STATE OF WISCONSIN
SUPREME COURT

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Clean Wisconsin, Inc. p/k/a Wisconsin's Environmental Decade Institute, Inc., S.C. Johnson & Son, Inc., and Calpine Corporation,
Petitioners–Respondents–Cross-Appellants–Cross-Respondents,

Town of Caledonia,
Petitioner–Cross-Respondent,

v.

Appeal No. 04-3179

Public Service Commission of Wisconsin and Wisconsin Department of Natural Resources,
Respondents–Co-Appellants–Cross-Respondents,

Wisconsin Electric Power Company, W.E. Power, LLC and Wisconsin Energy Corporation,
Interested Parties–Appellants–Cross-Respondents,

Dairyland Power Cooperative,
Interested Party–Cross-Respondent,

Madison Gas & Electric Company and Wisconsin Public Power, Inc.,
Interested Parties–Co-Appellants–Cross-Respondents,

(Caption continued on following pages)

BRIEF OF PETITIONERS-RESPONDENTS-CROSS-APPELLANTS-CROSS-RESPONDENTS CLEAN WISCONSIN, INC. AND S.C. JOHNSON & SON, INC.

City of Oak Creek,
Interested Party–Respondent–
Cross-Appellant

Robert H. Owen,
Interested Party–Respondent–
Cross-Respondent.

Calpine Corporation,
Petitioner,

v.

Public Service Commission of Wisconsin, and
Wisconsin Department of Natural Resources,
Respondents,

Wisconsin Electric Power Company, Wisconsin
Energy Corporation, W.E. Power, LLC, Dairyland
Power Cooperative, Madison Gas & Electric
Company, Robert H. Owen, Jr., and City of Oak
Creek,
Interested Parties.

Clean Wisconsin, Inc., p/k/a Wisconsin's
Environmental Decade Institute, Inc., and S.C.
Johnson & Son, Inc.,
Petitioners,

v.

Wisconsin Department of Natural Resources,
Respondent,

Wisconsin Public Power, Inc., City of Oak Creek,
Dairyland Power Cooperative, Madison Gas &
Electric Company, Wisconsin Electric Power
Company, Wisconsin Energy Corporation
and W.E. Power, LLC,
Interested Parties.

Calpine Corporation,
Petitioner,

v.

Wisconsin Department of Natural Resources,
Respondent,

City of Oak Creek, Dairyland Power Cooperative, Madison Gas & Electric Company, Wisconsin Public Power, Wisconsin Electric Power Company, Wisconsin Energy Corporation, and W.E. Power, LLC,
Interested Parties.

City of Oak Creek,
Petitioner,

v.

Public Service Commission of Wisconsin,
Respondent.

Town of Caledonia,
Petitioner,

v.

Public Service Commission of Wisconsin,
Respondent,

Wisconsin Electric Power Company, Wisconsin Energy Corporation, W.E. Power, LLC, Dairyland Power Cooperative, Madison Gas & Electric Company, Robert H. Owen, Jr., and Wisconsin Public Power, Inc.,
Interested Parties.

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TABLE OF CONTENTS

STATEMENT OF ISSUES 1

INTRODUCTION 2

STATEMENT OF THE CASE 3

A. Nature of Proceeding 3

B. The Proposed Project 4

C. The Statutory CPCN Process 5

D. The PSC Administrative Proceeding 6

ARGUMENT 8

I. Standard Of Review 8

A. PSC's Violation of the CPCN Statute and Failure to Make Required Findings Are Legal Errors Subject to *De Novo* Review 9

B. The CPCN and EIS Must Satisfy the "Arbitrary and Capricious" and "Substantial Evidence" Tests 11

II. PSC Erred in Determining that ERGS Is in the Public Interest 12

A. PSC Failed to Make Required Findings or Explain the Basis for Ignoring Significant Project Costs and Cost Errors 15

1. PSC Failed to Make Findings of Fact 15

2. PSC Failed to Explain Its Decision to Ignore Significant Costs and Impacts Relevant to the Statutory Criteria 16

B. PSC Erred by Ignoring Known Costs of ERGS in EGEAS Modeling, Including Health Costs 17

1. Health Costs 18

2. WEC/PSC Ignored Agreed-Upon Oak Creek Payments 21

3. WEC/PSC Ignored Other Local Community Impacts 22

C. PSC Erred as a Matter of Law in Failing to Evaluate Alternative Sources of Supply in Its Modeling 23

D. PSC Ignored and Failed to Consider Flaws in Performance and Cost Assumptions that Underlie Its Need and Public Interest Determinations 25

1. PSC Without Explanation Ignored Inconsistencies and Inaccuracies 25

2. PSC Without Explanation Relied Upon Inconsistent and Erroneous Cost and Performance Assumptions 26

a. WEC/PSC used inconsistent assumptions to shift ERGS-related construction costs to existing OCPP units, thereby lowering the assumed cost of ERGS in EGEAS 28

b. PSC relied on unprecedented, unrealistic SCPC performance assumptions 29

III. The EIS Did Not Comply with WEPA 31

A. Compliance with WEPA is a Cornerstone of Environmental Decisionmaking 31

B. The EIS Did Not Satisfy WEPA 36

1. The EIS Does Not Analyze the Availability and Cost-Effectiveness of Lower Emitting Alternatives 37

2. The EIS Failed to Analyze Alternatives to Once Through Cooling 40

3. The EIS Did Not Analyze Alternatives to the OCPP Site 42

4. The EIS Fails to Present Sufficient Information About ERGS' Adverse Impacts....44

a. Health Impacts of ERGS' Air Pollution....44

b. Impacts of ERGS-Related Transmission Lines....45

c. Impacts to Wetlands and Lake Michigan and Mitigating Measures....47

5. The Responsiveness Summary Is Grossly Inadequate....49

CONCLUSION....50

TABLE OF AUTHORITIES

Cases

Boscoe v. LIRC, 2004 WI 77, 272 Wis. 2d 586, 681 N.W.2d 157 9

California v. Bergland, 483 F. Supp 465 (E.D.Cal. 1980), *affirmed in relevant part,* 690 F.2d 753 (9th Cir. 1982) 35

Calvert Cliffs' Coordinating Comm., Inc. v. U.S Atomic Energy Comm'n., 449 F.2d 1109 (D.C. Cir. 1971) 33

Cedar-Riverside EDF v. Hills, 422 F. Supp 294 (D.Minn. 1976), *vacated as moot,* 560 F.3d 377 (8th Cir. 1977) 35

Chicago & North Western Ry. v. PSC, 43 Wis.2d 570, 169 N.W.2d 65 (1969) 12

Citizens Advisory Committee v. U.S. Dept. of Justice, 197 F.Supp.2d 226 (W.D.Pa. 2001) 44

City of Carmel-By-The-Sea v. U.S. Dept. of Transp., 123 F.3d 1142 (9th Cir. 1997) 33

Connecticut General Life Ins. Co. v. DILHR, 86 Wis. 2d 393, 273 N.W.2d 206 (1979) 10

Dubois v. U.S. Dep't. of Agriculture, 102 F.3d 1273 (1st Cir. 1996) 34

Gilbert v. State, Medical Examining Bd., 119 Wis. 2d. 168, 349 N.W.2d 68 (1984) 15, 16

Hacker v. DH&SS, 197 Wis. 2d 441, 541 N.W.2d 766 (1995) 12

Kegonsa Jt. Sanitary Dist. v. City of Stoughton, 87 Wis. 2d 131, 274 N.W.2d 598 (1979) 8

League of Wilderness Defenders v. Forsgren, 309 F.3d 1181 (9th Cir. 2002) 33

Madison Gas & Elec. Co. v. PSC, 109 Wis. 2d 127, 325 N.W.2d 339 (1982) 17

Milwaukee Brewers Baseball Club v. DH&SS, 130 Wis.2d 56, 387 N.W.2d 245 (1986) 32

Motor Vehicle Mfgrs. Ass'n. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983) 11

Muckleshoot Indian Tribe v. U.S. Forest Serv., 177 F.3d 800 (9th Cir. 1999) 33, 34

NRDC v. Callaway, 524 F.2d 79 (2nd Cir. 1975) 44

NRDC v. Morton, 458 F.2d 827 (D.C. Cir. 1972) 34

Olson v. Rothwell, 28 Wis. 2d 233, 137 N.W.2d 86 (1965) 11

Physicians Plus Ins. Corp. v. Midwest Mut. Ins. Co., 2002 WI 80, 254 Wis. 2d 418, 646 N.W.2d 777 9

Reidinger v. Optometry Examining Bd., 81 Wis. 2d 292, 260 N.W.2d 270 (1977) 17

Robertson Transportation Co. v. PSC, 39 Wis. 2d 653, 159 N.W.2d 636 (1968) 12, 16

Robertson v. Methow Valley Citizens Council, 490 U.S. 332 (1989) . 32, 35

Sierra Club v. Dombeck, 161 F. Supp.2d 1052 (D. Ariz. 2001) 46

Sierra Club v. U.S. Dept. of Energy, 255 F. Supp.2d 1177 (D. Colo. 2002) 46

Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664 (7th Cir. 1997) 31, 34, 35

Stas v. Milwaukee County Civil Service Comm., 75 Wis.2d 465, 249 N.W.2d 764 (1977) 10, 15

State ex rel. Boehm v. Wis. Dept. of Natural Resources, 174 Wis. 2d 657, 497 N.W.2d 445 (1993) 31

State ex rel. Parker v. Sullivan, 184 Wis.2d 668, 517 N.W.2d 449 (1994) 11

Thomas v. Peterson, 753 F.2d 754 (9th Cir. 1985) 46

Town of Huntington v. Marsh, 859 F.2d 1134 (2nd Cir. 1988) 33

Utahns For Better Transp. v. U.S. Dept. of Transp., 305 F.3d 1152 (10th Cir. 2002) 33

Village of Palatine v. U.S. Postal Service, 742 F.Supp. 1377 (N.D. Ill. 1990) 43

Watkins v. DILHR, 69 Wis.2d 782, 233 N.W.2d 360 (1975) 11

Westring v. James, 71 Wis. 2d 462, 238 N.W.2d 695 (1976) 11

Wis. Prof. Police Ass'n. v. PSC, 205 Wis. 2d 60, 555 N.W.2d 179 (Ct. App. 1996), *rev. den.* 207 Wis. 2d 285, 560 N.W.2d 274 (1997) 15

Wisconsin Citizens Concerned with Cranes and Doves v. DNR, 2004 WI 40, 270 Wis.2d 318, 677 N.W.2d 612 11

Wisconsin's Environmental Decade, Inc. v. PSC, 79 Wis.2d 161, 255 N.W.2d 917 (1977) 31

Wyoming v. U.S. Dep't of Agriculture, 277 F.Supp.2d 1197 (D.Wyo. 2003) 35

Statutes

33 U.S.C. § 1326(b) 50

42 U.S.C. § 4332 32

42 U.S.C. § 4332(2)(C) 31

Wis. Stat. § 1.11 ..... 6, 31

Wis. Stat. § 1.11(2)(c) 31

Wis. Stat. § 1.12 6

Wis. Stat. § 1.12(4), (5) 24

Wis. Stat. § 196.491 4

Wis. Stat. § 196.491(3)(a)1 5

Wis. Stat. § 196.491(3)(a)2 6

Wis. Stat. § 196.491(3)(b) 6

Wis. Stat. § 196.491(3)(d) 43

Wis. Stat. § 196.491(3)(d)3 ..... passim

Wis. Stat. § 196.491(3)(d)3, 4 9

Wis. Stat. § 196.491(3)(e) 21

Wis. Stat. § 196.491(3)(g) 6

Wis. Stat. § 227.57 8

Wis. Stat. § 283.31(6) 50

Wis. Stat. §§ 196.491(3)(d)2, 4 5

Wis. Stat. ch. 227 3

Other Authorities

40 C.F.R. § 1500.1(c) 32

40 C.F.R. § 1502.14 ..... 31, 34

40 C.F.R. § 1502.15 31

40 C.F.R. § 1502.16 32

40 C.F.R. § 1505.2(b), (c) 35

40 C.F.R. § 1508.25(a)(1) 46, 47

40 C.F.R. § 1502.9(b) 49

40 C.F.R. §§ 1502.9(b), 1503.4 35

40 C.F.R. Parts 1500-1508 31

Ch. PSC 111, Wis. Adm. Code 4

Ch. PSC 2, Wis. Adm. Code 6

Sec. NR 150.22(2)(3)), Wis. Adm. Code 43

Sec. NR 150.22(2)(e), Wis. Adm. Code 34

Sec. NR 150.22(2), Wis. Adm. Code 31

Sec. PSC 111.53(1)(d) and (e), Wis. Adm. Code 6

Sec. PSC 111.53(1)(e), Wis. Adm. Code 43

Sec. PSC 4.10(1), Wis. Adm. Code 6

Sec. PSC 4.30(1)(a), Wis. Adm. Code 31

Sec. PSC 4.30(3)(c), Wis. Adm. Code 34

STATEMENT OF ISSUES

There are two fundamental issues raised on this cross-appeal:

1. Whether the Public Service Commission ("PSC") erred by issuing a Certificate of Public Convenience and Necessity ("CPCN") for a proposed power plant based on a determination of need and public interest that failed to make required findings, ignored significant economic factors, relied on incomplete and inaccurate data, and failed to explain PSC's rationale for relying on that flawed analysis.

   Answered "no" by the Circuit Court.

2. Whether PSC and the Department of Natural Resources ("DNR") violated the Wisconsin Environmental Policy Act ("WEPA") by issuing an environmental impact statement ("EIS") for the proposed power plant project that failed to analyze the cost-effectiveness of alternative generation technologies, the health effects of the emissions from the proposed power plant, the availability of mitigation measures, and was otherwise inadequate.

   Answered "no" by the Circuit Court.

INTRODUCTION

The approval of an electric generating facility has significant and enduring environmental and economic consequences. State law requires that PSC and DNR carefully examine the cost and other impacts of power plant proposals and compare them to available alternatives. These evaluations must be an integral part of the decision-making process, not an afterthought. They are necessary to ensure that the public receives a reliable supply of electricity at a reasonable cost, and that public utility owners are not allowed to build the wrong kind of facility to profit at public expense. The evaluation of alternative locations and sources of supply is critical to PSC's charge to protect the public purse and health from the potential excesses of a monopolistic industry.

Wisconsin Energy Corporation ("WEC") has proposed to build the largest, most expensive power plant in State history, using the least desirable fuel: high sulfur coal. Its air emissions would have a significant, adverse impact on public health; its cooling water system would kill billions of aquatic organisms in Lake Michigan. The issues before the Court do not turn on whether new power plants are needed. The issues relate to the lawfulness of PSC's approval of this coal-fired facility.

PSC unlawfully approved an admittedly incomplete application that failed to consider alternative sites. It approved the energy source that is lowest priority under State law, without evaluating the cost-effectiveness of

higher priority energy sources. To the extent that they were considered at all, more environmentally benign sources were projected to be less costly than the PSC-approved units, even using modeling inputs biased to favor the project.

The Circuit Court properly vacated PSC's decision for several procedural and substantive errors. Two additional grounds also dictate that result. First, PSC's required public interest evaluation lacked specific findings and relied upon a flawed, biased cost analysis that omitted facility-related costs, including the substantial public health costs of coal-fired generation. Second, the EIS failed to comply with WEPA due to manifest, substantial inadequacies. The agency errors identified by the Circuit Court, as well as those errors discussed in this brief, reflect PSC's predisposition to approve this project by bending, ignoring, and misapplying the law to achieve that result.

STATEMENT OF THE CASE

A. Nature of Proceeding

This is an appeal from a final decision on judicial review under Wis. Stat. ch. 227. Clean Wisconsin, Inc. ("CW") and S.C. Johnson & Son, Inc. ("SCJ") sought review of two agency decisions: a) PSC's decision to issue a CPCN for an electric generation station; and b) the EIS for the project, issued jointly by PSC and DNR. The Circuit Court vacated the CPCN, holding that PSC: a) acted on an incomplete application; b) issued the

CPCN without WEC having obtained required DNR permits; c) failed to comply with the Energy Priorities Law; and d) unlawfully approved expenditures for a third unit it had rejected as unnecessary. Arguments in support of the Circuit Court's decision will be presented in SCJ/CW's respondents' brief. This brief addresses additional grounds for vacating the CPCN and EIS.

B. The Proposed Project

This case involves a CPCN for construction of a large electric generating station under Wis. Stat. § 196.491, and ch. PSC 111, Wis. Adm. Code. WEC proposed to construct three new coal-fired generating units at its existing Oak Creek Power Plant ("OCPP"): two 615-megawatt ("MW") super-critical pulverized coal ("SCPC") units, and one 600-MW integrated gasification combined cycle ("IGCC") unit. The proposed new units were collectively called the Elm Road Generating Station ("ERGS"). PSC-R.1.[1] WEC proposed that 100 MW of each SCPC unit's 615 MW capacity would be sold to other utilities. CW/SCJ-Ap.131-32.[2]

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[1] "PSC-R" is the PSC record, R.18. All court record ("R.") citations are to the record in case No.03-CV-3478, except as noted.

[2] "CW/SCJ-Ap." is the appendix to this brief.

PSC approved two SCPC units; it did not approve the IGCC unit, but it did approve construction of the infrastructure for a third, presently unneeded coal-fired unit at the OCPP site. CW/SCJ-Ap.157.

ERGS would create a major source of air pollution in southeastern Wisconsin. It would be a significant emissions source of particulate matter, sulfur dioxide, nitrous oxides, volatile organic compounds, mercury and other toxic pollutants. PSC-R.119 at 163. It would also kill billions of aquatic organisms by drawing them out of Lake Michigan with water used to cool the plant. *See, e.g.,* PSC-R.157 at 3533-41, 4289-94.

PSC approved a 3,000-MW OCPP "campus." CW/SCJ-Ap.132. Upon completion of these units, the OCPP would be one of the largest coal-fired electric generating stations in the United States.

C. <u>The Statutory CPCN Process</u>

To issue a CPCN, PSC must determine that

> The design and location or route is in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability and environmental factors . . . .

Wis. Stat. § 196.491(3)(d)3. The proposed facility must "satisfy the reasonable needs of the public for an adequate supply of electric energy," without "undue adverse impact on other environmental values ...." Wis. Stat. §§ 196.491(3)(d)2, 4.

A CPCN application must contain the information needed for each of these standards. Wis. Stat. § 196.491(3)(a)1. It is complete only if it

contains detailed information about "alternative sources of [fuel] supply considered, including . . . any alternative whose energy source has a higher priority ranking under the [Energy Priorities Law] than the fuel proposed to [be] used for the facility . . . [and] at least two proposed sites for the proposed facility . . . ." Sec. PSC 111.53(1)(d) and (e), Wis. Adm. Code.[3]

When an application is filed, PSC must determine whether it is complete. Wis. Stat. § 196.491(3)(a)2. A completeness determination triggers a 180-day deadline for PSC to decide whether to grant a CPCN, subject to a court-approved extension for up to 180 days. Wis. Stat. § 196.491(3)(g).

Before acting on the CPCN application, PSC must prepare an EIS. Wis. Stat. § 1.11; sec. PSC 4.10(1), Wis. Adm. Code. PSC is also required to hold contested case and public hearings. Wis. Stat. § 196.491(3)(b); ch. PSC 2, Wis. Adm. Code.

D. <u>The PSC Administrative Proceeding</u>

WEC initially submitted its CPCN application in February 2002. PSC-R.1. WEC proposed a single site for its new units: the OCPP. The application identified three layouts at the site. PSC determined that the

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[3] The Energy Priorities Law, Wis. Stat. § 1.12, which requires PSC to approve energy resources according to legislatively prescribed priorities, is discussed in SCJ/CW's respondents' brief.

application was incomplete on several occasions and required additional information. PSC never requested that WEC identify an alternative site to the OCPP. PSC-R.34, 38, 46.

On November 15, 2002, PSC pronounced the application complete, but simultaneously required WEC to provide additional information to address aspects of the application that were incomplete. This pronouncement triggered the statutory deadline, later extended by 180 days, for action on the CPCN application. PSC-R.51, Exh.A.

SCJ and CW petitioned PSC to reconsider its completeness determination. When PSC affirmed its determination on April 17, 2003 (PSC-R.76), SCJ and CW immediately filed an action in circuit court challenging that decision. PSC and WEC moved to dismiss, arguing that review of the completeness determination must await PSC's final decision on the CPCN. The court granted their motions, expressly adopting their argument. R.55, Exh.C.

In its May 2003 pre-filed testimony for the contested case hearing, WEC submitted a new layout of ERGS equipment at the OCPP site. CW/SCJ-Ap.225. WEC did not amend its application or submit any supplemental environmental or cost analysis for this so-called "North-CUP" layout.

PSC and DNR issued the draft EIS ("DEIS") on April 21, 2003 (PSC-R.76), and issued the final EIS on July 23, 2003. PSC-R.119 (also

Exh. 274). PSC held a contested case hearing on August 25 and September 4-12, 2003, and a public informational hearing on September 17-19, 2003. None of the PSC Commissioners attended the contested case or public hearings.

PSC issued the CPCN decision on November 10, 2003. CW/SCJ-Ap.101-63. It found that the EIS complied with WEPA and approved the construction of two units and infrastructure for a third unit within the North-CUP configuration. Id. DNR issued a separate decision on the EIS on December 17, 2003. CW/SCJ-Ap.164.

ARGUMENT

I. STANDARD OF REVIEW

Judicial scrutiny is critical to our system of checks and balances. Broad deference in lieu of careful analysis is inconsistent with the legislative policy favoring judicial review. Kegonsa Jt. Sanitary Dist. v. City of Stoughton, 87 Wis.2d 131, 152, 274 N.W.2d 598 (1979). Courts scrutinize the reasoning and reasonableness of agency decisions to ensure that agencies fulfill their statutory responsibilities and articulate rational explanations for their determinations.

Under Wis. Stat. § 227.57, the Court must set aside, reverse, modify, or remand the decision if the agency failed to follow prescribed procedure (subsec.(4)); erroneously interpreted the law (subsec.(5)); adopted factual findings not supported by substantial evidence (subsec.(6)); or exercised

discretion outside its delegated range of discretion, inconsistent with the agency's rule, policy or prior practice without satisfactory explanation, or otherwise in violation of a constitutional or statutory provision (subsec.(8)). This Court reviews the agency's decision *de novo*, without deference to the lower court's decision, *see* Boscoe v. LIRC, 2004 WI 77, ¶ 16, 272 Wis.2d 586, 681 N.W.2d 157, but considers and benefits from the lower court's analysis. *See* Physicians Plus Ins. Corp. v. Midwest Mut. Ins. Co., 2002 WI 80, ¶ 18, 254 Wis.2d 77, 646 N.W.2d 777 (review of summary judgment).

A. PSC's Violation of the CPCN Statute and Failure to Make Required Findings Are Legal Errors Subject to *De Novo* Review

The CPCN statute requires PSC to perform certain analyses before issuing a CPCN for a new power plant. The statute requires that PSC determine that the proposed facility is in the "public interest" by considering and analyzing specific statutory factors quoted above, and must also determine that the facility will not have an "undue adverse impact" on, *inter alia*, ecological and public health. Wis. Stat. § 196.491(3)(d)3, 4.

To comply with the statute, PSC must analyze the relevant factors and, based on that analysis, make specific findings as to these statutory factors. PSC failed to discharge these obligations. It failed to analyze and make findings as to: 1) the cost of using a different type of generation technology as an alternative to the coal-based ERGS; 2) the availability of

alternative sites; 3) the ecological, public health, and social cost impacts of the proposed facility; and 4) potential mitigation measures.

PSC's failure to perform this statutorily required analysis was an error of law subject to *de novo* review. PSC had no discretion whether to undertake that analysis. Accordingly, its failure to comply with that obligation is not reviewed under an abuse of discretion standard; it is an error of law.

PSC also failed to make findings that would support its conclusory determinations that the project is in the "public interest" and meets other statutory criteria. An agency is required to clearly state necessary findings to support its conclusions. Connecticut General Life Ins. Co. v. DILHR, 86 Wis.2d 393, 405, 273 N.W.2d 206 (1979). The mere declaration of having satisfied a statutory criterion (*e.g.*, the facility is in the public interest) is not a factual finding: it is a legal conclusion, for which the agency must articulate its factual underpinnings. Id.; Stas v. Milwaukee County Civil Service Comm., 75 Wis.2d 465, 472-74, 249 N.W.2d 764 (1977).

The agency must state its reasoning with sufficient clarity and detail that a reviewing court can discern and review the basis for the decision. Connecticut General, 86 Wis.2d at 405. An agency's decision may be sustained solely on the specific grounds stated by the agency with sufficient clarity. Stas, 75 Wis.2d at 473-75; *accord* Motor Vehicle Mfgrs. Ass'n v.

State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). Failure to make the required findings is an error of law. Watkins v. DILHR, 69 Wis.2d 782, 788, 233 N.W.2d 360 (1975).

In Wisconsin Citizens Concerned with Cranes and Doves v. DNR, 2004 WI 40 ¶¶ 9, 13, 270 Wis.2d 318, 677 N.W.2d 612, this Court held that *de novo* review applies to an agency's construction of a statute that is purely a question of law, as well as in cases asserting that the agency has exceeded its statutory authority. Moreover, an agency's interpretation of a statute or regulation cannot be upheld if it is inconsistent with its plain meaning:

> A court [should] not . . . give deference to an agency's interpretation of a statute when the court concludes that the agency's interpretation directly contravenes the words of the statute, is clearly contrary to legislative intent, or is otherwise unreasonable or without rational basis.

State ex rel. Parker v. Sullivan, 184 Wis.2d 668, 699, 517 N.W.2d 449 (1994).

B. The CPCN and EIS Must Satisfy the "Arbitrary and Capricious" and "Substantial Evidence" Tests

To the extent PSC made findings, those findings must satisfy the "arbitrary and capricious" and "substantial evidence" tests. Westring v. James, 71 Wis.2d 462, 475, 238 N.W.2d 695 (1976). The arbitrary and capricious standard looks to the reasonableness of the agency decision and whether it has a rational basis. Olson v. Rothwell, 28 Wis.2d 233, 239, 137 N.W.2d 86 (1965).

The substantial evidence standard focuses on whether there is evidence which reasonable minds might accept as adequate to support the finding. Hacker v. DH&SS, 197 Wis.2d 441, 467, 541 N.W.2d 766 (1995). A court must independently review whether the supporting evidence is substantial and reasonable; it does not defer to the agency:

> What is substantial or what a reasonable man might consider to be adequate support of a conclusion lies within the domain of the reviewing court and this court may well differ on this point with an administrative agency. This is not a violation of the separateness of the branches of government but the exercise of a check and balance.

Robertson Transportation Co. v. PSC, 39 Wis.2d 653, 659, 159 N.W.2d 636 (1968). This Court has overturned agency decisions under the substantial evidence test. *See, e.g.,* Chicago & North Western Ry. v. PSC, 43 Wis.2d 570, 169 N.W.2d 65 (1969).

II. PSC ERRED IN DETERMINING THAT ERGS IS IN THE PUBLIC INTEREST

PSC may conclude that a proposed plant is in the public interest only after it evaluates the economic and environmental consequences of the proposal, and it must consider alternative sources of supply and alternative locations in this analysis. Wis. Stat. § 196.491(3)(d)3. In evaluating the economic component of the need and public interest requirement, PSC relied upon the Electric Generation Expansion Analysis System ("EGEAS") model. CW/SCJ-Ap.106 n.3. PSC rationalized approval of the two SCPC units because EGEAS selected coal-fired units to be built at

some point in time, and the only question raised by the modeling was one of timing. CW/SCJ-Ap.124.

This conclusion is fundamentally flawed. PSC failed to make specific findings as to the statutory criteria applicable to the project and failed to explain or provide a rational basis for rejecting the criticisms of its EGEAS modeling. *See* Section II.A, below. It failed to include significant cost items in the EGEAS analysis necessary to determine whether new coal plants are cost-effective and in the public interest. *See* Section II.B. It failed to consider alternative generation technologies that could supply the same amount of electricity as ERGS with less damage to human health and the environment. *See* Section II.C. It also relied upon model inputs that were inaccurate and incomplete, consistently skewing the analysis to favor the SCPC units. *See* Section II.D.

To determine the need for new power plants, EGEAS uses assumptions as to: a) the projected demand for electricity over the planning period; and b) the existing capacity available to meet the demand. To address any projected shortfall in existing capacity, the model selects specific generation options during specific future years, based on assumptions regarding the costs of these options. The assumed cost of each generation option is a function of: a) performance characteristics (*e.g.*, generating capacity, availability); and b) capital and operating costs.

When EGEAS is run to select new generation options without restriction, it selects a least-cost expansion plan called the "optimal" plan. CW/SCJ-Ap.227. The modeler can also require EGEAS to select a particular generating option (*e.g.*, ERGS SCPC units to be in service in 2009 and 2010) to compare the cost of an expansion plan incorporating that option with the cost of the "optimal" plan or alternative expansion plan (*e.g.*, incorporating the Calpine plant). The modeler can also vary cost assumptions to determine the sensitivity of the modeling results to specific variables. For example, PSC modified the projected cost of natural gas and coal to show the model's sensitivity to varying fuel costs. Id.

The EGEAS output is only as reliable as its inputs, and it will only account for a cost that is included in the model run. If PSC assumes a cost that understates the true cost of one option, it biases the model to favor that option. If a category of cost (*e.g.*, health-related costs) disproportionately affects one fuel source, exclusion of that cost favors that fuel source over alternatives. The effect of an increase in the cost of one option may result in the option being selected after less costly alternatives; or, as in the case of IGCC, it may result in the option never being selected. PSC-R.157 at 4745-46.

A. PSC Failed to Make Required Findings or Explain the Basis for Ignoring Significant Project Costs and Cost Errors

1. PSC Failed to Make Findings of Fact

PSC did not make findings of fact regarding the various public interest factors that must be considered. It merely recited the statutory criteria and labeled them "Findings." CW/SCJ-Ap.104-05. PSC "found" that the proposed SCPC units satisfy the reasonable needs of the public; public convenience and necessity require construction of the SCPC units; and the SCPC units are reasonable and in the public interest. Id., Nos. 3-6. These statements are not findings of fact. They are merely recitations of statutory criteria, *i.e.*, conclusions of law.

PSC's bare-bones recitations of statutory criteria stand in stark contrast to the detailed findings of fact that this Court has previously reviewed under the substantial evidence test. *See, e.g.*, Gilbert v. State, Medical Examining Bd., 119 Wis.2d. 168, 194-205, 349 N.W.2d 68 (1984); Wis. Prof. Police Ass'n. v. PSC, 205 Wis.2d 60, 67-73, 555 N.W.2d 179 (Ct. App. 1996), *rev. den.* 207 Wis.2d 285, 560 N.W.2d 274 (1997). For this reason alone, the CPCN decision must be reversed and remanded. *See* Stas, 75 Wis.2d at 475-76.

2. PSC Failed to Explain Its Decision to Ignore Significant Costs and Impacts Relevant to the Statutory Criteria

PSC arbitrarily ignored undisputed categories of costs in its EGEAS modeling, invalidating its conclusion that the coal-fired units are needed and in the public interest. Moreover, PSC failed to state any reasons for ignoring these cost categories and inconsistencies, leaving this Court unable to independently review the rationale or reasonableness of PSC's decision.

The flaws in modeling assumptions are profound. PSC relied on its modeling to approve ERGS despite the fact that it is the lowest priority alternative under the Energy Priorities Law and costs more than higher priority alternatives. Nevertheless, the Circuit Court deferred to PSC without scrutiny, concluding that PSC had discretion to determine which data to rely upon. CW/SCJ-Ap.194-95. The Circuit Court similarly deferred to PSC's decision not to consider health-related costs, based on the rationale that PSC has discretion to consider these impacts on a qualitative and not quantitative basis. CW/SCJ-Ap.198.

An agency's plea for deference does not displace judicial review. This Court has never shied away from detailed, in-depth review of an agency's findings, reasoning, or the corresponding record. *See, e.g.*, Gilbert; Robertson. The Circuit Court was required to consider whether PSC made sufficient findings to support its conclusion that ERGS is needed and in the public interest and, if so, whether those findings are supported by

substantial evidence. To the extent that PSC exercised discretion, the Circuit Court was required to examine the record for a rational basis for that exercise of discretion. "Discretion is more than a choice between alternatives without giving the rationale or reason behind the choice." Reidinger v. Optometry Examining Bd., 81 Wis.2d 292, 297, 260 N.W.2d 270 (1977). "'[T]here should be evidence in the record that discretion was in fact exercised and the basis of that exercise of discretion should be set forth.'" Id. (citations omitted); *see also* MG&E v. PSC, 109 Wis.2d 127, 136, 325 N.W.2d 339 (1982). Since PSC's determination can be upheld only for reasons that the PSC itself articulated in its decision, its failure to make the required findings renders its decision unsustainable.

B. PSC Erred by Ignoring Known Costs of ERGS in EGEAS Modeling, Including Health Costs

WEC/PSC modeling ignored significant categories of external but necessarily incurred costs. PSC did not dispute whether these costs exist. Rather, PSC staff suggested that these costs could be assessed outside of EGEAS to compare the cost of ERGS with alternatives. CW/SCJ-Ap.233-36. Yet PSC's decision to approve the CPCN ignores them. By failing to include these costs in the assumed cost of the SCPC units, PSC understated the true cost of the SCPC units, distorting and invalidating the EGEAS results. PSC violated Wis. Stat. § 196.491(3)(d)3 by failing to consider the full economic consequences of the proposal.

The Circuit Court's decision regarding external costs is inconsistent. It correctly concluded that PSC erred by not including the cost of necessary transmission upgrades in its modeling. It reasoned that these were necessary and directly related to the physical facility. CW/SCJ-Ap.199. It also noted PSC's concession that it had ignored these costs, estimated at $166 million for the two SCPC units. Id.

The Circuit Court treated other necessary and unavoidable costs of ERGS differently, allowing PSC to ignore them in its modeling.

1. Health Costs

CW and SCJ introduced substantial evidence of the health-related costs from ERGS' planned air emissions. That evidence included the cost of mortality and morbidity impacts associated with fine particles and mercury, based on methodologies used by U.S.EPA. The experts concluded that health-related impacts of the coal-fired ERGS had a present value cost of $3.3 billion, five times larger than for comparably sized natural gas-fired plants. PSC-R.157 at 4043. WEC's experts testified to lesser, albeit significant, health impacts from ERGS' emissions. They calculated the value of health impacts from ERGS in Wisconsin alone at between $1.8 million and $6 million annually, *i.e.*, up to $240 million over the 40-year projected life of the project. Id. at 2486. WEC's experts did not dispute that coal-fired generation would impose much higher health-related costs than natural gas-fired generation.

The Circuit Court relied upon Wis. Stat. § 196.491(3)(d)4, which directs PSC to evaluate whether the "proposed facility will have an undue adverse impact on other environmental values," including public health. The Circuit Court reasoned that PSC was not required to include these costs in its modeling, but that it could consider health-related costs as a qualitative factor. CW/SCJ-Ap.198-99. The Circuit Court's analysis misses the point for two reasons.

First, since PSC used EGEAS as the tool to determine whether coal-fired units are cost-effective, its failure to include the health-related costs of coal-fired generation in EGEAS calculations necessarily led to an erroneous cost analysis. The coal-fired units may in fact impose greater total costs on society than other options. Omission of health-related costs biased the analysis in favor of the SCPC units.

Second, the Circuit Court incorrectly assumed that PSC considered health costs as a "qualitative" factor. PSC rationalized that DNR is in a better position than PSC to evaluate emissions, and that the evidence "regarding the externalized health costs associated with air emissions will be valuable to DNR as it examines its air permit applications ...." CW/SCJ-Ap.152. PSC therefore declined to consider these costs at all. CW/SCJ-Ap.153. As a result, PSC made its decision without considering the fact that coal-fired units emit greater quantities of air pollutants than other alternatives and therefore impose greater social costs.

This was legal error. The relevance of health or environmental costs to DNR permitting decisions does not limit or preclude their relevance to PSC decisions. On the contrary, PSC must either consider *all* costs of a proposed electric generating facility, including environmental and health costs, or, at a minimum, provide a rational explanation why that category of costs is so small that it would not affect the outcome of the analysis. Here, PSC failed to consider the evidence of tens of millions of dollars in health-related costs.

Wis. Stat. § 196.491(3)(d)3 requires that PSC consider "economic, safety ... and environmental factors ...." That subsection goes on to say that PSC may not determine that the design is not in the public interest because of air pollution "if the proposed facility will meet the requirements of ch. 285." PSC is precluded under this subsection from denying a CPCN on the basis of the *environmental impacts* of air emissions *if* the project meets state air pollution control requirements. It does not limit PSC's authority and obligations for evaluating the *health impacts* of air emissions, or environmental impacts if compliance with ch. 285 is not certain. Nor does it limit PSC's obligation to fully consider the *economic* impacts of the project.

PSC did not find that ERGS will meet the requirements of ch. 285, instead deferring to DNR's anticipated future decision on proposed air permits. CW/SCJ-Ap.151, 153. This unlawful reliance on a speculative

future DNR approval is one consequence of PSC's violation of Wis. Stat. § 196.491(3)(e), as discussed in SCJ/CW's respondents' brief.

Moreover, health costs are not environmental impacts that PSC can ignore, even if DNR had made a final determination of compliance with ch. 285. They are economic impacts that PSC must consider under Wis. Stat. § 196.491(3)(d)3.

There is no dispute that ERGS will impose health costs, and that these health costs are higher for ERGS than for lower-emitting alternatives. PSC's failure to consider those costs skewed its cost analysis to favor ERGS and is an additional error of law requiring reversal.

2. WEC/PSC Ignored Agreed-Upon Oak Creek Payments

Under the agreement between WEC and the City of Oak Creek, PSC's approval of the two SCPC units triggers an obligation, to be passed through to the ratepayers, to pay the City up to $2.25 million *per year*. CW/SCJ-Ap.149. These payments were not included in the assumed cost of ERGS used for modeling. Exclusion of those costs biases the modeling to favor ERGS over other competing sources of electricity.[4] PSC erred as a matter of law by ignoring this substantial cost, without explanation.

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[4] The assumed cost of the Calpine natural gas alternative used in EGEAS included any local community impact payments. PSC-R.157 at 3416-21.

3. WEC/PSC Ignored Other Local Community Impacts

There was also undisputed evidence that local communities will suffer cost burdens that will not be directly compensated by WEC. Oak Creek's police chief, fire chief and public works director testified to substantial costs that their departments will incur because of ERGS. PSC-R.157 at 3816, 3834-35, 3833. Oak Creek also offered expert testimony regarding the substantial impact to property values and lost tax revenues. Id. at 2711:19 to 2713:19. Its expert calculated a property value impact, based on "willingness to pay," of approximately $17.8 million per year. Id. at 2715-16.

Other affected communities would suffer those same types of burdens, although the monetary value might vary. The Town of Caledonia and Racine County would also incur costs for police, fire and emergency response protection, and they would also suffer a drop in neighboring property values. Id. at 2668-70, 2743, 2749.

PSC acknowledged these burdens. CW/SCJ-Ap.148. It required that WEC work with neighboring communities to mitigate those impacts. Id. Yet it inexplicably failed to incorporate these costs into its analysis of whether ERGS is cost-effective and in the public interest.

C. PSC Erred as a Matter of Law in Failing to Evaluate Alternative Sources of Supply in Its Modeling

Wis. Stat. § 196.491(3)(d)3 requires PSC to consider alternative sources of supply in its public interest evaluation. But PSC did not undertake the analysis required to evaluate whether more environmentally responsible alternatives to ERGS are cost-effective and in the public interest. As explained below, the PSC used EGEAS to decide that ERGS was cost-effective and in the public interest, but it failed to use the model to evaluate higher priority, more environmentally responsible alternatives. The PSC's failure to undertake this required analysis is an error of law.

PSC used EGEAS to compare the cost of WEC's proposed SCPC units to the EGEAS-generated "optimal" plan. PSC created a base-case scenario (the optimal plan) that did not require any particular unit. It then compared the timing and cost of that base case scenario with a scenario that made the same assumptions but required construction of the ERGS SCPC units. PSC also ran an alternative scenario that assumed construction of the previously approved 523 MW Calpine Fond du Lac facility. It used these three scenarios (base case, ERGS, and Calpine) for several sensitivity runs in which it modified other input assumptions, *e.g.*, lower electric demand growth, higher gas costs, higher SCPC construction costs. Using this modeling, PSC compared the cost of an expansion plan that included and

excluded the SCPC units, and an expansion plan that included and excluded the Calpine unit. CW/SCJ-Ap.229, Table 4-4.[5]

PSC failed to run a comparable modeling analysis for a non-coal alternative to the two ERGS SCPC units, *i.e.*, an alternative with equivalent electric generating capacity.[6] This is a significant violation of WEPA (*see* Section III.B.1, below), but it is also critical to the public interest test, which requires consideration of "alternative sources of supply," as well as economic, safety, and environmental factors. Wis. Stat. § 196.491(3)(d)3. The State Energy Priorities Law also requires the PSC to determine whether higher priority energy supply options are cost-effective. Wis. Stat. § 1.12(4), (5).

PSC's modeling ignored these requirements. It did not evaluate the cost of relying upon natural gas units (or a combination of higher priority alternatives) as a substitute for coal-fired generation from ERGS. There is no basis on the present record for PSC, this Court, or the public to determine whether a natural gas or other higher-priority alternative to the SCPC units would be more costly or less costly than the SCPC units. Nor

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[5] All EGEAS runs omitted the cost categories discussed in Section II.B above and relied upon the flawed assumptions discussed in Section II.D; these errors are distinct from PSC's failure to analyze alternatives.

[6] The Calpine unit, which PSC did consider, is only 523 MW, *i.e*,, it would not replace two SCPC units.

does the record allow PSC to weigh and balance the cost of higher priority options with the environmental, safety, and other social benefits of those options. The absence of an analysis comparing the proposed SCPC units with alternative sources of the electric energy they would supply, as required by statute, precludes a finding that the SCPC units are in the public interest.

D. PSC Ignored and Failed to Consider Flaws in Performance and Cost Assumptions that Underlie Its Need and Public Interest Determinations

Two variables in EGEAS are key to determining what kinds of new generating facilities are selected to meet future demand, and when they are selected: a) the available existing capacity to meet future demand; and b) the assumed cost of new facilities. PSC's decision ignored the many inconsistencies and flaws in the modeling that biased the output to favor ERGS.

1. PSC Without Explanation Ignored Inconsistencies and Inaccuracies

The availability of existing facilities to meet future demand in EGEAS modeling depends on the assumed performance of those facilities: how often they will be available for use, and their cost when used. In this matter, the assumptions used for EGEAS modeling artificially reduced the availability of existing facilities, including WEC's existing flagship units at Pleasant Prairie, Wisconsin. WEC and PSC assumed that the ERGS SCPC

units would be available 90% of the time for the entire 30-year modeling period, based on the historical performance of the Pleasant Prairie units. PSC-R.159 at 1430:14-25; PSC-R.157 at 1756:6-8. But they then artificially limited the availability of the Pleasant Prairie units, reducing their availability to meet demand to 75.68-81.37%. PSC-R.159 at 1457; PSC-R.160, Exh.94 at 2-3. WEC and PSC thereby concealed approximately 9.5-16% of the capacity of the existing 1,200 MW at Pleasant Prairie in the EGEAS runs. Equally arbitrary availability limits were placed on all of WEC's other existing power plants. PSC-R.159 at 1460; PSC-R160, Exh. 94.

The Circuit Court did not address these biases, instead simply deferring to PSC in an area of technical expertise. PSC's decision also ignores these issues. It did not weigh evidence relating to the propriety of assumed unit performance; it did not find this bias to be inconsequential to the outcome. Rather, PSC's decision ignored this inconsistency and bias. PSC provided no explanation, much less the required rational explanation, to sustain any technical judgment for the biases in the EGEAS modeling.

2. PSC Without Explanation Relied Upon Inconsistent and Erroneous Cost and Performance Assumptions

A second significant factor to determine the need for and timing of particular facilities is the assumed cost of alternative generating options. Although PSC modeling used cost and operating assumptions selected by

WEC, it showed that ERGS is *never* the least-cost alternative within the planning period. WEC's modeling consistently showed that ERGS is at least $30 million more expensive than alternatives, and in some scenarios the cost difference exceeds $200 million. *See* PSC-R.158, Exhs.32, 37, 273.

Although ERGS was always higher cost, the modeling included assumptions that made ERGS appear far less costly than it really is. The Circuit Court held, and the point is undisputed, that WEC/PSC modeling assumed no transmission interconnection or upgrade costs, even though there was undisputed evidence that such ERGS-related costs would be incurred if ERGS were built. As discussed in Section II.B, above, the modeling also ignored PSC-approved mitigation payments under the WEC-Oak Creek compensation agreement. When one adds these and other hidden costs, the ERGS SCPC units were at least $526 million more expensive than other alternatives. PSC-R.157 at 3003.

PSC's modeling also hid costs by shifting them to existing units at OCPP, inconsistently and without considering the cost-effectiveness of incurring those costs for the other units.

a. WEC/PSC used inconsistent assumptions to shift ERGS-related construction costs to existing OCPP units, thereby lowering the assumed cost of ERGS in EGEAS

WEC proposed that all costs for constructing the ERGS units and associated facilities be recovered from ratepayers through the proposed lease agreements, and PSC approved this arrangement. CW/SCJ-Ap.158-60. For lease purposes, WEC and PSC allocated the total project costs among the two SCPC units and the IGCC unit. PSC-R.160, Exh.91.

For purposes of modeling and cost evaluation, however, PSC did not use this same allocation. WEC shifted over $149 million of those costs to the existing OCPP units 5 through 8, thereby reducing the apparent cost of the first SCPC unit by over 30%. It simultaneously assumed that OCPP units 5 and 6 would be retired by 2012 and placed arbitrary availability limits on all of the OCPP units. PSC-R.157 at 3003, Table 1; *compare* PSC-R.160, Exh. 91at 2, 3.

PSC did not account for these inconsistencies in its model runs; nor did it provide any reason for ignoring these inconsistencies in its decision. PSC erred as a matter of law by failing to explain this inconsistency. It was also arbitrary and capricious for PSC to make a decision based on an assumed future condition in which units exist for one purpose (to absorb ERGS-related costs) and do not exist for another purpose (to meet projected demand). PSC relied on unprecedented, unrealistic SCPC performance assumptions

b. PSC relied on unprecedented, unrealistic SCPC performance assumptions

The cost-effectiveness and suitability of a particular type of generating unit are dependent not just on its capital cost, but also on its operational cost. Factors that go into operational costs include both the cost of fuel and the performance efficiency of the units. The principal elements of a unit's performance efficiency are availability (how often a unit is available to be used) and heat rate (how much energy is required for the unit to produce electricity). A higher heat rate results in a higher operating cost for the unit because more fuel is required to generate the same amount of electricity. PSC-R.157 at 1851.

In its modeling, PSC used unduly optimistic assumptions for both of these factors. It assumed that the two SCPC units would be available to generate electricity 90% of the time. Id. at 1430. WEC acknowledged that this assumed availability for the SCPC units exceeded any existing unit in the WEPCO system. Id. at 1842.

Similarly, WEC assumed a heat rate of 8,700 Btu/kWh over the thirty-year planning period based on the best-run SCPC units in existence. Id. at 1772-74, 1845-46. At hearing, WEC could identify only two units among the 600 units built since 1990 (all outside the U.S.) that had average heat rates at or below 8,700 Btu/kWh. WEC did not know whether their designs were similar to ERGS, or whether they used the same type of

pollution control equipment, which may significantly increase the heat rate.[7] Id. at 1090, 1772-74, 1845-46.

Perhaps most significantly, WEC selected a combination of performance efficiencies that are unprecedented in the world. WEC was not aware of *any* facility in the world that had a sustained operation at 8,700 Btu/kWh and a 90% availability factor. Id. at 1850-51. There is no evidence in the record supporting these critical performance criteria or the optimistic cost assumptions derived from them.

PSC uncritically accepted WEC's biased assumptions in its own EGEAS modeling. PSC did not explain how or why it accepted SCPC unit costs based on performance assumptions that were unproven, unprecedented, and lacked evidentiary support.

For these reasons, PSC's determinations that coal-fired ERGS units are needed or in the public interest must be reversed as lacking legally required explanation, reasonable basis, supporting evidence, and evaluation of alternatives.

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[7] The contractually guaranteed heat rate for the SCPC units is 8,850 Btu/kWh. WEC's contractor would not guarantee the lower heat rate used in PSC's modeling. PSC-R.157 at 825.

III. THE EIS DID NOT COMPLY WITH WEPA

A. Compliance with WEPA is a Cornerstone of Environmental Decisionmaking

The Wisconsin Environmental Policy Act (WEPA), Wis. Stat. § 1.11, is modeled on its federal counterpart, the National Environmental Policy Act (NEPA). Wisconsin's Environmental Decade, Inc. v. PSC, 79 Wis.2d 161, 174, 255 N.W.2d 917 (1977) ("WED III"). The purpose of both statutes is to ensure that agencies carefully consider environmental impacts before committing to undertake certain "major" actions. State ex rel. Boehm v. DNR, 174 Wis.2d 657, 665, 497 N.W.2d 445 (1993); Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664, 666 (7th Cir. 1997). The statutes require agencies to prepare an EIS on actions that would significantly affect the quality of the human environment. Wis. Stat. § 1.11(2)(c); 42 U.S.C. § 4332(2)(C).

WEPA requires that an EIS follow NEPA regulations codified at 40 C.F.R. Parts 1500-1508. Wis. Stat. § 1.11(2)(c); *see also* sec. PSC 4.30(1)(a), Wis. Adm. Code; sec. NR 150.22(2), Wis. Adm. Code. NEPA case law is "persuasive authority" in construing WEPA. Boehm, 174 Wis.2d at 676 n.4.

The NEPA regulations require, *inter alia*, that an EIS analyze:

- Alternatives to the proposed action (40 C.F.R. § 1502.14);
- The environment affected by the proposed action (§ 1502.15);

- The environmental consequences of the proposed action, including direct and indirect effects (§ 1502.16); and
- Any adverse environmental effects that cannot be avoided should the proposal be implemented (§ 1502.16).

The requirements are not merely "red tape" or "paperwork." They ensure that the reviewing agencies "will have available, and will carefully consider, detailed information concerning significant environmental impacts," Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989), and the alternatives that avoid or mitigate those impacts. The EIS "is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." 40 C.F.R. § 1500.1(c). It "guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." Methow Valley, 490 U.S. at 349.

The EIS must be drafted to enable "an agency to take a 'hard look' at the environmental consequences of its proposed action." Milwaukee Brewers Baseball Club v. DH&SS, 130 Wis.2d 56, 72, 387 N.W.2d 245 (1986); *accord* Methow Valley, 490 U.S. at 350. The information and analysis contained in an EIS must demonstrate that the agency has considered the environmental consequences of its action to "the fullest extent possible." 42 U.S.C. § 4332; *see also* Calvert Cliffs' Coordinating

Comm'n, Inc. v. U.S Atomic Energy Comm'n, 449 F.2d 1109, 1114 (D.C. Cir. 1971). The "hard look" requirement "sets a high standard for the agencies, a standard which must be rigorously enforced by the reviewing courts." Id. at 1114. Indeed, "if [an agency's] decision was reached procedurally without individualized consideration and balancing of environmental factors, conducted fully and in good faith, it is the responsibility of the courts to reverse." Id. at 1115.

Courts rigorously apply the "hard look" standard, and do not hesitate to invalidate an EIS that fails to include the required level of discussion and analysis. *See, e.g.*, League of Wilderness Defenders v. Forsgren, 309 F.3d 1181, 1191-92 (9th Cir. 2002) (EIS failed to consider impacts of pesticide drift outside target spray area); Utahns For Better Transp. v. U.S. Dept. of Transp., 305 F.3d 1152, 1179-80 (10th Cir. 2002), *modified on other grounds*, 319 F.3d 1207 (10th Cir. 2003) (highway project's impacts to migratory birds); Muckleshoot Indian Tribe v. U.S. Forest Serv., 177 F.3d 800, 810-811 (9th Cir. 1999) (impacts of land exchange); City of Carmel-By-The-Sea v. U.S. Dept. of Transp., 123 F.3d 1142, 1160-61 (9th Cir. 1997) (cumulative impacts of highway); Town of Huntington v. Marsh, 859 F.2d 1134, 1140-43 (2nd Cir. 1988) (effects of discharge to Long Island Sound).

Analysis of alternatives is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14; Milwaukee Brewers, 130 Wis.2d at 73. The alternatives analysis must be prepared so as to "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. The EIS must:

> (a) Rigorously explore and objectively evaluate all reasonable alternatives . . . .
> (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
> (c) Include reasonable alternatives not within the jurisdiction of the lead agency. . . .
> * * * *
> (f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

Id. Similarly, WEPA requires an EIS to include "a rigorous exploration and objective evaluation of the environmental impacts of all reasonable alternatives, particularly those that might avoid all or some of the adverse environmental effects of the proposed action." Sec. NR 150.22(2)(e), Wis. Adm. Code; *see also* sec. PSC 4.30(3)(c), Wis. Adm. Code.

Courts frequently have found EISs to be inadequate where they failed to consider reasonable alternatives. *See, e.g.,* Muckleshoot, 177 F.3d at 812; Simmons, 120 F.3d at 669; Dubois v. U.S. Dep't. of Agriculture, 102 F.3d 1273, 1287-90 (1st Cir. 1996). An agency may not eliminate an otherwise reasonable alternative solely because it "[does] not offer a complete solution to the problem." NRDC v. Morton, 458 F.2d 827, 836 (D.C.Cir. 1972). Nor may the agency define the purpose of the proposed

action so narrowly as to eliminate reasonable alternatives. Simmons, 120 F.3d at 666; Wyoming v. U.S. Dep't of Agriculture, 277 F.Supp.2d 1197, 1223 (D.Wyo. 2003).

An EIS also must contain a "detailed analysis" of mitigation measures to assist the agency and public in evaluating a project's impacts and available opportunities to reduce or eliminate the impacts. Methow Valley, 490 U.S. at 350.

The agency must assess, consider and respond to the comments received on the draft EIS. 40 C.F.R. §§ 1502.9(b), 1503.4. The agency also must prepare a "record of decision" that (i) identifies "all alternatives considered by the agency in reaching its decision" indicating which of those alternatives were "environmentally preferable," and (ii) states "whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted" and if not, why not. Id. § 1505.2(b), (c). Courts have scrutinized EISs in detail and found them to be inadequate where they failed to adequately respond to public comments. *See, e.g.*, California v. Bergland, 483 F. Supp 465, 496-97 (E.D.Cal. 1980), *affirmed in relevant part,* 690 F.2d 753 (9th Cir. 1982); Cedar-Riverside EDF v. Hills, 422 F. Supp 294, 319-21 (D.Minn. 1976), *vacated as moot,* 560 F.3d 377 (8th Cir. 1977).

B. The EIS Did Not Satisfy WEPA

The EIS for ERGS did not meet the minimum requirements of WEPA and NEPA. It failed to disclose essential information that is necessary to take the required "hard look" at ERGS. A "hard look" would require the EIS to address at least the following fundamental questions:

1. Since the SCPC technology would emit an enormous amount of air pollution, are there alternative, cleaner technologies that could be used instead (*e.g.*, natural gas, wind, IGCC or conservation), or would the use of such technologies be prohibitively costly?

2. Since the proposed once through cooling system for the SCPC units would kill a tremendous number of aquatic organisms, are there alternative, less intrusive cooling technologies that could be used instead (*e.g.*, cooling towers), or would the use of such technologies be prohibitively costly?

3. Since there are many disadvantages to locating ERGS at the OCPP site (*e.g.*, destruction of a natural bluff, primary environmental corridor and wetlands, concentration of WEPCO's generating capacity at one site), are there alternative sites that would have less adverse impacts, or would the use of such alternative sites be prohibitively costly?

4. Is there enough information about ERGS to prescribe appropriate mitigating measures to address its adverse environmental impacts?

The EIS does not answer these questions and does not respond to significant public comments on the DEIS. The EIS is fundamentally flawed and fails to satisfy both the legally mandated analysis and the underlying statutory purposes.

Instead of scrutinizing the EIS, the Circuit Court commented on its length and the need for judicial deference. To date, there has been no scrutiny as required by the standards of judicial review.

1. The EIS Does Not Analyze the Availability and Cost-Effectiveness of Lower Emitting Alternatives

WEC's proposed SCPC units would burn high sulfur coal, emitting an enormous amount of air pollution. Even with the proposed control technology, the SCPC units would emit more than 20,000 tons of pollutants per year (excluding carbon dioxide). PSC-R.119, vol.1 at 163. Over a projected 50 years of operation, they would emit approximately two billion pounds of pollutants to the air. Id.

The EIS was required to take a "hard look" at SCPC technology and consider whether alternative, cleaner technologies could be used at a reasonable cost. The EIS never undertook this evaluation.

PSC's basic methodology for evaluating alternative generation sources (EIS Chapter 4) can be summarized as follows: (i) estimate the cost of the "optimal" (least cost) expansion plan selected using EGEAS; and (ii) compare the cost of ERGS and the "optimal" plan. Using this methodology, the EIS concludes that the SCPC units would be between $98.9 million and $346.7 million more costly than the "optimal" plan,

depending on assumptions about electric demand growth, natural gas prices, coal prices, and other relevant variables. CW/SCJ-Ap.229.[8] While the EIS discusses the cost comparisons between ERGS and the "optimal" plan, it does not discuss the cost of environmentally friendly alternatives to ERGS. The EIS contains no estimate of the cost of substituting alternatives, such as wind, natural gas, or IGCC units, for the first two ERGS units.

Although there are three additional sets of EGEAS runs in the EIS, none of these analyze the relative cost of reasonable alternatives to ERGS. PSC-R.119, vol.1, p. xxv, Appendix B. The first set of alternative EGEAS runs "forced in" the construction of the Calpine gas-fired unit.[9] Since the Calpine unit (523 MW) is smaller than the two SCPC units (each unit would have 515 MW available to WEC), this Calpine run does not tell us whether it would be cost-effective to use natural gas technology as a substitute for *both* SCPC units. PSC never performed such an EGEAS run.

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[8] PSC ultimately concluded that the EGEAS modeling runs in the EIS were wrong and substituted a limited new set of EGEAS runs on the last day of the technical hearing. PSC-R.158, Exh. 273. The new EGEAS runs used different assumptions but used the same methodology of comparing the cost of the ERGS SCPC units to the "optimal" plan.

[9] Even under the assumption of high future natural gas prices, the run with the gas-fired Calpine unit was $73.1 million cheaper than WEC's proposal. CW/SCJ-Ap.229, Table 4-4.

The second alternative EGEAS run assumed that all new generation to be built in Wisconsin for the next 30 years would use only natural gas. This expansion plan is reported as $1.9 billion more costly than the "optimal" plan. CW/SCJ-Ap.234.[10] A natural gas only plan for the next 30 years is not realistic; nor was it suggested by any ERGS opponent. Moreover, this fanciful projection does not tell us whether natural gas generation or a mix of gas and other supply sources would be a cost-effective alternative to the project that PSC approved, *i.e.,* two SCPC units to be constructed over the next 5-7 years. The EIS never analyzed any reasonable alternatives to the *proposed* units.

A third set of EGEAS runs in the DEIS (but not in the EIS) assumed WEC's actual proposal: construction of SCPC units in 2007 and 2009, followed by an IGCC unit (which has much lower air emissions than the SCPC units) in 2011. The DEIS concluded that this combination and time frame for new units was not cost-effective, as compared to the "optimal" plan. PSC-R.77, Table 4-6, p. 74. However, neither the DEIS nor EIS analyzed whether it would be feasible or cost-effective to substitute IGCC technology for SCPC technology for the first, second, or both SCPC units.

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[10] PSC's Exh.273, introduced to correct EIS errors, did not revise the "natural gas-only for 30 years" scenario.

The limited analysis that was performed also relied on flawed information. In addition to the biases discussed in Section II above, PSC's witness admitted at hearing that all of the EGEAS runs in the EIS were wrong and of limited utility. PSC-R.157 at 4729:15-24, 4733:19-24.

PSC's failure to analyze the cost-effectiveness of alternatives to ERGS is a fundamental error. Based on the limited, admittedly flawed analysis of alternatives, there is simply no way for PSC, DNR, the public, or this Court to determine whether it would be cost-effective to use less-polluting alternatives to the proposed SCPC units.

This issue does not turn on the reasonableness of PSC's various modeling assumptions, and the Court need not second-guess those assumptions to rule that the failure to consider the cost-effectiveness of alternatives was error. The PSC committed legal error by failing to do any modeling or analysis of less-polluting alternatives to ERGS.

2. <u>The EIS Failed to Analyze Alternatives to Once Through Cooling</u>

WEPCO has proposed to use a "once through" cooling system for ERGS. This technology uses cold water (Lake Michigan) to cool the steam after it passes through the electric turbine, so that the steam condenses to water and can be fed back into the coal-fired boiler to be converted back into steam. Because the cold water would be used only once before being piped back to Lake Michigan, the system is known as "once through"

cooling. The drawback of this system is that it uses an enormous amount of water (740,000 gallons per minute, the equivalent to a small river), killing most of the biota in the water it uses: the technology would kill literally billions of aquatic organisms every year, causing significant harm to the aquatic ecosystem. PSC-R.157 at 3533-56, 4289-94.

There are alternatives to once through cooling. Id. at 4313. One such alternative is the use of "cooling towers." This alternative withdraws far less water from the water body because it cools and reuses the water; it therefore would kill far fewer aquatic organisms. Id. at 4298-99. Another alternative is "dry cooling," which uses very little water and would have virtually no adverse aquatic impacts. Id.

These alternative technologies are available. The last coal-fired power plant that WEC built (Pleasant Prairie) uses cooling towers. Id. at 1702, 2261. Many other power plants have also been built using cooling towers or dry cooling.

The EIS fails to analyze whether cooling towers or dry cooling could be used for ERGS and whether the cost difference would be significant. Nor does the EIS analyze the ecological benefits of these technologies.

The EIS' failure to analyze less damaging technologies is a fundamental violation of WEPA. The EIS utterly fails to discuss *any* alternatives to the proposed once through cooling. The EIS provides the agencies with no basis to decide whether cooling towers or dry cooling

should be required for this project as a mitigation measure to protect aquatic resources.

There is no factual dispute as to this deficiency. The EIS states:

> No mitigation plans or strategies have been proposed by the applicants to avoid or minimize the potential adverse effects of the water intake structure, the thermal discharge from the plant, placing fill in wetlands, or the loss of important biological resources.

CW/SCJ-Ap.226.

The EIS also does not include sufficient information on once through technology. WEC had not submitted DNR-required studies to evaluate impacts on aquatic organisms. *See* Section III.B.4.c, below. DNR's water witness testified that "there has not been sufficient scientific discussion of the potential impacts of the proposed design on impingement and entrainment of Lake Michigan organisms." PSC-R.157 at 4465:22-24.

This issue does not require the Court to second-guess any aspect of the analysis of aquatic impacts in the EIS. The EIS violates WEPA for its acknowledged failure to perform required analyses of alternatives and potential mitigation.

3. The EIS Did Not Analyze Alternatives to the OCPP Site

Although there may be advantages to the OCPP site from WEC's perspective, there are a number of disadvantages: (i) an enormous amount of costly and polluting earth-moving work to destroy the bluff on the property and dump the rock and dirt in a seven-acre area of Lake Michigan;

(ii) destruction and use of a primary environmental corridor;

(iii) destruction and use of a migratory bird corridor (birds migrate by following the shoreline); (iv) cumulative air quality impacts on local residents, who would be forced to inhale emissions from both the new and existing coal-fired units; (v) concentration of a substantial percentage of WEC's generating capacity in one location, increasing risks if this location were to suffer a natural or man-made calamity; (vi) substantial necessary upgrading of high voltage transmission lines; (vii) damage to numerous wetlands on the property; and (viii) adverse impacts from coal-laden trains running through downtown Racine and other neighborhoods with at-grade crossings. PSC-R.119, vol.1 at 209, 217, 247, 259-60, 265, 400-01; PSC-R.157 at 4057-63. Yet the EIS fails to include any analysis of alternative sites, providing no basis for the agencies or public to determine whether the OCPP site is a suitable location for this project, compared to alternative sites.

PSC's enabling legislation and regulations require consideration of alternative locations, including at least two proposed sites. Wis. Stat. § 196.491(3)(d); sec. PSC 111.53(1)(e), Wis. Adm. Code. DNR regulations require a "rigorous" evaluation of "all reasonable alternatives." Sec. NR 150.22(2)(e), Wis. Adm. Code. Case law also requires that an EIS consider alternative sites. *See* Village of Palatine v. U.S. Postal Service, 742 F.Supp. 1377, 1392 (N.D. Ill. 1990); Citizens Advisory Committee v.

U.S. Dept. of Justice, 197 F.Supp.2d 226, 244 (W.D.Pa. 2001); NRDC v. Callaway, 524 F.2d 79, 93 n. 12 (2nd Cir. 1975); *cf.* Milwaukee Brewers, 130 Wis.2d at 73-74 (no need to consider alternative sites where legislature designated specific site).

In this case, review of alternative sites would have allowed the agencies to comparatively evaluate and mitigate impacts, such as the destruction of lakeshore bluff, primary environmental corridor, migratory bird corridor, wetlands and lakebed. The agencies would also be able to compare costs and impacts associated with the substantial, necessary transmission line improvements. The EIS contains none of the comparative information needed to perform those analyses. These deficiencies are legal error.

4. The EIS Fails to Present Sufficient Information About ERGS' Adverse Impacts

In addition to PSC ignoring significant cost of adverse project impacts in its economic analysis under the public interest standard, the EIS fails to provide essential information about adverse impacts. Without this information it is impossible to determine whether the project is in the public interest or what alternatives and mitigation measures are available.

a. Health Impacts of ERGS' Air Pollution

An enduring effect of ERGS would be its adverse impact on public health. SCJ/CW witnesses – nationally respected scientists from the

Harvard School of Public Health, who used a methodology that is used by U.S. EPA and has been published in peer-reviewed scientific journals – estimated that ERGS' air pollution would kill 1,200 people during the first 45 years of its operation, and lead to 16,000 emergency room visits and 87,000 asthma attacks, resulting in more than $3.3 billion in social costs on a present value basis. PSC-R.157 at 4040, 4044, 4054-55. WEC's witnesses, who used an unpublished methodology that had not been endorsed by any governmental agency or subject to peer review, offered an alternative value of $1.8-6 million *per year* in ERGS-induced premature deaths and illness in Wisconsin alone. Id. at 2486.

The EIS fails to discuss these health effects from the tens of thousands of tons of pollutants that would be emitted by this facility. This flaw alone demonstrates that the EIS is inadequate.

b. Impacts of ERGS-Related Transmission Lines

ERGS is co-located with the existing OCPP and therefore concentrates about half of WEPCO's base-load generation at one site. Id. at 633-34. The extent to which this would strain the high voltage transmission system, and require upgrades that would not be required if the new generation were located elsewhere, was never analyzed in the EIS. The transmission company's witness testified that even the limited transmission-related information in the EIS is inaccurate. PSC-R.157 at 3108:5-12.

The EIS also violated WEPA because it failed to analyze the environmental impacts of the massive construction work that will be required to transmit the electricity generated by ERGS. This work would involve extensive new high voltage transmission lines, substations and other transmission facilities. PSC-R.119 at 129-31. PSC was required to consider the potential impacts of these transmission upgrades in the EIS, since the upgrades and ERGS are "connected actions." 40 C.F.R. § 1508.25(a)(1) ("[c]onnected actions . . . should be discussed in the same impact statement").

Actions are deemed connected where one action is dependent on the occurrence of the other. *See, e.g.*, Thomas v. Peterson, 753 F.2d 754, 758 (9th Cir. 1985) (construction of road and sale of timber "connected" where timber sales could not proceed without road and road would not be built but for timber sales); Sierra Club v. U.S. Dept. of Energy, 255 F. Supp.2d 1177, 1184 (D.Colo. 2002) (road to mine and mine required to be studied together); Sierra Club v. Dombeck, 161 F. Supp.2d 1052, 1067 (D.Ariz. 2001) (development project and system to supply water to project held "connected actions").

ERGS and its transmission upgrades are interdependent, "connected" actions that the agencies were required to consider together in the EIS. The transmission upgrades are necessary to ensure the operation of ERGS and would not be built without ERGS. The two actions are

connected because they "cannot or will not proceed unless other actions are taken previously or simultaneously ...." 40 C.F.R. § 1508.25(a)(1).

The EIS estimated ERGS-related transmission line costs for the SCPC units to be $164 million. PSC-R.119 at 15. The transmission upgrades may result in a number of adverse environmental impacts, including disturbance of wetlands, construction impacts, and visual impacts, none of which is analyzed in the EIS. PSC's failure to evaluate this substantial project component renders the EIS inadequate and further biases its analysis in favor of ERGS over alternatives that would have lesser transmission-related impacts.

c. Impacts to Wetlands and Lake Michigan and Mitigating Measures

WEC acknowledged at the hearing that it had just submitted a "conceptual" wetland mitigation plan, which was not included in the EIS. PSC-R.157 at 1536; PSC-R.158, Exh.106. DNR's wetlands witness testified that WEC provided inconsistent information on wetland delineation and acreage, and she acknowledged that the wetlands information in the EIS is inaccurate. PSC-R.157 at 4419-20. No analysis was performed to disclose the adverse impacts of creating a seven-acre fill in Lake Michigan, expropriating sensitive shoreline to dump material

removed from the bluff and materials storage for the power plant. PSC-R.119 at 209.

The EIS itself acknowledges that a "comprehensive evaluation of the environmental effects of the new site layout brought forward by the applicant has not been completed." CW/SCJ-Ap.226. Since this "new site layout" is the one that PSC approved, the EIS on its face acknowledges that it is incomplete. The EIS does not provide the information required for the reviewing agencies to determine the extent of the project's damage to wetlands and the Lake Michigan shoreline or the availability of mitigating measures to address these impacts.

The EIS contains scant information about the aquatic impacts associated with ERGS' proposed once through cooling water system that would withdraw over 2.5 billion gallons of Lake Michigan water per day. DNR had requested two years of data to evaluate this impact. EIS, vol. 1, p. 206; Tr. 1691-92. Although ERGS was conceived in 1999 and publicly announced in 2000, WEC had not completed the data collection that it acknowledged to be necessary to evaluate these impacts for evaluation in the EIS or even at the hearing. PSC-R.119at 206-08; PSC-R.157 at 1692. DNR's witness testified that the effects of the intake structure cannot be identified until further study is completed. Id. at 4465:19-4466:6.

5. The Responsiveness Summary Is Grossly Inadequate

The EIS is required to respond to public comments submitted on the DEIS. 40 C.F.R. § 1502.9(b). PSC and DNR ignored or provided unreasonable responses to most of the significant comments on the DEIS.

The U.S. Army Corps of Engineers wrote:

> The EIS appears to be incomplete in several resource areas, and does not address mitigation in the majority of the resource areas. Consideration and incorporation of appropriate mitigation should be an integral part of the proposed project.

PSC-R.119, vol.3. The EIS Responsiveness Summary failed to address this comment, and the identified inadequacies were not corrected.

Numerous commenters requested a comparative analysis of health impacts of the air pollution from ERGS and alternatives to ERGS. The Responsiveness Summary merely concedes that the air pollution from "coal-fired power plants" is harmful to human health, and that compliance with regulatory standards does not imply that residents will not be harmed. PSC-R.119, vol.3, p.20. That concession is no substitute for studying health effects. The agencies were required to document and compare the extent of the health effects from the SCPC units to the health effect of alternatives. Only then could they make an intelligent choice among alternatives with knowledge of the public health impacts of that choice.

Numerous commenters suggested that the EIS analyze the potential impacts of cooling towers or other alternatives to once-through cooling. The Responsiveness Summary states that no such analysis will be

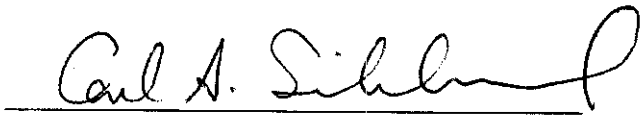
performed because "DNR does not have the authority to require closed-cycle cooling for this project." PSC-R.119, vol.3, p.34. This response is arbitrary and inadequate for two reasons. First, DNR's premise is erroneous: ERGS is required to use the "best technology available for minimizing adverse environmental impacts." 33 U.S.C. § 1326(b); Wis. Stat. § 283.31(6). One cannot determine whether closed-cycle cooling is available if it is never studied. Second, PSC is obligated to impose conditions on the project necessary to protect the public interest. The failure to develop this information prevented PSC from considering whether such alternatives should have been required to protect the public interest in Lake Michigan's ecology.

CONCLUSION

S.C. Johnson and Clean Wisconsin respectfully request that the Court reverse that portion of the Circuit Court's decision that affirmed the validity of the need and public interest determinations in the CPCN decision and the EIS, and reverse, vacate and remand both the CPCN and EIS.

Dated this 4th day of February, 2005.

WICKWIRE GAVIN, P.C.



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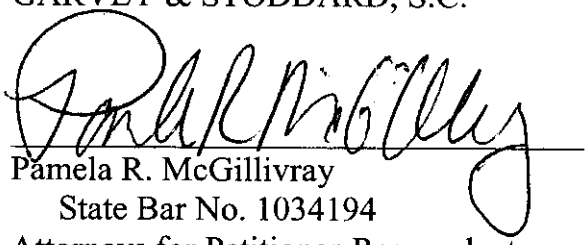

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CERTIFICATION

I certify that this Brief And Appendix of Petitioners-Respondents-Cross-Appellants-Cross-Respondents Clean Wisconsin, Inc., and S.C. Johnson & Son, Inc. conforms to the rules contained in Wis. Stat. §§ 809.19(8) and 809.62(4), for respondent's response using a proportional serif font: Minimum printing resolution of 200 dots per inch, 13 point body text, 11 point for quotes and footnotes, leading of minimum 2 points, maximum 60 characters per full line of body text. The length of the brief is 10,788 words.

Dated this 4th day of February, 2005.

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STATE OF WISCONSIN
SUPREME COURT

FILED
FEB 0 4 2005
Clerk of Supreme Court
Madison, WI

Clean Wisconsin, Inc. p/k/a Wisconsin's
Environmental Decade Institute, Inc.,
S.C. Johnson & Son, Inc., and Calpine Corporation,
Petitioners–Respondents–
Cross-Appellants–Cross-Respondents,

Town of Caledonia,
Petitioner–Cross-Respondent,

v.

Appeal No. 04-3179

Public Service Commission of
Wisconsin and Wisconsin Department of
Natural Resources,
Respondents–Co-Appellants–
Cross-Respondents,

Wisconsin Electric Power Company,
W.E. Power, LLC and Wisconsin Energy
Corporation,
Interested Parties–Appellants–
Cross-Respondents,

Dairyland Power Cooperative,
Interested Party–Cross-Respondent,

Madison Gas & Electric Company and
Wisconsin Public Power, Inc.,
Interested Parties–Co-Appellants–
Cross-Respondents,

(Caption continued on following pages)

**APPENDIX OF PETITIONERS-RESPONDENTS-
CROSS-APPELLANTS-CROSS-RESPONDENTS
CLEAN WISCONSIN, INC. AND S. C. JOHNSON & SON, INC.**

City of Oak Creek,
Interested Party–Respondent–
Cross-Appellant

Robert H. Owen,
Interested Party–Respondent–
Cross-Respondent.

Calpine Corporation,
Petitioner,

v.

Public Service Commission of Wisconsin, and
Wisconsin Department of Natural Resources,
Respondents,

Wisconsin Electric Power Company, Wisconsin
Energy Corporation, W.E. Power, LLC, Dairyland
Power Cooperative, Madison Gas & Electric
Company, Robert H. Owen, Jr., and City of Oak
Creek,
Interested Parties.

Clean Wisconsin, Inc., p/k/a Wisconsin's
Environmental Decade Institute, Inc., and S.C.
Johnson & Son, Inc.,
Petitioners,

v.

Wisconsin Department of Natural Resources,
Respondent,

Wisconsin Public Power, Inc., City of Oak Creek,
Dairyland Power Cooperative, Madison Gas &
Electric Company, Wisconsin Electric Power
Company, Wisconsin Energy Corporation
and W.E. Power, LLC,
Interested Parties.

Calpine Corporation,
Petitioner,

v.

Wisconsin Department of Natural Resources,
Respondent,

City of Oak Creek, Dairyland Power Cooperative, Madison Gas & Electric Company, Wisconsin Public Power, Wisconsin Electric Power Company, Wisconsin Energy Corporation, and W.E. Power, LLC,
Interested Parties.

City of Oak Creek,
Petitioner,

v.

Public Service Commission of Wisconsin,
Respondent.

Town of Caledonia,
Petitioner,

v.

Public Service Commission of Wisconsin,
Respondent,

Wisconsin Electric Power Company, Wisconsin Energy Corporation, W.E. Power, LLC, Dairyland Power Cooperative, Madison Gas & Electric Company, Robert H. Owen, Jr., and Wisconsin Public Power, Inc.,
Interested Parties.

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APPENDIX

Title	Record No.	Pages
PSC CPCN Decision (November 10, 2003)	R. 18 (03-CV-3478), PSC-R. 150	101-165
DNR Decision on WEPA Compliance (December 17, 2003)	R. 1, Exh. A (04-CV-133)	166-169
Circuit Court Order on Judicial Review (November 29, 2004)	R. 84 (03-CV-3478)	170-223
Selected Pages of Final Environmental Impact Statement (July 2003)	R. 18, (03-CV-3478) PSC-R. 119	224-242

DATE MAILED

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BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Three Large Electric Generation Facilities, the Elm Road Generating Station, and Associated High Voltage Transmission Interconnection Facilities to be Located in Milwaukee and Racine Counties	05-CE-130
Application for Approval of Affiliated Interest Agreements Between Wisconsin Electric Power Company and Elm Road Generating Station	05-AE-118

Introduction

This is the final decision regarding Part II of the proposal filed by Wisconsin Energy Corporation (WEC) and several of its subsidiaries to construct new electric generating plants, which the applicants have named Power the Future (PTF). The Commission received the initial application for the approvals needed to build PTF on January 31, 2002.

In its original form, the PTF application proposed to construct a total of five new generating plants: two natural gas-fired units at Port Washington, to replace the existing coal-fired plants there, and three new coal-fired units added to the existing Oak Creek Power Plant (OCPP) site. The application also includes other components, in addition to the proposals to construct new generating stations. It commits WEC to further reduce environmental emissions by upgrading its existing fleet of generating plants, to work in a collaborative group for the purpose of reaching a target of 5 percent of energy derived from renewable resources by

the year 2012, to pursue carbon dioxide mitigation projects that are energy-focused and Wisconsin-focused, and to increase its existing investment in energy conservation.[1]

The Commission separated WEC's request for authority to construct new natural gas-fired units at Port Washington, known as the Port Washington Generating Station (PWGS), from its request to construct new coal-fired units at Oak Creek. On December 19, 2002, the Commission issued a Certificate of Public Convenience and Necessity (CPCN), approving Part I of PTF by granting authority to construct PWGS; on February 27, 2003, the Commission issued a subsequent order reopening and amending its initial decision.

WEC is proposing to finance each of these new generating units using leased generation contracts. Leased generation is governed by a law the Wisconsin Legislature enacted as part of 2001 Wis. Act 16, which took effect on September 1, 2001. Leased generation contracts are affiliated interest transactions and are regulated under Wis. Stat. § 196.52(9). WEC offered proposed leases for each generating unit, consisting of a Facility Lease, a Ground Lease and a Ground Sublease, and the Commission approved leased generation contracts to finance Part I of PTF. The leased generation contracts now being offered for Part II are based upon these approved contracts.

On November 15, 2002, the Commission issued a determination that WEC's CPCN application for Part II of the PTF project was complete. This triggered the 180-day period under

[1] Subject to regulatory review and provision for cost recovery, the PTF application commits WEC to spending $1.3 billion over ten years to reduce emissions from its existing units, $6 million annually for ten years on the pursuit of additional renewable resources, $10 million over five years on carbon dioxide mitigation projects, and $20 million over ten years for additional energy conservation activities. (PTF Application, pp. 4-5, 10-11; Vol. 1 Enclosure 1, pp. 2 and 11.)

which the Commission is required to conduct its review of this CPCN application regarding Part II of PTF. The Commission extended this period to 360 days by petitioning the Dane County Circuit Court for additional review and received the necessary order, pursuant to Wis. Stat. § 196.491(3)(g)1, on April 29, 2003. During this period Commission staff prepared an Environmental Impact Statement (EIS) for this project in collaboration with staff of the Wisconsin Department of Natural Resources (DNR), which was subsequently introduced into the record at hearing.

Part II of PTF is comprised of two Super Critical Pulverized Coal units (SCPC 1 and SCPC 2), each sized at 615 megawatts (MW), which WEC proposes to place in service in the years 2008 and 2009, and an Integrated Gasification Combined Cycle (IGCC) unit, sized at 600 MW and projected to be on-line in the year 2011.[2] Bituminous coal would be the principal fuel for each of the three units. WEC describes these three units as its Elm Road Generating Station (ERGS). Calpine Corporation and LS Power, Inc., both independent power producers (IPPs), entered the case in opposition to the ERGS project, arguing that independent power sources could meet the current energy and capacity needs of Wisconsin Electric Power Company (WEPCO) more economically than this leased generation project that WEC has proposed. S.C. Johnson & Son, Inc. also entered as a party in opposition; it alleges that ERGS is not the least-cost alternative for reliable electric service and is not in the public interest. All parties to the docket are listed in Appendix A.

[2] Both Wisconsin Public Power, Incorporated (WPPI) and Madison Gas & Electric Company (MGE) have options to acquire ownership interests of 50 MW in SCPC 1 and in SCPC 2. If these options are exercised, the capacity available to WEPCO from each SCPC unit would be 515 MW.

The Commission held 11 days of hearings before Administrative Law Judge David Whitcomb, commencing August 25, 2003, and continuing through September 12, 2003. At these hearings, witnesses with technical and professional expertise testified on behalf of the parties, Commission staff and DNR staff. In addition, in the cities of Oak Creek and Racine, Wisconsin, the Commission held three more days of hearings for the public on September 17 to 19, 2003. All those who appeared and testified are listed in the Commission's files. The parties then submitted briefs to the Commission. At its open meeting on October 29, 2003, the Commission considered this matter in oral deliberations.

This Final Decision approves the PTF application in part, denies it in part, and modifies it. The Final Decision APPROVES that portion of the PTF application regarding construction of two SCPC units at the North Site—CUP alternative, subject to conditions, but DENIES that portion regarding construction of the IGCC unit. The Commission APPROVES the construction of the first SCPC unit with an in-service date of 2009, and the second SCPC unit with an in-service date of 2010, rather than the dates of 2008 and 2009 that the applicants had proposed. The Commission APPROVES WEC's use of leased generation contracts, as modified by this Final Decision, to procure coal-fired generation through non-utility affiliates for its electric utility, WEPCO.

Findings of Fact

1. Energy conservation, renewable resources, or other energy priorities listed in Wis. Stat. §§ 1.12 and 196.025, or their combination, are not cost-effective or technically feasible alternatives to the projects proposed in this docket.

2. TheWEPCO's demand forecast demonstrates a need for new baseload generation within the next decade.

3. Part II of PTF, consisting of the two SCPC units and WEC's other commitments to secure additional energy conservation and renewable resources, satisfies the reasonable needs of the public for an adequate supply of electric energy.

4. The public convenience and necessity require WEC to construct the two SCPC units, subject to the conditions specified in this final decision.

5. The two SCPC units are reasonable and in the public interest after considering alternative sources of supply, individual hardships, engineering, economic, safety, reliability, and environmental factors. The IGCC unit does not meet this standard.

6. The North Site—CUP alternative is in the public interest after considering alternative locations, individual hardships, engineering, economic, safety, reliability, and environmental factors.

7. The two SCPC units will not have undue adverse impact on other environmental values.

8. The two SCPC units will not unreasonably interfere with orderly land use and development plans for the area involved.

9. The two SCPC units will not have a material adverse impact on competition in the Wisconsin Upper Michigan System (WUMS) wholesale electric service market.

10. Leased generation contracts are a reasonable means of financing the two SCPC units.

11. The leases proposed in this docket, as modified by this Final Decision, are reasonable and in the public interest.

12. The conditions attached to the CPCN for the two SCPC units, as described in this Final Decision, are reasonable.

13. Requiring that ERGS-SCPC 1 LLC commence construction of SCPC 1 within 12 months after it receives all necessary government permits and approvals is reasonable, so the generating plant will satisfy the reasonable needs of the public for electric energy in a timely manner. Requiring that the applicants file an updated demand and energy forecast and updated EGEAS modeling[3] before commencing construction on SCPC 2 is reasonable.

Conclusions of Law

The Commission has jurisdiction under Wis. Stat. §§ 1.11, 1.12, 196.02, 196.025, 196.395, 196.40, 196.49, 196.491, 196.52, and 196.795 to issue certificates authorizing W.E. Power LLC, through its subsidiaries ERGS-SCPC 1 LLC and ERGS-SCPC 2 LLC, to construct and place in operation two 615 MW SCPC electric generating units at the site described below, and to impose the conditions specified in this Final Decision.

Opinion

This proceeding involves the second half of WEC's proposal to meet forecasted electric demand of its electric utility, WEPCO, by constructing large-scale coal-fired generating facilities

[3] "EGEAS" is the Electric Generation Expansion Analysis System, a complex interactive computer model developed by the Electric Power Research Institute. Over the past decade, the Commission has consistently used and required utilities to use EGEAS to evaluate electric generation expansion plans for cost-effectiveness and optimality.

through an affiliated entity. The proposed baseload[4] generation facilities, if the applicants receive all regulatory approvals, would represent the largest energy project ever constructed in Wisconsin. Wisconsin's Leased Generation Law, Wis. Stat. § 196.52(9), permits load-serving entities to lease generating resources from an affiliated entity, subject to the approval of the Commission. As with Part I, the Commission has consolidated WEC's application for construction authority with its application for Commission approval of the proposed leases as affiliated interest transactions. In these consolidated dockets the Commission has balanced its responsibilities under the Leased Generation Law, as well as its other obligations under the power plant siting law and the affiliated interest statute, with its paramount obligation to the consuming public.

Project Description

WEC has created separate limited liability corporations for the purpose of constructing and owning the generating units that comprise ERGS. WEC also created W.E. Power LLC, a non-utility affiliate within the WEC holding company that would have majority ownership of these limited liability corporations.

ERGS-SCPC 1 LLC and ERGS-SCPC 2 LLC would build the two SCPC units, for operation as baseload facilities. The design would also allow for cycling, to accommodate load changes required by the electrical system demand. SCPC technology involves heating water to a temperature and pressure that exceeds its critical point, which is 705 degrees Fahrenheit at a pressure above 3,200 pounds per square inch absolute. The steam then exits the steam generator

[4] A utility's "baseload" energy demand is driven by high load factor customer needs, i.e., electric uses such as commercial lighting, refrigeration, and industrial loads that run constantly. Generally, electric generating plants that are cost-effective when running at least 70 percent of the time are considered "baseload" units.

and moves to the high-pressure turbine, to which an electric generator is attached. Pulverized coal and combustion air mix together, flowing to the coal nozzles at the various furnace elevations. The hot combustion products heat the water to supercritical conditions in the steam generator, then move through the selective catalytic reduction system, preheater, fabric filter, induced draft fans, flue gas desulfurization system, and stack. The higher temperatures and pressures achieved in a supercritical steam generator increase the energy content of the fluid delivered to the turbines, which improves efficiency, as would the use of cold Lake Michigan water in the condenser. In general, the SCPC units would convert approximately 38 to 39 percent of their fuel's heat content into electricity. Greater plant efficiency means less fuel burned per unit of electrical output. The expected life of the SCPC plants is 40 to 45 years.

The proposed IGCC unit would use a process that breaks down coal into its basic constituents and obtains a synthetic gas (syngas) for use in two combustion turbines. The gas conditioning process enables the separation of any pollutants from the syngas prior to its use as fuel. If the quality of the syngas is not adequate for use in the combustion turbines, it would be ignited in a stack, with a resulting flare approximately 80 feet high. During normal startups, syngas would also be flared for a few hours.

An IGCC facility would employ industrial frame, advanced technology combustion turbines. Hot exhaust gases from the combustion turbines would also be used to produce steam, which would be expanded in a steam turbine to drive an electric generator and produce electricity. An IGCC plant would operate for the majority of the year as a baseload facility, with an expected life span of 40 years.

Trains deliver coal to the existing OCPP units and would also be used to deliver coal to the new units. The existing on-site rail facilities are over 35 years old, and their continued use for both OCPP and ERGS would exacerbate off-site impacts. The rail unloading facilities lack a complete rail loop, which increases the number of movements needed to get a train into and out of the rail yard and increases the time required to unload a train. Existing track allows room for only one coal train to park on-site, so that if one train is present when another arrives, the second must wait off-site. The applicants propose to modernize the rail unloading facilities by adding track to create an on-site rail loop, adding another rail spur, installing a new rail car positioner (indexer) and dumper, moving the location of repair-in-place track, and making other needed changes. The new rail facilities would allow two full and two empty trains to park on WEPCO's property and would shorten the current unloading time of approximately 16 hours to five or six hours. The proposed rail system improvements would also mitigate the off-site effects associated with existing and future coal delivery.

WEC proposes to construct a once-through cooling system for ERGS, with an intake structure resting on the bed of Lake Michigan and a transport system to move the lake water from the intake structure to the generating units on shore. The intake structure would consist of four timber cribs, located about 9,000 feet from shore and 45 feet below the water surface. Water would be drawn into the cribs at a velocity of about one foot per second. Each crib would be connected via a 14-foot diameter pipe to the water transport system, with the water traveling through a 32-foot diameter tunnel located about 200 feet below the bed of Lake Michigan to the shoreline, where it would be pumped upward and through screening facilities before entering the plant. Water use for each SCPC unit would be about 700 million gallons per day. The

cumulative water use for the existing OCPP Units 5-8 and the two new SCPC units would be about 2.56 billion gallons of water per day.

For its water discharge structure, WEC proposes to build a seal well with concrete retaining walls and a rock-lined dredged channel. The channel, which would control erosion and reduce the velocity of the discharged water, would be approximately 200 feet wide and extend approximately 750 feet into the lake. To create the discharge channel, about 10,000 to 15,000 cubic yards of material would need to be dredged from the bed of Lake Michigan. The proposed discharge structure for the North Site-CUP alternative would be located north of the existing coal dock.

The new generating units of ERGS would require step-up unit transformers adjacent to the buildings that house the generators. Electric generators produce power at approximately 20 kV, which is then raised to 345 kV so it can be moved efficiently over the transmission network. The American Transmission Company (ATC) has conducted several studies to determine the cost of interconnecting ERGS to the transmission system and the cost of upgrading the transmission system so it can transmit power from ERGS. It completed a partial transmission restudy of ERGS on July 25, 2003, estimating the transmission costs associated with installing SCPC 1 and SCPC 2 at $65.5 million and $100.5 million, respectively. Determining transmission system requirements for ERGS, though, depends upon the amount of forecasted generation in southeast Wisconsin and northern Illinois. Recently, several proposed generating units in the area have dropped from ATC's queue and will not be operating in the same time frame as the ERGS units. This will require ATC to restudy the interconnection needs, to minimize the amount of transmission facilities installed and recalculate the costs involved. This

analysis is quite complex, depends upon the site chosen, and requires several months of sequential computer model runs.

ATC's preliminary Facility Study Report indicated that the construction of SCPC 1 would require changes in the 345 kV, 230 kV, and 138 kV substations, while the construction of SCPC 2 would require further upgrades to the existing transmission lines and substations in the area. Some of the possible line and associated substation work includes Oak Creek–Brookdale 345 kV, Brookdale–Granville 345 kV, Oak Creek-St. Martins #2 138 kV, Butler-Tamarack 138 kV, and Bluemound-Butler 138 kV; most of this transmission work would be on existing rights-of-way.

The applicants proposed four site alternatives, all located on the OCPP property. The existing north OCPP building, which originally housed OCPP Units 1-4, is now empty and serves only to support the existing coal handling facilities. WEC intends to dismantle and dispose of this building. The remaining OCPP Units 5-8 would continue to operate in the south OCPP building, though Units 5 and 6 may be retired as part of the PTF plans.

Three of the sites were originally proposed in the CPCN application; these have been designated the North Site, the South Site, and the South Site—Exp. The North Site is in the city of Oak Creek in Milwaukee County at the east end of Elm Road, north of the existing OCPP units. The South Site would place the generating units on a portion of the OCPP property south of existing Units 5-8, in the town of Caledonia in Racine County. The South Site—Exp is a variation on the South Site, placing the SCPC units in the same location but with the IGCC facility on a federal/state-owned shooting range (land that WEC would need to purchase).

In May 2003, the applicants and the city of Oak Creek negotiated a Conditional Use Permit (CUP), making some changes to the original North Site. The North Site—CUP alternative would move the coal handling facilities and coal storage piles south about 1,500 feet, to a location inside the existing OCPP rail loop. This would require relocation of the existing 138/345 kV substations, which are currently within that rail loop. These substations could be separated and relocated on site to avoid the new rail and coal facilities, connect the new SCPC units at 345 kV, and facilitate transmission ROW exits to the west.

Delivery of coal to the plant site could block vehicles for significant periods of time at the Seven Mile Road and Six Mile Road crossings of the Union Pacific rail line. To eliminate this impact the applicants would pay for road improvements to separate or eliminate at-grade rail crossings at these roads. In addition, the town of Caledonia is concerned about lengthy blockages of vehicular traffic at Four Mile Road, due to existing train deliveries to OCPP. The applicants maintain that their improvements to on-site rail facilities should eliminate this problem, allowing trains to cross Four Mile Road at speed. It is reasonable to require that the applicants monitor the effect of train deliveries on vehicular traffic at this road, and address valid concerns the town may have about road blockage. Any changes at the rail crossings ultimately require the approval of the Office of the Commissioner of Railroads, which also has the authority to determine the nature of the changes. Local government and the Union Pacific Railroad would own any new roads, tunnels, bridges, or other elements of approved crossing changes.

Reasonable Needs of the Public; Forecasting Capacity and Energy Demand

An important threshold determination the Commission must decide is whether or not there is a need for the generation facilities proposed by WEC and its subsidiaries. Wisconsin's

Power Plant Siting Law requires that a proposed facility satisfy "the reasonable needs of the public for an adequate supply of electric energy" in order to receive a CPCN. Wis. Stat. § 196.491(3)(d)2. To justify the need and timing of the three units that comprise ERGS, WEC submitted WEPCO's forecast of growth in electric demand and energy over the next ten years and then provided optimal expansion plan results from the EGEAS computer model.

WEPCO forecasts that, between 2003 and 2012, total electric demand (including reserves and new wholesale sales) will grow 1,995 MW or 2.8 percent annually. Excluding new wholesale sales, the rate of retail electric demand growth would be 2.5 percent annually. Total electric energy for the same period is expected to grow 2.5 percent annually. These growth rates also incorporate WEPCO's existing energy efficiency and demand-side management (DSM) efforts, and assume that similar efforts will continue into the future. When used in the EGEAS model, these forecasts demonstrate a need for new baseload supply resources.

The Commission is not persuaded by the argument raised by certain parties concerning the reasonableness of WEPCO's capacity and energy needs. S.C. Johnson criticizes the demand and energy forecasts as too high and argues that they improperly include wholesale requirements load for WPPI and Municipal Electric Utilities of Wisconsin (MEUW), which WEPCO is not obligated to supply. The forecast growth rates are consistent with WEPCO's historical growth patterns and those adopted in the Port Washington order.[5] WEPCO's total demand has been growing 2.5 percent per year since 1997. In addition, WEPCO has a long-standing relationship supplying electric energy and power to wholesale municipal customers and this relationship will

[5] Final Decision, *Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Two Large Electric Generation Facilities the Port Washington Generating Station, and Associated High Voltage Transmission and Natural Gas Interconnection Facilities to be Located in Ozaukee County*, PSCW docket 05-CE-117.

continue. Commission staff reviewed WEPCO's forecasts in the EIS and considered them reasonable; the Commission agrees. For these reasons, the Commission concludes that WEPCO's demand forecast is reasonable.

Statutory Energy Priorities

Another important legal and policy issue this Commission must decide is whether or not there is enough energy conservation, renewable resources, or a cleaner burning fuel to cancel or delay the construction approvals sought for the SCPC units in this proceeding. State law provides guidance to the Commission in carrying out the state's energy policy. Our obligations are set forth in Wis. Stat. § 1.12.

Wis. Stat. § 1.12(4) establishes energy priorities for Wisconsin. The statute provides as follows:

> **1.12(4)** PRIORITIES. In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:
>
> (a) Energy conservation and efficiency.
> (b) Noncombustible renewable energy resources.
> (c) Combustible renewable energy resources.
> (d) Nonrenewable combustible energy resources, in the order listed.
> 1. Natural gas.
> 2. Oil or coal with a sulphur content of less than 1 percent.
> 3. All other carbon-based fuels.

In addition, Wis. Stat. § 196.025 declares that the Commission must implement these priorities in its energy-related decisions, to the extent "cost-effective, technically feasible and environmentally sound."

Several parties have suggested that the Commission, in construction cases involving a lower priority fuel source like coal, is obligated to select a higher priority fuel source

(e.g. natural gas) in order to fulfill its obligations under the Energy Priorities Law. S.C. Johnson asserts that it is not enough that ERGS be close in price to other higher priority options and that the applicants in the present proceeding must prove a "compelling reason" not to abide by the energy priorities described in Energy Priorities Law. Under this reasoning, the Commission would be obligated to select a higher priority fuel option unless the applicants have demonstrated that the proposed units at ERGS will be provided at a substantially lower cost than available higher energy priorities.

This Energy Priorities Law, however, is not a mandate to state agencies that must be mechanically applied to achieve a specific outcome. In the Prefatory Note to 1993 Wis. Act 414, which enacted this law, the Legislature declares that it "does not want to create inflexible mandates or deprive decision makers of the discretion needed to respond appropriately to the circumstances surrounding energy-related decisions." The Legislature explains that this law uses "a combination of directives and encouragement, while reserving substantial discretionary authority to the decision maker." Such discretion must be applied in this case, to harmonize the directives of the Energy Priorities Law with those of the Power Plant Siting Law. The statutory framework for analyzing whether approving a CPCN project would be in the public interest involves a number of factors, beyond those specified in the Energy Priorities Law. The Commission must consider the extent to which a proposal may cause individual hardships, as well as concerns about its engineering, economics, safety, reliability, environmental impacts, interference with local land use plans, and impact upon wholesale competition. The Commission is required to balance all of these competing elements, which frequently lead in different directions; no single primary factor is the measure of a CPCN project. Thus, the Commission is

responsible for harmonizing the Energy Priorities Law and the Power Plant Siting Law, in order to determine what is in the public interest.

WEPCO's forecast of future demand and energy needs already includes some level of energy efficiency, because WEPCO uses an econometric method that relies upon historical electric energy usage data. Incorporated in its historical usage data is the net impact of energy efficiency and the increased use of energy efficiency programs. While it is not possible to quantify how much energy efficiency is included in WEPCO's forecast, it assumes that the future impacts of energy efficiency will be similar to historical impacts. For this reason, in their testimony on energy efficiency potential, both the applicants and Commission staff attempted to estimate the amount of potential energy efficiency savings above that already included in the forecast, i.e., the "achievable potential."

The applicants' energy efficiency analysis consists of three scenarios, which reflect differing assumptions about the rate at which consumers will adopt energy efficiency measures based on the level of program intervention. The applicants' analysis suggests an achievable potential in 2008 for the Minimally Aggressive, Moderately Aggressive, and Highly Aggressive Scenarios of 23, 55, and 79 MW, respectively. The corresponding achievable potentials identified in 2016, the final year of the applicants' analysis, are 119, 172, and 186 MW. The applicants' energy efficiency witnesses testified that they are confident that, by 2008, over 50 MW of cost-effective energy efficiency will be achievable in WEPCO's service territory.

Commission staff also conducted an energy efficiency analysis. Commission staff calculated achievable energy efficiency potential in 2007, 2009, and 2011 of about 200, 400, and 600 MW, respectively. These are the upper bound of the range of estimates provided. The

estimates of energy efficiency potential provided by both the applicants and Commission staff have shortcomings related to the unknown amount of energy efficiency already included in WEPCO's forecast, restrictions on the measures included in the analysis, and the limited availability of current data on energy efficiency measures.

In the Commission's Port Washington order, the Commission highlighted the difficulty in attempting to substitute energy efficiency for needed intermediate load facilities. The Commission stated:

> The Commission lacks sufficient evidence on energy in this case on energy efficiency to make the judgment that energy efficiency gains—which will ultimately be in the hands of consumers and businesses—are either of a sufficient quantity or are demonstrably achievable such that they may serve as a substitute for traditional generation in a cost-effective way. The Commission's concern is that there is no way to dictate this type of behavior to consumers that it is both technically feasible and practically feasible to alleviate the need demonstrated in this proceeding. The testimony of the various parties indicates that it is not possible to evaluate all possible technologies and programs in order to ascertain their realizable potential as well as their accuracy.

The same reasoning is equally applicable in the present proceeding. The applicants' and Commission staff's estimates of achievable energy efficiency do not demonstrate that energy efficiency could reliably or cost-effectively serve to substitute, or postpone, the SCPC units. On the other hand, the record demonstrates that a moderate level of intervention in the energy efficiency market would produce at least 55 MW of cost-effective and technically feasible energy efficiency in WEPCO's service territory by 2008. As part of the PTF proposal, WEPCO has committed to spending $20 million over the next ten years to support energy efficiency activities. A key component to WEPCO's efforts is to work with other parties to support building code reforms that increase the energy efficiency of buildings. It is appropriate for WEPCO to implement energy efficiency programs to capture, at a minimum, this additional

55 MW of cost-effective energy efficiency by 2008 as identified by its consultants. Based on the consultants' estimate of a cost of about $60 million to capture this 55 MW, an additional commitment of dollars may be needed to capture this savings. Although WEPCO is now in a rate freeze, it can commence these energy efficiency programs without delay by using its conservation escrow. The associated expenditures will then be held for recovery in the utility's next rate proceeding. It is therefore reasonable for WEPCO to submit a plan to the Commission, by March 1, 2004, for capturing at least 55 MW of additional energy efficiency.

(Chairperson Bridge dissents and would capture at least 100 MW of additional energy efficiency.)

After energy conservation, the state Energy Priorities Law favors renewable resources. The two forms of renewable generation most likely to be cost-effective during the forecast period are wind and biomass combustion, both of which were reviewed in the record.

As part of the PTF proposal, WEPCO has committed to a goal of obtaining 5 percent of its energy from renewable resources by 2011. This is more than twice the renewable portfolio standard set forth under Wis. Stat. § 196.378, which requires that at least 2.2 percent of each electric provider's retail energy must be from renewable resources by this date. WEC has also declared its intent to spend up to $6 million per year for ten years on emerging technologies and activities, to encourage the development of renewable resources.

WEPCO has taken steps to meet its 5 percent goal by issuing two requests for proposals (RFPs). The first RFP was issued on December 18, 2002, for up to 200 MW of wind power capacity. In July 2003, the utility selected and signed power purchase agreements with three wind power projects having a total capacity of 214 MW. WEPCO issued the second RFP on

August 14, 2003, for 25 MW of biomass. The biomass proposals must be submitted to the utility by November 26, 2003.

The Commission does not believe that renewable resources are either cost-effective or technically feasible to meet WEPCO's baseload needs. The EGEAS model runs in the record select large quantities of wind during the forecast period, but these runs rely upon an assumption that much of these wind resources can be sited in Lake Michigan, a new location for wind turbines that has never previously been used. Furthermore, these runs assume that the existing federal production tax credit for wind energy will remain in effect indefinitely. This federal production tax credit allows a wind facility owner to take a 1.8 cent/kWh tax credit for a period of ten years, but is now available only to projects that go online by December 31, 2003.

Whether Congress will extend this credit again, and for how long, are unknown. It would not be prudent to rely upon a wind production tax credit, which may or may not continue to exist, to meet WEPCO's major baseload needs. Furthermore, the EGEAS runs do not show that significant quantities of biomass would be cost-effective during the forecast period. For these reasons, the Commission finds that renewable resources are not cost-effective, technically feasible alternatives.

(Chairperson Bridge dissents, and would direct WEPCO to implement its plan to install 200 MW of new wind resources by 2005 and 50 MW by 2011.)

The Commission also considered whether gas-fired generation is a cost-effective or technically feasible alternative that could replace the need for new baseload generating facilities. No gas-fired, baseload facilities were presented as either a cost-effective or technically feasible alternative in this record.

A critical part of the Commission's ultimate preference for coal-fired generation over gas-fired generation rests heavily on the discretion accorded to the Commission under the Energy Priorities Law and the Power Plant Siting Law. More significantly, the crux of this case is really about the appropriate timing to construct new baseload generation. A fundamental policy choice presented in this case is whether the Commission believes that WEPCO needs to take steps now to address needs for new baseload facilities over the next decade. The Commission believes that the applicants should take those steps now to ensure these facilities are in service in 2009 and 2010.

The quantitative evidence presented in this proceeding supports the construction of new baseload generation to address WEPCO's needs. Almost every EGEAS run shows the need for new baseload generation over the next decade.[6] Commission staff did conduct an "integrated alternative" EGEAS analysis that examines the feasibility of combining renewable resources with natural gas, while also reflecting a more aggressive energy efficiency approach. This modeling run includes all of the energy priority generation alternatives, while also reducing WEPCO's base demand forecast in 2011 by 600 MW in order to incorporate Commission staff's energy efficiency potential estimate. Even this integrated alternative run shows that an SCPC unit is needed during the forecasting period.

These EGEAS runs demonstrate that the energy priority resources, alone or in combination, cannot replace the need for new baseload, coal-fired units to serve WEPCO. EGEAS also shows the extent to which these resources can delay the need for additional

[6] The only EGEAS model runs that do not confirm a need for additional baseload capacity by 2012 or sooner are conditioned upon either a permanent federal tax credit for wind or upon the taxation of carbon dioxide emissions. The former is unlikely, given the amount of wind that would be produced as a result of an unlimited tax credit, and the record is too speculative to reach conclusions regarding the latter.

baseload units, and the Commission has considered this evidence in order to reach its conclusion that the first SCPC unit should be placed in service in 2009, rather than 2008 as proposed by WEC.

(Chairperson Bridge dissents and would authorize in service dates of 2010 and 2012 for SCPC 1 and 2.)

There are qualitative factors set forth in Wis. Stat. § 196.491(3)(d) that also support the Commission's conclusion that new coal-fired generation is in the public interest and that ERGS is the most cost-effective and technically feasible way to address WEPCO's baseload needs. The Commission's decision to approve SCPC 1 and 2 balances its obligations under the Energy Priorities Law and the Power Plant Siting Law. It also reflects the Commision's policy judgment that while natural gas-fired generating facilities may be better suited for peak and intermediate load generation, coal-fired generation provides the most practical means to serve WEPCO's needs for baseload capacity. The evidence in this proceeding demonstrates the advantages of using cleaner burning coal technologies like SCPC as a baseload resource over gas-fired generation.

The need for new baseload generation is the critical factor that distinguishes this decision from the Port Washington order. The Port Washington order addressed WEPCO's need for new intermediate capacity. The Commission has not approved construction of any new baseload, coal-fired generation in Wisconsin since 1980. The evidence presented reflects the fact that WEPCO's existing fleet of baseload plants is aging. WEPCO's aging baseload resources may be asked to maintain or even increase their historical production as older facilities are retired over the next decade and transmission constraints within WUMS continue to limit the ability of

Wisconsin load-serving entities to import electricity. In fact, in Phase I of PTF the Commission approved the retirement of 320 MW of existing baseload, coal-fired generation at Port Washington. The record in this docket demonstrates that WEPCO needs more baseload capacity.

The Commission believes it is in the public interest to have more reliable baseload generation in place sooner rather than later as a matter of public policy. Concerns over electric reliability are paramount today and the Commission concurs with the policy arguments raised by the applicants, transmission-dependent utilities and consumer groups that it is better to err on the side of planning for more baseload needs sooner rather than later. Based on a number of qualitative and quantitative factors, the Commission believes that coal-fired generation provides the most cost-effective, prudent and practical means of meeting WEPCO's baseload capacity needs over the next decade.

The Commission also considered qualitative environmental factors in concluding that the construction of SCPC 1 and 2 is in the public interest under the Energy Priorities Law and the Power Plant Siting Law. The applicants' proposed units utilize the best available control technology (BACT) that are designed to substantially reduce the amount of emissions from WEPCO's existing fleet of baseload, intermediate and peaking units. The applicants will install BACT for several emissions, including SO_2, NO_X and PM_{10}. Taken together with the applicants' other regulatory consent decrees and voluntary emissions reductions agreements that were presented in this record, the evidence also demonstrates that total air emissions will decrease substantially from current levels after the completion of all PTF projects.

Finally, the Legislature stated that compliance with its Energy Priorities Law is based upon "the overall pattern of decisions made by each agency." Since the enactment of that law in 1994, the Commission has authorized the construction of over 6,900 MW of natural gas-fired generation and 20 MW of wind-fired generation that have addressed peaking and intermediate capacity needs. The total mix of energy sources that the Commission has approved over this time period shows a pattern of decisions for baseload, intermediate and peaking generating facilities that complies with the state's energy policy.

Reasonable Needs of the Public; EGEAS Modeling Results

As in other Commission decisions over the past decade, including Part I of PTF, this docket relies extensively upon computer expansion plan modeling of the electric system to identify cost-effective means of meeting a utility's future electric demand. Both Commission staff and the applicants relied on the EGEAS model in this proceeding as the primary tool to consider optimal resource options on a quantative basis for WEPCO's future electric demand. The EGEAS model is a quantitative tool requiring three forms of inputs: data about the utility's existing generating system; economic and engineering data for proposed new generating units; and a variety of base forecasts for demand and fuel prices. The existing unit data reflect the operational characteristics of the utility's current generating fleet. New unit data, in this docket, concern the ERGS facilities, Calpine's projects, wind and biomass renewable resources, and generic gas-fired combustion turbines and combined-cycle units. The EGEAS model then uses these data to calculate the overall system cost of adding different new units to the electric system, ultimately producing an optimal expansion plan for a minimum period of 30 years.

WEC submitted the results of its EGEAS runs and introduced them into the record. Commission staff then conducted its own independent review of this submission, examining the reasonableness of the company's data inputs and preparing its own EGEAS model runs. The results of this work appear in the EIS and in other evidence that Commission staff introduced in the record. Commission staff concluded that the forecasts WEC submitted with respect to base demand, energy, and fuel were not unreasonable. Commission staff also built into its EGEAS model the Commission's approval of the 545 MW, natural gas-fired Port Washington facilities in 2005 and 2008, as well as WEPCO's commitment to procure up to 250 MW of wind resources by 2012.

After considering the quantifiable evidence presented in the EGEAS runs, the key question in this docket is not whether additional coal-fired baseload generation should be approved, but when it should be installed. The principal difference among the various EGEAS runs concerns the proper timing of such an addition. Almost every sensitivity run of the EGEAS model, including runs that integrate more energy conservation and lower demand and energy growth, demonstrate a need for additional baseload capacity by 2012. Even those runs that support the use of additional gas-fired generation in the next few years also point to a baseload coal capacity need for WEPCO.

Commission staff performed one EGEAS model run using inputs it considered reasonable within a central range of estimates, which it described as its "base case," and modeled ten other EGEAS scenarios. These ten additional runs used different data inputs regarding factors such as WEPCO's demand forecast or the cost of fuel, in order to demonstrate the sensitivity of the model to changes in input assumptions and to depict the results when different

forecasting assumptions are used. Under Commission staff's modeling approach, the base EGEAS runs pick the SCPC units in 2011 and 2013. WEC argues, based upon both its EGEAS runs and its qualitative concerns, that the proper timing should be 2008 and 2009 for these units.

The EGEAS model is an engineering tool that depends upon a great deal of numerical data inputs, assumptions, and forecast uncertainty. Although its results are complex estimates, EGEAS is a useful tool—albeit one important quantitative tool —for the Commission to use in deciding the timing of the proposed generating facilities. Power supply planning is not a science. Determining what resource options will ensure low cost, reliability and environmental sensitivity for the consuming public requires the exercise of judgment and consideration of a wide variety of qualitative factors. The complexity of the assumptions built into this docket's EGEAS runs make it reasonable to select an outcome that is within the range of years proposed by Commission staff's and WEC's results. Given the requirement that it must maintain a reliable electric system, the Commission finds it prudent to construct these units slightly sooner, rather than later. For these reasons the Commission approves a timeline that places SCPC 1 in service in 2009 and places SCPC 2 in service in 2010.

Some parties suggest that the Commission should focus its attention in this docket solely upon the utility's near-term needs, arguing that looking more than five years into the future is too speculative. Baseload projects, however, can take five years to construct after all permits are received, and the process of preparing the project applications and receiving the required state and federal permits may add years to this timeline, especially if litigation follows. For this reason alone, when a utility's baseload needs are under consideration a more appropriate

forecasting period would be approximately ten years. The EGEAS runs show that new baseload SCPC units are cost-effective within this time period.

With respect to the proposed IGCC unit, EGEAS demonstrates that the proposed IGCC unit is never cost-effective and must be denied. The EGEAS model does not select an IGCC unit in any of its optimal runs. When the EGEAS model is forced to take an IGCC unit in 2011, the expansion plan becomes $349 million more expensive in present value terms. The EGEAS model strongly dismisses the IGCC unit as non-economic because of its higher construction cost. An IGCC would cost $1,579/kW to build, as compared to the lower construction cost of an SCPC unit ($1,400 to $1,440/kW). The guaranteed heat rate for the IGCC units, 9,500 Btu/kWh, is also inferior to the guaranteed 8,850 Btu/kWh heat rate for the SCPC units. IGCC technology, while promising, is still expensive and requires more maturation. For these reasons, the application to construct the IGCC unit is denied.

S.C. Johnson criticizes a number of modeling inputs, alleging that WEC is using improper engineering and fuel data for existing WEPCO units, an improper common systems cost allocation to the OCPP units, a demand and energy forecast that is too high, an improper addition of 200 MW of demand obligations for WPPI and MEUW, overly favorable engineering assumptions for the proposed SCPC units, and an improper early retirement of certain OCPP and Presque Isle units, while it is also ignoring the likely availability of additional energy efficiency efforts that would reduce the growth in electric demand. Commission staff evaluated these concerns, revised some of its assumptions, and prepared an EGEAS run to demonstrate how these changes would affect the optimal expansion plan. Because it includes additional energy efficiency to control electric demand, in addition to generation options, Commission staff

described this run as an "integrated alternative" that integrates the energy priorities described in Wis. Stat. §§ 1.12(4) and 196.025. For example, this EGEAS run includes lower forecast demand and energy growth rates of 1.8 to 2.1 percent per year, instead of the 2.5 to 2.9 percent per year growth rates in the base forecast. In addition, a total of 600 MW of demand is stripped away from the WEPCO base electric demand forecast, in 200 MW increments every two years through 2011, to reflect a more aggressive approach to energy conservation. This integrated alternative also includes a less favorable 4 percent forced outage rate for the SCPC units.

Even with the revised input assumptions of this integrated alternative, the EGEAS model results are not significantly different. EGEAS still selects an SCPC unit, by the year 2012. In addition, the record would not support such an aggressive estimate of cost-effective energy conservation, nor does the Commission agree that the 200 MW of demand for the WPPI and MEUW should be excluded. These are continuing power sales arrangements; for WPPI, the relationship with WEPCO has spanned decades. S.C. Johnson's concern that WEC has improperly allocated common system costs to OCPP Units 5 and 6 (which WEC is proposing to retire early) does have merit, but Commission staff also identified that such an allocation would underestimate the actual costs of the SCPC units and modified its EGEAS cost figures accordingly.

Effect on Wholesale Competition

Under Wis. Stat. § 196.491(3)(d)7., the Commission may issue a CPCN for a proposed facility only if it "will not have a material adverse impact on competition in the relevant wholesale electric service market." Such a determination requires an analysis of market power, which is the ability of a firm to charge prices for its product above what a competitive market

would allow. Since WEPCO has turned over operational control of its transmission system to ATC, the analysis need only focus on horizontal market power issues associated with the construction and operation of ERGS. Vertical market power issues associated with the combined operation of proposed facilities and the transmission system do not need review, given the existence of the Midwest Independent System Operator and its control over the ATC transmission system. The relevant wholesale electric service market is the area designated by the WUMS because this region is an electric "island system," a limited market due to transmission constraints in which a large electric generating firm can obtain leverage over the prices paid for electricity.

Capacity and energy from ERGS will be provided to WEPCO via the Facility Lease, at rates this Commission regulates through its review of the lease's economic terms and conditions. This regulation prevents any material adverse impact on competition in WUMS. As the market power study conducted for the Commission in 2000 by Tabors, Caramanis and Associates found, fixed price contracts (such as the proposed Facility Lease) mitigate market power. In addition, the Federal Energy Regulatory Commission only allows WEPCO to sell in WUMS at cost-based rates. For these reasons, the Commission finds that approval of ERGS will not create material adverse impacts on competition.

Calpine and LS Power, however, express concern that approval of ERGS would have a material adverse impact on competition by preventing the development of a competitive wholesale generation sector and hindering further electric industry restructuring in Wisconsin. However, WEPCO plans to continue contracting for power with independent power producers. Furthermore, a stand-alone generation company such as W.E. Power LLC could more easily be

divested by WEC than generating assets that are held within WEPCO, should a future legislature split generating plant assets away from utilities. For these reasons, the Commission does not concur that ERGS would materially harm competition.

Competing IPP Proposals

LS Power argues that WEC should have conducted an RFP for the capacity represented by ERGS. The Commission does not agree. In an earlier ruling on the applicants' request for a declaratory ruling on Part I of PTF, the Commission expressly declined the opportunity to mandate a formal RFP process.[7] No statute, rule or order of this Commission requires such a process, even when purchasing from an affiliate. WEC has already used competition in its selection of an engineering vendor for this project, Bechtel Corporation.

The company also indicates that it will continue to use competitively bid contracts and subcontracts for various aspects of ERGS. Such competition will directly benefit ratepayers. At hearing, Commission staff indicated that the major component of ERGS not facing a market test per se was with respect to project financing. However, the Commission's selection of competitive financing terms can substitute for such a test. The Commission has broad experience in setting such financing terms in rate proceedings and other recent construction cases. The record, particularly as established in the affiliated interest docket, contains ample evidence on what the appropriate financing terms and conditions should be.

In Part I of PTF, the Commission compared WEC's PWGS project against several bids filed by IPPs. In this proceeding, one IPP filed a competing bid for Commission consideration.

[7] *In the Matter of Wisconsin Electric Power Company's Request for Declaratory Ruling Approving a Proposed Plan to Increase Generation in Wisconsin*, Docket 6630-DR-104 (October 17, 2001).

On its own volition and as an alternative to the ERGS project, Calpine submitted a proposal to the Commission on February 19, 2003, offering to develop a 523 MW combined-cycle natural-gas-fired power plant in the town of Fond du Lac, Fond du Lac County, with similar additional 500 MW units located elsewhere in the state.[8] In addition, on June 20, 2003, Calpine updated its February 2003 proposal by including 260 MW of combined-cycle, natural gas-fired capacity from Calpine's recent purchase of the Fox Energy Center located in the town of Kaukauna. Construction on that project commenced in October 2003.[9] The Fox Energy Center is rated at 510 MW, with 250 MW of that capacity already under contract to Wisconsin Public Service Corporation. Calpine also submitted to the Commission a sample power purchase agreement, identifying and bidding relevant economic and engineering terms and conditions.[10]

Calpine's projects are natural gas-fired, combined-cycle units. Ordinarily, such units are considered intermediate load generating stations, with capacity factors up to 50 percent. Almost without exception, though, the EGEAS model runs in this record show that WEPCO needs additional baseload capacity within the next decade, in which generating stations must operate between 70 and 90 percent capacity factors. This is also the need for which the applicants have proposed the construction of ERGS.

Over a shorter forecasting period, WEPCO may need additional gas-fired, intermediate or peaking units. For example, some EGEAS runs identify a $57 million cost reduction if a 523 MW, combined-cycle Calpine plant is included in 2006 or 2007. Yet the EGEAS models demonstrate that approving such units would not replace the need for additional coal-fired,

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[8] In docket 9343-CE-100, the Commission issued a CPCN for Calpine's Fond du Lac Energy project on May 5, 2003.

[9] In docket 05-CE-115, the Commission issued a CPCN for the Fox Energy Center on November 7, 2002.

baseload generation. In addition, relying upon natural gas to meet WEPCO's baseload needs as well as its intermediate and peaking requirements would raise the risk of not properly diversifying the utility's fuel mix. Calpine may be an appropriate, cost-effective resource to meet intermediate load needs of WEPCO. However, this docket is focused upon the utility's baseload requirements and it is not necessary simultaneously to determine what intermediate facilities may be appropriate for WEPCO in the interim.

WPPI and MGE Ownership Options

Both WPPI and MGE have options to obtain 50 MW of ownership interests in each of the SCPC units. Historically, WPPI has met some of its baseload requirements through system power purchases from WEPCO, and MGE has acquired baseload capacity through joint ownership of power plants. As a result, the EGEAS model assumes that WEPCO only takes 515 MW from each of these 615 MW units. A decision by WPPI and MGE not to exercise their options would have significant financial consequences to WEPCO's ratepayers. For example, if the WPPI and MGE options are not exercised, WEC's modeling runs show total system costs increasing by approximately $80 million. The record indicates that WPPI and MGE do intend to acquire ownership, so the Commission finds it reasonable to authorize construction of the SCPC units at 615 MW. If WPPI or MGE fails to do so within nine months after the date when the Facility Lease becomes final, however, WEC must return to the Commission and provide a plan that eliminates the risk of WEPCO ratepayers acquiring and paying for too much capacity. One

[10] Calpine filed its power purchase agreement as a confidential document, due to the trade secret nature of its terms and conditions.

means of protecting ratepayers that WEC can consider is the sale of these ownership shares to another entity.

Cost of Construction; Approved Amounts

In approving construction of the SCPC units for 2009 and 2010, the Commission must ascertain the appropriate costs to be placed into each Facility Lease as the "Approved Amount." ERGS includes common facilities that would serve 1,800 MW of new coal-fired capacity as well as 1,200 MW of existing coal-fired capacity from OCPP, i.e., a 3,000 MW "campus" at this site. Although the Commission has rejected the IGCC unit, it finds that a 3,000 MW coal campus remains an appropriate size, because it affords future planning flexibility to WEC. The additional cost of sizing common systems at 3,000 MW, instead of 2,400 MW, is approximately $20 million, which is a modest amount to pay in order to provide additional planning flexibility.

(Chairperson Bridge dissents, and would size the common systems at 2,400 MW.)

The record does not describe the cost of constructing these units, with common facilities to serve 3,000 MW, in 2009 and 2010. It does, however, show the following cost structure under assumed construction dates of 2008 and 2009:

	Generating Unit and SCPC Common Systems	Site Common Costs Shared with OCPP	Inflation	Approved Amount
SCPC Unit 1	$922,140,000	$375,190,000	$129,344,000	$1,426,674,000
SCPC Unit 2	$623,470,000	$ 22,730,000	$ 77,932,000	$ 724,132,000
			Total:	$2,150,806,000

The right-hand column reflects values in year-of-occurrence dollars, meaning that a level of expected inflation is included. Since the Commission has moved the dates of construction back one year, the values in this table must be adjusted by one more year of inflation. Within 45 days after the date this Final Decision is signed, the applicants are instructed to submit to the Commission, for its approval, corrections to the above table to incorporate this adjustment. The EGEAS model uses a 1.87 percent general annual inflation rate during the 2008-2010 timeframe. The applicants shall use no more than 1.87 percent as the annual inflation rate when making this adjustment.

If the Commission approves this submitted correction, the amounts shown therein shall become the Approved Amounts to be used in each Facility Lease. Because these figures are in year-of-occurrence dollars, W.E. Power LLC assumes the risk that inflation will cause actual construction costs to exceed the Approved Amounts by more than the cost overrun collar that is discussed below.

In their Facility Leases the applicants propose that actual construction costs be allowed to exceed the Approved Amounts by up to 10 percent, if the Commission determines that the excess cost is prudent. The applicants describe this as a 10 percent cost "collar" and indicate that W.E. Power LLC incurs the risk of larger cost overruns. The cost estimates in this record, however, are based upon engineering estimates at a point in time when only 5 percent of the actual engineering has been completed. To protect ratepayers from the risk that these estimates are too high, the Commission finds it reasonable to reduce the allowable margin of prudently incurred cost overruns by imposing a smaller, 5 percent cost collar. Parties representing certain customer groups also recommended that the Commission only allow costs meeting the definition

of "Force Majeure," "Excused Event," or "Event of Loss" under a Facility Lease be billed to WEPCO if the Commission determines that such costs are prudently incurred. The Commission agrees that this revision to the Facility Lease is necessary to protect ratepayers. Finally, the Commission agrees with the recommendation of these parties that the Approved Amount recoverable through the Facility Lease may not exceed the unit's actual construction cost. The applicants concurred with this latter recommendation.

Financing Mechanism

Background

In its resource planning, WEC considered both utility-owned, rate-based generation, procurement from wholesale merchant plant suppliers, and leased generation financing. After reviewing these alternatives, WEC decided to pursue leased generation financing to fulfill WEPCO's supply needs.

One of the reasons a lease option needs to be pursued, according to WEC, is that WEPCO will not be allowed sufficient return on a traditional rate base investment to compensate investors for the risks associated with the plant. Although the rate-based option is clearly one feasible alternative based on the evidence presented in this case, the Commission concludes that leased generation financing is in the public interest and is a reasonable method to finance SCPC 1 and 2.

The lease approach presents an innovative opportunity for procuring capacity and, as modified by this Final Decision, the terms of the leases WEC has offered are reasonable. The plant owner acts as a passive investor and the utility, which will operate and maintain the plant, remains a regulated entity under the Commission's jurisdiction. This can provide ratepayers

with protections similar to those afforded under a rate-based paradigm. Moreover, the changes the Commission has made to the lease arrangement, as discussed in this Final Decision, provide further protection to ratepayers.

In addition, recent legislative changes in Wisconsin have fundamentally altered the regulatory landscape for utilities, their customers and regulators. Public utilities have an obligation to serve their customers and in this proceeding, the Commission needs to give WEPCO some flexibility in transacting for energy to meet those needs in a manner that results in low and stable rates for consumers. One of the means to fulfill the Commission's mandate to ensure just and reasonable rates and reliable service includes leased generation financing. The Commission finds that the inter-affiliate leased generation proposal is the most reasonable choice for this ERGS facility and provides certainty that consumers will have these needed baseload facilities in 2009 and 2010.

Review of the proposed leases

The PTF leases are affiliated interest agreements under Wis. Stat. § 196.52(9). WEC proposes financing and operating each ERGS unit with a Facility Lease, a Ground Lease, and a Ground Sublease. Taken together, these leases constitute a leased generation contract. The ERGS leases filed in this case are based upon the final leases approved in docket 05-AE-118 for PWGS.

In general, the Commission finds that the Ground Lease, Ground Sublease, and Facility Lease are reasonable, but some changes to the Facility Lease are needed to balance risk and responsibility properly between the parties to this contract. These modifications are discussed in this Final Decision.

Because a leased generation contract is an affiliated interest transaction, under Wis. Stat. § 196.52(3)(a) the Commission may approve such a contract "only if it shall clearly appear and be established upon investigation that it is reasonable and consistent with the public interest." This law grants the Commission continuing supervisory control over the terms and conditions of most affiliated interest contracts or arrangements, which means it can modify such agreements as needed to protect the public interest. Wis. Stat. § 196.52(9)(e), however, limits the Commission of this control over a leased generation contract unless the contract itself grants the Commission this authority, or unless the Commission specifically reserves continuing supervisory control in its order approving the contract. Therefore, the Commission's jurisdiction over these PTF leases will be limited by the terms of the leases themselves and by this Final Decision.

Financial terms

The Commission finds it reasonable to set the following financial terms of the Facility Lease:

1. Return on equity

To attract investment capital of the size and scope needed to construct the SCPC units, the Commission must include a return in the lease payments at a level that compensates investors for the risks they take by providing that capital. The record in this proceeding contains a wide range of estimates of what that return level should be. It is very difficult to determine precisely what return investors require, especially when the estimates of that return as developed by well-respected finance experts vary by hundreds of basis points. Given this difficulty, selecting the final return on equity figure involves as much art as science.

The applicants initially requested a return on equity of 12.9 percent. After a series of negotiations with representatives of customer groups took place, the applicants agreed to lower the requested return on equity to 12.7 percent.[11] This is the same return on equity the Commission authorized for PWGS. Others suggested that the compromise return was too high and that the SCPC units could be financed at a lower return on equity. While it is conceivable that the projects could be financed at a return on equity that is slightly lower than the negotiated figure, given the critical need for the SCPC capacity it is prudent to set the return on equity at a level sufficient to ensure that those units will be constructed rather than selecting a level that contains some risk that units could not be financed at reasonable terms for the applicants. The applicants were able to secure financing for the PWGS units at a 12.7 percent return on equity. The Commission therefore finds it reasonable to set this the return on equity at 12.7 percent in this proceeding as well.

(Chairperson Bridge dissents, as shown in the attached opinion.)

The dissent proposes to include in this order a condition requiring the Commission to revisit this provision of the lease, and others, after the conclusion of the first five years of the Facility Lease. The inclusion of this provision would introduce an unacceptable level of financial uncertainty into the lease. One of the principal advantages of affiliated lease generation financing terms is the certainty they provide ratepayers and the applicants over the next three decades to ensure that low-cost, reliable baseload generation is constructed in Wisconsin.

[11] The customer groups that negotiated and supported these lease provisions were the Wisconsin Industrial Energy Group, the Citizens' Utility Board, and the Customers First! Coalition (AARP-Wisconsin, Dairyland Power Cooperative, IBEW Locals 2150 and 2304, League of Wisconsin Municipalities, MGE, MEUW, National Federation of Independent Business-Wisconsin, RENEW Wisconsin, Wisconsin Alliance of Cities, Wisconsin Community Action Program Association, Wisconsin Electric Cooperative Association, Wisconsin Federation of Cooperatives, Wisconsin Merchants Federation, WPPI, Wisconsin Retired Educators' Association, and Wisconsin Towns Association).

2. Cost of long-term debt

The cost of long-term debt was an uncontested issue in this docket. As part of the Facility Lease rent calculation, a long-term debt cost is required. The Commission finds it reasonable to use the same computation method that it approved for the PWGS leases. That method requires that the long-term debt cost be determined within 180 days prior to the Facility Lease effective date and that the interest rate reflect an appropriate cost of long-term debt index from Moody's Investors Services for WEC's senior unsecured debt securities. The method also includes an appropriate refinancing or call option.

3. Capital structure

In its decision approving PWGS, the Commission found that a reasonable capital structure to be used in estimating the lease payments was 53 percent common equity and 47 percent long-term debt. In this proceeding the applicants initially requested a capital structure with 58 percent common equity and 42 percent long-term debt. The applicants maintain that, because ERGS would be coal-fired, the project needs a higher common equity ratio than the natural-gas-fired PWGS units. They contend that coal-fired units are inherently more risky than are natural-gas-fired units. A higher common equity ratio reduces the volatility associated with the earnings stream and thus mitigates the higher risk of the project to some extent. After negotiations with representatives of certain customer groups, the applicants agreed to reduce the common equity portion of the capital structure to 55 percent and to increase the long-term debt component to 45 percent.

The Commission finds that a 55 percent common equity, 45 percent long-term debt mix is a reasonable capital structure for the coal-fired SCPC units. This reflects three major risk

factors that cause coal-fired units to be more risky than natural-gas-fired units: (1) coal-fired units are more expensive to construct; (2) coal-fired units take longer to construct; and (3) coal-fired units need larger amounts of ongoing capital investment to maintain the facilities. These risk factors are large enough to require some additional equity in the capital structure, beyond the level that would be appropriate for natural-gas-fired units.

(Chairperson Bridge dissents, as shown in the attached opinion.)

4. Initial lease term

The initial term of the Facility Lease is 30 years. No party disagreed with this length of term, and the Commission finds it reasonable.

5. Rent reduction in first five years

At hearing, the applicants and parties representing certain customer groups supported a 5 percent rent reduction during the first five years of the respective Facility Leases, accompanied by an undefined present value true-up mechanism. The 5 percent rent reduction would be applied to the base rent calculation using the annuity approach, as found in the Facility Lease. After the five-year rent reduction period ends, some type of rent adder to that base annuity rent calculation would be required to maintain the original present value.

The Commission finds that this rent reduction approach is reasonable and will assist in reducing rate shock, but the record does not contain any potential present value true-up mechanism. WEPCO is therefore required to work with Commission staff to prepare, for Commission approval, an appropriate present value true-up mechanism.

(Commissioner Garvin dissents, concerning this rent reduction during the first five years.)

6. Renewal rent terms

The Facility Lease, as proposed, grants WEPCO the right to renew the lease upon its expiration at lower rates. For the first renewal period, the lease payments are reduced to 50 percent of the original payments. For subsequent lease extensions, assuming such extensions can be made,[12] the lease payments drop to 15 percent of the original rent. Parties representing certain customer groups recommended that a more appropriate allocation of risk would decrease the lease payments for the first renewal period to 25 percent of the original payments. The Commission agrees. Such a reduction would provide additional ratepayer protection in terms of overall cost-effectiveness and is therefore reasonable.

7. Damages amount

The Facility Lease, as proposed, provides that if the Lease Effective Date is not achieved due to a failure of WEPCO, the Lessor can terminate the lease and sell the generating plant to WEPCO. As part of the purchase price, the utility would be required to pay a "Damages Amount" that constitutes 60 months of lost return on capital. In order to protect ratepayers, this provision must be eliminated.

(Commissioner Garvin dissents, concerning the elimination of "Damages Amount" from the Facility Lease.)

8. Securitization of lease payments

The stream of rent payments that WEPCO will be making to W.E. Power LLC and its subsidiaries could be "securitized" by the Lessor, i.e., sold for a lump sum that could either be

used as a financing vehicle for other generation improvements or be passed up to the holding company as a special dividend. As the Commission determined in its PWGS order, any such securitization may only occur with the Commission's prior review and approval in order to ensure that securitization will not harm the utility or its ratepayers.

9. WEPCO credit quality degradation

In the PWGS Facility Lease, the Commission mandated certain restrictions regarding the transfer or assignment of the PWGS plant or Facility Lease and, to protect WEPCO's credit quality from degradation, required the inclusion of a "hold harmless" lease provision. This hold harmless provision would apply if a national rating agency downgrades the utility's debt as a result of the transfer or assignment, or if the utility is required to issue equity to avoid such a downgrading of debt. A copy of this "hold harmless" provision, approved for the PWGS leases, was introduced into this docket as part of Ex. 22. As with the PWGS Facility Leases, the Commission finds these terms reasonable and requires that they be included in the ERGS Facility Leases.

Other terms and conditions

1. General changes

The applicants agreed to make the following changes to the Facility Lease:

a. Modify the definition of "Loss Proceeds" in Schedule 1.1 to delete the phrase "pursuant to any insurance policies maintained pursuant to the Facility Lease."
b. Add the phrase "The Project's cost shall not exceed the Approved Amount" to the Development Protocol in Schedule 3.1(a), to conform the ERGS lease to the approved PWGS lease.

[12] In order to be considered a "true" lease for tax purposes, ERGS cannot be leased to WEPCO for more than 80 percent of its useful life. The Facility Lease provides that the length of any renewal period will be 80 percent of the then-estimated useful life of ERGS, as determined by an independent evaluator.

c. Delete Section 9.4 dealing with the Delegation of Operation and Maintenance to one or more agents.

d. Change subsection (a) of the definition of Approved Amount in Schedule 1.1 to read "(a) the specific amount determined to be reasonable in the CPCN Approval, plus."

2. Force Majeure, excused events and events of loss

As discussed above, all construction costs defined as Force Majeure, an Excused Event, or an Event of Loss must have prior Commission approval before being recovered from WEPCO.

3. Guaranteed heat rate; cooling towers

As part of its application, W.E. Power LLC is guaranteeing a heat rate of 8,850 Btu/kWh for the SCPC units. This heat rate assumes once-through cooling; a design that the applicants contend will be approved and successfully installed. This is an important fixed term in the Facility Lease because if the applicants are unable to install once-through cooling, the heat rate may degrade significantly. As a result, W.E. Power LLC and WEPCO may only propose to change this guaranteed heat rate in the Facility Lease if they offer equivalent, offsetting ratepayer benefits and savings.

4. Engineering, Procurement and Construction contract

To ensure that WEPCO ratepayers secure the benefits of all the protections that W.E. Power LLC gains through its Engineering, Procurement and Construction (EPC) contract with Bechtel Corporation, the following Facility Lease terms shall be modified to incorporate any terms found in the EPC contract that are more beneficial to ratepayers than those currently included in the Facility Lease:

a. Commercial Operation Test and Scheduled Commercial Operation Date Damages.

b. Guaranteed Performance Level tests (including heat rate and net electrical output).

c. Duration of construction, in months from the Decommissioning Completion Date to the Scheduled Commercial Operation Date and the Required Commercial Operation Date.

d. Dates on which the Construction Milestones are scheduled to occur.

e. Test Fuel and Test Power Procedures to the extent such procedures are addressed in the EPC contract.

5. Conforming leases

This Final Decision makes modifications to the PTF leases proposed by WEC. It is reasonable to require that WEC rewrite these leases for SCPC 1 and SCPC 2, making the changes specified herein. It is also reasonable to require that WEC return these final documents to the Commission for review and approval, with the revisions highlighted, no later than 45 days after the date this Final Decision is signed.

6. Statutory compliance

A leased generation contract must meet eleven separate conditions under Wis. Stat. § 196.52(9)(b), as well as requirements for land and property transfers under Wis. Stat. § 196.795(5)(k)3. The proposed leases for SCPC 1, as modified by this Final Decision, comply with these statutory requirements. The Commission also approves the modifications WEC proposes to convert these documents into a leased generation contract for SCPC 2. Pursuant to Wis. Stat. § 196.52(9)(f), the Commission shall maintain jurisdiction to ensure that the construction of ERGS is completed as provided in the leased generation contracts.

The Commission retains continuing supervisory control only over the terms and conditions specified in this Order and in each Facility Lease, Ground Lease, and Ground Sublease. This is reasonable and in the public interest, to balance properly the parties' risks and responsibilities, and to protect WEPCO's ratepayers. In addition, any future changes to these leases, whether mutually agreed upon or otherwise, and any transfer or assignment of a lease or of the ERGS facility, must first receive Commission approval.

Site Location

Wis. Stat. § 196.491(3)(d)3. requires that the Commission consider "alternate locations" before determining whether the location of a new project is in the public interest. In addition, Wis. Admin. Code § PSC 111.53(1)(e) requires that a CPCN application for a new generating plant contain "[a]t least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives." The Commission's rules further specify certain site-related information that must be provided for each proposed power plant site. Wis. Admin. Code § PSC 111.53(1)(f).

S.C. Johnson alleges that the four ERGS site alternatives, all located at OCPP, are simply different plant configurations on the same parcel of land and therefore do not satisfy the Commission's statutory and rule requirements. On January 14, 2003, S.C. Johnson and Wisconsin's Environmental Decade (now known as Clean Wisconsin) originally raised this issue by filing a petition with the Commission requesting that it reconsider a determination that WEC's CPCN application was complete. The petitioners alleged that the application failed to include information on at least two proposed sites. On April 17, 2003, the Commission issued an order denying this petition. The petitioners appealed, but Dane County Circuit Judge Moria

Krueger ruled that this order is a "preliminary, interlocutory decision that is not immediately reviewable under Wis. Stat. ch. 227, but is reviewable in an action for judicial review of the final decision." *Clean Wisconsin, Inc. and S.C. Johnson & Son, Inc. v. Wisconsin Public Service Commission*, Case No. 03-CV-1480 (Dane County Circuit Court: Final Order, July 8, 2003).

The completion of hearings and development of a record in this docket provide no new information that would be sufficient to cause the Commission to change its conclusions regarding the four site alternatives for ERGS. S.C. Johnson and Clean Wisconsin, among others, continue to maintain that site alternatives must be geographically distinct and that these site alternatives do not demonstrate real differences. As the Commission declared in its April 17, 2003, order, though, the fact that alternate sites may be geographically close together does not automatically render them unreasonable alternatives. The Commission has accepted CPCN applications for numerous other projects where the alternate sites have been close together, or even adjacent to each other. The Commission determines whether proposed site alternatives are reasonable by applying two standards: the site alternatives must each be feasible locations and they must be sufficiently distinct to offer different packages of costs and benefits. With the benefit of a fully developed record on these site alternatives, the Commission reaffirms its April 17, 2003, decision.

S.C. Johnson and Clean Wisconsin now raise a slightly different argument about the sufficiency of the site alternatives, involving their interpretation of Commission rules. They contend that these rules only allow the use of site alternatives that are all located at a single facility in two specific situations. S.C. Johnson and Clean Wisconsin refer to Wis. Admin. Code § PSC 111.53(2)(b), which states:

> **PSC 111.53(2)(b)1.** An application for a cogeneration facility may meet the requirement under sub. (1)(e) by filing information on 2 sites that are both located at the steam host's existing industrial plant, if the cogeneration facility will be a qualifying facility under 18 CFR 292.205 and none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11(2)(c), Stats.
>
> **2.** An application for repowering an existing generating facility may meet the requirement under sub. (1)(e) by filing information on 2 sites that are both located at the existing generating facility site, if none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11(2)(c), Stats.

These parties conclude that these must be the only conditions where alternate sites at the same general location are permissible, since they are the only exceptions to the "alternative sites" requirements specified in the Commission's rules.

This interpretation, however, mischaracterizes the exceptions. A "cogeneration" project is designed to use waste heat from an electric generating plant, heat that would otherwise be lost up the smokestack, in an industrial process such as paper making or food processing. Wis. Admin. Code § PSC 111.53(2)(b)1. recognizes that in order to achieve this increase in energy efficiency the electric generating unit must be combined with an existing industrial plant, which can only occur by locating the generating unit at the industrial plant site. The same is true when a utility proposes to "repower" a generating plant by removing and replacing the existing units. Wis. Admin. Code § PSC 111.53(2)(b)2. recognizes that the only location for such a project is at the existing electric site. These two exceptions therefore are driven by the first standard of the Commission's requirements for proposed site alternatives—that every alternative must be a feasible location. There are no other feasible locations for cogeneration and repowering projects, and these two exceptions codify that finding.

S.C. Johnson and Clean Wisconsin have improperly interpreted Wis. Admin. Code § PSC 111.53(2)(b). These two exceptions are not the entire universe of situations where the Commission will accept site alternatives that are located in close proximity. In other situations the Commission applies its general rule, examining proposed alternatives to ensure that they are each feasible sites and each provide different packages of costs and benefits, so that the Commission is presented with a real choice. The site alternatives for ERGS do provide such a choice.

The record demonstrates that any of the four sites proposed would meet the standards established under Wis. Stat. § 196.491 and could be selected for construction of ERGS. The North Sites, however, are principally located within the city of Oak Creek and that city, unlike the neighboring town of Caledonia where the South Sites are found, has clearly expressed its willingness to accept this project. Furthermore, the North Site—CUP alternative involves substantial compromise and agreement between the city and the applicants regarding the proper means of mitigating municipal concerns, such as noise, traffic and air emissions. The city of Oak Creek, which has already hosted a power plant for 50 years, favors use of the North Site—CUP alternative and locating ERGS within its municipal boundaries will ensure that the city is in a stronger position to enforce mitigation measures that protect its citizens from undue impact. The city has rezoned this site as being suitable for manufacturing and is both willing and able to provide potable water and sewage service to the site. The Commission finds these to be determining factors in choosing among the four alternatives, and selects the North Site—CUP alternative as the proper location for ERGS.

This site alternative moves the coal pile and coal handling facilities inside the existing OCPP rail loop, which means that a 138/345 kV substation already found in that area must be relocated. At the time of the technical hearing, the possible sites for this substation and the cost of relocation were not clearly defined, though one alternative would split this facility into two substations and place the 345 kV substation southeast of the rail loop, in a wooded wetland designated by the Southeast Wisconsin Regional Planning Commission as an Isolated Natural Resource Area. This location would have unnecessary environmental impacts and would require relocation of the federal/state shooting range, but the applicants have indicated that other locations for the substation are available and are willing to investigate better sites. It is reasonable to require that the applicants work with ATC, DNR, and the neighboring communities to find a suitable location for these substations, minimizing both the adverse environmental effects and the cost of relocation.

Although the two SCPC units would be placed within the city of Oak Creek, even with the selection of the North Site—CUP alternative some of the plant-related facilities will be constructed in the town of Caledonia: new access roads; railroad improvements; possibly the 345 kV substation. The record demonstrates that the town of Caledonia will also experience a variety of environmental and socioeconomic effects because of the construction of ERGS. These effects may include changes in local air quality, noise levels, traffic patterns, and traffic volume, among others. The applicants have committed to working with all neighboring communities to mitigate valid concerns, including the town of Caledonia, and it is reasonable to require that they do so.

Mitigation Payments

In a Development Agreement reached with the city of Oak Creek, WEC agreed to make annual mitigation payments to the city of $1.5 million for SCPC 1 and $750,000 for SCPC 2. In Part I of PTF, the Commission granted an annual mitigation payment of $500,000 to the city of Port Washington, though it reserved the right to review this approval if the state of Wisconsin's shared revenue program was revised and payments to municipalities increased.

The enactment of 2003 Wis. Act 31 on July 15, 2003, has significantly altered the state's shared revenue program. Prior to Act 31, compensation dollars to municipalities and counties were based on a power plant's net book value and declined over time, as the plant depreciated. The maximum payment to a municipality or county under this prior formula is $750,000 per year. This is the amount the city of Oak Creek currently receives for the existing OCPP. In contrast, payments under the new shared revenue program are based on a plant's megawatt capacity multiplied by $2,000 and do not decline over time. The new shared revenue program will pay municipalities double and triple what they would have received under the former program. Cities or villages with power plants that begin operation after December 31, 2003, will annually receive two-thirds of the plant's MW capacity multiplied by $2,000, while the host county will annually receive one-third of the MW capacity multiplied by $2,000.[13] Additional incentive shared revenue payments are also distributed to both the municipality and the county if the unit is non-nuclear and built on or adjacent to an existing or former plant site or on a brownfield site, if the unit is a baseload plant, if the unit derives energy from an alternative energy source, or if the unit is a cogeneration plant. A municipality can receive multiple incentive payments. Under this new law, the city of Oak Creek will also receive annual incentive payments in the amount of $1,200 multiplied by the plant's megawatt capacity.

This new shared revenue program commences the annual payments when a generating unit becomes operational. Shared revenue payments to the city of Oak Creek will be $1.6 million for the first SCPC unit and increase to $3.2 million for the second unit. These payments will be added to the shared revenue payments that the city is currently receiving for the existing OCPP.

Under Act 31, the annual state shared revenue payments to the city of Oak Creek when ERGS is completed will exceed the amount the city is requesting in the form of mitigation payments from WEPCO ratepayers. Thus, mitigation payments are not required while compensating shared revenue dollars for ERGS are forthcoming. The shared revenue payments, however, will not begin until 2009 when SCPC 1 is first scheduled to be in service, and the city has introduced evidence that it will begin incurring costs as soon as construction commences. For this reason, the Commission finds it appropriate to authorize annual mitigation payments, as described in the Development Agreement, for the period from the commencement of construction of SCPC 1 until the year when SCPC 2 enters service, which is scheduled for 2010. The shared revenue payments for ERGS that commence in 2009, however, will partially offset the city's costs and it is appropriate to reduce the annual mitigation payment by the amount of shared revenue that the city receives for ERGS. When ERGS is fully in service, the shared revenue payments will fully replace any mitigation payment under the Development Agreement, so any further mitigation payment cannot be billed to WEPCO. If, however, state shared revenue payments decrease during the course of the 30-year Facility Lease and are no longer sufficient to offset fully the mitigation payment that would have been paid under the Development

[13] The two-third/one-third relationship is reversed if the power plant is built in a town rather than a city or village.

Agreement, the Commission finds it reasonable for W.E. Power LLC to make a partial mitigation payment to the city that equals the remaining portion.

(Commissioner Garvin dissents, concerning the decision to award mitigation payments.)

DNR Permits

Before construction may proceed, a project site selected by the Commission must receive a corresponding air pollution control construction permit from DNR. WEC submitted four permit applications to DNR, one for each site alternative. Before it can issue a CPCN for a project, the Commission must make a number of determinations, including a finding that the project is in the public interest when considering environmental factors. However, if DNR declares that a project will meet the agency's air pollution requirements under Wis. Stat. ch. 285, the Commission loses its authority under Wis. Stat. §§ 196.491(3)(d)3. and 4. to determine that a project would have undue adverse air pollution impacts. DNR issued preliminary determinations that both the North Site and the North Site—CUP alternative should meet applicable criteria for permit approval under Wis. Stat. § 285.63 on October 6 and 9, 2003, and scheduled public hearings on these permit applications on October 28, 2003. DNR also declared that WEC's permit applications for the South Site and South Site—Exp are complete, but it has not yet issued preliminary determinations regarding whether they meet the criteria for permit approval.

The combustion of coal involves the release of numerous air pollutants. During the Commission hearings, health concerns relating to these pollutants were expressed both by expert witnesses testifying on behalf of the parties and by members of the public, particularly regarding the potential health impacts of mercury and particulate matter less than 2.5 microns in diameter

($PM_{2.5}$). Some parties urge the Commission to quantify the monetary cost of these adverse health effects as an additional cost of ERGS that was not included in the EGEAS model inputs.

Mercury emissions are regulated under DNR air pollution control construction permits. DNR considers mercury to be a hazardous pollutant, requiring the use of maximum achievable control technology to meet the emission limits set by permit. DNR's air pollution permits, though, do not yet address $PM_{2.5}$. This is because the U.S. Environmental Protection Agency (EPA) has set National Ambient Air Quality Standards for $PM_{2.5}$ emissions over a 24-hour episode and annually, but has not yet instituted a program for determining non-attainment areas and thus has not taken steps yet to reduce emissions. DNR currently intends to submit a State Implementation Plan to the EPA regarding $PM_{2.5}$ in 2005. S.C. Johnson and other parties requested that the Commission consider the health impacts caused by $PM_{2.5}$ emissions from ERGS and offered evidence regarding the monetary cost of these impacts. WEC introduced contrary evidence on these subjects.

The evidence in the record regarding the externalized health costs associated with air emissions will be valuable to DNR as it examines its air permit applications for ERGS, but the Commission does not have special expertise to render an independent judgment on this topic. To do so would require the Commission to pick appropriate methods for modeling emission dispersion, determine if a causal relationship exists between emissions and adverse health impacts, decide whether a threshold level exists below which no impacts occur, and establish how to translate any identified impacts into dollars. These are primarily the functions of the EPA and DNR, and these agencies have not yet spoken. Any conclusions the Commission might

reach would likely be rendered a nullity by the ultimate decisions of the EPA and DNR. In this docket, the Commission is willing to defer to these decisions of the EPA and DNR.

DNR must also issue a number of water-related permits and approvals before construction may commence. These include: permits for grading work for the generating facilities and for the railroad improvements; the approvals for dredging and for use of lakebed and shoreline structures to construct breakwater and harbor facilities; the approval for use of lakebed to install the cooling water intake and discharge structures; and the water quality certification needed for wetland fill. As of the date the record closed, DNR has deemed the joint state/federal application for water regulatory permits and approvals for ERGS to be incomplete. Five parties to this docket jointly filed with DNR a request for a contested case hearing on WEC's application for water regulatory permits and approvals, which DNR granted on October 6, 2003. A hearing date will not be set until DNR determines that the application is complete.

Section 316(b) of the federal Clean Water Act and Wis. Stat. § 283.31(6) require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts. In December 2001, the EPA published final regulations defining the federal requirements that apply to the construction of "new" facilities and, in April 2002, proposed regulations regarding "existing" facilities. On January 28, 2003, DNR determined that ERGS could be treated as an existing facility. Under this designation ERGS could utilize once-through cooling, as OCPP does now, if the applicants can demonstrate that the intake structure represents Best Technology Available for controlling impingement and entrainment of aquatic organisms.

If the EPA overrules DNR's preliminary decision about whether ERGS is a modification to an existing facility under Section 316(b) of the Clean Water Act, the applicants may not be able to build their proposed once-through cooling system for ERGS. Instead, ERGS would need to be redesigned to utilize cooling towers. The cooling towers would be new features in the plant layout, costing approximately $100 million per SCPC unit. Changes in the cooling efficiency could also change emissions and the environmental impact of the SCPC units, requiring alterations in air pollution control equipment. Because of these substantial effects that would result, if cooling towers are required the applicants must submit a redesigned or relocated plant to the Commission for approval.

DNR has not yet granted its approval for water withdrawal and water loss under Wis. Stat. §§ 281.35 and 281.41. The applicants must provide an accurate water balance for the ERGS facilities in order for DNR to complete its review. A Wisconsin Pollutant Discharge Elimination System (WPDES) permit for discharges related to stormwater during construction and an amendment of the existing OCPP stormwater pollution prevention plan are needed prior to beginning construction. These have not been issued, due to an incomplete application. Finally, DNR has not yet authorized modifications to the existing WPDES permit related to the new cooling water intake structure. The documentation submitted by the applicants, demonstrating that the new intake will meet Best Technology Available standards, is currently being reviewed by the DNR and EPA.

DNR's Bureau of Endangered Resources has indicated that incidental take permits for threatened or endangered species will not be required for the ERGS project. Based on completed surveys, it is unlikely that any rare animal species would be adversely affected by construction of

ERGS. Although it is anticipated that numerous state-endangered blue-stemmed goldenrod plants (*Solidago caesia)* and some yellow gentian (*Gentiana alba*), a state-threatened species, will be destroyed during construction, these plants are not protected on private property and a DNR permit is not required.

Adequacy of EIS

Wis. Stat. § 1.11(2) requires the Commission to prepare a detailed EIS for any "major action" it is considering that would significantly affect the quality of the human environment. The Commission has adopted rules that categorize the types of actions it undertakes, for purposes of complying with this statute. Wis. Admin. Code § PSC 4.10(1) and Table 1, item f., provide that a proposal to construct "an electric generation facility fueled by coal" is a major action, and an EIS is required. As a result, Commission staff collaborated with DNR staff to prepare an extensive EIS about ERGS, including holding scoping sessions in the Oak Creek community at which members of the public could learn about the project and could relate particular concerns about its environmental impacts to Commission and DNR staff. The Commission and DNR released a draft EIS dated April 21, 2003, 450 pages long, plus a second volume of 34 figures, which it distributed broadly to interested persons. The agencies encouraged people to respond with concerns and criticisms during a 45-day comment period, and held meetings with the public in the project area to receive these comments.

Following the comment period, Commission and DNR staff prepared a final EIS that took into consideration the comments received as well as new information collected. The final EIS substantially expanded the draft EIS, adding more figures to Volume 2 as well as a 300-page

Volume 3, which identifies and responds to the comments received. In all, the EIS now totals approximately 900 pages.

Several parties argue that the EIS's discussion of the environmental impacts of ERGS is inadequate. After hearing these concerns and reviewing the detailed record prepared in this case, much of which concerns environmental impacts, the Commission finds that this EIS properly discusses the significant aspects of probable environmental consequences. In those areas where the likely environmental consequences associated with ERGS are unknown, the EIS identifies these uncertainties. ERGS also remains under continuing regulatory review by DNR, the state's primary regulator for most purposes of environmental protection. During its review of numerous permit applications, DNR can respond to remaining areas of uncertainty. The Commission recognizes DNR's continuing regulatory oversight of this project and, by the conditions imposed in this order, defers to DNR's permitting decisions that will mitigate environmental impacts.

For these reasons, the Commission finds that the draft and final EIS comply with the requirements of Wis. Stat. § 1.11 and Wis. Admin. Code ch. PSC 4.

Certificate of Public Convenience and Necessity

W.E. Power LLC, through its subsidiaries ERGS-SCPC 1 LLC and ERGS-SCPC 2 LLC, may commence construction of two 615 MW SCPC electric generating units, as described in WEC's project application and modified by this Final Decision, at an estimated cost of $1,426,674,000 for SCPC 1 and $724,132,000 for SCPC 2 (year-of-occurrence dollars), plus any adjustment that is approved by this Commission for one year of additional inflation.

Order

ERGS Generating Plants

1. W.E. Power LLC and its subsidiaries may construct SCPC 1 and SCPC 2 at the North Site—CUP alternative. The in-service date for SCPC 1 shall be May 1, 2009; the in-service date for SCPC 2 shall be May 1, 2010. W.E. Power LLC and its subsidiaries shall construct these units in conformance with the design specified in the ERGS application, in conformance with the construction schedule specified in the application (as delayed one year by this Final Decision), and subject to the conditions specified in this Final Decision. Although the application to construct an IGCC unit is denied, W.E. Power LLC and its subsidiaries may construct common facilities with the SCPC units to accommodate up to 3,000 MW of generation at this site.

2. W.E. Power LLC and its subsidiaries shall commence construction of SCPC 1 within 12 months after receiving all necessary federal, state, and local permits and approvals. Before commencing construction of SCPC 2, the applicants shall file an updated demand and energy forecast and updated EGEAS computer modeling with the Commission.

3. Within three months of the date when SCPC 2 is fully operational, W.E. Power LLC shall repeat the noise measurements that were taken before project approval, shall measure the maximum noise generated at the site with all units on, and shall measure the noise at the site with all units off. W.E. Power LLC shall report its findings to the Commission, using the same format as its pre-approval noise studies.

4. W.E. Power LLC shall provide documentation to the Commission of all work with individuals who raise concerns about noise or interference with radio or television reception, and of the resolution of those concerns.

5. The applicants shall work with neighboring communities to mitigate valid concerns and impacts.

6. The applicants shall seek the approval of the Office of the Commissioner of Railroads to separate or eliminate the existing at-grade Union Pacific rail crossings at Seven Mile Road and Six Mile Road. The applicants shall also monitor the effect of train deliveries on road blockages at Four Mile Road crossing, following their construction of the new on-site rail facilities, and shall work with the town of Caledonia to address legitimate concerns it may have at this location.

7. The applicants shall work with ATC, DNR, and neighboring communities to minimize the cost and the environmental impact of moving and reconfiguring the 138 kV and 345 kV substations. The applicants shall inform the Commission of the results of this work, documenting the estimated cost involved, the new proposed layout of the substations, and the associated transmission line interconnection routes and routes for exiting from the plant site.

8. If the EPA or DNR determine that once-through cooling is not permittable, WEC shall submit a revised project application for the Commission's approval that redesigns or relocates ERGS, as needed.

Leased Generation Contracts

9. The Facility Lease for SCPC 1 shall use a construction cost of $1,426,674,000 as the Approved Amount and the Facility Lease for SCPC 2 shall use a construction cost of

$724,132,000 as the Approved Amount, but the applicants can alter these amounts by submitting to the Commission for its review and approval revised construction costs that include one year of additional inflation at an annual inflation rate of no more than 1.87 percent. Any such submission shall be provided to the Commission no later than 45 days after the date this Final Decision is signed.

10. W.E. Power LLC and its subsidiaries may only recover construction costs from WEPCO that exceed the amounts approved in this Final Decision if the Commission makes a prior determination, before billing, that the excess cost is prudently incurred. W.E. Power LLC and its subsidiaries may not recover from WEPCO more than 105 percent of the construction costs approved in this Final Decision, except that costs qualifying as Force Majeure, an Excused Event, or an Event of Loss under the definitions of the Facility Lease are not included in this calculation. W.E. Power LLC and its subsidiaries may only recover from WEPCO a cost that qualifies as Force Majeure, an Excused Event, or an Event of Loss if the Commission makes a prior determination, before the cost is billed, that it is prudently incurred. If the actual cost of constructing an ERGS unit is less than the Approved Amount defined in the Facility Lease, the Approved Amount shall be reduced to equal the actual cost.

11. Neither WEC nor any of its affiliates may securitize the lease payment stream under the Facility Lease without the Commission's prior review and approval.

12. WEPCO shall treat each Facility Lease, Ground Lease, and Ground Sublease approved in this docket as operating leases for ratemaking purposes. In future rate cases, WEPCO may not seek a higher authorized return on equity for its rate-based assets, or any other

capital structure adjustments, related to credit quality degradation resulting from a lease's classification as a capital, operating, or true tax lease.

13. WEPCO shall work with Commission staff to develop a tracking mechanism, and appropriate accounting practices, that prevent a double collection of costs from ratepayers through utility rates and lease payments.

14. WEPCO shall work with Commission staff to develop an appropriate present value true-up mechanism for Commission approval, to balance the 5 percent rent reduction in the first five years of each Facility Lease.

15. WEC shall revise the Facility Lease, Ground Lease, and Ground Sublease for SCPC 1 and SCPC 2, reflecting each of the lease modifications approved in this Final Decision. Within 45 days after the date this Final Decision is signed, WEC shall submit these revised leases to the Commission for its review and approval, with the revisions highlighted.

16. No future changes may be made to a Facility Lease, Ground Lease, or Ground Sublease, approved in this docket, whether mutually agreed upon or otherwise, without first receiving the Commission's review and approval. No interest in any of these leases or agreements or in the ERGS facility may be transferred or assigned, without first receiving the Commission's review and approval.

17. All books and records underlying any transaction made pursuant to a Facility Lease, Ground Lease, or Ground Sublease shall be provided to the Commission upon request.

18. The Commission retains limited continuing jurisdiction over those terms and conditions expressly set forth in each lease approved by the Commission and set forth in this Final Decision.

General Requirements

19. WEPCO shall submit a plan to the Commission by March 1, 2004, for capturing a minimum of 55 MW of additional cost-effective energy conservation by 2008.

20. W.E. Power LLC and its subsidiaries shall notify the Commission within five working days of the date when construction commences on each unit. W.E. Power LLC and its subsidiaries shall notify the Commission, in writing, within 24 hours of any decision not to proceed with any of the approved projects or to enter into any partnership or other arrangement with another entity with respect to the project.

21. W.E. Power LLC and its subsidiaries shall submit quarterly progress reports to the Commission that summarize the status of construction, the status of land acquisition, the status of environmental control activities, and the overall percent of physical completion for each unit. Each report shall include a summary of consultations with DNR and other agencies concerning the issuance of permits. The reports shall list dates, names, and the results of each contact and the company's progress in implementing prescribed environmental protection or control standards. The first report for SCPC 1 is due for the quarter ending December 2003; the first report for SCPC 2 is due for the quarter ending December 2004. The reports shall be filed within 31 days after the end of each quarter and shall continue until the certificate holder's project is fully operational.

22. W.E. Power LLC and its subsidiaries shall each provide the Commission with copies of all final executed agreements related to the construction, operation, or ownership of the project when they are obtained, including the final EPC contract with Bechtel Corporation.

23. W.E. Power LLC and its subsidiaries shall promptly inform the Commission of any substantial scope or design modifications in the approved facilities.

24. If WPPI or MGE fails to exercise its purchase option within nine months after the date when a Facility Lease becomes final, within the next 45 days WEC shall provide the Commission with a plan that eliminates the risk of WEPCO ratepayers acquiring and paying for too much capacity. One means of protecting ratepayers that WEC can consider is the sale of these ownership shares to another entity.

25. For each SCPC unit, upon completion of construction W.E. Power LLC and its subsidiaries shall file with the Commission a complete report of the final costs segregated by plant account and shall explain any variances between the authorized and actual costs.

26. This Final Decision takes effect on the day after it is mailed. The CPCN for the ERGS facility only takes effect when the DNR issues all permits and approvals that it identified, pursuant to Wis. Stat. § 196.491(3)(a)3.a., as being required prior to construction of the facility.

(A separate dissent from Chairperson Bridge follows.)

Dated at Madison, Wisconsin, November 10, 2005

By the Commission:

Lynda L. Dorr

Lynda L. Dorr
Secretary to the Commission

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See attached Notice of Appeal Rights

Attachment

Notice of Appeal Rights

Notice is hereby given that a person aggrieved by the foregoing decision has the right to file a petition for judicial review as provided in Wis. Stat. § 227.53. The petition must be filed within 30 days after the date of mailing of this decision. That date is shown on the first page. If there is no date on the first page, the date of mailing is shown immediately above the signature line. The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

Notice is further given that, if the foregoing decision is an order following a proceeding which is a contested case as defined in Wis. Stat. § 227.01(3), a person aggrieved by the order has the further right to file one petition for rehearing as provided in Wis. Stat. § 227.49. The petition must be filed within 20 days of the date of mailing of this decision.

If this decision is an order after rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not an option.

This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

Revised 9/28/98

CHAIRPERSON BURNEATTA BRIDGE
DISSENTING OPINION
Dockets 05-CE-130 and 05-AE-118
November 10, 2003

In this decision the Commission has authorized construction of the largest electric generation project in Wisconsin history. The $2.15 billion price tag used today will undoubtedly grow substantially by the time all related costs are included and construction is completed. This cost will be borne by families and businesses in southeastern Wisconsin. The promised benefit to them should be the assurance of reliable base load generation for the next 35 or 40 years.

The Commission has determined that W.E. Power, LLC is entitled to a return on equity of 12.7 percent, based on a capital structure of 55 percent common equity and 45 percent long-term debt. I believe that this return on equity is extraordinarily high when compared to historic rates and is not in step with current capital markets. Because I believe that the return the Commission has authorized is more generous than necessary to attract investors and will unduly burden future ratepayers, I respectfully dissent.

These lease provisions extend for 30 years. Factoring in the lease terms the Commission has already approved for the Port Washington plant, the result is that a major component of residential, commercial, and industrial customer rates will be locked in for almost two-thirds of W.E. Power, LLC's net investment in electric and gas facilities through the year 2040. Under the financing package approved by the Commission, W.E. Power, LLC's customers will be obligated to pay at least $233 million annually over that period of time.

I proposed that the return on equity be set at 12.1 percent, based on a capital structure of 53 percent common equity. I consider this rate of return and equity structure to be much more in line with current financial markets and with recent actions taken by other state commissions.

Under my proposal, ratepayers would pay approximately $100 million less over the term of the lease on a present value basis.

I also proposed that the Commission reserve the right to review these terms at the end of 5 years, when the total costs of the project are more certain. At that time, the Commission would have available much more accurate information about actual costs and would be in a much better position to evaluate an appropriate financial structure. In view of the size of the project, the enormous cost, and the attendant uncertainties of a venture of this magnitude, I believe that this approach would be a sound exercise of our responsibility to protect the people who will pay the bills.

Burneatta Bridge

Burneatta Bridge
Chairperson

BB:DJG:sp:G:\PTF-ELM\bb ptf dissent 11-10-03

BEFORE THE
DEPARTMENT OF NATURAL RESOURCES

DECISION ON
WISCONSIN ENVIRONMENTAL POLICY ACT COMPLIANCE
FOR PROPOSED WISCONSIN ENERGIES ELM ROAD GENERATING STATION

INTRODUCTION

The Wisconsin Environmental Policy Act (WEPA, s. 1.11, Stats.) requires state agencies to prepare an Environmental Impact Statement (EIS) for major state actions significantly affecting the quality of the environment. The Department of Natural Resources (DNR) and the Public Service Commission of Wisconsin (PSC) prepared a joint EIS for the proposed Wisconsin Energies Elm Road Generating Station (ERGS). The ERGS proposal includes two super-critical pulverized coal units and one integrated gasification combined cycle unit, all to be constructed on or adjacent to a site containing Wisconsin Electric Power Company's (WEPCO) existing Oak Creek Power Plant (OCPP). The ERGS would have approximately 1,830 megawatts of coal-fired generating capacity. There are four proposed sites for the ERGS near the existing OCPP on the large WEPCO property located along the shore of Lake Michigan in Milwaukee and Racine Counties. The ERGS proposal affects local roadway, railroad, harbor, and electrical transmission facilities, as well as air, land and water resources.

The power plant project was the subject of an EIS prepared in cooperation with the Public Service Commission of Wisconsin (PSC). The DNR's regulatory authorities applicable to this project are:

> Air pollution control permits under ss. 285.60, 285.61 and 285.62, Stats., and chs. NR 405, 406, 407, 408, and 409, Wis. Adm. Code, for construction and operation, and for acid rain purposes.
>
> A construction stormwater management approval under ch. NR 216, Wis. Adm. Code.
>
> Water Withdrawal and Water Pollutant Discharge Elimination System permits under ch. 281 and s. 283, Stats., and s. NR 142.06, Wis. Adm. Code, for the use of Lake Michigan for cooling water and for discharge to Lake Michigan.

Waterway permits issued under ch. 30, Stats., for grading, dredging, lakebed fill, and structures in navigable waters.

Water Quality Certification for wetland fill under ss. 287.22 and 281.37, Stats., and chs. NR 103 and NR 299, Wis. Adm. Code.

Approval for storage of coal combustion byproducts under ch. NR 502, Wis. Adm. Code.

Approval for modification of solid waste landfill plan of operation under ch. NR 514, Wis. Adm. Code.

Incidental Take Authorization for threatened and endangered species if necessary under s. 29.604, Stats., and ch. NR 27, Wis. Adm. Code.

This Decision considers requirements of these regulatory actions as well as other environmental impacts disclosed in the Environmental Impact Statement for this project.

FINDINGS OF FACT

The Department of Natural Resources (hereinafter DNR) finds that:

1). The EIS process was conducted jointly with the PSC as authorized by s. NR 150.20 (f), Wis. Adm. Code. That process included issue identification (scoping) activities in which affected members of the public were asked to help identify important issues and determine the depth of analysis in the EIS. The issues that were identified that pertain to DNR authority included the effects of air pollutant emissions, the effects of wastewater discharge and stormwater management on water quality, and the effects of site, railroad and power line construction and operations on wildlife, aquatic life, and sensitive natural resources. Public comments on the draft EIS are contained in the ERGS Final EIS Volume 3.

2). A draft EIS was issued for public comment in April 2003 accompanied by a news release. In accordance with PSC rules, a Final EIS was issued in July 2003. The EIS comment period continued until the close of the hearings on the project.

3). PSC's technical hearings on the EIS and the application for a Certificate of Public Convenience and Necessity (CPCN), were held from August 25, 2003, to September 12, 2003. Department staff members testified at the hearing. Written testimony and statements made at the technical hearings were considered before preparing this Record of Decision.

4). PSC's public hearings on the EIS and the application for a Certificate of Public Convenience

and Necessity (CPCN), were held on September 17, 18, and 19, 2003. Written testimony and statements made at the public hearings were considered before preparing this Record of Decision.

5). The DNR considered the Draft and Final EIS and all comments on it, along with the associated hearing record, in making this decision pertaining to compliance with WEPA.

CONCLUSIONS OF LAW

The DNR concludes that:

1) The DNR, under s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code, has the responsibility to comply with WEPA.

2) The procedure and analysis identified in the Findings of Fact comply with the requirements of s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code. This includes joint preparation of Environmental Analyses under NR 150.20 (2) (f), Wis. Adm. Code.

DECISION

The DNR has complied with the requirements of WEPA, s. 1.11, Stats. and ch. NR 150, Wis. Adm. Code for the proposed WE Elm Road Generating Station and supporting facilities.
Dated at Madison, Wisconsin, this 17th day of December 2003

STATE OF WISCONSIN
Department of Natural Resources
For the Secretary

By Michael C.
Michael C. Thompson, Supervisor,
Southeast Region Environmental Analysis Program

NOTICE OF APPEAL RIGHTS

If you believe you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

For judicial review of a decision pursuant to ss. 227.52, and 227.53, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition shall name the Department of Natural Resources as the respondent.

This notice is provided pursuant to s. 227.48 (2), Stats.

STATE OF WISCONSIN CIRCUIT COURT DANE COUNTY

Clean Wisconsin, Inc. et. al.,

Petitioners

vs. Case No. 03 CV 3478

Wisconsin Public Service
Commission and Department
of Natural Resources,

Respondents

ORDER UPON JUDICIAL REVIEW OF PUBLIC
SERVICE COMMISSION ORDER

Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E., Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Three Large Electric Generating Facilities, the Elm Road Generating Station, and Associated High Voltage Transmission Interconnection Facilities to be Located in Milwaukee and Racine Counties.

Public Service Commission Docket No. 05-CE-130

Table of Contents

		page
I.	**Statement of the Case**	3
II.	**Standard of Review**	5
III.	**WEC Application for Certificate of Public Convenience and Necessity Approval**	9
	A. Alternative Site Requirement	11
	B. Regulatory Approvals	16
	C. Transmission Line Agreements	19
	D. Identity of Contingent Owners	22
	E. Completeness of Application as of November 15, 2002	23
IV.	**Commission's Order**	25
	A. Energy Need Projections	25
	B. EGEAS Computer Model	26
	C. Health Care Costs	27
	D. Transmission Facility Design, Location and Cost	30
	E. Wisconsin Energy Priority Law	32
	1. Selection of High-Sulfur Coal over Natural Gas as the Primary Energy Source	34
	2. Lack of Consideration of Oil and Low Sulfur Coal	40
	F. Approval of Expansion Capacity	41
	G. Issuance of CPCN Prior to Obtaining Regulatory Approvals	43
	H. Adequacy of the Environmental Impact Statement	45
	I. Least Cost Alternative	47
	J. Wholesale Power Competition	49
	K. City of Oak Creek Mitigation Payment Agreement	50
V.	**Summary and Order**	52

I. Statement of the Case

This proceeding arises from a Final Decision and Order of the Public Service Commission (PSC), rendered November 10, 2003, (Order). In the Order, the PSC issues a Certificate of Public Convenience and Necessity (CPCN) for the construction of two large coal-fired electric power plants by the Wisconsin Energy Corporation (WEC). The two unit facility is known as the Elm Road Generating Station (ERGS) and is to be located on the shore of Lake Michigan at an existing Oak Creek Power Plant (OCPP) owned by Wisconsin Electric power Company (WEPCO). Each of the two new plants is to be a Super Critical Pulverized Coal unit (SCPC 1 and SCPC 2) and each is to be capable of producing 615 megawatts (MW) of electric power. WEC had sought authorization to build a third new coal-fired facility, that being a 600 MW Integrated Gasification Combined Cycle (IGCC) unit but the PSC, in the Order, declined to authorize construction of the third unit. The projected cost of the two new authorized units is 2.15 billion dollars and apparently will be the largest, most expensive generating facility ever constructed in Wisconsin.

The PSC Order resolves what has been designated as second and final part of a WEC proposal initially submitted to the PSC January 31, 2002 and known as Power the Future (PTF).. The original combined proposal was a plan to construct five new power generating facilities, two natural gas-fired units at Port Washington and three new coal-fired units at the existing Oak Creek Power plant (OCPP) site. The Port Washington plants were approved[1] and, thereafter, the PSC undertook consideration of the remaining three proposed new facilities at the Oak Creek site. The new Oak Creek facilities, known

[1] Final Decision, Application of Wisconsin Electric Power Company, Wisconsin Energy Corporation and W.E. Power, LLC, PSCW docket 05-CE-117.

also as the Elm Road Generating Station (ERGS) thus became phase II of the PTF proposal.

This Circuit Court action is a consolidation of five separate petitions[2] for judicial review pursuant to sec. 227.52, Wis. Stats. in the Circuit Court of Dane County; Clean Wisconsin, Inc. and S.C. Johnson & Sons, Inc. v. Wisconsin Public Service Commission and Wisconsin Department of Natural Resources, 03 CV 3478; Clean Wisconsin, Inc. and S.C. Johnson & Sons, Inc. v. Wisconsin Department of Natural Resources, 03 CV 133; Calpine Corporation v. Public Service Commission of Wisconsin, Case no. 04 CV 149; Calpine Corporation v. Public Service Commission of Wisconsin and Wisconsin Department of Natural Resources, Case no. 04 CV 3731; City of Oak Creek v. Public Service Commission of Wisconsin, Case no. 04 CV 533. By order of March 11, 2004, the foregoing separate cases were consolidated into Case no. 03 CV 3478.

The record of the proceedings before the PSC is extensive. Hearings were held on nineteen days and the record contains some 5,945 pages of testimony transcript, of which 302 pages have been designated as confidential pursuant to secs. 134.90 and 196.14, Wis. Stats.

The record begins with a three volume application filed January 31, 2002 by WEC and includes twenty six volumes of testimony, correspondence and exhibits. The record contains a draft Environmental Impact Statement (EIS), issued April, 2003 and a final EIS, issued July, 2003, R. 77 and R. 119, respectively.

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[2] Initially there was a sixth case which was part of the consolidated proceeding, Town of Caledonia v. Public Service Commission of Wisconsin and Wisconsin Department of Natural Resources, Dane County Case no. 04 CV 533. This case was filed in the Circuit Court of Racine County as Case no. 03 CV 2084 and venue was thereafter transferred to the Circuit Court of Dane County. The parties thereafter submitted a stipulation seeking dismissal and, by order of September 2, 2004, this matter was dismissed.

II. Standard of Review

The PSC Order is the product of extensive consideration of complex engineering, economic and environmental matters. Wisconsin must provide adequate electric power for the future and that requires careful, thoughtful planning for facilities needed many years down the road. Generation facilities cannot be built quickly. The planning must consider extremely complex technical, financial and environmental considerations. The PSC is charged by the legislature with oversight of state utilities and possesses both expertise and long experience in that role. In this particular proceeding, involving what is described as the largest utility construction proposal in the history of the state, the PSC has shared regulatory responsibility, as to environmental aspects of the proposal, with the Wisconsin Department of Natural Resources (DNR). This truly is an area where a specialized agency is likely to be far more qualified than any court to analyze the extraordinary volume of relevant factual information. Thus the role of the Circuit Court, in an action which seeks judicial review of an agency Order, should properly be limited. The overarching structure for this great administrative responsibility, however, is a framework of legal principle and while the discretion assigned to the Commission is very great, that discretion must work within the tangible, visible limits of the applicable law.

Section 227.52, Wis. Stats., authorizes a Circuit Court to review a Order of the PSC in this matter and sets forth statutory guidance for court review.

> 2) Unless the court finds a ground for setting aside, modifying, remanding or ordering agency action or ancillary relief under a specified provision of this section, it shall affirm the agency's action.
>
> (3) The court shall separately treat disputed issues of agency procedure, interpretations of law, determinations of fact or policy within the agency's

exercise of delegated discretion.

(4) The court shall remand the case to the agency for further action if it finds that either the fairness of the proceedings or the correctness of the action has been impaired by a material error in procedure or a failure to follow prescribed procedure.

(5) The court shall set aside or modify the agency action if it finds that the agency has erroneously interpreted a provision of law and a correct interpretation compels a particular action, or it shall remand the case to the agency for further action under a correct interpretation of the provision of law.

(6) If the agency's action depends on any fact found by the agency in a contested case proceeding, the court shall not substitute its judgment for that of the agency as to the weight of the evidence on any disputed finding of fact. The court shall, however, set aside agency action or remand the case to the agency if it finds that the agency's action depends on any finding of fact that is not supported by substantial evidence in the record.

(7) If the agency's action depends on facts determined without a hearing, the court shall set aside, modify or order agency action if the facts compel a particular action as a matter of law, or it may remand the case to the agency for further examination and action within the agency's responsibility.

(8) The court shall reverse or remand the case to the agency if it finds that the agency's exercise of discretion is outside the range of discretion delegated to the agency by law; is inconsistent with an agency rule, an officially stated agency policy or a prior agency practice, if deviation therefrom is not explained to the satisfaction of the court by the agency; or is otherwise in violation of a constitutional or statutory provision; but the court shall not substitute its judgment for that of the agency on an issue of discretion.

9) The court's decision shall provide whatever relief is appropriate irrespective of the original form of the petition. If the court sets aside agency action or remands the case to the agency for further proceedings, it may make such interlocutory order as it finds necessary to preserve the interests of any party and the public pending further proceedings or agency action.

(10) Upon such review due weight shall be accorded the experience, technical competence, and specialized knowledge of the agency involved, as well as discretionary authority conferred upon it. The right of the appellant to challenge the constitutionality of any act or of its application to the appellant shall not be foreclosed or impaired by the fact that the appellant has applied for or holds a license, permit or privilege under such act.

Section 227.57, Wis. Stats.,

Certainly the PSC Order reflects determinations of fact reached by the PSC as well as interpretations of law. The petitioners challenge factual determinations reached by the PSC and in undertaking judicial review as to such matters, the court is required to,

> accept findings of the agency if they can be supported by substantial evidence. Section 227.20(6), Stats. Substantial evidence does not mean the preponderance of evidence, but rather whether reasonable minds could reach the same conclusion reached by the agency.
>
> Citizens' Utility Board. v. Public Service Commission, 211 Wis.2d 537, 565 N.W.2d 554 (Ct App. 1997)

As to legal interpretations adopted by the PSC the court must determine, in each instance, the proper level of deference which should be given to the PSC interpretation. All parties recognize that the court should employ one of three levels of deference which may be regarded as a continuum; great weight, due deference and de novo review. If the court accords great weight deference, the court largely defers to the determination adopted by the agency.

> Great weight deference is afforded to an agency's decision under the following circumstances: (1) the agency was charged by the legislature with the duty of administering the statute; (2) that the interpretation of the agency is one of long-standing; (3) that the agency employed its expertise or specialized knowledge in forming the interpretation; and (4) that the agency's interpretation will provide uniformity and consistency in the application of the statute."
>
> Brauneis v. State, 236 Wis.2d 27, 612 N.W.2d 635, citing Harnischfeger Corp v. LIRC, 196 Wis.2d 650, 660, 539 N.W.2d 98 (1995)

Moreover, the court is obligated to regard an agency's interpretation of its own administrative regulation as controlling unless that interpretation is "inconsistent with the language of the regulation or clearly erroneous." Pfeiffer v. Board of Regents, 110

Wis.2d 146, 155, 328 N.W.2d 279 (1983), quoting Beal v. First Federal S. & L. Ass'n. 90 Wis. 2d 171, 183, 279 N.W.2d 693 (1979).

At the other end of the spectrum lies de novo review in which the court begins anew to determine independently what should be the proper legal interpretation. De novo review is the appropriate standard when the court is presented with a circumstance in which the agency's interpretation conflicts with the plain meaning of the statute.

> A court does not, however, give deference to an agency's interpretation of a statute when the court concludes that the agency's interpretation directly contravenes the words of the statute, is clearly contrary to legislative intent, or is otherwise unreasonable or without rational basis.
>
> State ex rel. Parker v. Sullivan, 184 Wis.2d 668, 669, 517 N.W.2d 449 (1994), see also, Lisney v. LIRC, 171 Wis.2d 499, 506, 493 N.W.2d 14, (1992)

De novo review is also proper "where there is no evidence that the agency used any special knowledge or expertise, the issue is clearly one of first impression, or the agency's position on an issue has been inconsistent." RURAL v. PSC, 239 Wis.2d 660, 679, 619 N.W.2d 888 (2000)

The middle of the road approach is for the court to give what is termed due weight to the agency's legal interpretation, a level of deference that is appropriate when the agency is acting within its jurisdictional area but with regard to a particular matter that is unusual or novel.

> Due weight deference, the middle ground between great weight deference and *de novo* review, is warranted where an agency has some experience in the area, but has not developed any particular expertise in interpreting and applying the statute at hand that positions the agency more favorably to interpret that statute than a reviewing court.
>
> RURAL v. PSC, supra, 239 Wis.2d at 678, 679

And finally, it must be noted that the burden is upon the petitioners to demonstrate a proper and adequate basis to modify, vacate or remand the Order of the Commission, Shoreline Park Preservation, Inc. v. DOA, 195 Wis.2d 750, 761, 537 N.W.2d 388 (Ct. App. 1995).

The challenges posed by the petitioners may usefully be placed in two groups. The petitioners argue that the Commission's proceeding began based upon an application for CPCN approval which was incomplete and thus legally insufficient. The petitioners also find fault with various aspects of the Order which resulted. This judicial review will discuss first the issues relating to the application and thereafter will consider the Commission's Order.

III. WEC Application for CPCN Approval

WEC is required to obtain from the PSC, prior to beginning construction of the proposed ERGS, a certification that the proposed new facilities that public convenience and necessity require the project (CPCN), sec, 196.49(3)(b); sec. 196.491(3)(a), Wis. Stats. The process of obtaining certification begins with an application in a form prescribed by the Commission, sec. 196.49(2), Wis. Stats. and Wis. Admin. Code. Section 196.491, Wis. Stats. creates a process whereby the PSC has a limited time to consider an application for authorization to construct a new electric generating facility. The procedure includes, at critical points, default provisions which provide to the applicant a favorable determination, if the Commission fails to act within statutorily determined periods.

The first step in the process is a determination by the PSC as to whether the application for a CPCN is complete. The Commission must review the application and

advise the applicant as to whether it is complete, within 30 days. The applicable statute provides,

> The commission shall determine whether an application filed under subd. 1. is complete and, no later than 30 days after the application is filed, notify the applicant about the determination. If the commission determines that the application is incomplete, the notice shall state the reason for the determination. An applicant may supplement and refile an application that the commission has determined to be incomplete. There is no limit on the number of times that an applicant may refile an application under this subdivision. If the commission fails to determine whether an application is complete within 30 days after the application is filed, the application shall be considered to be complete.
>
> Section 196.491(3)(a)(2), Wis. Stats.

Section 196.491(3)(g), Wis. Stats. provides that the PSC must take final action within 180 days from the point that the application is complete. The 180 day time limit can be extended one time, upon approval by a circuit court, by an additional 180 days. Thus, from the date that an application is complete, the PSC has no more than 360 days to take final action. If the Commission fails to do so the application is deemed approved.

The determination that the application is complete is a crucial element in this process. At that point, the statutory deadline for determination is fixed. 360 days appears to be a substantial period of time until consideration is given to the size, cost and complexity of the current proposal as well as the opportunity for public participation that the Commission must provide.

There is a compelling logic to the statutory process which is all the more apparent in this case where extraordinary factual complexity and the need for timely resolution confront the finite resources of a regulatory agency. It is significant and appropriate that the key date in the process, the starting gun as it may be envisioned, is in the hand of the party most interested in the application, the applicant utility. WEC

presumably has the best access to the information that must be assembled to produce a complete application. The applicant utility has the direct, immediate concern and is likely possesses the resources necessary to assemble the required information.

Petitioners now assert that the PSC improperly determined that the WEC application was complete and seek an order vacating the PSC Order upon that basis. The arguments that the application was incomplete evolve essentially to three primary assertions;

1. The application did not present at least two proposed sites as required by sec. 196.491(3)(d)3, Wis. Stats. and Wis. Admin. Code, sec. 111.53(1)(e).

2. The application did not contain the regulatory approvals required by Wis. Admin. Code, sec. 111.53(1)(f) 1.

3. The application did not contain the information about needed new transmission line facilities as required by Wis. Admin. Code, sec. 111.53(1)(f) 4.

A. Alternative Location/Site Requirement

The WEC application offers three proposed configurations of the three proposed new generating plants. The Final EIS describes a 1000 acre parcel owned by WEPCO and states the proposal is one for three new units, "all constructed on or adjacent to a site containing WEPCO's existing Oak Creek Power Plant (OCPP)." Ex. 274, Vol. 1, Final EIS, p. xvii. In the course of the proceeding, a fourth configuration, known as "North CUP", evolved and eventually was the choice of the PSC. This too is located within the 1000 acre parcel.[3]

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[3] At an earlier point, petitioners Clean Wisconsin and Johnson sought reconsideration of the determination that the multiple OCPP configurations were sufficiently separate sites. On April 17, 2003, the PSC issued an order denying the request for reconsideration and the petitioners sought review in the circuit court. The court ruled that the April 17, 2003 order was a

Wisconsin law directs the PSC to consider "alternative locations" for a proposed new power plant facility,

> Except as provided under par. (e) and s. 196.493, the commission shall approve an application filed under par. (a)1. for a certificate of public convenience and necessity only if the commission determines all of the following:
>
> ...
>
> 3. The design and location or route is in the public interest considering ... alternative locations...
>
> Sec. 196.491(3)(d), Wis. Stats. , in part.

Moreover, the Commission has adopted a rule which requires the applicant to identify "[a]t least two proposed sites" in order for an application to be deemed complete.

> (1) Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> ...
>
> > (e) At least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives.
>
> Wis. Admin. Code, sec. 111.53, in part.

Finally, the Commission has also adopted a provision which provides that in specific circumstances, there is to be no requirement that an alternate location be identified and described in the application.

> 1. An application for a cogeneration facility may meet the requirement under sub. (1) e) by filing information on 2 sites that are both located at the steam host's existing industrial plant, if the cogeneration facility will be a qualifying facility under 18 CFR 292.205 and none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.
>
> 2. An application for repowering an existing generating facility may meet the requirement under sub. (1) (e) by filing information on 2 sites that are both

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preliminary decision not subject to judicial review prior to the issuance of a final decision, Clean Wisconsin, Inc. and S.C. Johnson & Son, Inc. v. Wisconsin Public Service Commission, Case No. 03-CV-1480, Dane County Circuit Court, Order, July 8, 2003.

> located at the existing generating facility site, if none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.
>
> Wis. Admin. Code, sec. 111.53(2)(b), in part.

The Order of the PSC acknowledges the requirement that alternative locations/sites must be considered and interprets that requirement as follows,

> the fact alternate sites may be geographically close together does not automatically render them unreasonable alternatives ... The Commission determines that whether proposed site alternatives are reasonable by applying two standards: the site alternatives must each be feasible locations and they must be sufficiently distinct to offer different packages of costs and benefits
>
> PSC Order, page 45

The Commission reads the statute and the rule to require only that the alternative sites be feasible locations which offer alternative costs and benefits. The present application presents three configurations each of which used the 1000 acre parcel, to some degree, in a different manner. Apparently, none of the three submitted alternatives used precisely the same portion of the parcel. But, using the commission's interpretation of the alternative locations/sites requirement, each of the three WEC alternatives could use precisely the exact same land so long as they were each feasible and involved different costs and benefits. Thus the PSC's interpretation of the law permits elimination of the core requirement, the presentation of at least two different locations.

This formulation is one of law and the question becomes one of determining first the degree of deference owed by the court to the PSC as to this determination. Interpretation of the alternative site provisions of sec. 196.491(3)(d), Wis. Stats. and Wis. Admin. Code sec. 111.53, are matters squarely within the jurisdiction of the PSC. It may be that the agency has called upon a degree of expertise in rendering this

interpretation but it does not appear that the interpretation is a matter of long standing. Nor does it appear that the interpretation will provide uniformity of interpretation.[4]

There is no ambiguity as to what is meant by "alternative locations" in sec. 196.491(3)(d)3, Wis. Stats. Similarly, there is no ambiguity as to what is meant by "[a]t least two proposed sites " in Wis. Admin. Code sec. PSC 111.53(1)(e). The statute and the rule require that not less than two distinct locations be submitted as proposed alternate sites. There is no ambiguity and therefore no need to look to other sources for assistance. If there was ambiguity, however, two other related rules adopted by the PSC make clear the intent of Wis. Admin. Code sec. PSC 111.53(1)(e). The PSC, by adopting Wis. Admin. Code secs. PSC 111.53(2)(b)1 and 111.53(2)(b)2 expressly provides for two specific situations where the logic of the alternate proposed sites rule is declared inapplicable. Those two exceptional situations arise when a utility may seeks to undertake a substantial renovation of an existing generation plant or seeks to build a co-generation facility to capture the energy otherwise wasted in steam produced by some other industrial process. In either instance, the proposal is by definition site-specific. In such situations, the Commission has acknowledged that the two site requirement cannot be applied. Wis. Admin. Code, secs. 111.53(2)(b) 2 and 3. If alternate configurations of the same parcel is a sufficient demonstration of alternatives, then these two specific exceptions are needless surplusage. The more reasonable interpretation is that the exceptions are necessary because Wis. Admin. Code sec. PSC

[4] The decision approving a CPCN as to the Fond du Lac Energy Center includes a consideration of two separate, distinct proposed locations for the new facility, Application of Fond du Lac Energy Center, LLC, Final Decision, May 5, 2003, pp. 6-8, Docket 9343-CE-100, as does the decision in approving the Joint Application of Fox Energy Company, LLC and American Transmission Company, LLC, Final Decision, November 8, 2002, pp. 7, 8, Docket 05-CE-115.

111.53(1)(e) is intended to mean precisely what is clearly says, the applicant must propose at least two distinct, alternative sites for a new plant.

In argument submitted to this court, the PSC suggests that the alternate location requirement should be viewed as a "rule of reason" based upon a requirement in the Wisconsin Environmental Policy Act that state agencies consider "alternatives to the proposed action", sec. 1.11(2)(c)3, Wis. Stats. and caselaw interpreting that statute, together with a parallel provision within the National Environmental Policy Act, 42 U.S.C. sec. 4332 (1970), Wis. Environmental Decade v. Public Service Commission, 79 Wis.2d 161, 175, 255 N.W. 2d 917 (1977). The WEPA requirement is intended to offer general guidance to an extremely wide range of government actions. It is a broad, statement of an approach to be taken generally. By contrast, the statute and rule applicable here speak directly to the number of "proposed sites" or "alternative locations" that must be identified. The express requirement is that more than one must be included in the application and neither the WEPA nor the NEPA are intended to offer guidance of such specificity.

In the alternative, if the court accepts the interpretation offered in the PSC Order, there remains a question as to whether the three alternatives submitted in the WEC application actually meet the test stated, whether the record reflects sufficient evidence upon which the PSC could reasonably conclude that the sites really offer distinct costs and benefits. A fair review of the record reflects the clear picture that there is no significant distinction between the costs and benefits offered by each of the three alternatives. These are not alternative sites or locations; They simply are three

different configurations or utilizations of a single site which means that the application does not meet the legal minimum for consideration by the PSC.

The interpretation of sec, 196.491(3)(d)3, Wis. Stats. and Wis. Admin. Code sec. PSC 111.53(1)(e) is clearly erroneous. It is error for the PSC to deem the WEC application complete on November 15, 2002 because the application failed to include at least two alternative sites as required by applicable rule. The Order based upon that application is hereby vacated and the matter is remanded to the Commission to permit the applicant to submit an application which does comply with sec. 196.491(3)(d)3, Wis. Stats., and Wis. Admin. Code sec. PSC 111.53(1)(e).

B. Regulatory Approvals

The Commission requires that an application for CPCN must demonstrate that regulatory approvals, other than that of the PSC, have been obtained.

> (1) Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
> ...
> (f) Site-related information for each proposed power plant site, including all of the following:
>
> 1. The regulatory approvals required for construction and operation of the facility.

Wis. Admin. Code, sec. 111.53, in part.

The WEC initial application was filed in January, 2002. WEC thereafter filed a series of four supplements to the application, the fourth on October 23, 2002. On November 15, 2002, PSC Electric Division Administrator Robert Norcross rendered a

determination that the WEC application was complete.[5] That determination was expressly based, however, upon the applicant's commitment to provide further data related to wetlands issues, subsurface sampling as well as aquatic, benthic and lake bottom information. Specifically, the Norcross correspondence stated,

> While the application is determined to be complete at this time, our determination is, in part, based on WE Energies' commitment to supply additional information related to items 6, 7, and 18 of the Commission's October 7, 2002, incompleteness letter. Substantial amounts of information relating to items 6, and 7 have been provided and will allow our review of the wetland delineations to begin. based upon the information contained in Supplement 4 and conversations with WE Energies staff, it is my understanding that the remaining information relative to items 6 and 7, consisting of final wetlands report from the Southeast Regional Planning Commission, will be available in approximately two weeks. In addition, the information relative to the subsurface drilling, sampling and resting survey, the wave/environmental climate date survey and the aquatic/benthic environmental and lake bottom characterization survey in item 18 will be available on the time line set out as answer 5-SUP-021 of Supplement 4.
>
> Norcross correspondence, November 15, 2002, in part.

There is no dispute that the application was deemed complete by Administrator Norcross despite the lack of certain environmental information which was to be submitted later. The Norcross letter speaks in terms of missing information rather than missing regulatory approvals but the PSC Order makes clear that all regulatory approvals still had not been obtained 360 days after the Norcross letter, as of the November 10, 2003 issuance of the Order.

> DNR must also issue a number of water-related permits and approvals before construction may commence. These include: permits for grading work for the generating facilities and for the railroad improvements; the approvals for dredging and for use of lakebed and shoreline structures to construct breakwater and harbor facilities; the approval for use of lakebed to install the cooling water intake and discharge structures; and the water quality certification needed for wetland

[5] The November 15, 2002 correspondence of Administrator Norcross is attached as Exhibit A to the April 30, 2004 brief of Clean Wisconsin/Johnson. This document, the authenticity of which is not challenged by any party, does not appear otherwise to be within the record.

> fill. As of the date the record closed, DNR has deemed the joint state/federal application for water regulatory permits and approvals for ERGS to be incomplete.
>
> Order, at page 53

With regard to air pollution, the legislature has expressly committed such matters to the DNR, sec. 196.491(3)(d) 3, Wis. Stats., but water-related approvals are to be part of the application. Specifically, the applicant is required to provide an engineering plan to the DNR not less than 60 days before the PSC application is submitted which then triggers an obligation by the DNR to list, within 30 days, the permits that will be required, sec. 196.491(3)(a) 3.a, Wis. Stats. This begins a time-limited application and approval process before the DNR, sec. 196.491(3)(a) 3. b., Wis. stats., which is similar to but shorter than that applicable before the PSC under sec. 196.491(3)(g), Wis. Stats. The coordination between the DNR application process and CPCN process before the PSC, particularly the requirement that the DNR process precede that of the PSC is readily apparent in the explicit requirement that the CPCN not issue until all required regulatory permits have issued.

> The commission may not issue a certificate of public convenience and necessity under this subsection until the department has issued all permits and approvals identified in the listing specified in par. (a)3.a. that are required prior to construction.
>
> Section 196.491(3)(g), Wis. Stats., in part.

Here the plain language of the applicable rule states that an application, in order

to be deemed complete, must include the regulatory approvals necessary for construction and operation of the proposed new facility, Wis. Admin. Code, sec. 111.53(1)(f) 1. The requirement of the administrative rule is plain and unambiguous.[6] The application does not contain the required regulatory approvals and thus to deem it complete is an action undertaken in violation of an applicable administrative regulation.

It is error for the PSC to deem the WEC application complete on November 15, 2002 because the application fails to include the regulatory approvals required by Wis. Admin. Code, sec. 111.53(1)(f)1. The Order based upon that application is hereby vacated and the matter is remanded to the Commission to permit the applicant to submit an application which does comply with Wis. Admin. Code sec. PSC 111.53(1)(f)1.

C. Transmission Line Agreements

The third primary area of objection to the completeness of the application is the question of transmission line facilities. The applicable administrative rule provides,

> Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> ...
>
> (f) Site-related information for each proposed power plant site, including all of the following:
>
> ...
>
> 4. Any required transmission line construction, agreements for use of the transmission system to deliver plant power, transmission losses, and effects on system reliability. If a certificate of authority under s. 196.49, Stats., is required to construct the transmission line, the location of termini, length in miles, and voltage for each transmission line.

[6] There is an obvious logic to this requirement. It is clear that the legislature has decreed that the PSC bats last, sec. 196.491(3)(g), Wis. Stats., and that the PSC has a limited period of time within which to consider an application. It follows therefore that the Commission should have before it a truly complete application before it undertakes its significant responsibility.

Wis. Admin Code, PSC, section 111.53(1), in part.

There are other administrative rules which appear to have application as well. A complete application is required to include,

> The estimated capital cost of the generating facility *and all related facilities*, broken down by major plant accounts. All cost escalation factors used in the estimate shall be identified.
>
> Wis. Admin. Code, sec. 111.53,(1)(c) 1, in part, emphasis added.

There is no dispute that the application did not contain agreements for the use of transmission lines for the 1230 MW of new power to be produced by the two proposed plants which were approved, nor does the record appear to contain the much of the other information required by Wis. Admin. Code, sec. 111.53(1)(f) 4.[7] The Commission offered an estimate of $166 million, Order, p. 10.[8] Potentially, construction of the required transmission facilities will require a CPCN from the PSC, Sec. 196.49, Wis. Stats.,Wis. Admin. Code, sec. 111.53(1)(f) 9,[9] which will in turn require a careful consideration of the technical, environmental and economic facts by the PSC, Wis. Admin. Code, sec. 111.55.

In argument, the PSC suggests that recent reorganization of the state utilities, involving the transfer of transmission lines to an entity known as the American Transmission Company (ATC) makes it difficult to obtain the information required by the

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[7] As will be discussed below, the Commission notes that the available transmission data is preliminary and contingent, for resolution at a later time, Order, p. 10, 11.

[8] The total estimate in the Final EIS is $266,216,753 but of that amount, $102,164,662, apparently is allocated for operation of the third, IGCC unit, as to which the PSC did not give approval which would produce an estimate of $164,052,091, Final EIS Vol 1, pp. 15, 126-132.

[9] Hearing transcript, Circuit Court, October 8, 2004, p. 62, ll. 2-7.

applicable rule.[10] The study of the need for transmission facilities does appear to be an on-going process, [11] however, and other recent orders do include transmission facility information.[12]

This is a matter of consequence. The substantial power to be produced is of no use without adequate facilities to transmit it for distribution. A related and necessary facility, required for the use of the power, with an estimated cost equal of $166 million, 7.5% of the cost of the largest utility construction project in the history of the state, appears to be one of the "related facilities" to be considered in the approval process, Wis. Admin. Code sec. PSC 111.53(1)(c)1. In any event, there is no dispute that the applicable Administrative rule requires that agreements for the use of transmission facilities be part of a complete application but that no such agreements are included in the WEC application. The requirement is both clear and unambiguous and it has not been complied with.

It is error for the PSC to deem the WEC application complete on November 15, 2002 because the application fails to include the transmission line agreements required by Wis. Admin. Code, sec. 111.53(1)(f)4. The Order based upon that application is hereby vacated and the matter is remanded to the Commission to permit the applicant

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[10] Hearing transcript, Circuit Court, October 8, 2004, p. 63, l. 1 to p. 64, l. 6.

[11] The Final EIS refers to a 10 year assessment update and interconnections studies relating to the ERGS project prepared by ATC, Final EIS, V. 1, p. 128, R. 119.

[12] Joint Application of Fox Energy Company LLC and American Transmission Company LLC, Final Decision, pp, 10-18, PSC Docket 05-CE-115; Application of Fond du Lac Energy Center, Final Decision, pp. 3, 7 & 8, PSC Docket 9343-CE-100.

to submit an application which does comply with Wis. Admin. Code sec. PSC 111.53(1)(f)4.

D. Identity of Contingent Owners

Petitioner Robert Owen submits that the WEC application was incomplete because it did not identify properly the contingent interests held by Wisconsin Public Power, Inc. (WPPI) and Madison Gas & Electric (MGE). WPPI is a wholesale supplier of power to thirty-seven Wisconsin communities and MGE is a utility located in Dane County. Both WPPI and MGE hold options each to purchase a 50 MW ownership interest in the proposed new facility and the Commission's Order contemplated both the probability that the options would be exercised as well as the possibility that they would not, Order, pp. 31, 32. With regard to the identity of utility owners, the applicable administrative regulation provides,

> Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> (a) The operating characteristics of the proposed facility, including all of the following:
>
> ...
>
> 4. The names and addresses of owners and investors and the percent of ownership.

Wis. Admin Code, Sec. PSC 111.53(1), in part.

The PSC has interprets the above rule not to require the listing of the type of potential ownership interest, an option to become an owner, which were held by WPPI and MGE at the point that the application was filed. The question posed initially is the level of deference that this court should give to the interpretation adopted by the Commission.

This appears to be a question squarely within the Commission's jurisdiction and one which has been adopted by the Commission in the past. The interpretation adopted by the Commission is not in conflict with the plain meaning of the regulation and will promote uniformity of interpretation. Therefore the court believes great deference should be given to the Commission's interpretation, Pfeiffer v. Board of Regents, supra. The court concludes the Commission acted properly in its treatment of the ownership option interests of WPPI and MGE.

E. Completeness of the Application as of November 15, 2002

The PSC argues that it may properly deem an application substantially complete notwithstanding failure to include every item required by statute or rule. This is, however, a novel interpretation of the law by the Commission[13] and should properly be given no more than due deference, RURAL v. PSC, supra 239 Wis.2d at 679.

The petitoners question the wisdom of embarking upon this complex approval process without the required information but the question now presented is limited to whether the PSC holds the authority to forego the benefit of rules created to assure to the Commission that sufficient information is available in a timely manner to render a decision upon an application. If the PSC is intended to be the exclusive beneficiary of the information required to be included in an application, it might be possible for the Commission, in effect, to waive the right to receive the information in question. The consideration of CPCN is, however, very much a public process. The public is entitled

[13] Hearing transcript, Circuit Court, October 8, 2004, p. 17, L. 4-25

to participate in the process and full participation requires access to a full record of information, the first and perhaps the most critical element of which is a complete application. The PSC therefore must assure that the application be complete, not simply so it has before it all necessary information but also to provide to the public an opportunity to examine the basis for the proposed construction.

The requirements set forth in administrative law defining a complete application serve an important public purpose. The application pending on November 15, 2002, fails to identify at least two alternative locations, fails to include all required regulatory approvals and fails to set forth transmission line agreements. The November 15, 2002 determination by administrator Norcross is that the application was complete and the Commission's April 17, 2003 Order affirms that determination. Both determinations are in violation of the plain meaning of the applicable regulation and are therefore entitled to no deference, State ex rel. Parker v. Sullivan, supra, 184 Wis.2d at p. 669. It is the ruling of this court, as a matter of law, that the application is not complete within the meaning of sec. 196.491(3)(d), Wis. Stats. The law, sec. 196.491(3)(e), Wis. Stats., gives to the PSC only two choices when faced with the incomplete application, it can "reject the application or approve the application with such modifications as are necessary for an affirmative finding under" sec. 196.491(3)(d), Wis. Stats. The PSC chose a third course, however, and permitted the process to begin based upon an incomplete application. In doing so, the PSC acted in violation of the law and the Order which resulted from that procedure must therefore be vacated and the matter remanded to the PSC to do that which is required under sec. 196.491(3)(e), Wis. Stats. Specifically, the Commission must give the applicant an opportunity to submit an

application which meets the requirement of the Wis. Admin. Code secs. PSC 111.53(1)(e), 111.53(1)(f)1 and 111.53(1)(f)4.

IV. Commission's Order

A. Energy Need Projections

The touchstone of any petition for authorization to build a new generating facility is the obvious question of whether there will be a need for the power that will be produced. The WEC has included within its application, forecasts of growing demand over the period 2003 through 2012. Petitioners CW/Johnson and Robert Owen question the projections of need submitted by WEC and Mr. Owen, particularly, asserts that appropriate investment in alternative power sources could reduce the requirements asserted by the applicant. The PSC, in its order, concludes that the proposed plants would not be needed as quickly as WEC suggested and further directs that there be an increased reliance upon alternative sources. The PSC, however, does accept the fundamental position that more generation capacity will be needed both to replace aging facilities and to respond to increasing demand. This is a determination involving both fact and law, a determination squarely within the jurisdiction and expertise committed to the PSC. This clearly is an area as to which the court should properly accord great deference to the legal interpretation of the PSC and also an equivalent deference as to the fact determinations that were made. The criticism and suggestions offered by the petitioners as to projected need are plausible and reasonable. That, however, is not the test and for the court to intrude upon the PSC's determination of future need. That which the petitioners urge would be an improper interference with the agency's exercise

of its expertise and discretion as contemplated and protected by sec. 227.57(6), Wis. Stats. The court therefore affirms the Order of the Commission in this respect.

B. EGEAS Computer Model

The applicant, the PSC and the petitioners, in varying degree, all rely upon a computer program known as the Electric Generation Expansion Analysis System (EGEAS). The operator of the program introduces assumptions as to future power need together with estimates of construction cost, maintenance expense, fuel cost and fuel availability. The program is designed to calculate what are thought to be optimal plans to meet the needs defined. No party suggests that it is error for the PSC to rely, at least in part, upon the EGEAS model and indeed, the program appears to be simply a device that is able to describe and compare alternative future construction scenarios through consideration of a wide range of variables. All parties appear to acknowledge that the product of the AGEAS model can be no more valuable, accurate or complete than the assumed facts that are introduced into the program. As with the projection of future power need, the question of whether the data relied upon by the AGEAS model is reasonable or not, appears to be every bit as much within the PSC's area of responsibility and expertise. The petitioners offer reasonable critiques and suggestions but the test is whether the petitioners have shown that the choices made by the PSC, in selecting the data used in the various AGEAS reports, were unreasonable. That showing has not been made.

The petitioners suggest that the assumptions upon which AGEAS studies are based were inaccurate, improper or incomplete but no petitioner suggests that it was an error of law for the Commission to use the AGEAS program. In essence, the argument

is one of fact; the petitioners suggest that the factual basis for the AGEAS studies relied upon by the PSC began with erroneous assumptions. The question arguably evolves to whether or not the factual assumptions relied upon by the PSC, in utilizing the AGEAS program, are supported by substantial evidence, within the meaning of sec. 227.52(6), Wis. Stats. The burden to demonstrate the basis to vacate the Order is upon the petitioners, Shoreline Park Preservation, Inc. , supra, and it is the determination of the court that petitioners have not shown that the factual assumptions upon which the AGEAS studies were based to be lacking the support of substantial evidence, within the meaning of sec. 227.52(6), Wis. Stats.

C. Health Care Costs

The PSC Order does not attribute any health-related cost to the construction and operation of the two new facilities but instead suggests that the evidence offered as to health cost should be considered by the DNR as that agency considers air pollution permits applicable to the new facility, Order, p. 52.

Petitioners CW & Johnson submit that the record contains competent evidence that reflects that there will be a quantifiable economic impact, that is, a cost attributable to health care and disability caused by the proposed new facilities. The argument is that while there is dispute as to the magnitude of that cost, the Commission must determine there will be operating cost in some amount caused by a need for increased health care. The petitioners' argument flows to the assertion that the PSC does not hold the discretion simply to make no finding as to that cost; Cannot ignore it entirely.

Petitioners CW & Johnson argue that, as part of determining whether or not the PSC should approve a CPCN, the commission must include as an operational cost of

the project, the on-going health costs attributable to air emissions from the new facility. The petitioners assert that the PSC is not precluded from including the on-going economic impact upon health care caused by the operation of the new facilities and they go on to argue that it is reversible legal error to fail to include that as an element of project cost.[14]

The legislature has imposed upon the PSC an obligation to consider environmental issues by requiring that the Commission approve an application for CPCN only if it determines that the proposed facility "will not have an undue adverse impact on other environmental values, such as ... public health and welfare", sec. 196.491(3)(d)4, Wis. Stats., in part. Moreover, the legislature has limited that authority by providing that "[i]n its consideration of the environmental factors, the commission may not determine that the design and location or route is not in the public interest because of the impact of air pollution if the proposed facility will meet the requirements of ch. 285," Sec. 196.491(3)(d)3, in part. The limitation in sec. 196.4191(3)(d) 3, Wis. Stats. is specific and is focused upon the power to approve an application for CPCN. The statute does not expressly preclude the PSC, however, from considering quantifiable health care cost as an operating expense.[15]

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[14] If the DNR had issued air pollution permits pursuant to Chapter 285, it might be arguable that sec. 196.491(3)(d) 3, Wis. Stats. implies an absence of PSC jurisdiction for any consideration of air pollution matters. The petitioners observe correctly, however, that no DNR permit has been issued.

[15] Should the Commission choose to do, however, that would lead to other issues. Typically, operational cost estimates are directed in large part to determining the sums that may be recovered by the utility from rate-payers. In the case of future health care costs to be incurred, the question arises as to how such anticipated costs are to be measured and to whom are they to be paid.

It may be that the PSC could choose to include within its projection of operational cost, presumably as part of the effort to select between various equipment options and alternative locations, the costs attributable to public health matters. That is something very different, however, from the claim that the PSC must, as a matter of law, determine a health care cost whenever a record contains competent evidence as to such costs. Within the statute in question, Sec. 196.491(3)(d) 4, Wis. Stats., the term "public health and welfare" is part of a larger list of factors that the commission is to consider, including "ecological balance, ... geological formations, esthetics of land and water and recreational use," If there is a legal duty to include whatever quantification may be available as to public health, would not that same duty also apply to "esthetics of land ... use"? It may be that certain of the listed concerns can be measured in cost but it appears equally true that other concerns may not be quantifiable. Unquantifiable does not mean unimportant. Another, more reasonable interpretation of Sec. 196.491(3)(d) 4, Wis. Stats., is that the legislature identified important categories of concern which should properly be considered, even if it may not be possible to assign a clear economic value.

The language of the statute does not require quantification but rather directs the PSC to look to the overall impact of a proposal. Moreover, the legislature has not said that no adverse impact may be allowed. Rather it requires the Commission to withhold approval if it determines there to be an "*undue* adverse impact on ... public health", sec. 196.491(4)(d), Wis. Stats., emphasis added. This requirement is one which affords to the Commission substantial discretion to determine whether or not a particular impact is too great or "undue". The Commission has permitted evidence as to such costs to be

presented, apparently has even provided funding to assist the petitioners to prepare and present such evidence.

The court concludes that sec. 196.491(3)(d), Wis. Stats. cannot be read to impose a clear obligation upon the commission to include within the project cost calculation, any amount attributable to health costs. Further, in the alternative, if the statute could be so interpreted, the interpretation adopted by the Commission is one to which great deference should properly be given by this court, Brauneis v. State, supra.

D. Transmission Facility Design, Location and Cost

The cost of additional facilities to permit the transmission of the power generated by the approved plants poses a somewhat different question than that of projected health care costs. The proposed facility cannot serve any purpose whatsoever until sufficient transmission lines are constructed to distribute the power generated. As noted above, no application is complete until it contains whatever agreements are necessary for access to the transmission facilities and, again as noted above, the estimate of cost for these facilities is set at $166 million.[16] This is a cost of a necessary, directly related physical facility. The Commission is prohibited from granting the CPCN until it determines that,

> the design ... is in the public interest considering ... engineering, economic... and environmental factors...
>
> Sec. 196.491(3)(d) 3, Wis. Stats.

[16] The available information, described by the Commission as incomplete, Order, pp. 10 & 11, includes a Generation Interconnection Study Report, dated December 21, 2001, prepared by the American Transmission Company is in the Record at R.1, Vol. 3, Appendix Y.

As to design. cost and location of transmission facilities, the Commission essentially elects not to address the issue. In the Order, the Commission candidly states that it does not have the required information,

> American Transmission Company (ATC) has conducted several studies to determine the cost of interconnecting ERGS to the transmission system and the cost of up grading the transmission system so it can transmit power from ERGS. It has completed a partial transmission restudy of ERGS on July 25, 2003, estimating the transmission costs associated with SCPS 1 and SCPC 2 at $65.5 million and $100.5 million, respectively. Determining transmission system requirements for ERGS, though, depends upon the amount of forecasted generation in southeast Wisconsin and northern Illinois ... This will require ATC to restudy interconnection needs to minimize the amount fo transmission facilities installed and recalculate the costs involved. The analysis is quite complex, depends upon the site chosen, and requires several months of sequential computer model runs.
>
> Order, p. 10-11

Given the lack of definitive information, the Commission is able only to provide as follows in the Order,

> The applicants shall work with the ATC, DNR and neighboring communities to minimize the cost and the environmental impact of moving and reconfiguring the 138 kV and 345 kV substations. The applicants shall inform the Commission of the results of this work, documenting the estimated cost involved the proposed layout of the substations, and the associated transmission line interconnection routes for exiting the plant site.
>
> Order, p. 58, para. 7

The Commission is prohibited from granting the CPCN until it determines that the design of the proposed facility is in the public interest, with particular attention to the engineering, economic and environmental facts, sec. 196.491(3)(d)3, Wis. Stats. The Order, however, grants the CPCN approval while expressly stating that the Commission does not know what the cost or design of the required transmission facilities will be. This determination to approve construction of the largest generating facility in state

history without also determining the cost, design and location of the transmission facilities appears to be unprecedented and is, at best, puzzling. This determination to go forward without the transmission information is, nonetheless, a decision that is within the area of concern assigned to the PSC and it may well be the product of the special expertise possessed by the Commission. The granting of CPCN approval without considering the question of transmission facilities, however, does not appear to be an interpretation of long standing, nor does it appear that this approach will provide uniformity and consistency. It certainly is true that sec. Sec. 196.491(3)(d) 3, Wis. Stats., does not expressly compel the inclusion of transmission facilities but this court concludes that the those facilities are so integral and necessary to the planned generation plant that the decision to grant approval without determining the design, cost and location of those facilities to be contrary to the legislature's intent, sec. 196.491(3)(d) 3, Wis. Stats. and "otherwise unreasonable or without rational basis" within the meaning of State ex. rel. Parker, supra. It is therefore the order of the court that the Order is hereby vacated and the matter remanded to the Commission for a determination as to the design, cost and location of transmission facilities needed to serve the proposed new plant.

E. Energy Priority Law

The PSC Order approves the construction of two 615 MW plants which will use high sulfur coal as the fuel source. The Order considers the contribution that renewable energy sources, wind generation and energy conservation could make to the future energy needs of the state. The PSC also considers a competing proposal,

submitted by Calpine, which would have provided power using equipment that uses natural gas as the fuel. The Commission determines the following as fact,

> Energy conservation, renewable resources, or other energy priorities listed in Wis. Stat. Secs. 1.12 and 196.025, or their combination, are not cost-effective or technically feasible alternatives to the projects proposed in this docket.
>
> Finding of fact, no. 1, Order, p. 4

The petitioners argue that the PSC, in its process, fails to comply with the requirements of the Wisconsin Energy Priority Law, sec. 1.12, Wis. Stats. That statute provides,

> **(4) Priorities.** In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:
>
> (a) Energy conservation and efficiency.
> (b) Noncombustible renewable energy resources.
> (c) Combustible renewable energy resources.
> (d) Nonrenewable combustible energy resources, in the order listed:
> 1. Natural gas.
> 2. Oil or coal with a sulfur content of less than 1%.
> 3. All other carbon-based fuels.
>
> **(5) Meeting energy demands.** (a) In designing all new and replacement energy projects, a state agency or local governmental unit shall rely to the greatest extent feasible on energy efficiency improvements and renewable energy resources, if the energy efficiency improvements and renewable energy resources are cost-effective and technically feasible and do not have unacceptable environmental impacts.
>
> (b) To the greatest extent cost-effective and technically feasible, a state agency or local governmental unit shall design all new and replacement energy projects following the priorities listed in sub. (4).
>
> Sec. 1.12, Wis. Stats. in part.

Moreover, the foregoing fuel priority policy is reinforced in Chapter 196 where it is stated,

> To the extent cost-effective, technically feasible and environmentally sound, the commission shall implement the priorities under s. 1.12(4) in making all energy-

related decisions and orders, including advance plan, rate setting and rule-making orders.

Sec. 196.025(1), Wis. Stats.

The Order addresses the two top priorities, energy conservation and renewable energy, Order, pp. 16-19, but selects, for the great majority of the future power need, equipment which uses the lowest priority fuel, high sulfur coal.

The question of compliance with the Wisconsin Energy Priorities Law appears to resolve into two distinct issues;: The selection of high-sulfur coal over natural gas as the primary energy source for baseload facilities and the lack of consideration of oil and low-sulfur coal as potential fuels.

1. Selection of High-Sulfur Coal over Natural Gas as the Primary Energy Source

The Order of the PSC bases the decision to use high-sulfur coal upon the need to provide what is termed, "baseload" power and a determination that high sulfur coal is substantially better suited to the production of baseload power than is the top priority fuel, natural gas, Order, pp. 19-22, and the petitioners argue that this is in violation of the Wisconsin Energy Priorities Act. . The term, "baseload" is not defined in the statutes, in the administrative regulations or in the Order of the PSC. In the argument submitted to this court, it has become apparent that the parties understand "baseload" to be a generating facility intended to provide power effectively on a constant basis, not less than 70% of the time, day in, day out. [17]

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[17] At hearing, the PSC indicated that the distinction is one of economics rather than technical capacity.

"What you need to recognize is the commission has never contested the fact that

The petitioner's objection is framed as a legal issue, whether the Order reflects PSC compliance with the obligations imposed by sec. 196.025(1), Wis. Stats. which requires the Commission to "implement" the fuel priorities of the Energy Priorities Law Wisconsin to the extent that it is "cost-effective, technically feasible and environmentally sound" to do so. The petitioners suggest that, as to each of the fuel sources listed, the Commission must require the applicant to begin with the highest priority fuel and rely upon that source unless it can be shown that the reliance is not cost effective, not technically feasible or not environmentally sound. The Commission asserts, in effect, that it need only consider or contemplate the priority concept without requiring an actual examination of each possibility.

The Energy Priorities Law lists four types of non-renewable fuels; natural gas, oil, low sulfur coal and everything else. The high sulfur coal that the applicant seeks to rely upon falls into the last and lowest priority. In the decision, the PSC repeatedly states that natural gas is not an appropriate fuel for a power plant intended to provide baseload power but does so without offering a clear factual basis. This appears to be in response to a competing proposal submitted by petitioner Calpine, the owner of a natural gas generating plant recently approved by the PSC to provide baseload power. Calpine submitted to the PSC, as a confidential exhibit pursuant to sec. 196.14, Wis.

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a gas plant is capable of running in baseload mode. It is not a question of whether or not the machinery is strong enough to run night and day. It is a question of whether the gas is available and at what price. And at this point the commission is worried that it would be over extending the use of gas because we are already using it for peakers, we are already using it for intermediate load plants. It is a slightly different question. When you go back are these plants capable of running at baseload? Yes, they are. We are not contesting that."

Hearing transcript, Circuit Court, October 4, 2004, p. 47, l. 19 to p. 48, l. 6

Stats., a proposal to provide the power needed by WEPCO, using natural gas-fired equipment located at Calpine's Fox Energy Center and Fond du Lac Energy Center, R-160, Exhibit 202(c); R-157, pp. 3366, 3367. Calpine argues that its proposal would have provided the power needed at less cost and through the use of a fuel determined to be a highest non-renewable fuel priority by sec. 1.12(4)(d), Wis. Stats.

The rationale for the Commission's preference for high-sulfur coal is not clear and appears to be more of an assumption than a determination of fact. Essentially, the Order simply states, repeatedly, that coal-fired equipment must be used because the need is for baseload power.

> The Commission also considered whether gas-fired generation is a cost-effective or technically feasible alternative that could *replace the need for new baseload generating facilities.*
>
> Order, p. 19, emphasis added

> A critical part of the Commission's ultimate preference for coal-fired generation over gas-fired generation rests heavily on the discretion accorded the Commission under the Energy Priorities Law and the Power Plant Siting Law. More significantly, the crux of this case is really about the appropriate timing to construct new baseload generation. A fundamental policy choice presented in this case is whether the Commission believes that WEPCO needs to take steps now to address needs for new baseload facilities over the next decade.
>
> Order, p. 20

> There are qualitative factors set forth in Wis. Stat. sec. 196.491(3)(d) that also support the Commission's conclusion that new coal-fired generation is in the public interest and that ERGS is the most cost-effective and technically feasible way to address WEPCO's baseload needs. The Commission's decision to approve SCPC 1 and 2 balances its obligations under the Energy Priorities Law and the Power Plant Siting Law... The evidence in this proceeding demonstrates the advantages of using cleaner burning coal technologies like SCPC as a baseload resource over gas-fired generation.
>
> Order, p. 21

The problem is that the "qualitative factors" alluded to above are not stated in the Order nor can they readily be inferred. The Commission candidly describes the preference for high-sulfur coal equipment as one which,

> reflects the *Commission's policy judgment* that while natural gas-fired generating facilities may be better suited for peak and intermediate load generation, coal-fired generation provides the most practical means to serve WEPCO's needs for baseload capacity
>
> Order, p. 21, emphasis added.

The above passage is revealing. The selection of the appropriate fuel is not a policy choice. The policy choice has been made by the legislature with the enactment of sec. 1.12, Wis. Stats. The role of the Commission is to implement that policy choice. What is required is a fair examination of fact in the context of the statutorily-enacted policy choice giving preference, where appropriate, to natural gas over high sulfur coal. There is to be a determination of fact as to whether natural gas or natural gas in combination with another fuel would produce power that is "cost-effective, technically feasible and environmentally sound", sec. 196.025, Wis. Stats.

No "policy" as to which fuel is always best for baseload operation has been identified. The Order itself says there has been no approval of "any new baseload, coal-fired generation in Wisconsin since 1980", Order, p. 21.[18]

It is not possible to escape the conclusion that sec. 196.025(1), Wis. Stats. imposes an obligation to make a determination as to each of the four fuel types. That is the plain, straightforward command of the statute. The argument is offered that the

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[18] Although the Order approving construction of the Calpine Fox Energy facility in Outagamie County finds that the gas-fired facility is capable of providing baseload power, Final Decision, p. 7, PSC Docket 05-CE-115 as did the Order approving construction of the Calpine Fond du Lac Energy facility, final decision, p. 5, PSC Docket 9343-CE-100.

PSC considered all priorities, but there is not a single word in the order to suggest that either oil or low sulfur coal[19] was ever, in any manner or degree, contemplated as a potential fuel.

The Commission Order looks to the prefatory note of the Energy Priorities Law to find language that suggests that an agency is to possess great flexibility in meeting the obligations created by the law. There is, however, no need to refer to secondary sources and it would be improper to do so when the language of the statute is as clear and plain as it now the case, City of Muskego, v. Godec, 167 Wis.2d 536, 545, 482 N.W.2d 79 (1992).

The Order further suggests that there is a need to harmonize the Energy Priorities Law and the Power Plant Siting Law but does not explain the need to do so. There is no obvious conflict between the two and each deals with an entirely separate question. The Commission, in argument, suggests the petitioners urge that there be two alternative locations identified for each of the priority list fuels. This claim attempts to mix together two entirely separate requirements. As noted above, the PSC must require the applicant to identify two separate proposed locations and there must be an examination as to feasibility of the various energy sources at each identified location. The minimum number of locations begins at two and does not increase.

The real world application of the Energies Priority Law by the Commission may well be complex and may require sophisticated technical and financial analysis but the intent of the law is extremely simple and clear. There is no ambiguity as to what the

[19] The court was advised during oral argument that the very substantial existing OCPP generating facility currently relies upon low sulfur coal. Hearing transcript, October 4, 2004, p. 20, l. 10.

legislature intended and, as a matter of law, there is no need nor any justification for looking to legislative history or other secondary materials to discern legislative intent.[20]

The PSC argues that it cannot be required to select a higher priority source which is not technically feasible or not cost-effective, Order, p. 15, and that is absolutely true. What is required by the statute as to non-renewable fuels, however, is precisely what the Commission actually did do in looking at renewable sources. As to both energy conservation and wind generation, the PSC carefully considered the extent to which it was feasible and cost-effective to rely upon each as a source of future power, Order, pp. 16-19. That is precisely what was required as to natural gas, oil and low sulfur coal.

Further, the Commission's determination that only high-sulfur coal may be considered as a fuel source to provide baseload power is not supported by facts identified with sufficient clarity in the Order.[21] It is the order of the court that the Order shall be remanded to the Commission to permit the Commission to offer further justification for the determination that only high-sulfur coal can be the fuel source for the proposed new facilities, Connecticut General Life Ins. Co. v. DILHR, 86 Wis.2d 393, 405, 273 N.W.2d 206 (1979).

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[20] Petitioner Clean Wisconsin seeks to buttress its statutory interpretation argument by reference to a transcript description of a public proceeding conducted October 29, 2003. Because, in the view of the court, the language of the Energies Priorities Law is plain and unambiguous, this court need not and does not base its determination as to the intent of the Energies Priorities Law upon any statement made at the October 29, 2003 proceeding.

[21] It may well be true, possibly self-evident, that if one starts with the premise that a demonstrated need for additional baseload capacity must be satisfied by new facilities located at the OCPP site, the logical choice would be additional coal-fired equipment given the existing coal-fired facilities at that location and potential for economies of scale. Sec. 196.491(3)(d)(3 and Wis. Admin. Code PSC sec. 1 11.53(1)(e), however, require that the analysis begin with not less than two realistic, alternative locations and that was done in this case.

It appears the Commission begins with a policy decision that the need for baseload power requires that the fuel must be high-sulfur coal. That may be a perfectly reasonable choice but the factual analysis to support that choice does not appear within the Order. The Order, in its determination as policy that only high-sulfur coal is an appropriate primary energy source, does not demonstrate compliance with the legislative mandate set forth at secs. 1.12 and 196.025, Wis. Stats. and must be remanded to the Commission for further proceedings. It is the order of the court that the Order shall be remanded to give to the Commission the opportunity to determine as fact, pursuant to sec. 196.025(1), Wis. Stats., the cost-effectiveness, technical feasibility and environmental impact of high sulfur coal in comparison to natural gas as a potential source for the future energy needs to be met.

2. Lack of Consideration of Oil and Low-Sulfur Coal as Potential Fuels

There is simply no basis whatsoever, for the court to infer that the Commission considered in any degree two of the higher priority fuels, oil and low sulfur coal. In rendering the Order without completing the required analysis, the Commission has acted upon an interpretation of law which is directly contrary to the plain meaning of sec. 196.025(4), Wis. Stats. and no deference to that interpretation is appropriate, State ex rel. Parker v. Sullivan, supra, 184 Wis.2d at p. 669. It is the order of the court that the Order shall be remanded to give to the Commission the opportunity to determine, as required by sec. 196.025(1), Wis. Stats., the cost-effectiveness, technical feasibility and environmental impact of oil and low-sulfur coal as potential sources for the future energy needs determined by the Commission to exist.

It is entirely possible that the required consideration will result in the conclusion that neither oil nor low sulfur coal would be both feasible, cost-effective or environmentally appropriate but the Order reflects no consideration, whatsoever, as to either. The Order is therefore vacated and the matter remanded to the Commission to undertake an examination, pursuant to sec. 196.025, Wis. Stats., as to whether either oil or low sulfur coal would be feasible, cost-effective and environmentally sound.

F. Approval of Expansion Capacity

The PSC concludes that CPCN is not demonstrated as to a third new generation facility that the applicant proposed to build, a 600 MW Integrated Gasification Combined Cycle (IGCC) unit and therefore the Order refuses authority to construct that unit, Order, p. 26. The Commission does, however, approve a total construction budget in a total amount which contemplated building "common systems" for 3000 MW capacity rather than the 2400 MW approved capacity at the OCPP site.[22] The Order indicates that this extra capacity would add an additional approved construction cost of "approximately 20 million", Order, p. 32.

The record reflects that the added capacity is in a cooling water structure which will extend from the site into Lake Michigan and also coal handling facilities. [23] The rationale offered is the possibility that there will be a future need to provide the full 3000 MW capacity and it will be far less expensive to include larger structures for that possibility as part of the current project. Further, the suggestion is offered that

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[22] The existing capacity at the OCPP site is 1200 MW. WEPCO sought CPCN authority to expand that site by an additional 1800 MW but the Commission only permitted expansion of an additional 1200 MW for a total site capacity of 2400 MW rather than the 3000 MW total capacity initially requested.

[23] R-157, Kenneth J. Detmer, Transcript, V. 14, pp. 4535 & 4640.

"approximately $20 million" is a negligible amount, "lost in the maze" in a $2.2 Billion dollar project. On the other hand, what is being done is that ratepayers are being assigned a construction cost for public utility facilities for which public convenience and necessity has not been determined, indeed has been expressly refused.

The argument offered in favor of enlarging the facility carries an immediate suggestion of prudent foresight and reasonableness. There is, however, another aspect of the problem. Preparation for yet another expansion of what is already the most expensive power plant in Wisconsin is very meaningful step toward selecting OCPP as the site for construction of future utility expansion. It does not completely control future site selection but it is likely to influence it. It does not preclude wholesale competition but, again, it is likelly to confer advantage upon the owner of the OCPP facility.

The applicable statute is quite clear, there is to be no construction of any generating facility until there has been the issuance of a CPCN, sec. 196.491(3)(a) 1, Wis. Stats. There is no suggestion that the Commission has ever before interpreted its authority to include the power to permit partial construction of a facility for which CPCN has not been determined, let alone a facility as to which CPCN has been expressly denied by Commission order. It is clear that the PSC Order contemplates an extension of the Commission's authority in a manner which is directly contrary to the plain meaning of the applicable statute. This is an interpretation which should properly be reviewed on a de novo basis and, upon that review, it is the determination of the court that the Order, to the extent it approves ratepayer payment for construction

elements not necessary to operate a 2400 MW facility, is hereby vacated and the Order remanded for modification by the Commission to eliminate such approval.

G. Issuance of CPCN Prior to Obtaining Regulatory Approvals

The PSC issues the Order approving CPCN as to the construction of the two new 630 MW generating facilities while expressly acknowledging that necessary government permits had not been issued. The Order notes expressly that there were then water-related DNR permits which had not been issued, Order, p. 53, 54, and the following appears as a finding of fact,

> Requiring that ERGS-SCPC 1 LLC commence construction within 12 months after it receives all necessary government permits and approvals is reasonable, so the generating plant will satisfy the reasonable needs of the public for electric energy in a timely manner.
>
> Finding of Fact no. 15, in part, Order, p. 6

Wisconsin law provides,

> The commission may not issue a certificate of public convenience and necessity under this subsection until the department has issued all permits and approvals identified in the listing specified in par. (a)3.a. that are required prior to construction.
>
> Sec. 196.491(3)(e) Wis. Stats., in part.

The Commission's Order candidly describes the water-related permits that had not been issued as of the date of the Order.[24] Argument submitted by the PSC explains the administrative advantage of deferring to DNR wherein presumably superior expertise regarding water quality may be found. The Commission makes no attempt to respond to the problem posed by the express provisions of sec. 196.491(3)(d) 3. Wis.

[24] As noted earlier, air quality permits are treated entirely differently from water-related permits. The legislature has expressly decided that the PSC may not hold up issuance of CPCN based upon any concern that potential air pollution may not meet standards imposed by Chapter 285, enforced by the DNR, sec. 196.491(3)(d) 3, Wis. Stats.

Stats., above, and in argument suggests that what was done has been in this proceeding is a standard practice of the Commission.[25]

It is instructive to refer to the decision of RURAL v. PSC, 239 Wis.2d 660, 679, 619 N.W.2d 888 (2000), in which the court did consider a related matter. RURAL arose from a non-statutory legislative enactment, Section 96 of 1997 Wisconsin Act 204, which created a brief opportunity for particular utilities to seek CPCN approval as to a narrowly defined class of generation plants. Approval or rejection was to be determined by the PSC in a notably short, 90 day period. In the RURAL case, as in this one, the PSC issued a CPCN approval subject to a requirement that the applicant thereafter obtain DNR regulatory permits. An opponent to the application objected, arguing that the PSC could not issue a conditional CPCN. The PSC responded suggesting that the general authority of sec. 196.395, Wis. Stats.,[26] conferred the needed power to issue a conditional CPCN. The supreme court, in upholding the issuance of the conditional CPCN, noted that the Commission could do so because the CPCN was being approved pursuant to the non-statutory authority, not pursuant to the normal process set out in sec. 196.419, Wis. Stats.[27] The court suggested that if sec.

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[25] Hearing transcript, October 4, 2004, p. 34, ll. 3-13.

[26] Sec. 196.395, Wis. Stats., provides,

> The commission may issue an order calling for a test of actual results under requirements prescribed by the order, during which test period the commission may retain jurisdiction of the subject matter. The commission may issue conditional, temporary, emergency and supplemental orders. If an order is issued upon certain stated conditions, any party acting upon any part of the order shall be deemed to have accepted and waived all objections to any condition contained in the order.

[27] The CPCN in RURAL, supra, was issued pursuant to the authority of the non-statutory enactment, not pursuant to sec. 196.491, Wis. Stats.

196.491, Wis. Stats. had been the basis for the CPCN, then 196.491(3)(e), Wis. Stats., would control over sec. 196.395, Wis. Stats., and would not permit the Commission to issue a conditional CPCN.[28]

Here, the CPCN was issued pursuant to the authority given to the PSC by sec. 196.491, Wis. Stats. That statute plainly states that the Commission shall not do what is being done here, issue the CPCN before the regulatory permits have been obtained, sec. 196.491(3)(e), Wis. Stats. Potentially, this is a matter of substantial consequence. The Commission in its Order notes the possibility that the planned draw of 1.4 billion gallons of Lake Michigan water daily[29] is not approved, cost of the proposal will escalate by some $200 million and may even preclude project viability, Order, p. 54. The approval stated in the Order was issued in clear violation of sec. 196.491(3)(e), Wis. Stats. It is the Order of this court that the PSC Order is hereby vacated and the matter remanded to the Commission to permit the applicant to demonstrate that the required regulatory permits have been obtained.

H. Adequacy of the Final EIS

The Wisconsin Environmental Protection Act (WEPA) requires state agencies to take a "hard look" at the environmental consequences of a proposed new facility, Wis. Environmental Decade, v. PSC, 98 Wis.2d 682, 690, 298 N.W.2d 205 (Ct. App. 1980). The law provides that all state agencies shall include in every major action, a detailed statement, substantially following the guidelines of the National Environmental Protection Act, 42 U.S.C. sec. 4331 (NEPA), describing,

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[28] RURAL, 239 Wis.2d at p. 698-700, paras. 58-61.

[29] Order, p. 9; Final EIS, V. 1, p. 200, R. 119.

1. The environmental impact of the proposed action;
2. Any adverse environmental effects which cannot be avoided should the proposal be implemented;
3. Alternatives to the proposed action;
4. The relationship between local short-term uses of the human environment and the maintenance and enhancement of long-term productivity;
5. Any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented; and
6. Such statement shall also contain details of the beneficial aspects of the proposed project, both short term and long term, and the economic advantages and disadvantages of the proposal.

Sec. 1.11(2)(c), Wis. Stats. in part.

Moreover, the PSC has adopted an administrative rule to assure compliance with WEPA, Wis. Admin. Code, sec. PSC 4.10(1).

Petitioners argue that the EIS prepared in this proceeding does not meet the standard of the law. The EIS in this matter is comprised of a 446 page draft document, R. 77, together with a significantly larger final document, R. 119. The criticism of the EIS document includes the suggestion that alternatives were not adequately examined and the absence of information about necessary transmission facilities. These are matters which arguably could be considered in an EIS but, as noted above, for purpose of this proceeding, both issues are resolved based upon statutes specifically applicable to the Commission's process. As to a lack of quantified health care costs, as well as potential impact upon natural resources, local communities and transportation, these are matters which are within the range of matters committed by the legislature to the Commission. The interpretations of law adopted by the Commission to the effect that the draft and final EIS documents represent an adequate examination of environmental issues are not shown to be legal error.

I. Least Cost Alternative.

Petitioner Calpine is a wholesale producer of electric power that seeks to provide to WEPCO, using its own generating facilities, the power that the WEPCO claims will be needed. Calpine argues that it can provide the needed power at less cost and suggests the PSC has committed legal error by not selecting their 'least cost' proposal. Calpine argues that Wisconsin law requires the commission to select whichever proposal can be shown to result in the lowest cost to consumers. Calpine looks to the following provision as authority for that concept,

> the commission shall approve an application ... for a certificate of public convenience and necessity only if the commission determines all of the following:
>
> > 3. The design and location ... is in the public interest considering *alternative sources of supply*, alternative locations or routes, individual hardships, engineering, *economic*, safety, reliability and environmental factors ..."
>
> Sec. 196.491(3)(d), Wis. Stats., in part, emphasis added.

Calpine looks to the term, "alternative sources of supply", in conjunction with the term, "economic", to find a clear legal duty, incumbent upon the commission, to select whatever alternative proposal offers the least cost of operation. Calpine looks also to a prior commission decision which does offer language describing the successful proposal as being the one which appeared to offer the needed power at the "least cost".[30]

Calpine's least cost argument goes well beyond the requirement that there be a fair comparison between fuel sources. Returning briefly to the requirements of the

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[30] Application of Wisconsin Public Service Corporation For Authority To Increase Electric Generating Capacity (Stage One, Competition Among Alternative Suppliers), Docket No. 6690-CE-156, December 22, 1994, p. 6;

Wisconsin Energy Priority Law, sec. 1.12(5)(a), Wis. Stats, requires that the Commission consider alternative energy sources with the requirement that a selected source meet three separate requirements; cost effectiveness, technical feasibility and no unacceptable environmental impact. The Calpine least cost theory would look only to cost effectiveness and ignore the remaining two criteria.

The Calpine least cost argument embraces a factual element; the suggestion that the AGEAS computer model actually selected natural gas as the preferred fuel or would have done so if proper data entry had been made. The comparisons of cost, timing, equipment and fuel presented to the Commission are very complex and do not offer an obvious alternative which may be readily identified as the least cost option. What is asserted as the least cost alternative appears to be a plan of using Calpine capacity, in combination with some future WEC facility expansion so as to defer significantly the date at which the WEC expansion will be needed, R.119, Final EIS, pp. 72 and 73.[31] As with the earlier discussion of criticism of the AGEAS program, however, the reality here is that the court does not possess any expertise, let alone that of the Commission regarding the proper use of the computation and comparison of the complex elements cost and timing. Suffice it to say that this is an area where great deference should be given to Commission.

As a question of law, the PSC is obligated to consider and to balance numerous elements of cost, environmental impact and technical feasibility. The Commission argues that the applicable law requires that it consider a myriad of factors, cost being a

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[31] Calpine refers also to the testimony of Commission employee Randal Pilo, who described a Calpine proposal as the lower cost alternative but appears to be based upon what is described as a "snapshot for one year', that being 2007, R.167, V. 18, transcript V. 11, p. 3900, l. 3.

primary factor but not an exclusive factor. This is clearly an area in which the PSC has been assigned significant jurisdiction and discretion by the legislature. Petitioner Calpine does not demonstrate that the Commission has acted contrary to applicable law.

J. Wholesale Power Competition.

Calpine asserts that in approving the WEC application to build the two SCPC plants, the Commission has failed to take into account the harm that will be visited upon competition in the wholesale power market. Wisconsin law requires that the Commission not issue approval until it has determined that,

> The proposed facility will not have a material adverse impact upon on competition in the relevant wholesale electric service market.
>
> Sec. 196.491(3)(d) 7, Wis. Stats.

The Commission did render the following determination of fact,

> The two SCPC units will not have a material adverse impact on competition in the Wisconsin Upper Michigan (WUMS) wholesale electric service market.
>
> Finding of Fact, no. 9, Order, p. 5

The determination of impact upon competition is a matter which has been committed by the legislature to the Commission. The petitioners express disagreement with the conclusions reached by the Commission but they do not demonstrate a basis upon which this court could properly do other than have give great deference to the determinations and interpretations of the Commission in this area.

K. City of Oak Creek Mitigation Payment Agreement

WEC and petitioner City of Oak Creek reached an agreement whereby WEC will pay to the city annual mitigation payments of $1.5 million for SCPC 1 and $750,000 for SCPC 2. The PSC Order reviews that agreement and considers as well a significant modification in the formula by which shared revenue payments form the state to the city are now to be computed. Prior to the enactment of 2003 Wis. Act 31, shared revenue was based upon the net book value of a power plant and thus the initial shared revenue amount derived upon the commencement of generation, capped at a maximum of $750,000 annually, declined thereafter as the net book value declined through depreciation. 2003 Wis. Act 31, enacted July 15, 2003, and applicable to plants that begin operation after December 31, 2003, provides that shared revenue is to be based upon MW capacity and other factors which may not decline with time. The PSC calculates that the new shared revenue formula will produce revenue to the city of $1.6 million for SCPC 1, an amount that will rise to $3.2 million when SCPC 2 begins operation. The PSC notes that the new shared revenue amounts, when paid to the city upon completion and operation of the new facilities, will exceed the payment called for by the agreement between the city and WEC and the Commission therefore includes a provision in the Order which requires that the payments called for by the agreement are to be offset by shared revenue payments made to the city. Thus the PSC order permits mitigation payments to the city pursuant to the agreement but provides that payments are to be reduced by shared revenue received which presumably will eliminate all payment pursuant to the agreement at a future point. The City of Oak Creek petitions the court seeking review of that portion of the Order.

The parties agree that the agreement between the City of Oak Creek and WEC was submitted to the PSC before June 10, 2003 and involves a "mitigation payment" within the meaning of sec. 196.20(7), Wis. Stats., as amended by 2003 Wisconsin Act 33. The parties further agree that the treatment of the agreement by the PSC is to be governed by section 196.20, Wis. Stats., as amended by 2003 Wisconsin Act 89, Section 33, effective December 18, 2003, which enacted the following provision,

> (7)(a) In this subsection, "mitigation payment" means, as approved by the commission, an unrestricted or recurring monetary payment to a local unit of government in which an electric generating facility is located to mitigate the impact of the electric generating facility on the local unit of government. "Mitigation payment" does not include payments made or in-kind contributions for restricted purposes to directly address health or safety impacts of the electric generating facility on the local unit of government.
>
> (b) Except as provided in par. (c), an electric public utility may not recover in rates any of the following:
>
> 1. The cost of mitigation payments paid by the utility.
>
> 2. The cost of mitigation payments paid by the owner or operator of an electric generating facility that the owner or operator recovers from the utility by selling electricity to the utility, by leasing the facility to the utility, or by any agreement between the owner or operator of the electric generating facility and the public utility.
>
> (c) The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003,
> and, if the commission finds the agreement to be reasonable, shall not subsequently modify the agreement.
>
> Sec. 196.20(7), Wis. Stats., as created by 2003 Wisconsin Act 89, Section 33.

The petitioner city reads subsection (c) above to give to the PSC only two choices, to approve or to reject a mitigation payment agreement as submitted. The city submits that what the PSC Order did was first to modify the agreement and thereafter to

approve the modified agreement. The city asserts that sec. 196.20(7)(c), Wis. Stats. expressly precludes that modification. The PSC, by contrast, submits that subsection (c), above permits the modification of a submitted agreement at the point of initial approval but precludes modification thereafter.

The language chosen by the legislature in this instance is uncommonly plain and direct. It deals with "a mitigation payment agreement that is received by the commission" and confers authority to do one of two things, approve or reject that agreement. The modified agreement is not the agreement that the Commission received. An administrative agency may exercise only such authority as has been expressly conferred or necessarily implied. Here the clarity of the legislation is such that it cannot be read to imply the power that the Commission seeks to exercise, the authority to modify "a mitigation payment that is received by the commission." The court concludes, as a matter of law pursuant to sec. 227.57(8), Wis. Stats, that the portion of the PSC Order which modifies the mitigation agreement to require that future shared revenue is an act beyond the jurisdiction of the PSC. The court orders that, upon remand, the PSC re-consider the mitigation agreement and either approve or reject the agreement as submitted.

V. Summary and Order

On November 15, 2002, the Public Service Commission determined that an application submitted by Wisconsin Energy Corporation to construct the largest power plant in the history of the state at the Oak Creek Power Plant site met the legal requirements to be a "complete" application thereby beginning starting a process before the Commission in which the application was required to be resolved within no more

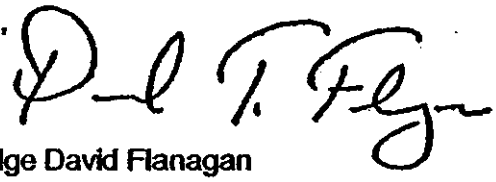
than 360 days. It is the conclusion of this court that the Wisconsin Energy Corporation application, as of November 15, 2002, does not meet the legal requirements in that it does not propose at least two alternative sites for the new plant, it does not present the required regulatory approvals and it does not include agreements for the use of the substantial transmission line facilities that inevitably must be constructed as an integral part of this project. It was therefore legal error to commence the approval process based upon that incomplete application and the resulting Order is hereby vacated and the matter remanded to the Commission to permit the applicant to submit a legally sufficient application.

On November 10, 2003, the Public Service Commission issued a Order modifying the proposed new Oak Creek facility and approving the application as modified. It is the conclusion of this court that the Order does not reflect adherence to the Wisconsin Energy Priorities Law nor does it include required cost and design information about substantial new power transmission lines that will be needed in order for the proposed new plant to operate. Moreover, the Order approves funding for construction intended to permit future expansion of the Oak Creek Power Plant site to accommodate new generation facilities that the Commission has determined there to be no present need to build and the approval order has been issued despite the fact that required regulatory approvals for the proposed new plants have not been obtained. For these reasons, the Order is hereby vacated and the matter remanded to the Commission for further proceedings consistent with the foregoing rulings.

Finally, the Order modified and thereafter approved an agreement whereby the City of Oak Creek agreed to accept from Wisconsin Energies Corporation, certain

annual payments to mitigate the cost to the city of the new facilities. It is the conclusion of the court that the applicable law required that the Commission either approve or reject the proposed agreement as submitted to the Commission. The modification of the agreement is therefore vacated and the matter is remanded to the Commission for further proceedings.

By the court this 29th day of November, 2004.



Judge David Flanagan

July
2003

PUBLIC SERVICE COMMISSION OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

Final Environmental Impact Statement

Elm Road Generating Station – Volume 1

Docket 05-CE-130

Date Issued, July 2003

CW/SCJ-Ap. 224

To the Reader:

This final Environmental Impact Statement (EIS) for the Elm Road Generating Station (ERGS) fulfills part of the requirements of the Wisconsin Environmental Policy Act (WEPA) Wis. Stat. § 1.11. WEPA requires state agencies to consider environmental factors when making major decisions. The purpose of this EIS is to provide the decision makers, the public, and other stakeholders with an analysis of the economic, social, cultural, and environmental impacts that could result from the construction of three new coal-fired power plants and their associated facilities. This document has been prepared jointly by the Public Service Commission of Wisconsin (Commission or PSC) and the Wisconsin Department of Natural Resources (DNR).

Many changes have been made to the draft EIS. These modifications have been made in response to written and oral comments received on the draft EIS, new information and proposed changes to the project made by the applicants, and as a result of additional analyses by PSC and DNR staff. Some of the major modifications include:

- A new chapter has been added to describe the new site layout for the proposed ERGS facilities brought forward by the applicants in their direct testimony in late May 2003. To the extent known, the potential environmental and social effects related to the new layout for the North Site have been presented.
- The cost of the ERGS proposal has increased based on information provided by the applicants. This new cost information has been used in the economic analysis of alternatives to this project.
- Additional EGEAS modeling has been performed that includes assumptions about monetization of major pollutants, further consideration of conservation potentials, unlimited wind potential, and retirement of Oak Creek Units 5 and 6 in 2012.
- A new analysis of the thermal pollution effects related to the SCPC and IGCC discharge water has been conducted.
- Additional information about air pollutants such as CO_2 and $PM_{2.5}$ has been added to the Air Emissions chapter.
- A third volume has been prepared to respond to comments, questions, and concerns raised by members of the public and parties to this case.

Alternatively, there are analyses and information that PSC and DNR staff have not been able to present in this document due to insufficient information and the press of time imposed by statutory deadlines. Some of these items include:

- The Department of Natural Resources (DNR) has been unable to complete its air modeling analysis for inclusion in the final EIS due to incomplete air permit applications, continuing changes made to the air modeling parameters by the applicants, and an additional air permit application for the new site layout.

- A comprehensive evaluation of the environmental effects of the new site layout brought forward by the applicants has not been completed. The information provided was incomplete with respect to several of the site features and inconsistent with the information submitted for the original site alternatives. A comparative analysis of the site alternatives, including the new site layout, has not been completed.

- No mitigation plans or strategies have been proposed by the applicants to avoid or minimize the potential adverse effects of the water intake structure, the thermal discharge from the plant, placing fill in wetlands, or the loss of important biological resources. The new site layout brought forward by the applicants in May would result in more wetland filling and greater loss of natural resources and habitat than the original site layouts, if evaluated on a consistent basis.

- The analysis of the proposed IGCC unit could not be completed because the information provided by the applicants was preliminary and is subject to change as technologies mature. PSC staff did supplement the applicants' information with its own analysis, but the applicants declare that the design for their proposed IGCC unit may change.

- Due to the continuing redesign of the project, some of the text and several of the maps and diagrams presented in this final EIS may not be up-to-date.

It is the agencies' intent to provide as much of this information and analysis as possible by the time of the public hearing for this project. The Commission decision on the merits of this project will be based on the record of public hearings, which are scheduled for August and September 2003 in Oak Creek, Caledonia, and Madison, Wisconsin. The Commission will issue the Notice of Hearing for this project in July 2003. The EIS, as well as testimony from the public hearings, will be included in the hearing record. A Commission decision on the proposed project is expected in October 2003.

As necessary the DNR will hold a separate hearing on the application for an air pollution control permit and other water-related permits for this project.

Please use the PSC docket number 05-CE-130 on all e-mail and correspondence. Specific questions on the EIS should be addressed to:

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timely, and likely project for WEPCO ratepayers, with respect to all quantitative and qualitative considerations. Given the substantial cost and dollar magnitudes involved and the relatively few projects to choose from, this is an extremely important topic for the Commission to consider, especially because of the significant potential effects on the southeastern Wisconsin economy if too many coal units are approved or there are major cost overruns. The consequences of these errors are described later in this chapter.

EGEAS Sensitivities (Integrated Resource Alternative)

Both the company and Commission staff used the professionally-accepted EGEAS (Electric Generation Expansion Analysis System) model to compare alternatives to the ERGS facilities. EGEAS is a modular production-costing, generation-expansion software tool that is used to find least-cost generation system expansion plans by comparing all combinations of multiple generation options to meet forecasted system load. EGEAS inputs include forecasted energy and demand, the economic and engineering characteristics of existing and possible new generation units, fuel price forecasts, known or expected energy purchases or sales, desired reserve margin, and the forecasted cost of emission allowances.

Commission staff addressed the following scenarios when performing its EGEAS analyses: 1) Base Case; 2) DSM-EIA Load Growth; 3) High Gas Prices; 4) Low Gas Prices; 5) High Coal Prices; 6) Low Coal Prices; 7) Coal Capital Costs plus 10 percent (this scenario addresses the potential for cost overruns as described earlier in Chapter 2); 8) CO_2 Monetization; 9) Monetization of SO_2, Hg, and NO_x Emissions; 10) Capacity of the SCPC of 615 MW; and 11) Retirement of all Coal at 60 years. For each of these scenarios, Commission staff performed an EGEAS run assuming three different outcomes:

- Optimal operation (EGEAS picks the best combination of WEPCO generating options)[48]
- Optimal operation with a Calpine 523 MW combined-cycle unit by 2007
- Two SCPC units (2008 and 2009); no IGCC unit

These scenarios are denoted Optimal (w/o Calpine), Calpine, and ERGS-no IGCC in Table 4-4 below. Lastly, each of the scenarios was modeled assuming the continued existence of the current wind tax credit (escalated for inflation over time). In these runs, wind development potential was limited to that placed into the EGEAS model or "hard-wired" by WEPCO presumably to reflect its potential commitment to the renewable resource under its complete Power the Future plan. (WEPCO recently submitted an RFP for 200 MW of wind generation which the company includes in its model by 2005. The company then adds another 50 MW of wind in 2011. The company also adds more wind in later years, totaling 410 MW of additional wind by 2030.) As a sensitivity, an EGEAS analysis was conducted by placing no limit on wind development potential as discussed later.

Commission staff based its capital cost parameters on the Commission's decision in the Port Washington case (docket 05-CE-117). These assumptions were 12.7 percent return on equity, 6.0 percent cost of long-term debt, and a capital structure of 53 percent equity and 47 percent long-term debt. These financing assumptions are less costly than those sought by WEPCO, namely a 12.90 percent return on equity using 58 percent common equity in the capital structure.

[48] This distinction is necessary relative to the next one because WEPCO does not have the Calpine proposal to evaluate, as PSC staff did.

Commission staff's Base Case assumes the following inputs:

- updated forecast for peak demand and energy use provided by WEPCO
- base coal and gas prices as forecasted by WEPCO beginning at $1.38 MMBtu for coal and $6.57 MMBtu for natural gas in 2003. In 2007, these fuel prices are $1.52 MMBtu and $4.67 MMBtu respectively in the WEPCO base fuel price forecast.
- the approved Port Washington facilities (two 545 MW combined-cycle units with one installed in 2005 and the other in 2007 or 2008)
- retirement of Presque Isle units 1-4 and Oak Creek 5 and 6 at the end of 2012.
- retirement of other coal plants at age 60
- relicensing of Point Beach Nuclear Power Plant Units 1 and 2
- Wind Tax Credit at $18 per MWh for 2002 (and escalated for inflation)

The wind units have a capacity factor of 30.0 percent. Commission staff assumed that these wind units have a 20 percent credit to reserve margin, which means for every 100 MW only 20 MW are counted towards the utility's reserve margin.

As an alternative to WEPCO's higher forecast of demand and energy, Commission staff applied its estimated impact of DSM programs through 2011 and then applied EIA growth factors to the peak and energy forecasted at 2011 for the period through 2031 (see Chapter 3, Table 3-6 "Projected Growth in Energy Use and Peak Demand). Commission staff believes that WEPCO's revised forecast is not unreasonable but perhaps slightly optimistic. Therefore, it is important to identify the impact on the economics of the ERGS proposal assuming a lower forecast for peak and energy.

Commission staff used WEPCO's high and low forecasts for coal and gas for its price sensitivity runs. Commission staff also used a 10 percent cost overrun on new coal units as a sensitivity to reflect WEPCO's new pricing proposal made available in its May 2003 direct testimony. Finally, a Calpine proposal for 523 MW filed with the PSCW in February 2003 (and updated in June 2003) was modeled as a potential substitute for ERGS coal units. In June 2003, Calpine also submitted a proposal for 260 MW of combined-cycle capacity from its recently acquired Fox Energy Center which received a CPCN in November 2002. A sensitivity analysis of that proposal is also examined below.

Commision staff incorporated the retirement of Presque Isle units 1-4 and Oak Ceek 5 and 6 at the end of 2012 to reflect the tentative agreement WEPCO has with the US Environmental Protection Agency (US EPA) which is the result of a settlement for WEPCO's violation of Clean Air Act standards. Commission staff also has a sensitivity where all coal plants are assumed to be retired at age 60.

Commission staff moved the installation of the first SCPC unit from 2007 to 2008 for the ERGS without IGCC proposal since the lease calls for the first unit to come on-line in May 2008.

EGEAS results - with 410 MW of wind by 2030

Table 4-4 shows that, for the DSM-EIA Load Growth and the High Gas Prices scenarios, the EGEAS run with Calpine's 523 MW combined-cycle unit forced to be taken in either 2006 or 2007 is not least cost when

compared with the EGEAS run with WEPCO-only generation incorporated. For the remaining cases shown in Table 4-4, the EGEAS model with the 523 MW Calpine Fond du Lac unit is immaterially different from the EGEAS run with WEPCO-only generation. However, in all of the scenarios in Table 4-4, the EGEAS run that includes the 523 MW Calpine unit is materially more economic than the ERGS without IGCC proposal from WEPCO. In the base run for instance, the expansion plan with the 523 MW Calpine Fond du Lac project is $95.6 million lower cost on a present value basis than ERGS without IGCC.

As is shown in Appendix A, Summary of EGEAS Expansion Plans, the presence of Calpine's 523 MW unit pushes the first coal plant out to at least 2011, except for the CO_2 monetization scenario where the Calpine and Optimal runs without Calpine push coal out to 2025. For the EGEAS runs with WEPCO-only generation, coal is pushed back to 2009, except for the DSM-EIA Load Growth scenario where the first unit is pushed out to 2012, the Coal Capital Costs plus 10 percent scenario where the first coal unit is selected in 2011 and the CO_2 monetization scenario.

Table 4-4 Cost comparisons of EGEAS modeling results with wind limited to 410 MW

	EGEAS Model Results NPV ($000,000)			Differences from Optimal		
Scenario	Optimal w/o Calpine	Calpine	ERGS no IGCC	Optimal w/o Calpine	Calpine	ERGS no IGCC
Staff Base Case	19,073.7	19,080.7	19,176.3	0.0	7.0	102.6
DSM- EIA Load Growth	16,914.8	16,979.9	17,144.2	0.0	65.1	229.4
High Gas Prices	19,233.0	19,261.8	19,334.9	0.0	28.8	101.9
Low Gas Prices	18,690.1	18,686.8	18,821.1	0.0	-3.3	131.0
High Coal Prices	19,353.3	19,354.4	19,458.5	0.0	1.1	105.2
Low Coal Prices	18,823.0	18,836.7	18,921.9	0.0	13.7	98.9
Coal Cap. Costs + 10%	19,485.6	19,475.0	19,625.2	0.0	-10.6	139.6
Staff Base Case with CO_2 Monetization	27,009.9	27,017.2	27,356.6	0.0	7.3	346.7
Hg, SO_2 and NO_X monitization	19,506.3	19,504.4	19,610.3	0.0	-1.9	104.0
Coal Capacity at 615 MW	19,106.2	19,106.6	19,261.4	0.0	0.4	155.2
Retire Coal at 60 Years	18,722.8	18,736.3	18,825.2	0.0	13.5	102.4

Note: Optimal without Calpine is equivalent to WEPCO-only generation. This distinction is necessary, related to the Calpine run because WEPCO does not have the Calpine proposal to evaluate, as PSC staff did.

Figures 4-3, 4-4, and 4-5 depict the Base Case expansion plans for the period 2004 to 2014 under the Optimal without Calpine, Calpine, and ERGS w/o IGCC approaches. For reference sake, the Optimal w/o Calpine expansion plan in Figure 4-3 is $7 million less expensive on a present value basis than the expansion plan with Calpine proposals in Figure 4-4. As indicated, this difference is statistically immaterial. On the other hand, the Calpine expansion plan in Figure 4-4 is $95.6 million less expensive than the WEPCO proposed expansion plan w/o the IGCC unit which is depicted in Figure 4-5. Examination of the following figures shows that coal plants are generally part of a least cost EGEAS expansion plan for WEPCO. However, the optimal timing appears to be for the period 2009 and 2011, which is about two to three years later than the operational date sought by WEPCO in its CPCN application.

Figure 4-3 Optimal expansion plan without any Calpine units

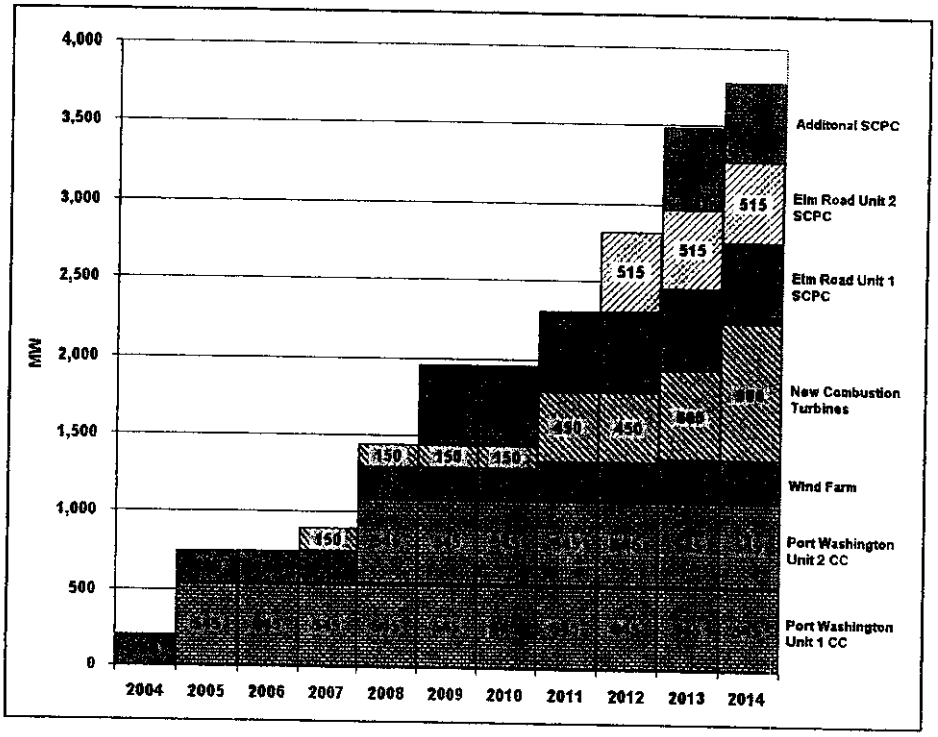
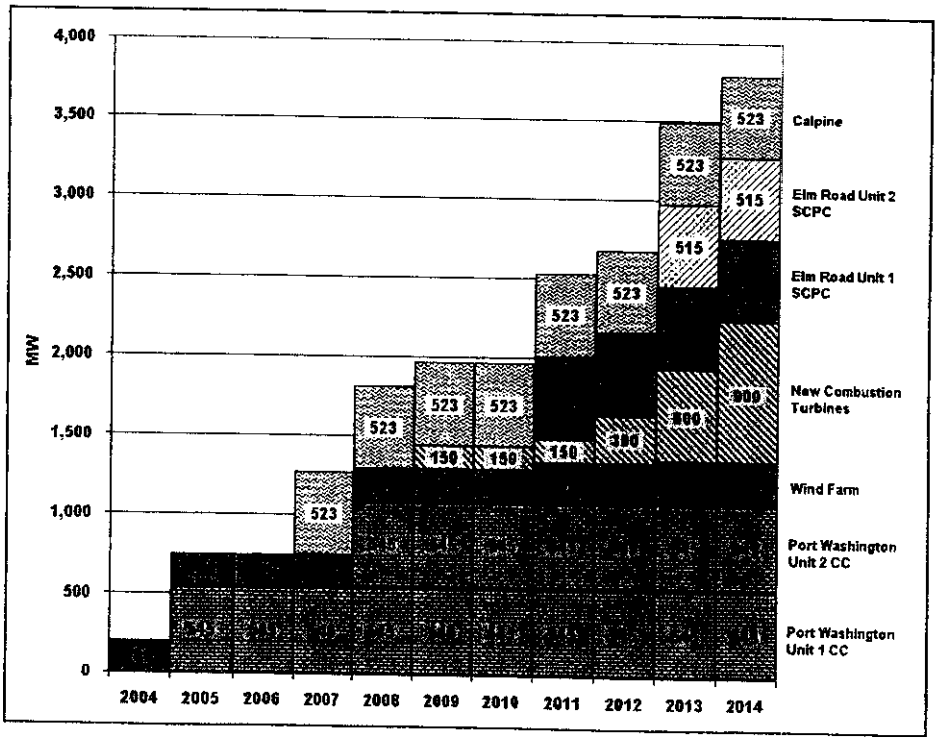
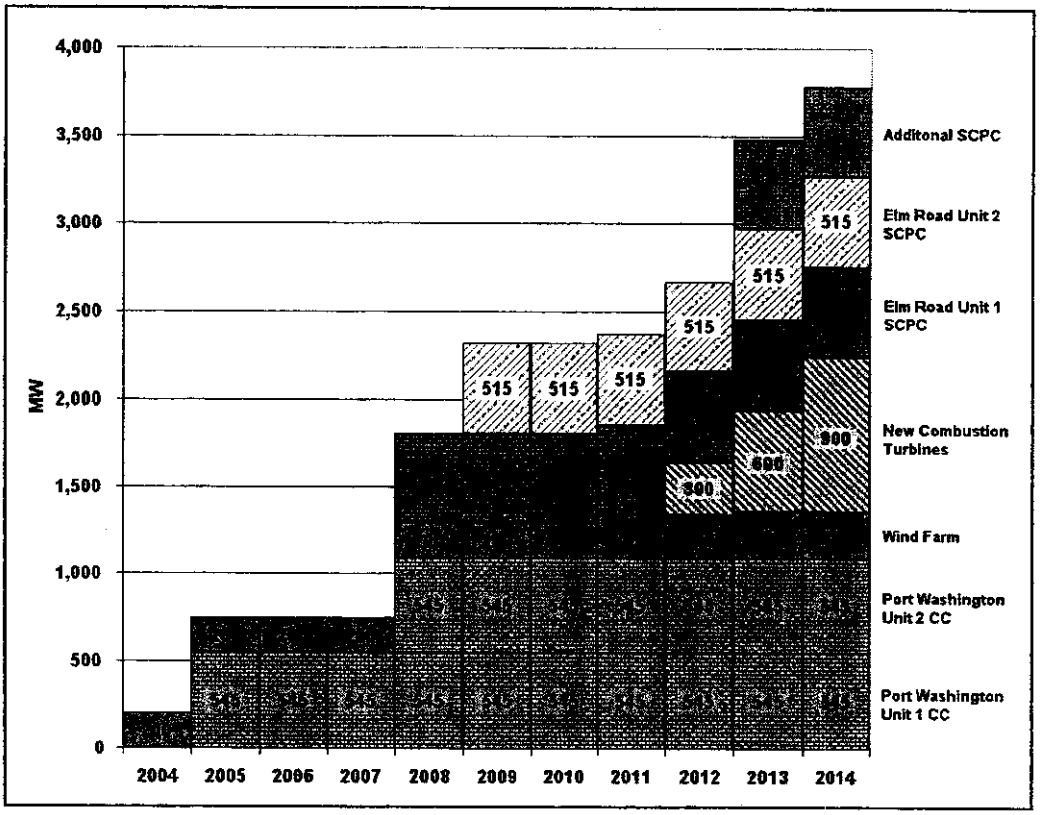


Figure 4-4 Expansion plan with Calpine proposal



CW/SCJ-Ap. 230

Figure 4-5 Expansion plan for WEPCO's ERGS without IGCC



EGEAS Results- with No Limit on Wind

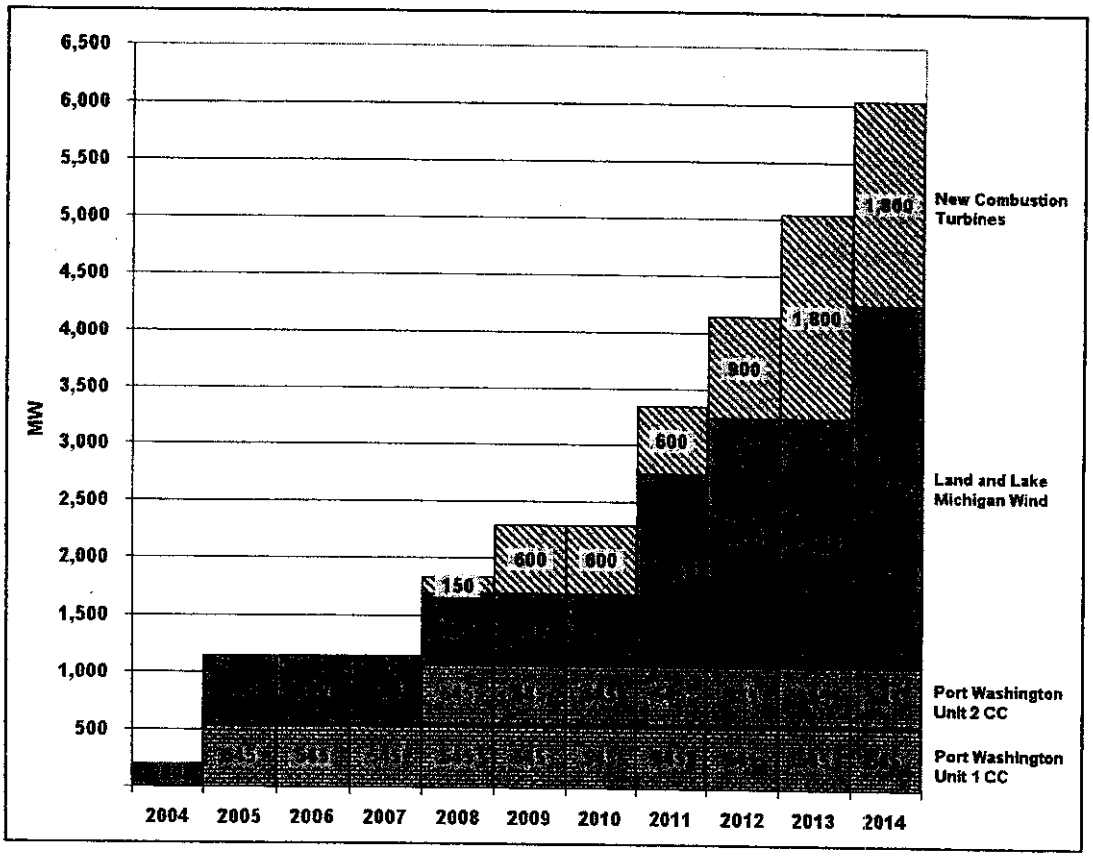
Commission staff also ran scenarios in EGEAS where wind was allowed to be picked freely by the EGEAS model. The results are shown in Table 4-5. Commission staff used two sources of wind—the first was based on the bids that WEPCO received from its RFP (request for proposal) and the second was wind assumed to come from offshore in Lake Michigan. For the Lake Michigan wind, a 35 percent capacity factor was assumed (as compared to the 30 percent assumed by the company for its wind units). Both sources of wind were assumed to make a 20 percent contribution to the capacity reserve.

Commission staff looked at two scenarios—one with the wind tax credit continuing through the foreseeable future and the other with no wind tax credit. In both cases, the Calpine proposal was significantly less expensive than the ERGS w/o IGCC proposal. For the continuing wind tax credit scenario, the Optimal run was, however, less expensive than the Calpine run since the presence of an additional 523 MW of combined-cycle reduces the amount of wind and wind production tax credit (PTC) that the EGEAS model can select. In the "no limit wind" run, the EGEAS model selects up to 2,500 MW of Lake Michigan wind by 2014. This is in addition to 400 MW of new land-based wind placed into service in 2005. In neither the Optimal nor Calpine runs is any coal picked for the wind tax credit continuation scenario. Figure 4-6 displays the 2004 to 2014 expansion plan when there is no limit on wind generation development.

Table 4-5 EGEAS model results under unlimited wind scenario

	EGEAS Model Results NPV ($000,000)			Differences from Optimal		
No Limit on Wind Scenario	Optimal w/o Calpine	Calpine	ERGS no IGCC	Optimal w/o Calpine	Calpine	ERGS no IGCC
No limit on Wind with the Wind Tax Credit	14,794.8	14,945.9	15,547.1	0.0	151.1	752.3
No limit on Wind; No wind Tax Credit	18,020.8	17,899.7	18,128.6	0.0	-121.1	107.8

Figure 4-6 Expansion plan with no limit on wind development and with continuing PTC



There are two concerns Commission staff has with the unlimited wind capacity and the continuing wind tax credit scenario. First, EGEAS picks so much wind capacity that baseload units have drastically reduced capacity factors in later years. Second, Commission staff does not believe that the federal government would be willing to pay $18 per MWh (2002$) for the volume of wind of 11,000 MW by 2023 selected by EGEAS under this scenario.

CW/SCJ-Ap. 232

For the no wind tax credit scenario, the Calpine run is the most economic. For the Calpine run, the first coal unit is pushed out to 2011, whereas the Optimal without Calpine run picks its first coal unit in 2009. The Calpine proposal is significantly less expensive than the ERGS w/o IGCC proposal. With no wind tax credit, no new wind is picked by EGEAS until 2017.

Other EGEAS Analyses

Commission staff also analyzed a June 2003 proposal from Calpine for 260 MW of combined-cycle capacity from its Fox Energy Center using Commission staff's Base Case assumptions. The Fox Energy proposal using only 260 MW in 2007 was more expensive than the Calpine Fond du Lac proposal using 523 MW by $12.4 million. (See Appendix A, Summary of EGEAS Expansion Plans) Commission staff did not run the EGEAS model with capacity available from both Calpine projects simultaneously due to limited time, but may explore that possibility in time for the technical hearing.

Commission staff made an EGEAS run with the IGCC unit included in the model for the Base Case scenario. The ERGS proposal with the IGCC was more expensive than the ERGS proposal without the IGCC by $247.1 million.

Commission staff made an EGEAS run assuming no coal nor biomass, and wind limited to that hardwired by WEPCO. The cost of that plan was less economic than the Optimal plan by $1,937.8 million. When Commission staff allowed EGEAS to pick up to 1,500 MW of biomass, the resulting expansion plan was more expensive than the Optimal plan by $1,405 million. These latter sensitivities indicate that a mixture of properly timed gas- and coal-fired units would result in the lowest overall cost expansion plan for WEPCO.

EGEAS summary

10. The IGCC unit, which is the third unit in the ERGS proposal, is not cost-effective.
11. The proposed timing of the SCPC units in 2007 and 2009, as WEPCO has proposed, is not least cost. This scenario is generally more than $100 million more expensive on a present value basis. Timing appears to be about two to three years premature.
12. The Calpine 523 MW CC proposal in Fond du Lac using natural gas is lower cost than the ERGS - w/o IGCC proposal. However, the Calpine proposal would not need to be put in-service until 2007. Selecting the Calpine proposal does not mean that coal plants would not be needed. Several scenarios suggest that a coal plant would not be needed until 2011, if not later, if the Calpine proposal is selected.
13. CO_2 monetization, as well as other emissions monetization scenarios, favors picking the Calpine proposal versus ERGS w/o IGCC.
14. If the coal plants were to have cost overruns of 10 percent, then the Optimal expansion plan does not select a coal plant until 2011.
15. Should lower demand and energy growth occur due to increased energy efficiency efforts and lower overall use of electricity than depicted by WEPCO in its base demand and energy forecast, then the earliest a new coal facility would be needed is 2012.
16. ERGS w/o IGCC could be made competitive with the Calpine Fond du Lac proposal by the Commission choosing an overall finanacing plan that would cost ratepayers between $50 million and $100 million less on a present value basis.

CW/SCJ-Ap. 233

17. Substantial Lake Michigan wind development exceeding 2,500 MW by 2014 and 11,000 MW by 2023 would be effective in meeting demand and energy growth for WEPCO, but it would require a substantial federal transfer via a permanent wind tax creit of $18 MWh. If the federal government were to not renew the wind tax credit presently set to expire in 2004, then no new wind would be selected by EGEAS until 2017.
18. An expansion plan over the next 30 years relying exclusively on natural gas would cost ratepayers $1.9 billion more than a balanced plan using optimally timed gas- and coal-fired electric generation, as well as some wind generation development.

There are important caveats in interpreting and understanding the above comments. First, Commission staff has used a strict materiality threshold of $10 million in interpreting the EGEAS model results. This means that Commission staff believes that expansion plan total costs that differ by more than $10 million are considered significant. Due to modeling complexity, the number and type of input assumptions, as well as the long-term nature of the EGEAS expansion plans, different parties may want to use other materiality thresholds. For instance, the Commission used a materiality threshold of $50 million during the Port Washington CPCN case. Using a $50 million materiality threshold still results in selecting Calpine proposal over the ERGS w/o IGCC proposal.

Another important caveat is that the Commission can choose a financing package other than the one proposed by WEPCO for ERGS and modeled here. The Commission could fashion a financing package for ERGS that would lower present value costs to ratepayers. For instance, in Chapter 3, rate-based financing rather than the lease approach could be used to lower ratepayer costs. Alternatively the Commission could still use a leasing approach but with different financial parameters.

It should also be noted that the above quantitative results only focus on parameters that can be directly modeled in EGEAS. The following sections adjust the EGEAS results for the ratepayer impact associated with mitigation payments under the WEPCO-city of Oak Creek agreement as well as the different transmission system upgrade costs associated with the various generation expansion plans.

Lastly, these results focus on quantitative effects. The Commission will need to consider the qualitative environmental and economic risks associated with the use of different fuels as discussed throughout this final EIS.

Effect on EGEAS results due to the potential for adverse credit quality effects on WEPCO's capital structure arising from the Facility Lease or a Purchase Power Agreement

When a long-term facility lease or purchase power agreement is signed, credit rating agencies can downgrade a utility's credit rating due to the debt-like quality of such agreements. This is especially the case if the lease or signed purchase power agreement constitutes a capital lease under Financial Accounting Standard Board (FASB) standards. Essentially, the signing of leases and PPAs with capital lease attributes and the attendant paying of rent or capacity payments looks much like a stream of continuing finance payments usually associated with long-term debt. This can reduce the utility's ability to obtain new financing and can raise borrowing costs as well. Any such increase in borrowing costs due to signed PPAs or leases needs to be factored into any generation cost analysis, including the quantitative EGEAS analysis reported above.

In this final EIS there has been no need to make quantitative adjustments associated with potential harm to the utility's credit rating. First, Calpine has proposed contract lengths in its proposal that make it less likely that a signed PPA for either the Fond du Lac Energy project or Fox Energy Center would constitute a capital lease under FASB standards. For instance, Calpine has not bid its proposals using a 25-year or longer term that would likely trigger capital lease accounting. Second, in the Port Washington construction case (docket 05-CE-117), WEPCO suggested and the Commission accepted the utility's commitment to treat all leases as operating leases for ratemaking purposes, and not as capital leases. Furthermore, WEPCO committed to a hold harmless provision with respect to debt costs if a transfer or assignment broadly defined of the leases or the Port Washington facility to a non-Wisconsin Energy Corporation company causes a national rating agency to downgrade the utility's debt rating or causes the utility to issue new equity to prevent such a downgrade, citing the lease as the reason. The Commission approved such terms in docket 05-AE-109. Similar conditions are expected in this ERGS docket. Finally, the facility lease itself contains a provision not allowing any such transfer or assignment broadly defined to occur for the first seven years after commercial operation of the ERGS. For these reasons, the EGEAS results have not been adjusted since the potential for credit quality degradation has been significantly reduced. Should underlying financing facts change with respect to either the ERGS or the Calpine proposals, a reexamination of this issue would be warranted.

Effect on EGEAS Results due to the WEPCO and city of Oak Creek Agreement

On March 25, 2003 the city of Oak Creek and WEPCO entered into an agreement by which WEPCO would, among several conditions, annually reimburse the city of Oak Creek $2.25 million after the start-up of the second SCPC plant that is part of the ERGS. This has not been modeled in the EGEAS quantitative results above, but the EGEAS results do need to be corrected for the long-term cost effect of the WEPCO-Oak Creek agreement. Specifically, the above EGEAS present value cost effects for the ERGS should be increased by $23.2 million. This $23.2 million is the 30 year present value of a stream of $2.25 million annual mitigation payments using a discount rate of 8.97 percent in an ordinary annuity formula. A 30-year period is used here because that is the facility lease's initial term.

Effect on EGEAS results due to necessary transmission system improvements

A proper cost analysis requires the inclusion of both generation and transmission costs. The EGEAS present value results depicted above only factor in electric generation capacity and energy costs. To these EGEAS generation costs, necessary transmission system improvement costs must be added in order to provide the overall generation and transmission impact to ratepayers.

Elsewhere in this FEIS it was indicated that the transmission system improvement costs associated with ERGS are $266 million. Without the third phase or IGCC component, the corresponding value is $164 million for the 1,230 MW of supercritical pulverized coal capacity. This latter transmission cost is used in the following discussion due to EGEAS modeling results showing that the IGCC phase is non-economic. It is important to note that this $164 million value may be overstated due to the fact that the July 2002 ATC study underlying it included generation projects that are unlikely to be constructed such as the 1,100 MW PG&E Badger Generating Station. Moreover, the July 2002 ATC study did not factor in the retirement of 500 MW of generating capacity associated with Oak Creek units 5 and 6 that now appears likely due to the EPA-WEPCO emissions agreement. How these elements would affect

the $164 million estimate is unclear without a formal study. ATC is presently conducting such an analysis, but official results are not available at the writing of this FEIS. Preliminary discussion between Commission staff and ATC staff suggests the $164 million may be decreased to $80 to $100 million.

As for the Calpine 523 MW Fond du Lac Energy project and the 510 MW Fox Energy Center, the estimated combined transmission cost is $40 million for 1,033 MW of gas-fired capacity. In order to compare this value which is based on 1,033 MWs with the cost of the ERGS project without the IGCC unit which is based on 1,230 MWs of capacity requires some normalization. For this reason, the $40 million for the combined Calpine projects is escalated by the simple ratio of 1,230/1,033 to arrive at a $48 million value for the cost of necessary transmission improvements. This represents a preliminary and simplistic analysis requiring further advanced study.

Nonetheless, the discussion here indicates that the Calpine projects may enjoy between a $30 and $120 million construction cost advantage with respect to necessary transmission improvements. The 2003 present value of such construction amounts if the transmission assets were put in service in 2008 is between $28 million and $111 million using a 13.70 percent return on equity and a 40-year depreciation period. This $28 million to $111 million present value range would correspondingly increase the Calpine projects' advantage in the EGEAS generation results if both a generation and transmission cost perspective were used. Such a value should be used cautiously as the Calpine projects have not had official ATC load flow or "source and sink" transmission impact studies conducted in which the delivery point is the WEPCO system.

Potential adverse economic development effects caused by constructing a generation expansion plan that is improper or too expensive

In this EIS, there is much discussion about the optimal, cost-effective generation expansion plan for WEPCO. In particular, there are results of various EGEAS computer model simulations. The point of the EGEAS simulations is to find the generation expansion plan that accommodates WEPCO's system needs in a cost-effective fashion. Selecting an expansion plan that does not accommodate WEPCO's system needs would have an adverse economic development impact. First, in the situation where insufficient electric power and energy are available due to an improper generation expansion plan, the electric system becomes unreliable. This leads to general business uncertainty, increased operational costs for business, and scheduling and production inflexibility.

Such factors would impose a tremendous economic cost on the economy of southeastern Wisconsin which would most likely take the form of business relocation or expansion outside of the area and consumers having less money to spend. Estimating the actual economic loss from insufficient electric power and energy is problematical, but the loss would likely be substantial in dollar and qualitative terms.

The second potential adverse impact comes from constructing an optimal expansion plan that is too expensive, due to either cost overruns or poor project selection. Estimating the loss to the southeastern Wisconsin economy is somewhat easier in this situation if the extra expense for electricity is viewed akin to a sales tax increase.

A recent study of the impact of tax increases on the Wisconsin economy shows that each $10 million increase in sales taxes has the potential to eliminate around 350 jobs.[49] Elsewhere in this EIS, it is reported that the annual lease payment from WEPCO to WE Power would be $111.25 million for each of the pulverized coal units. This means that a 10 percent construction cost overrun would make the annual lease payment cost about $11 million more than without the overrun. This ten percent overrun estimate is used because in its June 2003 testimony WEPCO has capped the cost overrun potential under the facility lease to no more than ten percent. If viewed as an unnecessary $11 million tax increase, such a 10 percent cost overrun could hurt the southeastern Wisconsin economy by about 385 jobs per year per unit.[50]

Lastly, there would be an impact if more coal units are approved than are actually needed. If WEPCO were to pay WE Power for a coal plant that was constructed but not needed, WEPCO under the facility lease would have to pay an annual rent of $111.25 million. Using the job-loss-to-sales-tax-increase estimate from above would translate into a loss of about 3,900 jobs per year per unit. For this reason, the Commission may want to consider a phased approach to the construction of the ERGS facilities, requiring the second or third units be constructed only after another examination of electric demand needs. In the case of an overbuilding scenario, the job loss impact would diminish slowly through time as electricity demand grew, eventually requiring the excess capacity to be used.

Nuclear Power as an Alternative

Currently, construction of new nuclear power plants is prohibited by Wis. Stat. § 196.493. However, this prohibition will cease once Yucca Mountain, or a similar geologic repository, becomes operational.

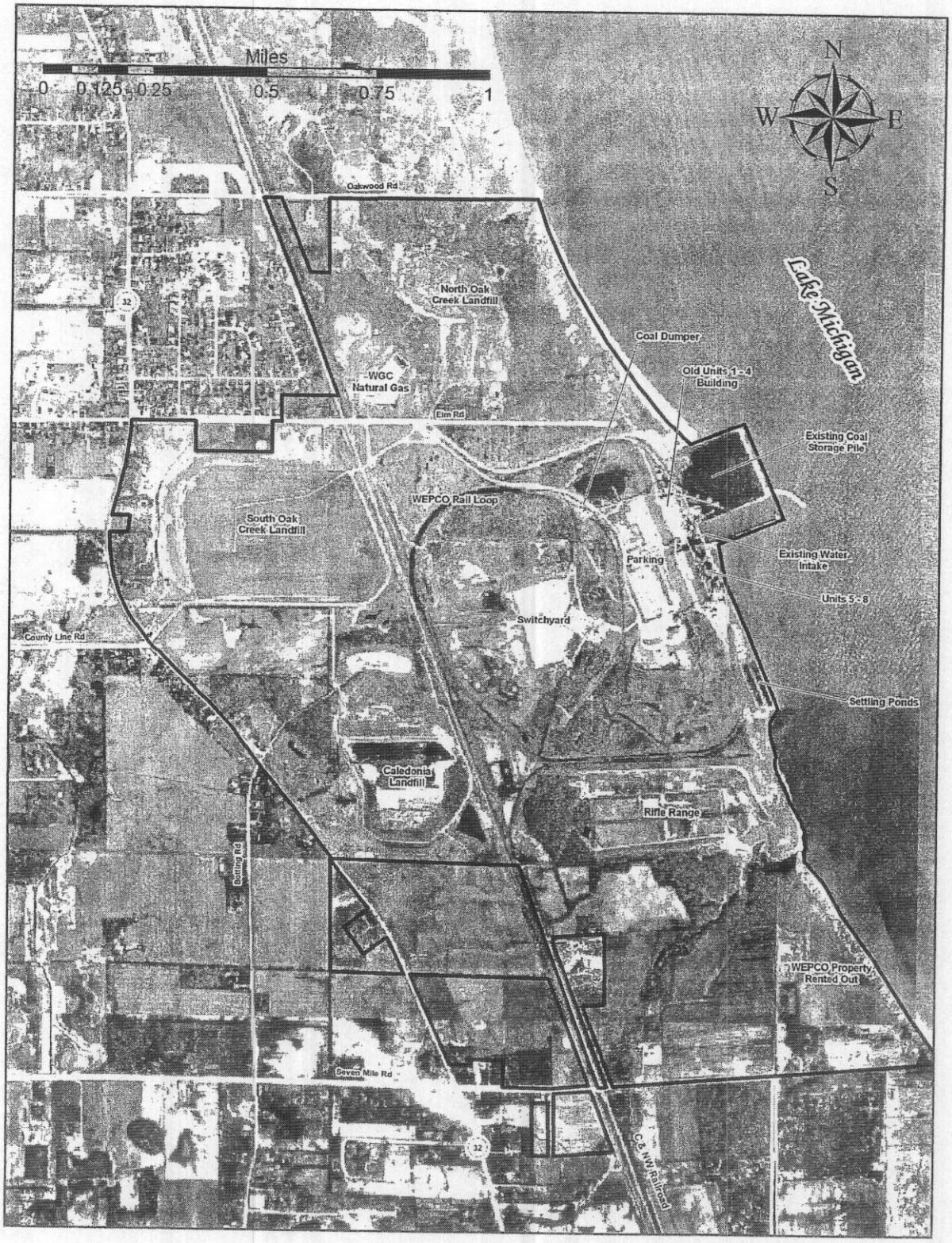
In July 2002, the U.S. Senate approved the development of Yucca Mountain as a long-term geologic repository. According to the Office of Civilian Radioactive Waste Management web site, the US Department of Energy (DOE) is "currently in the process of preparing an application to obtain the Nuclear Regulatory Commission license to proceed with construction of the repository." The 2004 budget proposed by DOE anticipates that Yucca Mountain will be operational by 2010.

During the scoping process, members of the public suggested that the Commission examine the possibility of replacing the proposed ERGS coal units with nuclear power plants. Evaluating the option of a nuclear power plants as an alternative to the ERGS proposal, requires the following assumptions:

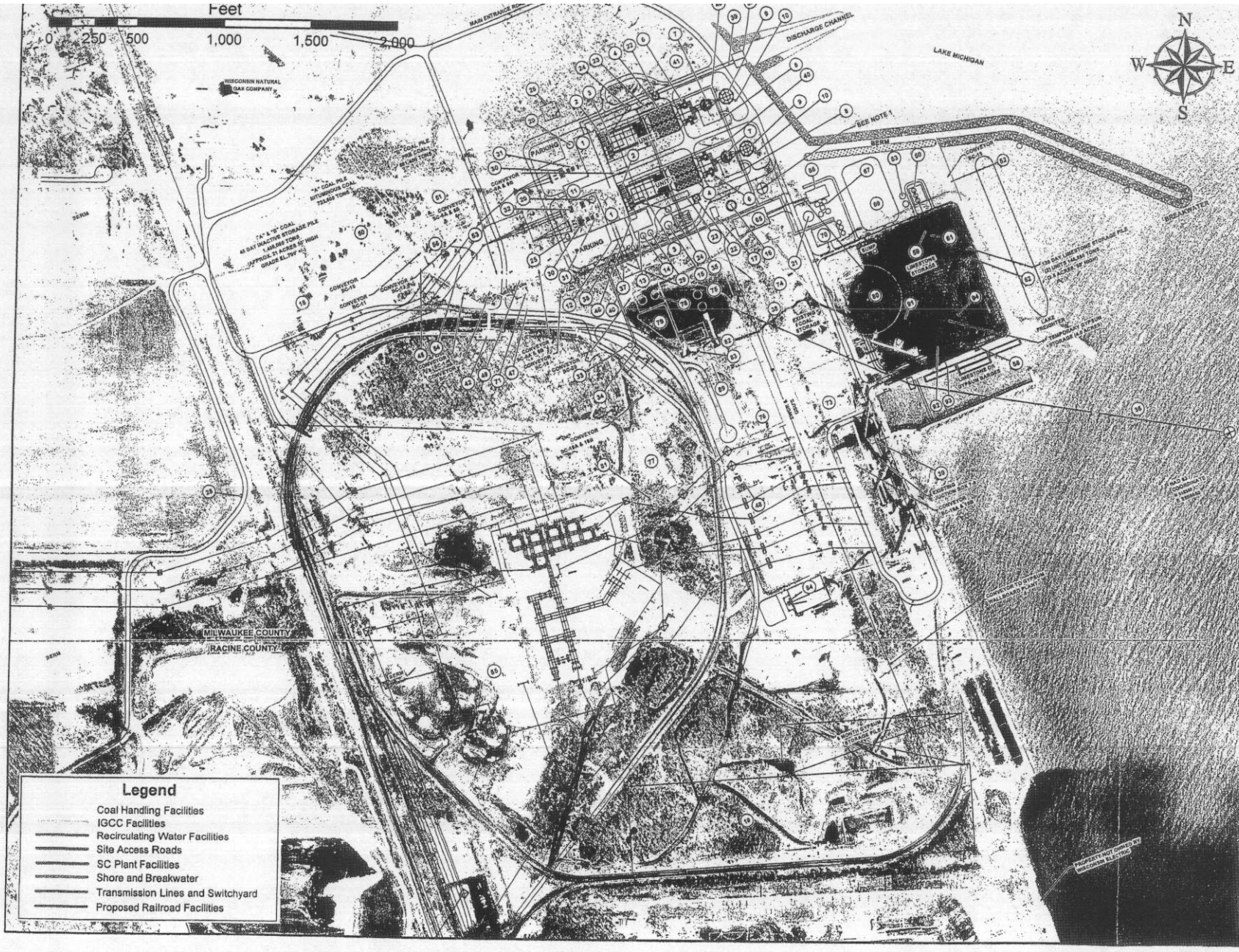
1. Wis. Stat. § 196.493 remains unchanged.
2. Yucca Mountain begins operation in 2010.
3. The Nuclear Regulatory Commission's (NRC) early site approval process is not precluded by Wis. Stat. § 196.493.
4. WEPCO could complete the early site approval process by 2010.
5. The Westinghouse AP600 nuclear facility is used in EGEAS modeling. The AP600 is similar in size to the proposed ERGS coal units and its design has been approved by the NRC.
6. A new nuclear unit could be constructed and placed in operation within 36 months, once site approval is obtained. This would allow the EGEAS model to choose a new nuclear unit beginning in 2013.

[49] "Raising Taxes in Wisconsin—Measuring the Full Costs," Wisconsin Policy Research Institute Report, Volume 16, Number 1, January 2003. This study shows that 55,514 jobs would be lost from a $1.6 billion sales tax increase, basically a 350 jobs to $10 million ratio.
[50] Calculated as [$21 million / $10 million] times 350 = 735

Figure 6-2 Aerial photo of existing OCPP site



CW/SCJ-Ap. 238



EQUIPMENT & FACILITIES ITEM DESCRIPTION

1	TURBINE BUILDING UNIT 1 & 2
2	COAL HANDLING BAY
3	BOILER BUILDING
4	BAGHOUSE
5	UNUSED
6	I.D. FANS
7	ABSORBER
8	ABSORBER PUMP & ELECTRICAL BUILDING
9	CHIMNEY
10	CEMS BUILDINGS
11	CONTROL BUILDING (WITH DIESEL GENERATORS, AIR COMPRESSORS)
12	SERVICE BUILDING & AUX. BOILER 1ST. FLOOR MAINTENANCE FACILITIES 2ND. FLOOR ADMINISTRATION FACILITIES
13	WATER TREATMENT BUILDING & BULK ACID/CAUSTIC STORAGE TANKS
14	DEMINERALIZED WATER TANK
15	SERVICE WATER TANK
16	FUEL OIL STORAGE TANK
17	FUEL OIL PUMP HOUSE
18	3 DAY ACTIVE COAL STORAGE & RECLAIM FACILITY
19	PROPOSED GYPSUM WALL BOARD PLANT
20	CONDENSATE STORAGE TANK
21	ABSORBER HOLDING TANK
22	FLY ASH SILO (72HRS)
23	FLY ASH VACUUM BLOWER & ELECTRICAL BUILDING
24	BOTTOM ASH BINS
25	HYDROGEN & CARBON DIOXIDE AREA
26	WAREHOUSE
27	UNUSED
28	GUARDHOUSE
29	WASTE NEUTRALIZATION TANK
30	MAIN POWER TRANSFORMER
31	UNIT AUX. TRANSFORMER
32	STATION AUXILIARY TRANSFORMER
33	UREA SYSTEM STORAGE SILO
34	UREA SYSTEM BLOWER BLDG.
35	UREA/AMMONIA ENCLOSURE
36	CIRCULATING WATER INTAKE PIPE
37	CIRCULATING WATER INTAKE PUMP HOUSE
38	CIRCULATING WATER SUPPLY PIPE
39	CIRCULATING WATER DISCHARGE PIPE
40	PIPE RACK
41	STORM WATER BASIN
42	COAL CAR DUMPER & TRAIN POSITIONER
43	UNUSED
44	UNUSED
45	COAL TRANSFER TOWER 3
46	COAL TRANSFER TOWER 4
47	COAL TRANSFER TOWER 5
48	COAL TRANSFER TOWER 6
49	COAL CRUSHER HOUSE
50	COAL RECLAIM HOPPER - PILE A
51	COAL RECLAIM HOPPER - PILE B
52	COAL SHIP UNLOADER & HOPPERS
53	COAL PILE SEDIMENTATION BASIN
54	ASH REBURN HOPPER BLDG.
55	SEAL WELL STRUCTURE
56	COAL YARD MAINTENANCE BUILDING
57	UNUSED
58	LIMESTONE BARGE UNLOADING PAD W/BARGE UNLOADER AND HOPPER/FEEDER
59	LIMESTONE RECLAIM HOPPER ENCLOSURE
60	LIMESTONE BLDG. MILL & PREPARATION BUILDING
61	LIMESTONE CONVEYORS
62	LIMESTONE PILE PERIMETER DRAINAGE AREA
63	LIMESTONE SLURRY STORAGE TANKS
64	UNUSED
65	GYPSUM STORAGE BUILDING (3 DAY STORAGE)
66	GYPSUM DEWATERING BUILDING
67	PRIMARY GYPSUM DEWATERING TANKS
68	UNUSED
69	WASTE WATER COLLECTION & EQUALIZATION BASIN
70	WASTE WATER TREATMENT BLDG.
71	COAL HANDLING CONTROL/SWITCHGEAR BLDG.
72	UNUSED
73	IGCC POWER BLOCK
74	IGCC AIR SEPARATION UNIT
75	IGCC GASIFICATION FACILITY
76	IGCC ACID GAS REMOVAL UNIT (SECOND FLOOR)
77	IGCC SULFUR RECOVERY UNIT
78	IGCC COAL PREPARATION
79	IGCC STORM WATER BASIN
80	IGCC FLARE
81	IGCC SULFURIC ACID STORAGE TANKS
82	IGCC WASTE WATER TREATMENT
83	IGCC SLAG STORAGE SILO
84	FLY ASH STORAGE BUILDING
85	SWITCHYARD EXPANSION FOR SCPC & IGCC UNITS
86	EXISTING UNITS 5 TO 8 TURBINE ROOMS (NOT SHOWN)
87	EXISTING UNITS 5 TO 8 BOILER ROOMS (NOT SHOWN)
88	UNIT NO. 9 BUILDING
89	IGCC FUEL OIL TANK
90	UNUSED
91	GYPSUM CONVEYOR
92	GYPSUM HOPPER FOR BARGE LOADING CONVEYOR
93	GYPSUM BARGE LOADING CONVEYOR
94	GYPSUM PILE PERIMETER DRAINAGE AREA

NOTES

1. THE COORDINATES USED ARE BASED ON N.10000 & E.10000 BEING EQUAL TO THE PLANT & DOCK BASE LINE OF N.0.0 & E.0.0. BEING EQUAL TO NORTH 317,037.42, EAST 2,581,051.26 WISCONSIN STATE PLANE SYSTEM GRID (REF RUDKER/BELKE EXISTING BASELINE)
2. ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL FOR OAK CREEK PLANT DATUM ELEVATIONS SUBTRACT 581.2' (PLANT ELEVATION 0'=0'=0.0000'= 581.2 MSL)
3. SCPC PLANT GRADE IS 592-0" (PLANT ELEVATION = 10.8') COAL HANDLING GRADE IS 707-0" (PLANT ELEVATION =115.8')

Figure Vol. 2-1
Plant Equipment Layout - North Site

CW/SCJ Ap. 239

CW/SCJ-Ap.240

EQUIPMENT & FACILITIES ITEM DESCRIPTION

1	TURBINE BUILDING UNIT 1 & 2
2	COAL HANDLING BAY
3	BOILER BUILDING
4	BAGHOUSE
5	UNUSED
6	I.D. FANS
7	ABSORBER
8	ABSORBER PUMP & ELECTRICAL BUILDING
9	CHIMNEY
10	CEMS BUILDINGS
11	CONTROL BUILDING (WITH DIESEL GENERATORS, AIR COMPRESSORS)
12	SERVICE BUILDING & AUX. BOILER 1ST FLOOR MAINTENANCE FACILITIES 2ND. FLOOR ADMINISTRATION FACILITIES
13	WATER TREATMENT BUILDING & BULK ACID/CAUSTIC STORAGE TANKS
14	DEMINERALIZED WATER TANK
15	SERVICE WATER TANK
16	FUEL OIL STORAGE TANK
17	FUEL OIL PUMP HOUSE
18	3 DAY ACTIVE COAL STORAGE & RECLAIM FACILITY
19	PROPOSED GYPSUM WALL BOARD PLANT
20	CONDENSATE STORAGE TANK
21	ABSORBER HOLDING TANK
22	FLY ASH SILO (72HRS)
23	FLY ASH VACUUM BLOWER & ELECTRICAL BUILDING
24	BOTTOM ASH BINS
25	HYDROGEN & CARBON DIOXIDE AREA
26	WAREHOUSE
27	UNUSED
28	GUARDHOUSE
29	WASTE NEUTRALIZATION TANK
30	MAIN POWER TRANSFORMER
31	UNIT AUX. TRANSFORMER
32	STATION AUXILIARY TRANSFORMER
33	UREA SYSTEM STORAGE SILO
34	UREA SYSTEM BLOWER BLDG.
35	UREA/AMMONIA ENCLOSURE
36	CIRCULATING WATER INTAKE PIPE
37	CIRCULATING WATER INTAKE PUMP HOUSE
38	CIRCULATING WATER SUPPLY PIPE
39	CIRCULATING WATER DISCHARGE PIPE
40	PIPE RACK
41	STORM WATER BASIN
42	COAL CAR DUMPER & TRAIN POSITIONER
43	UNUSED
44	UNUSED
45	COAL TRANSFER TOWER 3
46	COAL TRANSFER TOWER 4
47	COAL TRANSFER TOWER 5
48	COAL TRANSFER TOWER 6
49	COAL CRUSHER HOUSE
50	COAL RECLAIM HOPPER - PILE A
51	COAL RECLAIM HOPPER - PILE B
52	COAL SHIP UNLOADER & HOPPERS
53	COAL PILE SEDIMENTATION BASIN
54	ASH REBURN HOPPER BLDG.
55	SEAL WELL STRUCTURE
56	COAL YARD MAINTENANCE BUILDING
57	COAL TRANSFER TOWER 7
58	LIMESTONE BARGE UNLOADING PAD W/BARGE UNLOADER AND HOPPER/FEEDER
59	LIMESTONE RECLAIM HOPPER ENCLOSURE
60	LIMESTONE SILOS, MILL & PREPARATION BUILDING
61	LIMESTONE CONVEYORS
62	LIMESTONE PILE PERIMETER DRAINAGE AREA
63	LIMESTONE SLURRY STORAGE TANKS
64	UNUSED
65	GYPSUM STORAGE BUILDING (3 DAY STORAGE)
66	GYPSUM DEWATERING BUILDING
67	PRIMARY GYPSUM DEWATERING TANKS
68	UNUSED
69	WASTE WATER COLLECTION & EQUALIZATION BASIN
70	WASTE WATER TREATMENT BLDG.
71	COAL HANDLING CONTROL/SWITCHGEAR BLDG.
72	UNUSED
73	IGCC POWER BLOCK
74	IGCC AIR SEPARATION UNIT
75	IGCC GASIFICATION FACILITY
76	IGCC ACID GAS REMOVAL UNIT
77	IGCC SULFUR RECOVERY UNIT
78	IGCC COAL PREPARATION
79	IGCC STORM WATER BASIN
80	IGCC FLARE
81	IGCC SULFURIC ACID STORAGE TANKS
82	IGCC WASTE WATER TREATMENT
83	IGCC SLAG STORAGE SILO
84	FLY ASH STORAGE BUILDING
85	SWITCHYARD EXPANSION FOR SCPC & IGCC UNITS
86	EXISTING UNITS 5 TO 8 TURBINE ROOMS (NOT SHOWN)
87	EXISTING UNITS 5 TO 8 BOILER ROOMS (NOT SHOWN)
88	UNIT NO. 9 BUILDING (NOT SHOWN)
89	IGCC FUEL OIL TANK
90	UNUSED
91	GYPSUM CONVEYOR
92	GYPSUM HOPPER FOR BARGE LOADING CONVEYOR
93	GYPSUM BARGE LOADING CONVEYOR
94	GYPSUM PILE PERIMETER DRAINAGE AREA

NOTES

1. THE COORDINATES USED ARE BASED ON N.10000 & E.10000 BEING EQUAL TO THE PLANT & DOCK BASE LINE OF N.0.0 & E.0.0. BEING EQUAL TO NORTH 317,067.42, EAST 2,581,661.66 WISCONSIN STATE PLANE SYSTEM GRID (REF RUEKERT/MIELKE EXISTING BASELINE)
2. ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL FOR OAK CREEK PLANT DATUM ELEVATIONS SUBTRACT 581.2' (PLANT ELEVATION 0'-0"/0.0000' = 581.2 MSL)
3. SCPC PLANT GRADE IS 592'-0" (PLANT ELEVATION = 10.8') COAL HANDLING GRADE IS 700'-0" (PLANT ELEVATION = 118.8')

Figure Vol. 2-2
Plant Equipment Layout - South Site

EQUIPMENT & FACILITIES ITEM DESCRIPTION

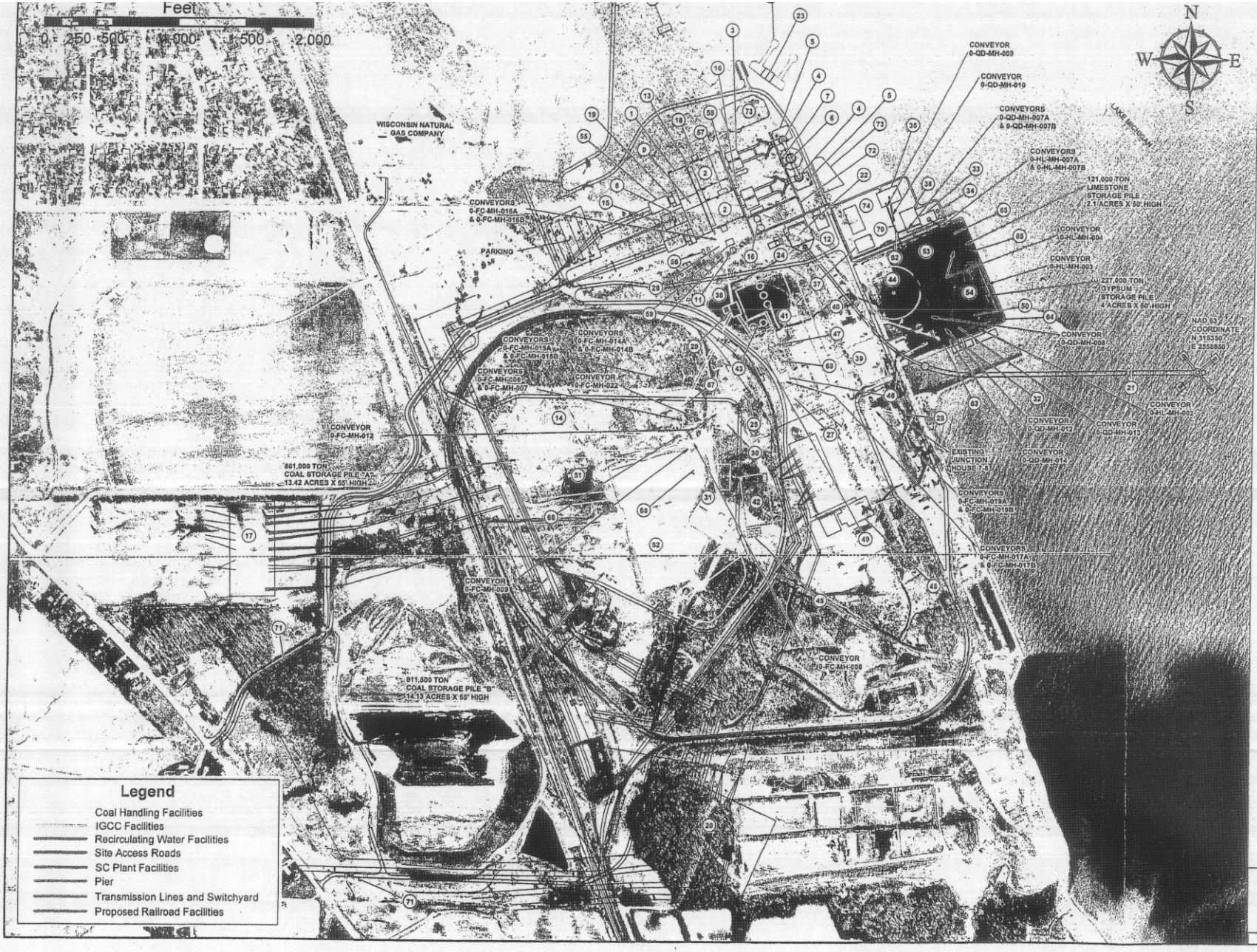
1	TURBINE BUILDING UNIT 1 & 2
2	COAL HANDLING BAY
3	BOILER BUILDING
4	BAGHOUSE
5	UNUSED
6	I.D. FANS
7	ABSORBER
8	ABSORBER PUMP & ELECTRICAL BUILDING
9	CHIMNEY
10	CEMS BUILDINGS
11	CONTROL BUILDING (WITH DIESEL GENERATORS, AIR COMPRESSORS)
12	SERVICE BUILDING & AUX. BOILER 1ST.FLOOR MAINTENANCE FACILITIES 2ND. FLOOR ADMINISTRATION FACILITIES
13	WATER TREATMENT BUILDING & BULK ACID/CAUSTIC STORAGE TANKS
14	DEMINERALIZED WATER TANK
15	SERVICE WATER TANK
16	FUEL OIL STORAGE TANK
17	FUEL OIL PUMP HOUSE
18	3 DAY ACTIVE COAL STORAGE & RECLAIM FACILITY
19	PROPOSED GYPSUM WALL BOARD PLANT
20	CONDENSATE STORAGE TANK
21	ABSORBER HOLDING TANK
22	FLY ASH SILO (TOPPS)
23	FLY ASH VACUUM BLOWER & ELECTRICAL BUILDING
24	BOTTOM ASH DING
25	HYDROGEN & CARBON DIOXIDE AREA
26	WAREHOUSE
27	UNUSED
28	GUARDHOUSE
29	WASTE NEUTRALIZATION TANK
30	MAIN POWER TRANSFORMER
31	UNIT AUX. TRANSFORMER
32	STATION AUXILIARY TRANSFORMER
33	UREA SYSTEM STORAGE SILO
34	UREA SYSTEM BLOWER BLDG.
35	UREA/AMMONIA ENCLOSURE
36	CIRCULATING WATER INTAKE PIPE
37	CIRCULATING WATER INTAKE PUMP HOUSE
38	CIRCULATING WATER SUPPLY PIPE
39	CIRCULATING WATER DISCHARGE PIPE
40	PIPE RACK
41	STORM WATER BASIN
42	COAL CAR DUMPER & TRAIN POSITIONER
43	UNUSED
44	UNUSED
45	COAL TRANSFER TOWER 3
46	COAL TRANSFER TOWER 4
47	COAL TRANSFER TOWER 5
48	COAL TRANSFER TOWER 6
49	COAL CRUSHER HOUSE
50	COAL RECLAIM HOPPER - PILE A
51	COAL RECLAIM HOPPER - PILE B
52	COAL SHIP UNLOADER & HOPPERS
53	COAL PILE SEDIMENTATION BASIN
54	ASH REBURN HOPPER BLDG.
55	SEAL WELL STRUCTURE
56	COAL YARD MAINTENANCE BUILDING
57	COAL TRANSFER TOWER 7
58	LIMESTONE BARGE UNLOADING PAD W/BARGE UNLOADER AND HOPPER/FEEDER
59	LIMESTONE RECLAIM HOPPER ENCLOSURE
60	LIMESTONE SILOS, MILL & PREPARATION BUILDING
61	LIMESTONE CONVEYORS
62	LIMESTONE PILE PERIMETER DRAINAGE AREA
63	LIMESTONE SLURRY STORAGE TANKS
64	UNUSED
65	GYPSUM STORAGE BUILDING (3 DAY STORAGE)
66	GYPSUM DEWATERING BUILDING
67	PRIMARY GYPSUM DEWATERING TANKS
68	UNUSED
69	WASTE WATER COLLECTION & EQUALIZATION BASIN
70	WASTE WATER TREATMENT BLDG.
71	COAL HANDLING CONTROL/SWITCHGEAR BLDG.
72	UNUSED
73	IGCC POWER BLOCK
74	IGCC AIR SEPARATION UNIT
75	IGCC GASIFICATION FACILITY
76	IGCC ACID GAS REMOVAL UNIT
77	IGCC SULFUR RECOVERY UNIT
78	IGCC COAL PREPARATION
79	IGCC STORM WATER BASIN
80	IGCC FLARE
81	IGCC SULFURIC ACID STORAGE TANKS
82	IGCC WASTE WATER TREATMENT
83	IGCC SLAG STORAGE SILO
84	FLY ASH STORAGE BUILDING
85	SWITCHYARD EXPANSION FOR SCPC & IGCC UNITS
86	EXISTING UNITS 5 TO 8 TURBINE ROOMS (NOT SHOWN)
87	EXISTING UNITS 5 TO 8 BOILER ROOMS (NOT SHOWN)
88	UNIT NO. 9 BUILDING (NOT SHOWN)
89	IGCC FUEL OIL TANK
90	UNUSED
91	GYPSUM CONVEYOR
92	GYPSUM HOPPER FOR BARGE LOADING CONVEYOR
93	GYPSUM BARGE LOADING CONVEYOR
94	GYPSUM PILE PERIMETER DRAINAGE AREA

NOTES

1. THE COORDINATES USED ARE BASED ON N.10000 & E.10000 BEING EQUAL TO THE PLANT & DOCK BASE LINE OF N.50 & E.0.0. BEING EQUAL TO NORTH 317,897.42, EAST 2,581,051.85 WISCONSIN STATE PLANE SYSTEM GRID (REF. RUSSE/PAMELIS EXISTING BASELINE)
2. ELEVATIONS SHOWN ARE ABOVE MEAN SEA LEVEL FOR OAK CREEK PLANT DATUM ELEVATIONS SUBTRACT 581.2 (PLANT ELEVATION 0=710.0000= 581.2 MSL)
3. SCPC PLANT GRADE IS 592'-0" (PLANT ELEVATION = 10.0') COAL HANDLING GRADE IS 700'-0" (PLANT ELEVATION =118.0')

Figure Vol. 2-3
Plant Equipment Layout - South Site-Exp

CW/SCJ Ap.241



EQUIPMENT & FACILITIES ITEM DESCRIPTION

1	TURBINE GENERATOR BUILDING (2)
2	BOILER BUILDING (2)
3	BAGHOUSE (4)
4	ABSORBER/SMET ESP'S (2)
5	ABSORBER PUMP/CONTROL BUILDING
6	CHIMNEY
7	CEMS BUILDING (2)
8	MAINTENANCE/WAREHOUSE/ ADMINISTRATION/CONTROL BUILDING
	MAINTENANCE BUILDING/WAREHOUSE - 1ST FLOOR
	ADMINISTRATION BUILDING - 2ND FLOOR
	CONTROL BUILDING - 3RD FLOOR
9	WATER TREATMENT AREA
	BULK ACID/CAUSTIC STORAGE TANKS
10	DEMINERALIZED WATER STORAGE TANK
11	SERVICE/FIRE WATER TANK
12	FUEL OIL PUMP HOUSE & FUEL OIL STORAGE TANK
13	SILO BAY (2)
14	3 DAY ACTIVE COAL STORAGE FACILITY
15	CONDENSATE STORAGE TANK (2)
16	FLY ASH SILO (2) & FLY ASH VACUUM BLOWER BUILDING
17	138kV SWITCHYARD
18	BOTTOM ASH BIN (2)
19	MAIN POWER TRANSFORMER (2) & UNIT AUXILIARY TRANSFORMER (4)
20	345 kV SWITCHYARD
21	CIRCULATING WATER INTAKE TUNNEL
22	CIRCULATING WATER INTAKE PUMP HOUSE
23	CIRCULATING WATER DISCHARGE STRUCTURE
24	AMMONIA UNLOADING TANKS & AMMONIA PUMPS
25	ROTARY CAR DUMPER HOUSE
26	COAL TRANSFER TOWER NO. 3
27	COAL TRANSFER TOWER NO. 4
28	COAL TRANSFER TOWER NO. 5
29	COAL CRUSHER HOUSE
30	ASH REBURN BUILDING
31	COAL YARD MAINTENANCE BUILDING
32	GYPSUM LOADER/LIMESTONE BARGE UNLOADER
33	LIMESTONE PREP BUILDING
34	LIMESTONE SLURRY STORAGE TANK (2)
35	GYPSUM STORAGE BUILDING
36	GYPSUM DEWATERING BUILDING
37	RAW WATER/WASTE WATER TREATMENT BUILDING
38	COAL HANDLING CONTROL/SWITCHYARD BUILDING
39	IGCC POWER BLOCK
40	IGCC AIR SEPARATION UNIT
41	IGCC GASIFICATION FACILITY
	IGCC ACID GAS REMOVAL UNIT (2ND FLOOR)
42	IGCC SULFUR RECOVERY UNIT
43	IGCC COAL PREPARATION
44	IGCC FLARS
45	IGCC SULFURIC ACID STORAGE TANK (2)
46	IGCC WASTE WATER TREATMENT
47	IGCC SLAG STORAGE SILO
48	OCPP FLY ASH STORAGE BUILDING BAGHOUSE
49	IGCC FUEL OIL STORAGE TANK
50	TEMPORARY GYPSUM LOADING HOPPER
51	COAL STORAGE PILE "A"
52	COAL STORAGE PILE "B"
53	LIMESTONE STORAGE PILE
54	TEMPORARY GYPSUM STORAGE
55	345 KV TRANSMISSION AREA (2)
56	DIESEL GENERATOR (2)
57	AUXILIARY BOILER
58	OIL WATER SEPARATOR
59	FIRE WATER PUMP HOUSE
60	ENERGY INFORMATION CENTER
61	FISHING PIER
62	GYPSUM TRANSFER TOWER NO. 1
63	GYPSUM TRANSFER TOWER NO. 2
64	LIMESTONE TRANSFER TOWER NO. 1
65	LIMESTONE TRANSFER TOWER NO. 2
66	COAL TRANSFER TOWER NO. 1
67	COAL TRANSFER TOWER NO. 2
68	COAL RECLAIM HOPPER
69	IGCC WATER TREATMENT
70	LIMESTONE AREA ELECTRICAL BUILDING
71	GUARD HOUSE (2)
72	PIPE RACK
73	STORM WATER BASIN (2)
74	WASTE WATER BASIN

CW/SCJ-Ap. 242

Figure Vol. 2-4
Plant Equipment Layout - North Site-CUP Option

STATE OF WISCONSIN
SUPREME COURT

CLEAN WISCONSIN, INC.
p/k/a Wisconsin's Environmental
Decade Institute, Inc., SC JOHNSON &
SON, INC. and CALPINE CORPORATION,
Petitioners-Respondents-Cross-
Appellants-Cross-Respondents,

TOWN OF CALEDONIA,
Petitioner-Cross-Respondent,

v.

Case No. 04-3179

PUBLIC SERVICE COMMISSION OF
WISCONSIN and WISCONSIN
DEPARTMENT OF NATURAL
RESOURCES,
Respondents-Co-Appellants-Cross-
Respondents,

Circuit Court Case Nos.
03CV3478, 03CV3731
04CV0133, 04CV0149
04CV0530, 04CV0533

WISCONSIN ELECTRIC POWER
COMPANY, W.E. POWER, LLC and
WISCONSIN ENERGY CORPORATION,
Interested Parties-Appellants-Cross-
Respondents,

(Caption continued on following pages)

APPEAL FROM A DECISION OF THE CIRCUIT COURT OF DANE
COUNTY, THE HONORABLE DAVID FLANAGAN, PRESIDING

**BRIEF OF RESPONDENTS-CO-APPELLANTS-CROSS
RESPONDENTS WISCONSIN PUBLIC SERVICE COMMISSION
AND WISCONSIN DEPARTMENT OF NATURAL RESOURCES**

DAIRYLAND POWER COOPERATIVE,
Interested-Party-Cross-Respondent,

MADISON GAS & ELECTRIC COMPANY AND WISCONSIN PUBLIC POWER, INC.,
Interested Parties-Co-Appellants-Cross-Respondents,

CITY OF OAK CREEK,
Interested Party-Respondent-Cross-Appellant,

ROBERT H. OWEN,
Interested Party-Respondent-Cross-Respondent.

CALPINE CORPORATION,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF WISCONSIN, and WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondents,

WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION, W.E. POWER, LLC, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, ROBERT H. OWEN, JR., and CITY OF OAK CREEK,
Interested Parties.

CLEAN WISCONSIN, INC.
p/k/a Wisconsin's Environmental Decade Institute, Inc., and
SC JOHNSON & SON, INC.,
Petitioners,

v.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondent,

WISCONSIN PUBLIC POWER, INC., CITY OF OAK CREEK, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION and W.E. POWER, LLC,
Interested Parties.

CALPINE CORPORATION,
Petitioner,
v.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondent,

CITY OF OAK CREEK, DAIRLYAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, WISCONSIN PUBLIC POWER, WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION and W.E. POWER, LLC,
Interested Parties.

CITY OF OAK CREEK,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent.

TOWN OF CALEDONIA,
Petitioner,
v.

PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent,

WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION, W.E. POWER, LLC, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, ROBERT H. OWEN, JR., and WISCONSIN PUBLIC POWER, INC.,
Interested Parties.

DAVID J. GILLES
General Counsel

EDWARD S. MARION
Assistant General Counsel
State Bar No. 1016190

PUBLIC SERVICE COMMISSION
OF WISCONSIN
610 North Whitney Way (53705-2729)
P.O. Box 7854
Madison, WI 53707-7854

TABLE OF CONTENTS

PAGE

ISSUES PRESENTED 1

STATEMENT ON ORAL ARGUMENT AND PUBLICATION 2

STATEMENT OF CASE 2

A. Introduction. 2

B. Procedural history and statement of facts. 5

1. The Declaratory Ruling docket. 5

2. The CPCN dockets 5

a. The CPCN applications. 5

b. The CPCN hearings. 6

c. The Final Decision. 7

3. Judicial proceedings 7

STANDARDS OF REVIEW 8

ARGUMENT 10

I. THE PSC CORRECTLY DETERMINED THAT THE APPLICATION WAS COMPLETE. 11

A. The Application contained all necessary information regarding required regulatory approvals 12

1. Plain meaning of the rule. 12

2. Legislative purpose. 13

B. The Application contained all necessary information regarding transmission facilities. 14

C. Requiring regulatory approvals and transmission agreements in a CPCN application would be inconsistent with the purpose of the completeness rule and the CPCN statute. 15

D. The PSC correctly determined that the Application satisfied the "two-site" requirement. 16

1. The PSC reasonably interpreted the alternative sites requirement and its interpretation is entitled to great weight. 17

2. Even under a less-deferential standard, the Court should affirm the PSC's interpretation because it is reasonable. 18

3. The PSC's interpretation is consistent with the rule's plain meaning 20

4. Any error with respect to the *bona fides* of the alternative sites described in the Application was harmless. 21

II. THE PSC COMPLIED WITH WIS. STAT. §§ 1.12(4) (THE "ENERGY PRIORITIES LAW") AND 196.025(1) WHEN IT CONCLUDED THAT EASTERN BITUMINOUS COAL WAS THE APPROPRIATE FUEL SOURCE FOR ERGS 21

III. THE PSC PROPERLY CONSIDERED THE "DESIGN, COST AND LOCATION" OF TRANSMISSION FACILITIES RELATED TO ERGS. 24

IV. THE PSC COMPLIED WITH WIS. STAT. § 196.491(3)(e) WHEN IT APPROVED THE CPCN APPLICATION AND INCLUDED A CPCN IN ITS FINAL DECISION BUT STAYED THE EFFECTIVENESS OF THE CPCN UNTIL THE DNR ACTED. 27

A. In effect, the PSC did not issue a CPCN when it issued its Final Decision. 28

B. The PSC gave full effect to the statute by delaying the effective date of the CPCN until all necessary DNR approvals are issued. 29

C. If the PSC erroneously issued the CPCN, the error was harmless. 30

V. THE PSC PROPERLY AUTHORIZED THE CONSTRUCTION OF COMMON SYSTEMS TO ACCOMMODATE POSSIBLE FUTURE PLANT EXPANSION. 31

VI. THE PSC PROPERLY LIMITED THE AMOUNT OF PAYMENTS TO BE MADE TO OAK CREEK TO MITIGATE THE ADVERSE EFFECTS OF ERGS. 34

A. The shared revenue program compensates local governments that host power plants. 34

B. No law requires the PSC to approve payments to municipalities that host generation facilities. 35

C. Wis. Stat. § 196.20(7)(c), which prohibits ratepayer subsidies for new mitigation payment agreements, does not authorize, let alone require, approval of the mitigation payments in the Development Agreement. 37

CONCLUSION 39

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17 Wis. 2d 120, 115 N.W.2d 498 (1962)..... 9

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211 Wis. 2d 537
565 N.W.2d 554 (Ct. App. 1997)..... 9, 10, 32, 33

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No. 03-CV-3389
(Dane Co. Cir. Ct. Sept. 28, 2003)..... 18

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253 Wis. 397, 34 N.W.2d 238 (1948)..... 8

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240 Wis. 2d 234, 621 N.W.2d 660 10

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80 P.3d 984 (2003)..... 28

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28 Wis. 2d 233, 137 N.W.2d 86 (1965)..... 9

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2000 WI 129, 239 Wis. 2d 660, ... 9, 15, 29, 30, 31, 36

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184 Wis. 2d 668, 517 N.W.2d 449 (1994)..... 9

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217 Wis. 2d 429, 576 N.W.2d 904 (1998)..... 15

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2003 WI 10, 259 Wis. 2d 523, 657 N.W.2d 393 14

State v. Williquette,
129 Wis. 2d 239, 385 N.W.2d 145, 149 (1986)..... 20

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223 Wis. 2d 723, 589 N.W.2d 445 (Ct. App.1998)... 18

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2002 WI App 277, 258 Wis. 2d 665,
654 N.W.2d 306..... 10, 18

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65 Wis. 2d 1, 221 N.W.2d 815 (1974)..... 10, 12

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2004 WI 103, 274 Wis. 2d 220,
682 N.W.2d 405..... 15

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71 Wis. 2d 462, 238 N.W.2d 695 (1976)..... 16, 26, 27

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148 Wis. 2d 881, 437 N.W.2d 888
(Ct. App. 1989) 26

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75 Wis. 2d 442, 249 N.W.2d 543 (1977)..... 28

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Wisconsin Traction, Light, Heat & Power Co. v. City of Menasha, 157 Wis. 1, 145 N.W. 231 (1914) 18

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1997 Wisconsin Act 204 ..... 15, 17, 29, 30

2001 Wisconsin Act 16 5

2003 Wisconsin Act 31 35

2003 Wisconsin Act 89 ..... 35, 37

Wis. Stat. ch. 30 28

Wis. Stat § 1.12(4) 1, 21

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Wis. Stat. § 79.04 34

Wis. Stat. § 196.025(1) 1, 11, 21

Wis. Stat. § 196.20 34

Wis. Stat. § 196.20(7) 11, 37, 38

Wis. Stat. § 196.20(a) 37

Wis. Stat. § 196.20(7)(c) 37, 38

Wis. Stat. 196.395 33

Wis. Stat. § 196.485(3m) 15

Wis. Stat. § 196.49 33

Wis. Stat. § 196.491 ..... 26, 34

Wis. Stat. § 196.491(1)(e) 32

Wis. Stat. § 196.491(3) 9, 31

Wis. Stat. § 196.491(3)(a)1 ..... 11, 28, 31

Wis. Stat. § 196.491(3)(a)2 ..... 5, 11

Wis. Stat. § 196.491(3)(a)3.a. 13

Wis. Stat. § 196.491(3)(a)3.b. 13

Wis. Stat. § 196.491(3)(e) 2, 27, 29

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Wis. Stat. § 196.491(3)(d)4 11

Wis. Stat. § 196.491(3)(d)6 ..... 11, 35

Wis. Stat. § 196.491(3)(g) 6, 29

Wis. Stat. § 227.40 4

Wis. Admin. Code ch. PSC 111 17

Wis. Admin. Code § PSC 111.53(1) 12

Wis. Admin. Code § PSC 111.53(1)(c)1 14

Wis. Admin. Code § PSC 111.53(1)(e) 1

Wis. Admin. Code § PSC 111.53(1)(f) 1

Wis. Admin. Code § PSC 111.53(1)(f)4 14

Wis. Admin. Code § PSC 111.53(2)(b)1. 20

Wis. Admin. Code § PSC 111.53(2)(b)2. 20

Wis. Admin. Code § PSC 111.55 15

OTHER AUTHORITIES

Re Wisconsin Electric Power Company,
2001 WL 1671064 5

Facilities in the Town of Pleasant Prairie, Kenosha County and Certain Related Transmission and Substation Additions,
CA-5489, 62 WIS PSC 131 (1977) 33

Webster's Third New International Dictionary of the English Language (1993)..... 20, 21

Wisconsin Legislative Council Information Memorandum
IM-01-8 (October 15, 2001)..... 5

ISSUES PRESENTED

1. Does Wis. Admin. Code § PSC 111.53(1)(f) require an applicant for a Certificate of Public Convenience and Necessity ("CPCN") to obtain permits from other regulatory agencies before the Wisconsin Public Service Commission (the "PSC" or "Commission") may deem the Application complete?

   Answered by the Circuit Court: Yes.

2. Does Wis. Admin. Code § PSC 111.53(1)(f) require an applicant for a CPCN to construct an electric generating facility to enter into agreements for transmission facilities before the PSC may deem the Application complete?

   Answered by the Circuit Court: Yes.

3. Can two different locations on the same parcel of property satisfy the requirement of Wis. Admin. Code § PSC 111.53(1)(e) that an Application for a CPCN contain information regarding "at least two proposed sites?"

   Answered by the Circuit Court: No.

4. Did the PSC comply with Wis. Stat. §§ 1.12(4) (the "Energy Priorities Law") and 196.025(1) when it concluded that eastern bituminous coal was the appropriate fuel source for the Elm Road Generating Station ("ERGS")?

   Answered by the Circuit Court: No.

5 Does Wis. Stat. § 196.491(3)(d)3. require the PSC to "determine" the "design, cost and location" of related transmission facilities?

   Answered by the Circuit Court: Yes.

6. The PSC approved the CPCN application but stayed the construction until the Wisconsin Department of Natural Resources ("DNR") acted. In so doing, did the PSC comply with Wis. Stat. § 196.491(3)(e) that provides the PSC "may not issue" a CPCN until the DNR issues pre-construction permits and approvals?

   Answered by the Circuit Court: No.

7. Does the PSC have the authority to allow the construction of "common systems" large enough to accommodate possible future expansion without issuing a separate CPCN for the common systems?

   Answered by the Circuit Court: No.

8. Did the PSC improperly limit payments the City of Oak Creek is to receive to mitigate the adverse impacts of ERGS by the amount of payments the city will receive under the shared revenue formula?

   Answered by the Circuit Court: Yes.

STATEMENT ON ORAL ARGUMENT AND PUBLICATION

The Court has scheduled oral argument and should publish its decision. Resolution of these issues will clarify PSC practice and procedure for proceedings involving the adequacy and reliability of the state's energy supply.

STATEMENT OF CASE

A. Introduction.

This is a review of a decision of the PSC, issued November 10, 2003 (the "Final Decision"). Appendix to this brief ("State's App." 101-171.) The decision authorized the construction of two electric generating facilities, as proposed in an application (the "Application") submitted by Wisconsin Energy Corporation ("WEC"), Wisconsin Electric Power

Company ("WEPCO") and W.E. Power, LLC (collectively "WE").

The decision was the culmination of proceedings lasting approximately three years and consisting of three separate dockets. The PSC's three commissioners, Chairperson Burneatta Bridge, Ave Bie and Robert Garvin, voted unanimously to approve the Application.

The docket giving rise to the decision under review involved 32 parties. (State's App. 166-171). The record includes the following:

- The Application, including supplemental filings, consisting of approximately 2,400 pages;
- The Draft Environmental Impact Statement ("DEIS"), consisting of approximately 493 pages in 2 volumes;
- Approximately 300 sets of written comments on the DEIS, comprising almost 400 pages;
- The Final Environmental Impact Statement ("FEIS"), consisting of approximately 882 pages in 3 volumes;
- A transcript of approximately 5,945 pages of testimony from 68 witnesses;
- 302 exhibits, totaling approximately 3,970 pages;
- Approximately 1,000 pages of briefs;
- A 48-page decision matrix summarizing 39 issues;
- A 65-page decision.

(R. 18). The contested case hearing took 11 days. Additional public hearings took 3 days. (State's App. 104.)

On this record, the PSC determined that WEPCO needed new baseload generation[1] to provide reasonable and adequate service for more than 1 million customers in its service territory; that the multi-year construction project must begin soon in order to meet the projected need within this decade; that there were no cost-effective or technically feasible alternatives to construction of ERGS; that the public convenience and necessity required construction and operation of ERGS; that construction of ERGS at Oak Creek was reasonable and in the public interest after considering alternative sources of supply, other locations, individual hardships, engineering, economic, safety, reliability, and environmental factors; and that construction of ERGS would not have an undue adverse impact on other environmental values. (State's App. 104-106.)

The Final Decision stated that the PSC had "not approved construction of any new baseload, coal-fired generation in Wisconsin since 1980" and found that:

> WEPCO's aging baseload resources may be asked to maintain or even increase their historical production as older facilities are retired over the next decade and transmission constraints . . . continue to limit the ability of Wisconsin load-serving entities to import electricity.

(State's App. 121-122.)

As mentioned above, the Final Decision came in the third of three dockets. The first docket was a declaratory ruling pursuant to Wis. Stat. § 227.40. The second and third dockets were CPCN dockets implementing the declaratory ruling.

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[1]A baseload facility provides power "effectively on a constant basis, not less than 70% of the time, day in, day out." (State's App. 206). In Wisconsin, the State's existing baseload facilities are predominantly fueled by coal and are aging. (R. 18, Record Item 119:66-67.)

B. Procedural history and statement of facts.

1. The Declaratory Ruling docket.

The declaratory ruling docket was a contested case proceeding on a petition for declaratory ruling. The proposal before the Commission was whether or not to permit an unregulated affiliate of WEPCO to finance, construct and own new electric generating facilities and to lease those facilities to the utility for operation under the then recently-enacted 2001 Wisconsin Act 16, §§ 3008mc, 3011g and 3011jc (the "Leased Generation Law"). *Re Wisconsin Electric Power Company*, 2001 WL 1671064, at *1-2 (Wis. P.S.C.) (October 17, 2001).[2]

WEC's proposal was dubbed "Power the Future-2" ("PTF"). It was the second iteration of an idea originally proposed to the Commission in November 2000, as "Power the Future." Wisconsin Legislative Council Information Memorandum IM-01-8. (State's App. 249.)

The PSC's ruling declared that PTF complied with the Leased Generation Law and that certain proposed expenditures by WEPCO were prudent. *Wisconsin Electric Power,* at *4.

2. The CPCN dockets.

a. The CPCN applications.

The first step the PSC must take in a CPCN docket is to determine whether or not an application is complete. The Commission has 30 days to determine completeness. Wis. Stat. § 196.491(3)(a)2.[3] If the Commission determines that an application is not complete, the applicant may re-file the application. *Id.* The Commission has 180 days after determining that an application is complete to take final

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[2] The Leased Generation Law was described in Wisconsin Legislative Council Information Memorandum IM-01-8 (October 15, 2001). (State's App. 249.)

[3] Relevant statutes, acts and rules are reproduced in the appendix.

action on the application. Wis. Stat. § 196.491(3)(g). The circuit court may extend that time for an additional 180 days. *Id.* In the event that the Commission does not take final action on a complete application within 180 days (or 360 days if the time is extended) the Commission "is considered to have issued a certificate of public convenience and necessity with respect to the application." *Id.*

On January 31, 2002, WE filed its application for the PTF facilities—five new generating plants: two natural gas-fired units in Port Washington (to replace existing coal-fired plants) and three coal-fired units in Oak Creek. (State's App. 101.)

On April 19, 2002, the PSC bifurcated consideration of the PTF CPCNs into two phases: the natural gas-fired units proposed for Port Washington as phase one and the coal-fired units for Oak Creek as phase two. (State's App. 232.)

On April 25, 2002, the PSC determined that the Application regarding the phase one facilities was complete but the Application regarding the phase two facilities was incomplete. (State's App. 230.) The Commission declared the Application incomplete two additional times (on July 3, 2002, and on October 7, 2002). WE supplemented the Application on June 3, 2002, September 6, 2002, and October 23, 2002. (State's App. 227-228.) The Commission declared the Application complete on November 15, 2002. (State's App. 228.)

As described in more detail in the Argument, the Application described the regulatory permits and approvals, presented extensive information about necessary improvements to the transmission system and proposed alternative sites for the two facilities ultimately approved by the PSC ("SCPC 1" and "SCPC 2"). (State's App. 235; R.18, Record Item 1/Vol. 3:1647-1758.)

b. The CPCN hearings.

The PSC conducted 11 days of technical hearings and an additional 3 days of public hearings. The evidence

included information about the cost effectiveness, technical feasibility and environmental soundness of all alternative sources of fuel for ERGS. The fuel source selected by WE was eastern bituminous coal, which has a sulphur content of 1 percent or more. None of the parties advocated oil or coal with a sulphur content of less than 1 percent.

Almost every demand forecast indicated that baseload coal-fired facilities were needed within the next ten years (although the exact timing was disputed). (State's App. 120.)

c. The Final Decision.

The Final Decision determined that there was a need for two additional coal-fired generation facilities to be in service by 2009 and 2010 and that the Oak Creek location was appropriate. (State's App. 120.)

The Application proposed three units. The PSC did not approve construction of the third unit. The Commission did, however, authorize WE to construct "common systems" in contemplation of possible future expansion at the site. WEC and Oak Creek entered into a contract (the "Development Agreement") containing provisions on air quality, redevelopment of property and annual payments of $2.25 million to the city to mitigate adverse effects of ERGS. (State's App. 236-248.) Under the agreement, payments would be made only "[i]f, and to the extent, approved by" the PSC and no payments will be made "in the event the [PSC] determines that the payments . . . may not be properly included in the rent payments under the Facility Lease . . . ." (State's App. 240.)

3. Judicial proceedings.

The circuit court vacated and remanded the PSC's decision on the following grounds:

1. The Application did not contain all permits and approvals required by the DNR;

2. The Application did not include agreements for related electric transmission service;

3. The Application did not contain information regarding alternative "sites;"

4. The Final Decision failed to adequately address why the PSC was not selecting oil or "low sulphur" coal as a fuel source;

5 The PSC issued the CPCN before the DNR had issued its permits and approvals;

6. The PSC failed to "determine" the design, cost and location of related electric transmission improvements;

7. The PSC erred in limiting the amount of mitigation payments to Oak Creek.

(State's App. 172-226.)

Notices of appeal were filed by the State, WE, Madison Gas & Electric Company, Wisconsin Public Power, Inc. and the City of Oak Creek. Notices of cross-appeal were filed by Clean Wisconsin, Inc and Calpine Corporation.

The State and WE filed petitions for bypass of the court of appeals. Those petitions were granted by Order of this Court dated January 5, 2005.

STANDARDS OF REVIEW

Whether or not to issue a CPCN calls for the exercise of legislative discretion. *See Gateway City Transfer Co. v. Public Service Comm'n,* 253 Wis. 397, 417, 34 N.W.2d 238 (1948) ("Whether the granting of the franchise . . . is in the public interest presents a matter for the exercise of legislative discretion by the commission."). PSC hearings "operate in the legislative field." *See id.* at 405 (discussing hearings under the Common Motor Carriers Act).

"[A]dministrative decisions of a legislative character" are to be given "wide berth" by the reviewing court. The test "is whether reasonable minds could arrive at the same conclusion . . . . " *Ashwaubenon v. State Highway Comm'n*, 17 Wis. 2d 120, 131, 115 N.W.2d 498 (1962). A court "may not substitute [its] judgment for that of the [agency] on a legislative matter [rather, the court] will review legislative-type decisions under the arbitrary and capricious standard." *J.F. Ahern Co. v. Building Commission,* 114 Wis. 2d 69, 90-91, 336 N.W.2d 679 (Ct. App. 1983). "A decision is arbitrary and capricious if it is 'unreasonable or does not have a rational basis' or 'is the result of an unconsidered, willful and irrational choice of conduct and not the result of the 'winnowing and sifting' process.'" *Olson v. Rothwell,* 28 Wis. 2d 233, 239, 137 N.W.2d 86, 89 (1965)."

An agency's interpretation and application of statutory requirements are generally given "great weight" deference. Under this standard, agency action is upheld unless the court finds it "irrational." *Beloit Education Ass'n v. WERC*, 73 Wis. 2d 43, 67, 242 N.W.2d 231 (1976).

The great weight standard is the general rule, *id.* at 67, and is warranted if an agency has expertise and if its interpretation and application of the statute are long-standing. *Citizens' Utility Board v. PSC*, 211 Wis. 2d 537, 551, 565 N.W.2d 554 (Ct. App. 1997). This rule reflects the "comparative institutional capabilities and qualifications of the court and the administrative agency." *State ex rel. Parker v. Sullivan*, 184 Wis. 2d 668, 699, 517 N.W.2d 449 (1994).

"[T]he DNR and PSC are charged with, and have substantial experience in, processing certificate applications," and their "interpretation of the provisions governing the substantive review of certificate applications in Wis. Stat. § 196.491(3) is long-standing." *Responsible Use of Rural and Agricultural Land (RURAL) et al. v. Public Service Commission of Wisconsin and RockGen Energy LLC,* 2000 WI 129, ¶24, 239 Wis. 2d 660, 699-700, 619 N.W.2d 888, 909. "[A]ccording great weight deference to PSC determinations . . . promote[s] greater uniformity and consistency in the future than if we were to accord a lesser level of deference that would invite ad hoc court

determinations of adequacy." *Citizens' Utility Board v. PSC*, 211 Wis. 2d at 552

"This court has frequently held that great weight should be given to the administrative agency's interpretation and application of its own rules, unless plainly erroneous or inconsistent with the regulation so interpreted. . . . This is especially so in an area calling for special expertise." *Vonasek v. Hirsch and Stevens, Inc.*, 65 Wis. 2d 1, 7, 221 N.W.2d 815 (1974).

"[A]lthough the [agency] has never decided a case presenting the precise facts raised by this appeal, that is not a prerequisite to giving the agency great-weight deference." *Virginia Sur. Co. v. LIRC*, 2002 WI App 277, ¶13, 258 Wis. 2d 665, 654 N.W.2d 306. "The correct test is whether [the Commission] has experience in interpreting a particular statutory scheme, not whether it has ruled on precise, or even substantially similar, facts before." *Honthaners Rests., Inc. v. Labor & Indus. Review Comm'n,* 2000 WI App 273, ¶12, 240 Wis. 2d 234, 621 N.W.2d 660.

ARGUMENT

The issuance of a CPCN for a large electric generating facility is a highly technical and complex endeavor. It requires a degree of expertise and specialized knowledge which the Legislature and the courts have recognized resides, not in the courts, but in the PSC. The decision to issue a CPCN is legislative, not judicial, in nature. It is a discretionary, policy determination, entitled to great deference.

The PSC correctly determined that the Application was complete within the meaning of the Commission's own rule, which requires an application to contain information *about* necessary regulatory approvals and transmission agreements, not, as decided by the circuit court, the permits and agreements themselves. The PSC also correctly determined that the rule's alternate sites requirement can be satisfied if an application includes distinct locations.

The PSC complied with the Energy Priorities Law and Wis. Stat. § 196.025(1) when it considered every alternative fuel source listed in the statutes and concluded that eastern bituminous coal was the appropriate fuel source ERGS.

The PSC considered the "design, cost and location" of related transmission facilities as required by Wis. Stat. § 196.491(3)(d)3. The PSC was not required to "determine" the final design, cost and location of those facilities.

In compliance with the CPCN statute, the PSC's Final Decision stayed the effectiveness of the CPCN until the DNR had issued all permits required for construction. By acting as it did, the PSC harmonized a conflict in statutes in order to fulfill the purposes of the Leased Generation Law.

The PSC has the authority to allow the construction of "common systems" large enough to accommodate possible future expansion at the site of a facility without having to issue a separate CPCN

Finally, the PSC properly limited mitigation payments to Oak Creek by the amount of payments the city will receive in shared revenue. Neither Wis. Stat. § 196.491(3)(d)3., 4. and 6, nor Wis. Stat. § 196.20(7) (which *prospectively* prohibits recovery in utility rates of "mitigation payments" to municipalities hosting utility facilities) required the PSC to approve or disapprove without modification the payments sought by Oak Creek.

I. THE PSC CORRECTLY DETERMINED THAT THE APPLICATION WAS COMPLETE.

Wis. Stat. § 196.491(3)(a)1. provides: "An application for a certificate issued under this subsection shall be in the form and containing the information required by commission rules. . . ." Wis. Stat. § 196.491(3)(a)2. provides: "The commission shall determine whether an application filed under subd. 1. is complete" and that "[i]f the commission fails to determine whether an application is complete within 30 days after the application is filed, the application shall be considered to be complete."

Wis. Admin. Code § PSC 111.53(1) provides:

> [A] CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> . . . .
>
> (e) At least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives.
>
> . . . .
>
> (f) Site-related information for each proposed power plant site, including all of the following:
>
> 1. The regulatory approvals required for construction and operation of the facility.
>
> . . . .
>
> 4. Any required transmission line construction, agreements for the use of the transmission system to deliver plant power, transmission losses, and effects on system reliability.

A. The Application contained all necessary information regarding required regulatory approvals.

1. Plain meaning of the rule.

The Application described the regulatory approvals in a table listing the regulator, the required activity and the type of approval required. (State's App. 235.) Nevertheless, the circuit court ruled that the Application was incomplete because it "fail[ed] to include the regulatory approvals required by [the rule]. (State's App. 187.)

The PSC interpreted its rule as requiring only information about necessary regulatory approvals and not the completed regulatory approvals. Instead of giving the PSC's interpretation great weight, *see Vonasek v. Hirsch*, 65 Wis. 2d

at 7, the court failed to give the PSC's interpretation any weight whatsoever. By any standard of review, the court erred.

Read fairly, the rule requires only information *about* other regulatory approvals, not the approvals themselves. The rule calls for "all of the following information" and then lists several subject areas, including operating characteristics, need, economic aspects, alternative sources of supply, proposed sites, and site-related information. Under "site-related information" the rule requires additional "information" and then lists several other subject areas, one of which is "regulatory approvals."

Had the PSC intended applicants to obtain and include all regulatory approvals the rule would have said so. Reasonably construed, the rule seeks only the identification of the other regulatory approvals, not the *faits accompli.*

As demonstrated by the table included in the Application (State's App. 235), WE identified federal, state and local regulators, 17 regulated activities and 17 required approvals. This fully complied with the rule.

2. Legislative purpose.

The circuit court's reading of the rule creates a conflict with the CPCN statute, which the PSC is presumed to have not intended.

Under Wis. Stat. § 196.491(3)(a)3.a., a person may file a CPCN application as early as 60 days after filing an engineering plan with the DNR. The DNR has 30 days after the filing of a plan to identify the DNR approvals that are required for construction or operation. Then, the applicant has 20 days to apply for the DNR approvals. Wis. Stat. § 196.491(3)(a)3.b. Finally, the DNR then has 120 days to take final action on those applications that are required prior to construction. *Id.*

The PSC could not have intended to require a person to obtain DNR approvals *before* applying for a CPCN when

the statute gives the DNR months after a person may file a CPCN application to process applications for the DNR pre-construction approvals. The Court should reject a reading of the rule "that would lead to an absurd or unreasonable result that does not reflect the [Commission's] intent." *State v. Jennings*, 2003 WI 10, ¶11, 259 Wis. 2d 523, 657 N.W.2d 393.

B. The Application contained all necessary information regarding transmission facilities.

The Application described transmission facilities required for ERGS, pointing out that some of these facilities "would not be required until seven years in the future. . . ." (R. 18, Record Item 1/Vol. 2:795.) The Application described transmission facilities required for ERGS, but did not include all final, signed agreements. As many factors may affect the transmission system in this timeframe, additional studies would be conducted by the transmission company before applications were filed. Nevertheless, the circuit court ruled that the Application was incomplete because it did not include "transmission line agreements." (State's App. 192.) The court refused to give any weight to the PSC's interpretation of its own rule and required more than the rule does.

Like the rule on regulatory approval information, Wis. Admin. Code § PSC 111.53(1)(f)4 requires only "information" regarding "agreements for the use of the transmission system to deliver plant power . . . ." Had the PSC intended to require the filing of signed transmission agreements at the very beginning of a lengthy and complicated approval process for a generation facility it certainly could have found a better way to state the requirement.

Wis. Admin. Code § PSC 111.53(1)(c)1. requires an estimate of the capital cost of the proposed facility "and all related facilities . . . ." The circuit court concluded that this language furnished additional support for its determination that completed transmission agreements were required to be

filed with an application. (State's App. 192.) This determination was erroneous as well.

Wis. Admin. Code § PSC 111.55 deals with CPCNs for transmission facilities. It would be putting the cart before the horse to require an applicant for a power plant (under § PSC 111.53) to produce signed transmission agreements with the provider of transmission—a separate entity, American Transmission Company (*see* Wis. Stat. § 196.485(3m))—which itself has to pursue a complicated CPCN proceeding. The transmission company could not enter into agreements to serve ERGS until the PSC determined that ERGS should be built.

C. Requiring regulatory approvals and transmission agreements in a CPCN application would be inconsistent with the purpose of the completeness rule and the CPCN statute.

"[T]he goal of statutory interpretation is to ascertain and give effect to the statute's intended purpose. . . . A cardinal rule in interpreting statutes is to favor a construction that will fulfill the purpose of the statute." *Wenke v. Gehl Co.* 2004 WI 103, ¶32, 274 Wis. 2d 220, 682 N.W.2d 405. Rules of statutory construction apply to the construction of administrative rules. *State v. Busch,* 217 Wis. 2d 429, 441, 576 N.W.2d 904 (1998). The circuit court's determinations do not serve the purpose of either the CPCN statute or the completeness rule.

The purpose of the completeness rule is to give the PSC enough information to start the process of considering whether or not to issue a CPCN. How much information the rule is intended to require should be determined in accordance with what determinations the PSC has to make before issuing a CPCN. One of the purposes of the CPCN statute, as amended by 1997 Wisconsin Act 204, is to "streamline the certificate application process" for DNR and PSC review. *RURAL*, 239 Wis. 2d at 682. The circuit court interpretation undermines this objective by requiring final action by DNR before the PSC formal process begins.

The statute provides that the PSC can issue a CPCN if the Commission determines that "[t]he design and location or route is in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering economic, safety reliability and environmental factors . . . ." Wis. Stat. § 196.491(3)(d)3. The statute does not require the PSC to make any findings or orders about other agencies' regulatory approvals or transmission facilities. *Cf., Westring v. James*, 71 Wis. 2d 462, 470, 238 N.W.2d 695 (1976) ("A careful reading of [Wis. Stat. § 66.016(2)(b) (1976)] indicates that the head of the planning function is not required to make a 'finding' in that respect. Rather, the director must find that the proposed incorporation must be 'in the public interest' upon the *consideration* of the level of services")(emphasis in original). It would serve no purpose, therefore, to require an application to contain information more specific than the evidence required for making the final decision.

D. The PSC correctly determined that the Application satisfied the "two-site" requirement.

The Application proposed two "sites" for the two units ultimately approved by the PSC. The first site was described as follows:

> [T]he site of the existing Oak Creek Power Plant (OCPP). The OCPP is coal-based facility located at the Milwaukee-Racine County Line on the shore of Lake Michigan, approximately 14 miles south of Milwaukee. . . .
>
> . . . .
>
> The site . . . is about ¼ mile north of the building that formerly housed the North Oak Creek Power Plant (units 1-4) and near the location where Elm Road divides the WE property. The proposed units will be located in the southwest ¼ of section 31, township 5 north, and range 23 east. This portion of the WE property is located along the Lake Michigan shoreline and the site for the generating units is about 35 acres.

(R. 18, Record Item 1/Vol. 3:1247.).

The Application described an alternative site this way:

> The proposed alternate site location is about 240 acres, including the state-owned "Rifle Range Property," and is located in the Town of Caledonia, Racine County, Wisconsin. The land is owned by WE, except for the 70 acre state owned parcel. The 60 acre portion of the site proposed for the SCPC units is approximately 1300 feet north and south between the county line and the north side of the state-owned rifle range property.

(R. 18, Record Item 1/Vol. 3:1347.)[4]

The circuit court determined that the Application did not propose alternative sites, but merely "different configurations or utilizations of a single site," *i.e.*, the "same portion" of one "parcel;" the "same land. . . ." (State's App. 185.) Once again, the court refused to give any deference whatsoever to the PSC's interpretation and application of its own rule, concluding that the rule was not ambiguous. (State's App. 185.)

1. The PSC reasonably interpreted the alternative sites requirement and its interpretation is entitled to great weight.

The only dispute over whether or not to give great deference to the PSC's interpretation of the completeness rule is over whether the PSC's interpretation is long-standing. It is long-standing enough.[5]

---

[4] In a supplement to the application, WE proposed yet a third site. (State's App. 145.)

[5] The two-site" requirement for CPCN applications became effective July 1, 2000, with the amendment of Wis. Admin. Code ch. PSC 111 after the enactment of the Electric Reliability Act, 1997 Wis. Act 204. In a separate motion, the State has requested that the court take judicial notice of records at the PSC which demonstrate the Commission's prior application of the alternative sites rule.

The PSC has been determining applications for CPCNs for generation facilities since at least 1914. *Wisconsin Traction, Light, Heat & Power Co. v. City of Menasha,* 157 Wis. 1, 145 N.W. 231 (1914). In the Final Decision, the PSC stated that: "it has accepted CPCN applications for numerous projects where the alternate sites have been close together, or even adjacent to each other." (State's App. 145.) In a recent decision, the Dane county circuit court recognized that the Commission had "found that . . . the two site requirement may be satisfied by two sites in close proximity to one another in [three previous dockets]. In those cases the alternate sites were either contiguous or separated by relatively short distances." *Friends of Responsible Energy v. PSC*, No. 03-CV-3389 (Dane Co. Cir. Ct. Sept. 28, 2003). (State's App. 255-270.)[6]

Even if the Commission had "never decided a case presenting the precise facts raised by [this case] that is not a prerequisite to giving the agency great-weight deference." *Virginia Sur. Co. v. LIRC*, 2002 WI App 277, ¶13, 258 Wis. 2d 665, 654 N.W.2d 306. "The correct test under Wisconsin law . . . is whether [the Commission] has experience in interpreting a particular statutory scheme, not whether it has ruled on precise, or even substantially similar, facts before." *Town of Russell Volunteer Fire Dept. v. LIRC*, 223 Wis. 2d 723, 733, 589 N.W.2d 445 (Ct. App.1998).

2. Even under a less-deferential standard, the Court should affirm the PSC's interpretation because it is reasonable.

Because the PSC had considered the alternative sites challenge earlier in the proceeding, the Commission did not explain its analysis in detail in the Final Decision. The PSC did state: "The Commission determines whether proposed site alternatives are reasonable by applying two standards: the site alternatives must each be feasible locations and they must be sufficiently distinct to offer different packages of costs and

[6] One of the dockets referred to is the instant case.

benefits." (State's App. 145.) The interlocutory decision went into great detail:

> The Commission's standard for reviewing site alternatives in a CPCN application is based upon both the rule of reason and the principle that alternatives must serve the public purpose underlying the issuance of a CPCN. The Commission first reviews a CPCN application to determine that each proposed site is "reasonable," i.e. is a feasible location for the project that would not directly conflict with any of the criteria for granting a CPCN expressed in Wis. Stat. § 196.491(3). In addition, the Commission's practice is to require that the sites are sufficiently distinct to offer different packages of costs and benefits, and thus present the Commission with a choice.
>
> The fact that alternate sites may be geographically close to each other does not render them unreasonable. The Commission has accepted CPCN applications for several projects where the alternate sites were close together or even adjacent to each other. Instead, the Commission looks at the characteristics of the sites in their entirety.
>
> . . . .
>
> At least two of the three sites WEC has included in its CPCN application meet the Commission's standards. The petitioners allege that 11 or more different characteristics of these sites are functionally identical, but this situation is difficult to avoid when searching for locations to install a new coal-fired plant where generation already exists. The similarities highlight the fact that each site alternative is relying on existing infrastructure at a brownfield generating site, and the Commission has encouraged the use of such locations because they tend to make electric generation projects less expensive and less environmentally damaging. The Commission also notes two significant distinctions among the sites WEC is proposing. The primary site is located in the city of Oak Creek, Milwaukee County, while the alternate sites are found in the town of Caledonia, Racine County. In addition, construction at the primary site would require WEC to cut and fill 10 million cubic yards of earth, while at Alternate Site A it would only need to move 7.3 million cubic yards.

(State's App. 273-274)(citations omitted). The Commission thoughtfully and reasonably interpreted the multiple sites requirement and the Court should accept that interpretation.

3. The PSC's interpretation is consistent with the rule's plain meaning.

The rule does not define the word "site." The Court should give the word its ordinary and accepted meaning, ascertained from a recognized dictionary. *See State v. Williquette,* 129 Wis. 2d 239, 248, 385 N.W.2d 145, 149 (1986). A "site" is:

> [t]he local position of building, town, monument, or similar work either constructed or to be constructed, especially in connection with its surroundings. . . ; a space of ground occupied or to be occupied by a building . . .; land made suitable for building purposes.

Webster's Third New International Dictionary of the English Language 2128 (1993). Nothing in this definition precludes multiple sites on the same parcel of land or multiple "configurations" or "utilizations," to use the circuit court's words. The PSC's interpretation of the alternative sites requirement requires that "the site alternatives must each be feasible locations and they must be sufficiently distinct to offer different packages of costs and benefits." (State's App. 145.) This is a reasonable interpretation to which the Court should defer.[7]

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[7] The rule exempts CPCN cogeneration and renovation applications from the two site requirement. Wis. Admin. Code § PSC 111.53(2)(b)1. and 2. The circuit court reasoned that the *inclusio unius, est exclusio alterius* cannon of construction dictates that these must be the *only* circumstances where a CPCN application can provide two site alternatives in the same general vicinity. (State's App. 185.) The circuit court's analysis begs the question of whether two "sites" may be identified within a single parcel. The Commission has never determined, nor does the rule require, a minimum distance between sites.

4. Any error with respect to the *bona fides* of the alternative sites described in the Application was harmless.

The CPCN statute does not require the PSC to consider alternative "sites." The Commission must consider "alternative locations." Wis. Stat. § 196.491(3)(d)3. Whatever the site choices offered by the Application, by the time the record was closed there were four possible locations for ERGS, not including the Fond du Lac site of the competing proposal of Calpine Corporation. (State's App. 144.)

The dictionary definition of "location" is as forgiving as the definition of "site." A "location" means "a position or site occupied or available for occupancy (as by a building) or marked by some distinguishing feature . . . ; an area or tract of land." *Webster's Third New International Dictionary of the English Language* 1327 (1993). Nothing in this definition precludes multiple "configurations" or "utilizations" of the same parcel or portion of land. There may be multiple "areas" of the same "land" or different "positions" on the same land.

Because the PSC considered multiple alternative "locations," as required by the CPCN statute, that the Application presented alternative "sites" close in proximity, is not a basis to vacate the CPCN.

II. THE PSC COMPLIED WITH WIS. STAT. §§ 1.12(4) (THE "ENERGY PRIORITIES LAW") AND 196.025(1) WHEN IT CONCLUDED THAT EASTERN BITUMINOUS COAL WAS THE APPROPRIATE FUEL SOURCE FOR ERGS.

The Energy Priorities Law makes it State policy that "to the extent cost-effective and technically feasible" options for meeting energy demands are to be considered based on a list of priorities. Wis. Stat. § 196.025(1) provides that the PSC "shall implement" these priorities "in making all energy related decisions and orders . . . ." The Final Decision fully complied with these statutes.

The record includes evidence regarding alternative sources. WE witness Allan Mihm testified about the benefits of eastern bituminous coal:

> [I]t allows achievement of higher thermal efficiency, which reduces the impact on the local community band because of its improved ability to control mercury emissions when compared to western bituminous and sub bituminous coals.
>
> From a community impact perspective, since bituminous coal in general, and particularly eastern bituminous coals improve unit efficiency, fewer trains will be required to support the operation of the proposed units. Additionally, bituminous coals have higher heat content . . . than sub-bituminous coals.
>
> . . . .
>
> From an environmental perspective, the use of a bituminous coal is also favorable because it has lower moisture content. Since this additional moisture does not need to be heated in the combustion process, bituminous coal can be converted to electric energy more efficiently than a sub-bituminous coal. . . . Higher efficiencies generally result in lower emission rates. In the case of CO_2, the inherent chemistry of bituminous coal results in an additional 4 percent reduction . . . relative to sub-bituminous. As a result, use of bituminous coal results in an 8 percent total reduction in CO_2 emissions, which is a reduction of 40 million tons . . . over the life of the units. Mercury is an emission that is gaining attention at both state and federal levels. We believe that to ensure high levels of mercury capture, the combination of bituminous coal and the proposed air quality equipment . . . provides the highest degree of certainty.

(R.18, Record Item 157/Vol. 157:1199-1200). WE's Jeffrey E. Knitter explained why oil and lower sulphur coal were not appropriate fuel sources:

> Oil as a combustion turbine fuel is not cost-effective and probably not permittable from an air permit perspective, except as a backup fuel to natural gas. Coal with less than 1 percent sulfur (generally western sub-bituminous coal such as PRB).was considered, but was rejected because of concerns related to the certainty of capture of

> mercury emissions, the volume of fuel transportation and other factors . . . .

(*Id.* at 744.)

Almost every computerized modeling run selected coal as a source for baseload generation by 2012. The Commission has used and requires utilities to use the Electric Generation Expansion Analysis System ("EGEAS"), a complex interactive computer model developed by the Electric Power Research Institute. EGEAS is a quantitative tool, requiring extensive data about existing generation, plus economic and engineering data that describes possible new generation. Commission engineers and economists have extensive training to use EGEAS. The Commission concluded that the EGEAS forecasts demonstrated that energy priority resources, alone or in combination, could not replace the need for new coal-fired baseload generation to serve WEPCO. (State's App. 120.) The dispute was not about whether coal was suitable, but when coal-fired generation would be needed to meet energy demands of WEPCO's customers.[8] (State's App. 124).

The Commission's opinion stated that it had considered "all of the energy priority generation alternatives." (State's App. 120.) Moreover, the Findings of Fact expressly stated:

> Energy conservation, renewable resources, or other energy priorities listed in Wis. Stat. §§ 1.12 and 196.025, or their combination, are not cost-effective or technically feasible alternatives to the projects proposed in this docket.

(State's App. 104.) These findings are supported by substantial evidence and should be affirmed. *See Madison Gas & Electric Co. v. PSC*, 109 Wis. 2d 127, 133, 325 N.W.2d 339 (1982).

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[8] The only EGEAS model runs that do not confirm the need for coal-fired capacity by 2012 or sooner are conditioned upon a permanent federal tax credit for wind or the taxation of carbon monoxide emissions—assumptions which the Commission found unlikely and speculative. (State's App. 120.)

III. THE PSC PROPERLY CONSIDERED THE "DESIGN, COST AND LOCATION" OF TRANSMISSION FACILITIES RELATED TO ERGS.

The Application described the transmission system improvements that might be necessary for the proposed generation facilities. The information included Interconnection Studies completed by American Transmission Company ("ATC") and environmental geographic information system data identified by the ATC. The Application also stated:

> Because many of these improvements are not required for six or more years in the future, current study predictions could change depending on developments resulting from factors affecting the transmission system such as: changes in existing generation dispatch patterns, addition of other new generation in the region, retirement of existing generation in the region, cancellation of other proposed generation in the region, and load growth changes. ATC will conduct additional studies at a later date to re-examine the nature of the improvements. Necessary applications will then be filed with the PSCW to gain approval to construct the identified improvements.

(R. 18, Record Item 1/Vol. 3:1246.)

The evidence before the PSC also included the FEIS, which contained extensive information regarding necessary transmission improvements. In Chapter 6, entitled "Overview of Proposed Sites and Technologies," the FEIS described interconnection on the plant site, substation changes on the plant site, possible system-wide transmission impacts, stability issues, and the estimated costs of the improvements. (R. 18, Record Item 119/Vol. 15:126-132.) In addition, in Chapter 11, entitled "Community Impacts," the FEIS described the process for electric transmission line/substation approval; differences due to site selection or the number of units; effect of proposed rebuilds of existing electric transmission line; effect of proposed substation work, effect of a proposed new 4-mile transmission line; paralleling existing transmission lines; route and potential environmental

effects; and the effects of a new, long 345kV transmission line. (R.18, Record Item 119/Vol. 15:381-89.)

In its decision, the PSC demonstrated that it considered this and other evidence regarding transmission:

> The new generating units of ERGS would require step-up unit transformers adjacent to the buildings that house the generators. Electric generators produce power at approximately 20 kV, which is then raised to 345 kV so it can be moved efficiently over the transmission network. The American Transmission Company (ATC) has conducted several studies to determine the cost of interconnecting ERGS to the transmission system and the cost of upgrading the transmission system so it can transmit power from ERGS. It completed a partial transmission restudy of ERGS on July 25, 2003, estimating the transmission costs associated with installing SCPC 1 and SCPC 2 at $65.5 million and $100.5 million, respectively. Determining transmission system requirements for ERGS, though, depends upon the amount of forecasted generation in southeast Wisconsin and northern Illinois. Recently, several proposed generating units in the area have dropped from ATC's queue and will not be operating in the same time frame as the ERGS units. This will require ATC to restudy the interconnection needs, to minimize the amount of transmission facilities installed and recalculate the costs involved. This analysis is quite complex, depends upon the site chosen, and requires several months of sequential computer model runs.
>
> ATC's preliminary Facility Study Report indicated that the construction of SCPC 1 would require changes in the 345 kV, 230 kV, and 138 kV substations, while the construction of SCPC 2 would require further upgrades to the existing transmission lines and substations in the area. Some of the possible line and associated substation work includes Oak Creek–Brookdale 345 kV, Brookdale–Granville 345 kV, Oak Creek-St. Martins #2 138 kV, Butler-Tamarack 138 kV, and Bluemound-Butler 138 kV; most of this transmission work would be on existing rights-of-way.

(State's App. 110-111.)

In *Wisconsin Power and Light Co. v. Public Service Comm'n of Wisconsin,* 148 Wis. 2d 881, 885, 437 N.W.2d 888 (Ct. App. 1989), the court stated:

> We have no doubt that the commission has expertise and special competence in administering sec. 196.49, Stats., insofar as that statute requires it to determine what proposed projects are appropriate additions to an electric utility's generating and transmission facilities.

The court was referring to the statute authorizing the PSC to grant a CPCN under a different statute, but the language applies as well to the issuance of a CPCN under Wis. Stat. § 196.491. The court went on to state:

> In *Clintonville Transfer Line v. Public Service Comm.,* 248 Wis. 59, 72, 21 N.W.2d 5, 12 (1945), the supreme court stated:
>
> It is true that the words "public convenience and necessity" are not words of precise legal content.
>
> . . . .
>
> The term is relative rather than absolute. No definition can be given that would fit all statutes in which the word has been used. The meaning in a given case must be ascertained by reference to the context and to the objects and purposes of the statute in which it is found." [Citation omitted.]

Wisconsin Power and Light, 148 Wis. 2d at 890.

In *Westring v. James*, 71 Wis. 2d at 470, the court considered the case of a town planning director's decision that a proposed municipal incorporation satisfied the requirements of the incorporation statute. The challenge was that the director had failed to make certain findings. The court rejected the challenge:

> The petitioners herein also argue that the planning director exceeded his statutorily conferred authority because he made no finding in respect to the level of governmental services referred to in sec. 66.016(2)(b), Stats. A careful reading of the statute, however, indicates that the head of the planning function is not required to

> make a 'finding' in that respect. Rather, the director must find that the proposed incorporation must be 'in the public interest' upon the consideration of the level of services.

The circuit court ruled that the PSC erred in not determining the "design, cost and location" of transmission facilities related to ERGS. (State's App. 202-204.) Like the statute considered in *Westring*, however, the CPCN statute is general; it does not require the findings read into it by the lower court.

The PSC is to approve of a CPCN application if the Commission determines that the "design and location . . . is in the public interest considering . . . engineering, economic, safety, reliability and environmental factors . . . ." Wis. Stat. § 196.491(3)(d)3. By the statute's plain wording, the PSC must determine whether or not the design and location of the project is in the public interest, not what the economic, safety, reliability and environmental factors are.

As the planning director's determination that an incorporation is in the public interest is informed by consideration of the level of services, *Westring*, 71 Wis. 2d at 470, so the PSC's determination that the design and location of a project is in the public interest is informed by the Commission's consideration of engineering, economic, safety, reliability and environmental factors.

The Court should conclude that the PSC properly determined that ERGS was in the public interest considering the design, cost and location of related transmission facilities.

IV. THE PSC COMPLIED WITH WIS. STAT. § 196.491(3)(e) WHEN IT APPROVED THE CPCN APPLICATION AND INCLUDED A CPCN IN ITS FINAL DECISION BUT STAYED THE EFFECTIVENESS OF THE CPCN UNTIL THE DNR ACTED.

Wis. Stat. § 196.491(3)(e) provides: "The commission may not issue a [CPCN] under this subsection until the

[DNR] has issued all permits and approvals identified in the listing specified in par. (a)3.a. that are required prior to construction."[9] Without discussing what the statute means by "issued," the circuit court vacated the Final Decision on the ground that the Commission violated the statute. The Court should reverse that determination on three grounds:

First, in substance the PSC did not "issue" a CPCN. A CPCN is not issued until it is legally effective. Since the PSC stayed the effective date of the CPCN until the DNR acted, the CPCN did not authorize commencement of facilities, and so, was not "issued." *See* Wis. Stat. § 196.491(3)(a)1.

Second, and in the alternative, if the PSC did "issue" a CPCN, the issuance was conditional and was the only reasonable way to harmonize conflicting statutes.

Third, and also in the alternative, if the PSC did err in issuing the CPCN, the error was harmless.

A. In effect, the PSC did not issue a CPCN when it issued its Final Decision.

"The construction of a statute . . . is determined with a view to substance, rather than form." *McLeod v. State,* 85 Wis. 2d 787, 790, 271 N.W.2d 157 (Ct. App. 1978). Moreover, substance controls form in the construction of permits. *Wisconsin Public Service Corp. v. Marathon County*, 75 Wis. 2d 442, 447, 249 N.W.2d 543 (1977).

The PSC's Final Decision states that the CPCN "only takes effect when the DNR issues all permits and approvals . . . ." (State's App. 162.) The CPCN statute forbids a person to "commence the construction" of a facility without a CPCN. Wis. Stat. § 196.491(3)(a)1. Manifestly, the legislative purpose was to prevent construction without valid and effective authorization. *See Nihi Lewa, Inc. v.*

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[9] The permits required prior to construction are: the air construction permit and water permits under Wis. Stat. ch. 30. (R. 18, Record Item 119:41.) In a separate motion, the State has requested that the Court take judicial notice of these permits.

Department of Budget and Fiscal Services, 103 Hawai'i 163, 173, 80 P.3d 984 (2003) (The term "to issue" may mean "to go forth as authoritative or binding").

By staying the effectiveness of the CPCN, the PSC prevented construction without DNR approval. This fully satisfied the legislative purpose. To conclude any other way would be to elevate form over substance.

B. The PSC gave full effect to the statute by delaying the effective date of the CPCN until all necessary DNR approvals are issued.

The Final Decision included a CPCN. The Court may conclude that the CPCN had, thus, been "issued," notwithstanding the delayed effective date. In *RURAL v. PSC*, 239 Wis. 2d 660, the court concluded that similar language in another PSC decision constituted the conditional issuance of a CPCN and that conditionally issuing a CPCN was the only reasonable way for the PSC to harmonize conflicting legislative provisions and gave "full effect" to Wis. Stat. § 196.491(3)(e). *RURAL*, 239 Wis. 2d 660, ¶61. The Court should reach the same conclusion in the instant case.

The *RURAL* court concluded that there was a conflict between Wis. Stat. § 196.491(3)(e) and 1997 Wisconsin Act 204, § 96(1)(e)3. Under the latter provision, if the PSC failed to take final action within a 90-day period the certificate would be deemed to have been issued. Under Wis. Stat. § 196.491(3)(g), if the PSC had not taken final action on the Application within 360 days, that certificate would have been deemed to have been issued.

Just as the DNR had not issued all of the required approvals for the facility considered in *RURAL* as the deadline for PSC action loomed, the DNR had not issued all of the required approvals for ERGS by the time the deadline for PSC action on the Application loomed. Thus, the PSC was faced with precisely the same quandary it faced in *RURAL*: if it did not conditionally issue the CPCN, it would have had to allow the pocket approval provision to take effect

(in which case, ERGS would have been approved without conditions and in precisely the form proposed by WE) or would have had to deny the Application.

To have denied the Application would have frustrated the purpose of both the Energy Reliability Act, 1997 Wis. Act 204, and the Leased Generation Law, which was to facilitate the expeditious construction of baseload generating capacity. The *RURAL* court concluded that the purpose of the Energy Reliability Act was to "expedite the construction of much-needed electric generation capacity," *id.*, ¶61, and that permitting the PSC to issue a conditional CPCN would fulfill the legislative purpose. *Id.* The Leased Generation Law was described in Wisconsin Legislative Council Information Memorandum IM-01-8 (October 15, 2001). (State's App. 249.) As background, the memorandum stated:

> In recent years, there has been considerable concern about the adequacy of the electric power supply, in Wisconsin and across the county. The Legislature, the Public Service Commission (PSC) and the electric power industry have all taken steps to address these concerns and short-term power shortages so far have been avoided. However, no new baseload power plants (large power plants that are designed to run full-time) have been built in Wisconsin since 1985, in spite of significant growth in demand for power since then. *There is a general consensus that a substantial amount of new electric generation capacity, including baseload facilities, must be built in the next 10 years to meet the projected demand for power.*

(State's App. 249)(emphasis added). Had the PSC denied the Application at the end of the 360-day period—and thereby nullified years of action on PTF—the agency would have "single-handedly defeated," the legislative purpose as surely as it would have done so under the facts of *RURAL*

C. If the PSC erroneously issued the CPCN, the error was harmless.

In *RURAL*, the court held that premature issuance of a CPCN was harmless error where the complaining party had failed to establish that "the fairness of the proceedings or the

correctness of the PSC's Order was impaired . . . ." 239 Wis. 2d 660, ¶63 (internal quotation marks omitted).

An issued-but-stayed CPCN determines the need for the facilities but does not authorize the commencement of construction of the facilities. This is consistent with Wis. Stat. § 196.491(3)(a)1. WE may not begin constructing ERGS until the DNR issues all of the necessary permits and approvals. No purpose would be served by vacating the PSC's decision. Thus, any error was harmless.

In suggesting harmless error, the State assures the Court it is mindful of the following admonition in *RURAL*: "Where the PSC has before it an application to process according to the longer timeline in Wis. Stat. § 196.491(3), the PSC should, and could, comply with subdivision (e)." *Id.*, ¶59. The State respectfully submits that the PSC "could" no more have complied with sub. (e) in this case than it could have in *RURAL*. In both cases, the DNR had not issued its permits and approvals before the PSC's deadline arrived.

V. THE PSC PROPERLY AUTHORIZED THE CONSTRUCTION OF COMMON SYSTEMS TO ACCOMMODATE POSSIBLE FUTURE PLANT EXPANSION.

The Final Decision, provided:

> In approving construction of the SCPC units for 2009 and 2010, the Commission must ascertain the appropriate costs to be placed into each Facility Lease as the "Approved Amount." ERGS includes common facilities that would serve 1,800 MW of new coal-fired capacity as well as 1,200 MW of existing coal-fired capacity from OCPP, i.e., a 3,000 MW "campus" at this site. Although the Commission has rejected the IGCC unit, it finds that a 3,000 MW coal campus remains an appropriate size, because it affords future planning flexibility to WEC. The additional cost of sizing common systems at 3,000 MW, instead of 2,400 MW, is approximately $20 million, which is a modest amount to pay in order to provide additional planning flexibility.

(State's App. 132.) The circuit court held that the Commission should have rejected the common systems because the Commission did not agree to issue a CPCN for a third generating unit. The Commission did not err.

Under Wis. Stat. § 196.491(3)(d)2. the Commission must find that "the proposed facility satisfies the reasonable needs of the public for an adequate supply of electric energy." Under sub. (3)(d)3., the Commission must find that "[t]he design and location [of the proposed facility] . . . is in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability and environmental factors . . . ." Nothing in either subsection precludes the Commission from allowing a utility to design a facility in such a way as to accommodate reasonable future expansion.

The circuit court stated: "The argument offered in favor of enlarging the facility carries an immediate suggestion of prudent foresight and reasonableness." (State's App. 214.) The court, nevertheless, invalidated the Commission's action on the ground that the PSC authorized partial construction of a separate "facility" for which a separate CPCN was required. (State's App. 214.) What the PSC actually did was include the common systems as part of the facilities which it approved, *i.e.*, ERGS. The common facilities were not a "facility" within the meaning of the CPCN statute and, therefore, no separate CPCN was required to authorize their construction.[10]

The PSC previously has authorized construction of additional facilities in anticipation of future expansion that requires future approval. For example, in *Citizens Utility Board v. Public Service Commission,* 211 Wis. 2d. 537, 543, 565 N.W.2d 554 (Ct. App. 1997), the court of appeals upheld an order permitting construction of additional storage facilities at a nuclear power plant. While the order was challenged on other grounds, the court noted that the PSC "authorized the construction and operation of only twelve [storage] casks, although the concrete pads to be constructed

[10] Wis. Stat. § 196.491(1)(e) defines "facility" to mean "a large electric generating facility or a high-voltage transmission line."

would allow for the eventual use of forty-eight casks." *Id.* at 541.

The PSC's authorization to construct common facilities is consistent with the process used for the approval of two 580 MW coal-fired plants at Pleasant Prairie in the 1970s—the last time that WEPCO constructed coal-fired plants. In 1975 the company applied for authority to construct two plants at a common site pursuant to Wis. Stat. §§ 196.395 and 196.49. *Application of Wisconsin Electric Power Company for authority to Construct and Place in Operation a Coal-Fired Power Plant and related Facilities in the Town of Pleasant Prairie, Kenosha County and Certain Related Transmission and Substation Additions,* CA-5489, 62 WIS PSC 131, 132 (1977). (State's App. 277-278.) After completing review of the application, the Commission authorized construction of a single unit but also permitted construction of common facilities for the second unit. The Commission provided the following explanation:

> While the Commission is authorizing only Unit 1 construction at this time, it believes it prudent to allow appropriate expenditures for such common equipment as proposed for future development of a second unit at this site should it eventually be needed. The present incremental costs of these facilities is not expected to be large in comparison to the additional future costs required if smaller separate equipment is provided now for Unit 1 and enlarged or duplicated later for a second unit.

Id. at 136 (State's App. 280.)

The circuit court was concerned that approving the common facilities would bias the Oak Creek site "for construction of future utility expansion." (State's App. 214.) Even if having constructed common systems would favor approving an expansion at the existing site, there is nothing in the law against that. The Commission would still have to determine that an additional "facility" was in the public interest. If factors militating against expansion should outweigh the value of existing common systems, the Commission could deny the future CPCN. Nothing in the PSC's final decision dispenses with the requirement of

determining the public convenience and necessity of a new facility at Oak Creek, despite the fact that there might be "sunk" costs.

According due deference to the PSC's determination of public convenience and necessity, the Court should affirm the Commission's decision to allow the construction of common systems to accommodate possible future expansion.

VI. THE PSC PROPERLY LIMITED THE AMOUNT OF PAYMENTS TO BE MADE TO OAK CREEK TO MITIGATE THE ADVERSE EFFECTS OF ERGS.

The PSC authorized W.E. Power to recover from ratepayers payments to Oak Creek under the Development Agreement during the period from the commencement of construction of SCPC 1 until the year when SCPC 2 enters service. The PSC authorized additional payments to Oak Creek if and to the extent that payments to the city under the shared revenue law are less than the city would receive under the Development Agreement. (State's App. 150.)

The circuit court concluded that the PSC's decision was contrary to Wis. Stat. § 196.20, as amended by 2003 Wis. Act 89, § 33, effective December 18, 2003. The circuit court failed to take into account the PSC's discretion under Wis. Stat. § 196.491 regarding the extent to which ratepayers should be responsible for payments to ERGS' host municipality and erroneously concluded that the Commission was without jurisdiction to approve a lower amount.

A. The shared revenue program compensates local governments that host power plants.

The State's revenue sharing with local governments includes a public utility distribution. Wis. Stat. § 79.04. Municipalities and counties that host power plants receive annual payments from the State. When the Development Agreement was negotiated Oak Creek received $750,000 annually, the maximum permitted for existing Elm Road

power plants, and would not be entitled to increased payments when ERGS became operational.

While this proceeding was pending, the Legislature significantly modified these provisions to provide incentives for local governments to host new or expanded power plants with the enactment of 2003 Wisconsin Act 31, effective July 30, 2003. The amendment increased the maximum payment amount and based the amount on the generation capacity of plants. Under the revised formula, Oak Creek should receive about $3.2 million annually for ERGS. These payments begin when the plants begin operation. (State. App. 150.)

B. No law requires the PSC to approve payments to municipalities that host generation facilities.

No statute, rule or order of the PSC requires the PSC to approve contracts to mitigate alleged adverse impacts of an electric power facility located in a municipality. The CPCN statute does provide that the PSC may not grant a CPCN unless the agency considers all of the factors in the statute, including a determination that "The proposed facility will not unreasonably interfere with the orderly land use and development plans for the area involved." Wis. Stat. § 196.491(3)(d)6.

Oak Creek and Wisconsin Energy Corporation took it upon themselves to negotiate the Development Agreement. The contract is premised on the fact that the Elm Road Generating Station "may" have "certain" effects on the city. (State's App. 236.) The contract did not enumerate particular impacts nor attempt to place a "value" to justify $2.25 million annual payments after the units are operational. Rather, Oak Creek struck a deal with Wisconsin Energy at a fixed price and at no risk to the company, which is required to pay only if the PSC allows the utility to recover the payments in utility rates.

After the fact, Oak Creek introduced evidence of adverse impacts in the PSC hearing record and subsequently

contended that the dollars in the Development Agreement—and not a penny less—are the only just compensation for the aggregate of those impacts. The PSC did not—nor was it required to—make findings on the specific impacts claimed by Oak Creek (such as the need for a new ambulance).

By approving what amounts to a supplement to Oak Creek's shared revenue payments, the PSC implicitly determined that the city would have additional compensable impacts which it was reasonable to subsidize with ratepayer money. The PSC did not, however, determine that ERGS was in the public interest *only* if those impacts were mitigated in their entirety nor that the precise dollar amount determined in the Development Agreement was necessary to finance any particular level of mitigation.

The PSC found simply that "it [is] reasonable for W.E. Power LLC to make a partial mitigation payment to the city that equals the remaining portion," *i.e.*, amounts not payable through shared revenue. (State's App. 151.) This finding was necessary to permit WEPCO to include the partial mitigation payment in lease payments and obtain recovery for those payments in rates. There is nothing unreasonable about not allowing the utility to require its ratepayers to supplement shared revenue payments to Oak Creek to any greater degree.

The PSC also found that Oak Creek would not require any payments in excess of shared revenue payments in order to mitigate adverse impacts of ERGS. (State's App. 150.) This finding will be affirmed if there is substantial evidence to support it. *RURAL*, 239 Wis. 2d 660, ¶20. "Substantial evidence does not mean a preponderance of the evidence. Rather, the test is whether, taking into account all the evidence in the record, 'reasonable minds could arrive at the same conclusion as the agency.'" *Id.*

At the hearing before the PSC, Marilyn Weiss testified that the legislative changes to the shared revenue formula would increase payments to Oak Creek by "almost exactly the same amount as the city is requesting in the form of mitigation payments." (R.18, Record Item 157/Vol. 20:3985). This testimony constitutes substantial evidence to support the PSC's finding.

C. Wis. Stat. § 196.20(7)(c), which prohibits ratepayer subsidies for new mitigation payment agreements, does not authorize, let alone require, approval of the mitigation payments in the Development Agreement.

With the enactment of 2003 Wisconsin Act 89, effective December 18, 2004, the statutes for the first time specifically reference mitigation payments. Section 33 of this act created Wis. Stat. § 196.20(7). Sub. (a) provides:

> In this subsection, "mitigation payment" means, as approved by the commission, an unrestricted or recurring monetary payment to a local unit of government in which an electric generating facility is located to mitigate the impact of the electric generating facility on the local unit of government. "Mitigation payment" does not include payments made or in-kind contributions for restricted purposes to directly address health or safety impacts of the electric generating facility on the local unit of government.

Sub. (c) provides: "The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003, and, if the commission finds the agreement to be reasonable, shall not subsequently modify the agreement."

The circuit court determined that under this statute, the PSC could only approve or disapprove of the exact amount of mitigation payments provided for in the Development Agreement, not approve partial payments. (State's App. 224.) The court erred in three respects: First, the statute does not control the PSC's decision and second, even if it did apply, it does not proscribe partial payments. Finally, the Commission has the authority to issue a conditional order approving the recovery of the mitigation payments in rates.

By its explicit terms, the statute does only one thing: prohibit the PSC from allowing a utility to recover in its rates the cost of mitigation payments made in an agreement received by the Commission on or after June 10, 2003. The statute, which became effective *after* the Commission's Final Decision, does not purport to retroactively authorize

mitigation agreements received prior to that date (although, of course, it assumes the existence of such agreements and implicitly recognizes their validity).

The PSC is required to allow a public utility to recover in rates all prudently-incurred costs. *See, e.g., Wisconsin Public Service Corp. v. Public Service Comm'n of Wisconsin,* 109 Wis. 2d 256, 325 N.W.2d 867 (1982). By approving partial payments, *i.e.*, payments provided in the Development Agreement to the extent not provided through shared revenue, the PSC allowed rate recovery. As argued above, had the PSC concluded that without mitigation payments the ERGS would not have been in the public interest under the CPCN statute, it might have been necessary to condition the granting of the CPCN on payments. This is not what the Commission did, however.

Because Wis. Stat. § 196.20(7) does not require approval of mitigation payments at all, the PSC did not err in not approving or disapproving *in toto* the amounts negotiated in the Development Agreement.

Even if the statute applied, however, the Commission did not err. Wis. Stat. § 196.20(7)(c) expressly requires that the Commission determine an agreement to be "reasonable." The final decision explains why the Commission regarded only limited payments to be appropriate. Indeed, Oak Creek and WE anticipated this possibility. The Development Agreement expressly recognizes that the Commission has the power to approve less than the full amount of payments provided in the agreement. Sec. 3 of the contract provides: "If, and to the extent, approved by the PSCW, Mitigation Payments will be made . . . ." Sec. 3 also lifts the obligation to pay in the event the Commission "determines that the payments . . . may not be properly included in the rent payments under the Facility Lease. . . ." (State's App. 240.)

In the final analysis, the circuit court again failed to take into account the PSC's discretion under the CPCN law to evaluate and consider competing interests presented by WE's proposal. Oak Creek elected to enter an agreement with WE instead of oppose construction. This agreement did not eliminate the Commission's responsibility to weigh

competing interests and impose only reasonable and necessary costs on ratepayers.

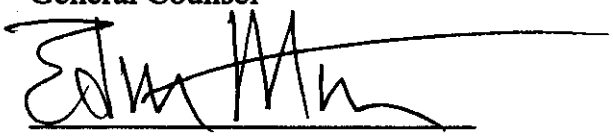
CONCLUSION

For the foregoing reasons, the State asks the Court to reverse the decision of the circuit court with instructions for the Court to affirm the PSC's final decision.

Dated this 4th day of February, 2005.

Respectfully submitted,

DAVID J. GILLES
General Counsel



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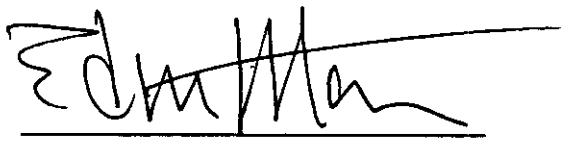
CERTIFICATION

I hereby certify that this brief conforms to the rules contained in Wis. Stat. § 809.19(8)(b) and (c) for a brief and appendix produced with a proportional serif font. The length of this brief is 10,969 words.

Dated this 4th day of February, 2005.



Edward S. Marion
Assistant General Counsel

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STATE OF WISCONSIN
SUPREME COURT

CLEAN WISCONSIN, INC.
p/k/a Wisconsin's Environmental
Decade Institute, Inc., SC JOHNSON &
SON, INC. and CALPINE CORPORATION,
Petitioners-Respondents-Cross-
Appellants-Cross-Respondents,

TOWN OF CALEDONIA,
Petitioner-Cross-Respondent,

v.

Case No. 04-3179

PUBLIC SERVICE COMMISSION OF
WISCONSIN and WISCONSIN
DEPARTMENT OF NATURAL
RESOURCES,
Respondents-Co-Appellants-Cross-
Respondents,

Circuit Court Case Nos.
03CV3478, 03CV3731
04CV0133, 04CV0149
04CV0530, 04CV0533

WISCONSIN ELECTRIC POWER
COMPANY, W.E. POWER, LLC and
WISCONSIN ENERGY CORPORATION,
Interested Parties-Appellants-Cross-
Respondents,

(Caption continued on following pages)

APPENDIX OF RESPONDENTS-CO-APPELLANTS-CROSS RESPONDENTS WISCONSIN PUBLIC SERVICE COMMISSION AND WISCONSIN DEPARTMENT OF NATURAL RESOURCES

DAIRYLAND POWER COOPERATIVE,
Interested-Party-Cross-Respondent,

MADISON GAS & ELECTRIC COMPANY
AND WISCONSIN PUBLIC POWER, INC.,
Interested Parties-Co-Appellants-Cross-Respondents,

CITY OF OAK CREEK,
Interested Party-Respondent-Cross-Appellant,

ROBERT H. OWEN,
Interested Party-Respondent-Cross-Respondent.

CALPINE CORPORATION,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF
WISCONSIN, and WISCONSIN
DEPARTMENT OF NATURAL
RESOURCES,
Respondents,

WISCONSIN ELECTRIC POWER
COMPANY, WISCONSIN ENERGY
CORPORATION, W.E. POWER, LLC,
DAIRYLAND POWER COOPERATIVE,
MADISON GAS & ELECTRIC COMPANY,
ROBERT H. OWEN, JR., and CITY OF OAK
CREEK,
Interested Parties.

CLEAN WISCONSIN, INC.
p/k/a Wisconsin's Environmental
Decade Institute, Inc., and
SC JOHNSON & SON, INC.,
Petitioners,

v.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondent,

WISCONSIN PUBLIC POWER, INC., CITY OF OAK CREEK, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION and W.E. POWER, LLC,
Interested Parties.

CALPINE CORPORATION,
Petitioner,

v.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondent,

CITY OF OAK CREEK, DAIRLYAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, WISCONSIN PUBLIC POWER, WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION and W.E. POWER, LLC,
Interested Parties.

CITY OF OAK CREEK,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent.

TOWN OF CALEDONIA,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent,

WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION, W.E. POWER, LLC, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, ROBERT H. OWEN, JR., and WISCONSIN PUBLIC POWER, INC.,
Interested Parties.

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STATE'S APPENDIX

PSC Final Decision (Nov. 10, 2003)
(R. 18, Record Item 150/Vol. 16) 101-171

Dane County Circuit Court Decision
(Nov. 29, 2004) (R. 84) 172-226

Letter from Robert Norcross to Larry Salustro
dated November 15, 2002 227-229

Letter from Robert Norcross to Larry Salustro
dated April 25, 2002 230-231

PSC Order (April 19, 2002)
(R. 18, Record Item 18/ Vol. 6) 232-234

Table 7, "Potential Permits and Approvals Required,"
from CPCN Application
(R. 18, Record Item 1/Vol. 3) 235

Development Agreement (April 2, 2003) 236-248

Wisconsin Legislative Council Information Memorandum,
IM-01-8 (Oct. 15, 2001) 249-254

Friends of Responsible Energy v. PSCW Decision
(03-CV-3389, Circuit Court, Dane County)
(Sept. 28, 2003) 255-270

PSC Order Denying Petition to Review Interim
Determination (Apr. 18, 2003)
(R. 18; Record Item 76/Vol. 13) 271-276

Application of Wisconsin Electric Power Company for authority to Construct and Place in Operation a Coal-Fired Power Plant and related Facilities in the Town of Pleasant Prairie, Kenosha County and Certain Related Transmission and Substation Additions CA-5489, 62 WIS PSC 131, 132 (1977) 277-286

Relevant Acts, Statutes and Rules 287-308
2001 Wis. Act 16, §§ 3008mc, 3011g, 3011jc
2003 Wis. Act 89
Wis. Stat. §§ 1.12, 196.025, 196.20, 196.491
Wis. Admin. Code § PSC 111.53

DATE MAILED

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BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Three Large Electric Generation Facilities, the Elm Road Generating Station, and Associated High Voltage Transmission Interconnection Facilities to be Located in Milwaukee and Racine Counties	05-CE-130
Application for Approval of Affiliated Interest Agreements Between Wisconsin Electric Power Company and Elm Road Generating Station	05-AE-118

Introduction

This is the final decision regarding Part II of the proposal filed by Wisconsin Energy Corporation (WEC) and several of its subsidiaries to construct new electric generating plants, which the applicants have named Power the Future (PTF). The Commission received the initial application for the approvals needed to build PTF on January 31, 2002.

In its original form, the PTF application proposed to construct a total of five new generating plants: two natural gas-fired units at Port Washington, to replace the existing coal-fired plants there, and three new coal-fired units added to the existing Oak Creek Power Plant (OCPP) site. The application also includes other components, in addition to the proposals to construct new generating stations. It commits WEC to further reduce environmental emissions by upgrading its existing fleet of generating plants, to work in a collaborative group for the purpose of reaching a target of 5 percent of energy derived from renewable resources by

the year 2012, to pursue carbon dioxide mitigation projects that are energy-focused and Wisconsin-focused, and to increase its existing investment in energy conservation.[1]

The Commission separated WEC's request for authority to construct new natural gas-fired units at Port Washington, known as the Port Washington Generating Station (PWGS), from its request to construct new coal-fired units at Oak Creek. On December 19, 2002, the Commission issued a Certificate of Public Convenience and Necessity (CPCN), approving Part I of PTF by granting authority to construct PWGS; on February 27, 2003, the Commission issued a subsequent order reopening and amending its initial decision.

WEC is proposing to finance each of these new generating units using leased generation contracts. Leased generation is governed by a law the Wisconsin Legislature enacted as part of 2001 Wis. Act 16, which took effect on September 1, 2001. Leased generation contracts are affiliated interest transactions and are regulated under Wis. Stat. § 196.52(9). WEC offered proposed leases for each generating unit, consisting of a Facility Lease, a Ground Lease and a Ground Sublease, and the Commission approved leased generation contracts to finance Part I of PTF. The leased generation contracts now being offered for Part II are based upon these approved contracts.

On November 15, 2002, the Commission issued a determination that WEC's CPCN application for Part II of the PTF project was complete. This triggered the 180-day period under

[1] Subject to regulatory review and provision for cost recovery, the PTF application commits WEC to spending $1.3 billion over ten years to reduce emissions from its existing units, $6 million annually for ten years on the pursuit of additional renewable resources, $10 million over five years on carbon dioxide mitigation projects, and $20 million over ten years for additional energy conservation activities. (PTF Application, pp. 4-5, 10-11; Vol. I Enclosure 1, pp. 2 and 11.)

which the Commission is required to conduct its review of this CPCN application regarding Part II of PTF. The Commission extended this period to 360 days by petitioning the Dane County Circuit Court for additional review and received the necessary order, pursuant to Wis. Stat. § 196.491(3)(g)1, on April 29, 2003. During this period Commission staff prepared an Environmental Impact Statement (EIS) for this project in collaboration with staff of the Wisconsin Department of Natural Resources (DNR), which was subsequently introduced into the record at hearing.

Part II of PTF is comprised of two Super Critical Pulverized Coal units (SCPC 1 and SCPC 2), each sized at 615 megawatts (MW), which WEC proposes to place in service in the years 2008 and 2009, and an Integrated Gasification Combined Cycle (IGCC) unit, sized at 600 MW and projected to be on-line in the year 2011.[2] Bituminous coal would be the principal fuel for each of the three units. WEC describes these three units as its Elm Road Generating Station (ERGS). Calpine Corporation and LS Power, Inc., both independent power producers (IPPs), entered the case in opposition to the ERGS project, arguing that independent power sources could meet the current energy and capacity needs of Wisconsin Electric Power Company (WEPCO) more economically than this leased generation project that WEC has proposed. S.C. Johnson & Son, Inc. also entered as a party in opposition; it alleges that ERGS is not the least-cost alternative for reliable electric service and is not in the public interest. All parties to the docket are listed in Appendix A.

[2] Both Wisconsin Public Power, Incorporated (WPPI) and Madison Gas & Electric Company (MGE) have options to acquire ownership interests of 50 MW in SCPC 1 and in SCPC 2. If these options are exercised, the capacity available to WEPCO from each SCPC unit would be 515 MW.

The Commission held 11 days of hearings before Administrative Law Judge David Whitcomb, commencing August 25, 2003, and continuing through September 12, 2003. At these hearings, witnesses with technical and professional expertise testified on behalf of the parties, Commission staff and DNR staff. In addition, in the cities of Oak Creek and Racine, Wisconsin, the Commission held three more days of hearings for the public on September 17 to 19, 2003. All those who appeared and testified are listed in the Commission's files. The parties then submitted briefs to the Commission. At its open meeting on October 29, 2003, the Commission considered this matter in oral deliberations.

This Final Decision approves the PTF application in part, denies it in part, and modifies it. The Final Decision APPROVES that portion of the PTF application regarding construction of two SCPC units at the North Site—CUP alternative, subject to conditions, but DENIES that portion regarding construction of the IGCC unit. The Commission APPROVES the construction of the first SCPC unit with an in-service date of 2009, and the second SCPC unit with an in-service date of 2010, rather than the dates of 2008 and 2009 that the applicants had proposed. The Commission APPROVES WEC's use of leased generation contracts, as modified by this Final Decision, to procure coal-fired generation through non-utility affiliates for its electric utility, WEPCO.

Findings of Fact

1. Energy conservation, renewable resources, or other energy priorities listed in Wis. Stat. §§ 1.12 and 196.025, or their combination, are not cost-effective or technically feasible alternatives to the projects proposed in this docket.

2. TheWEPCO's demand forecast demonstrates a need for new baseload generation within the next decade.

3. Part II of PTF, consisting of the two SCPC units and WEC's other commitments to secure additional energy conservation and renewable resources, satisfies the reasonable needs of the public for an adequate supply of electric energy.

4. The public convenience and necessity require WEC to construct the two SCPC units, subject to the conditions specified in this final decision.

5. The two SCPC units are reasonable and in the public interest after considering alternative sources of supply, individual hardships, engineering, economic, safety, reliability, and environmental factors. The IGCC unit does not meet this standard.

6. The North Site—CUP alternative is in the public interest after considering alternative locations, individual hardships, engineering, economic, safety, reliability, and environmental factors.

7. The two SCPC units will not have undue adverse impact on other environmental values.

8. The two SCPC units will not unreasonably interfere with orderly land use and development plans for the area involved.

9. The two SCPC units will not have a material adverse impact on competition in the Wisconsin Upper Michigan System (WUMS) wholesale electric service market.

10. Leased generation contracts are a reasonable means of financing the two SCPC units.

11. The leases proposed in this docket, as modified by this Final Decision, are reasonable and in the public interest.

12. The conditions attached to the CPCN for the two SCPC units, as described in this Final Decision, are reasonable.

13. Requiring that ERGS-SCPC 1 LLC commence construction of SCPC 1 within 12 months after it receives all necessary government permits and approvals is reasonable, so the generating plant will satisfy the reasonable needs of the public for electric energy in a timely manner. Requiring that the applicants file an updated demand and energy forecast and updated EGEAS modeling[3] before commencing construction on SCPC 2 is reasonable.

Conclusions of Law

The Commission has jurisdiction under Wis. Stat. §§ 1.11, 1.12, 196.02, 196.025, 196.395, 196.40, 196.49, 196.491, 196.52, and 196.795 to issue certificates authorizing W.E. Power LLC, through its subsidiaries ERGS-SCPC 1 LLC and ERGS-SCPC 2 LLC, to construct and place in operation two 615 MW SCPC electric generating units at the site described below, and to impose the conditions specified in this Final Decision.

Opinion

This proceeding involves the second half of WEC's proposal to meet forecasted electric demand of its electric utility, WEPCO, by constructing large-scale coal-fired generating facilities

[3] "EGEAS" is the Electric Generation Expansion Analysis System, a complex interactive computer model developed by the Electric Power Research Institute. Over the past decade, the Commission has consistently used and required utilities to use EGEAS to evaluate electric generation expansion plans for cost-effectiveness and optimality.

through an affiliated entity. The proposed baseload[4] generation facilities, if the applicants receive all regulatory approvals, would represent the largest energy project ever constructed in Wisconsin. Wisconsin's Leased Generation Law, Wis. Stat. § 196.52(9), permits load-serving entities to lease generating resources from an affiliated entity, subject to the approval of the Commission. As with Part I, the Commission has consolidated WEC's application for construction authority with its application for Commission approval of the proposed leases as affiliated interest transactions. In these consolidated dockets the Commission has balanced its responsibilities under the Leased Generation Law, as well as its other obligations under the power plant siting law and the affiliated interest statute, with its paramount obligation to the consuming public.

Project Description

WEC has created separate limited liability corporations for the purpose of constructing and owning the generating units that comprise ERGS. WEC also created W.E. Power LLC, a non-utility affiliate within the WEC holding company that would have majority ownership of these limited liability corporations.

ERGS-SCPC 1 LLC and ERGS-SCPC 2 LLC would build the two SCPC units, for operation as baseload facilities. The design would also allow for cycling, to accommodate load changes required by the electrical system demand. SCPC technology involves heating water to a temperature and pressure that exceeds its critical point, which is 705 degrees Fahrenheit at a pressure above 3,200 pounds per square inch absolute. The steam then exits the steam generator

[4] A utility's "baseload" energy demand is driven by high load factor customer needs, i.e., electric uses such as commercial lighting, refrigeration, and industrial loads that run constantly. Generally, electric generating plants that are cost-effective when running at least 70 percent of the time are considered "baseload" units.

and moves to the high-pressure turbine, to which an electric generator is attached. Pulverized coal and combustion air mix together, flowing to the coal nozzles at the various furnace elevations. The hot combustion products heat the water to supercritical conditions in the steam generator, then move through the selective catalytic reduction system, preheater, fabric filter, induced draft fans, flue gas desulfurization system, and stack. The higher temperatures and pressures achieved in a supercritical steam generator increase the energy content of the fluid delivered to the turbines, which improves efficiency, as would the use of cold Lake Michigan water in the condenser. In general, the SCPC units would convert approximately 38 to 39 percent of their fuel's heat content into electricity. Greater plant efficiency means less fuel burned per unit of electrical output. The expected life of the SCPC plants is 40 to 45 years.

The proposed IGCC unit would use a process that breaks down coal into its basic constituents and obtains a synthetic gas (syngas) for use in two combustion turbines. The gas conditioning process enables the separation of any pollutants from the syngas prior to its use as fuel. If the quality of the syngas is not adequate for use in the combustion turbines, it would be ignited in a stack, with a resulting flare approximately 80 feet high. During normal startups, syngas would also be flared for a few hours.

An IGCC facility would employ industrial frame, advanced technology combustion turbines. Hot exhaust gases from the combustion turbines would also be used to produce steam, which would be expanded in a steam turbine to drive an electric generator and produce electricity. An IGCC plant would operate for the majority of the year as a baseload facility, with an expected life span of 40 years.

Trains deliver coal to the existing OCPP units and would also be used to deliver coal to the new units. The existing on-site rail facilities are over 35 years old, and their continued use for both OCPP and ERGS would exacerbate off-site impacts. The rail unloading facilities lack a complete rail loop, which increases the number of movements needed to get a train into and out of the rail yard and increases the time required to unload a train. Existing track allows room for only one coal train to park on-site, so that if one train is present when another arrives, the second must wait off-site. The applicants propose to modernize the rail unloading facilities by adding track to create an on-site rail loop, adding another rail spur, installing a new rail car positioner (indexer) and dumper, moving the location of repair-in-place track, and making other needed changes. The new rail facilities would allow two full and two empty trains to park on WEPCO's property and would shorten the current unloading time of approximately 16 hours to five or six hours. The proposed rail system improvements would also mitigate the off-site effects associated with existing and future coal delivery.

WEC proposes to construct a once-through cooling system for ERGS, with an intake structure resting on the bed of Lake Michigan and a transport system to move the lake water from the intake structure to the generating units on shore. The intake structure would consist of four timber cribs, located about 9,000 feet from shore and 45 feet below the water surface. Water would be drawn into the cribs at a velocity of about one foot per second. Each crib would be connected via a 14-foot diameter pipe to the water transport system, with the water traveling through a 32-foot diameter tunnel located about 200 feet below the bed of Lake Michigan to the shoreline, where it would be pumped upward and through screening facilities before entering the plant. Water use for each SCPC unit would be about 700 million gallons per day. The

cumulative water use for the existing OCPP Units 5-8 and the two new SCPC units would be about 2.56 billion gallons of water per day.

For its water discharge structure, WEC proposes to build a seal well with concrete retaining walls and a rock-lined dredged channel. The channel, which would control erosion and reduce the velocity of the discharged water, would be approximately 200 feet wide and extend approximately 750 feet into the lake. To create the discharge channel, about 10,000 to 15,000 cubic yards of material would need to be dredged from the bed of Lake Michigan. The proposed discharge structure for the North Site-CUP alternative would be located north of the existing coal dock.

The new generating units of ERGS would require step-up unit transformers adjacent to the buildings that house the generators. Electric generators produce power at approximately 20 kV, which is then raised to 345 kV so it can be moved efficiently over the transmission network. The American Transmission Company (ATC) has conducted several studies to determine the cost of interconnecting ERGS to the transmission system and the cost of upgrading the transmission system so it can transmit power from ERGS. It completed a partial transmission restudy of ERGS on July 25, 2003, estimating the transmission costs associated with installing SCPC 1 and SCPC 2 at $65.5 million and $100.5 million, respectively. Determining transmission system requirements for ERGS, though, depends upon the amount of forecasted generation in southeast Wisconsin and northern Illinois. Recently, several proposed generating units in the area have dropped from ATC's queue and will not be operating in the same time frame as the ERGS units. This will require ATC to restudy the interconnection needs, to minimize the amount of transmission facilities installed and recalculate the costs involved. This

analysis is quite complex, depends upon the site chosen, and requires several months of sequential computer model runs.

ATC's preliminary Facility Study Report indicated that the construction of SCPC 1 would require changes in the 345 kV, 230 kV, and 138 kV substations, while the construction of SCPC 2 would require further upgrades to the existing transmission lines and substations in the area. Some of the possible line and associated substation work includes Oak Creek–Brookdale 345 kV, Brookdale–Granville 345 kV, Oak Creek-St. Martins #2 138 kV, Butler-Tamarack 138 kV, and Bluemound-Butler 138 kV; most of this transmission work would be on existing rights-of-way.

The applicants proposed four site alternatives, all located on the OCPP property. The existing north OCPP building, which originally housed OCPP Units 1-4, is now empty and serves only to support the existing coal handling facilities. WEC intends to dismantle and dispose of this building. The remaining OCPP Units 5-8 would continue to operate in the south OCPP building, though Units 5 and 6 may be retired as part of the PTF plans.

Three of the sites were originally proposed in the CPCN application; these have been designated the North Site, the South Site, and the South Site—Exp. The North Site is in the city of Oak Creek in Milwaukee County at the east end of Elm Road, north of the existing OCPP units. The South Site would place the generating units on a portion of the OCPP property south of existing Units 5-8, in the town of Caledonia in Racine County. The South Site—Exp is a variation on the South Site, placing the SCPC units in the same location but with the IGCC facility on a federal/state-owned shooting range (land that WEC would need to purchase).

In May 2003, the applicants and the city of Oak Creek negotiated a Conditional Use Permit (CUP), making some changes to the original North Site. The North Site—CUP alternative would move the coal handling facilities and coal storage piles south about 1,500 feet, to a location inside the existing OCPP rail loop. This would require relocation of the existing 138/345 kV substations, which are currently within that rail loop. These substations could be separated and relocated on site to avoid the new rail and coal facilities, connect the new SCPC units at 345 kV, and facilitate transmission ROW exits to the west.

Delivery of coal to the plant site could block vehicles for significant periods of time at the Seven Mile Road and Six Mile Road crossings of the Union Pacific rail line. To eliminate this impact the applicants would pay for road improvements to separate or eliminate at-grade rail crossings at these roads. In addition, the town of Caledonia is concerned about lengthy blockages of vehicular traffic at Four Mile Road, due to existing train deliveries to OCPP. The applicants maintain that their improvements to on-site rail facilities should eliminate this problem, allowing trains to cross Four Mile Road at speed. It is reasonable to require that the applicants monitor the effect of train deliveries on vehicular traffic at this road, and address valid concerns the town may have about road blockage. Any changes at the rail crossings ultimately require the approval of the Office of the Commissioner of Railroads, which also has the authority to determine the nature of the changes. Local government and the Union Pacific Railroad would own any new roads, tunnels, bridges, or other elements of approved crossing changes.

Reasonable Needs of the Public; Forecasting Capacity and Energy Demand

An important threshold determination the Commission must decide is whether or not there is a need for the generation facilities proposed by WEC and its subsidiaries. Wisconsin's

Power Plant Siting Law requires that a proposed facility satisfy "the reasonable needs of the public for an adequate supply of electric energy" in order to receive a CPCN. Wis. Stat. § 196.491(3)(d)2. To justify the need and timing of the three units that comprise ERGS, WEC submitted WEPCO's forecast of growth in electric demand and energy over the next ten years and then provided optimal expansion plan results from the EGEAS computer model.

WEPCO forecasts that, between 2003 and 2012, total electric demand (including reserves and new wholesale sales) will grow 1,995 MW or 2.8 percent annually. Excluding new wholesale sales, the rate of retail electric demand growth would be 2.5 percent annually. Total electric energy for the same period is expected to grow 2.5 percent annually. These growth rates also incorporate WEPCO's existing energy efficiency and demand-side management (DSM) efforts, and assume that similar efforts will continue into the future. When used in the EGEAS model, these forecasts demonstrate a need for new baseload supply resources.

The Commission is not persuaded by the argument raised by certain parties concerning the reasonableness of WEPCO's capacity and energy needs. S.C. Johnson criticizes the demand and energy forecasts as too high and argues that they improperly include wholesale requirements load for WPPI and Municipal Electric Utilities of Wisconsin (MEUW), which WEPCO is not obligated to supply. The forecast growth rates are consistent with WEPCO's historical growth patterns and those adopted in the Port Washington order.[5] WEPCO's total demand has been growing 2.5 percent per year since 1997. In addition, WEPCO has a long-standing relationship supplying electric energy and power to wholesale municipal customers and this relationship will

[5] Final Decision, *Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Two Large Electric Generation Facilities the Port Washington Generating Station, and Associated High Voltage Transmission and Natural Gas Interconnection Facilities to be Located in Ozaukee County*, PSCW docket 05-CE-117.

continue. Commission staff reviewed WEPCO's forecasts in the EIS and considered them reasonable; the Commission agrees. For these reasons, the Commission concludes that WEPCO's demand forecast is reasonable.

Statutory Energy Priorities

Another important legal and policy issue this Commission must decide is whether or not there is enough energy conservation, renewable resources, or a cleaner burning fuel to cancel or delay the construction approvals sought for the SCPC units in this proceeding. State law provides guidance to the Commission in carrying out the state's energy policy. Our obligations are set forth in Wis. Stat. § 1.12.

Wis. Stat. § 1.12(4) establishes energy priorities for Wisconsin. The statute provides as follows:

> **1.12(4)** PRIORITIES. In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:
>
> (a) Energy conservation and efficiency.
> (b) Noncombustible renewable energy resources.
> (c) Combustible renewable energy resources.
> (d) Nonrenewable combustible energy resources, in the order listed.
> 1. Natural gas.
> 2. Oil or coal with a sulphur content of less than 1 percent.
> 3. All other carbon-based fuels.

In addition, Wis. Stat. § 196.025 declares that the Commission must implement these priorities in its energy-related decisions, to the extent "cost-effective, technically feasible and environmentally sound."

Several parties have suggested that the Commission, in construction cases involving a lower priority fuel source like coal, is obligated to select a higher priority fuel source

(e.g. natural gas) in order to fulfill its obligations under the Energy Priorities Law. S.C. Johnson asserts that it is not enough that ERGS be close in price to other higher priority options and that the applicants in the present proceeding must prove a "compelling reason" not to abide by the energy priorities described in Energy Priorities Law. Under this reasoning, the Commission would be obligated to select a higher priority fuel option unless the applicants have demonstrated that the proposed units at ERGS will be provided at a substantially lower cost than available higher energy priorities.

This Energy Priorities Law, however, is not a mandate to state agencies that must be mechanically applied to achieve a specific outcome. In the Prefatory Note to 1993 Wis. Act 414, which enacted this law, the Legislature declares that it "does not want to create inflexible mandates or deprive decision makers of the discretion needed to respond appropriately to the circumstances surrounding energy-related decisions." The Legislature explains that this law uses "a combination of directives and encouragement, while reserving substantial discretionary authority to the decision maker." Such discretion must be applied in this case, to harmonize the directives of the Energy Priorities Law with those of the Power Plant Siting Law. The statutory framework for analyzing whether approving a CPCN project would be in the public interest involves a number of factors, beyond those specified in the Energy Priorities Law. The Commission must consider the extent to which a proposal may cause individual hardships, as well as concerns about its engineering, economics, safety, reliability, environmental impacts, interference with local land use plans, and impact upon wholesale competition. The Commission is required to balance all of these competing elements, which frequently lead in different directions; no single primary factor is the measure of a CPCN project. Thus, the Commission is

responsible for harmonizing the Energy Priorities Law and the Power Plant Siting Law, in order to determine what is in the public interest.

WEPCO's forecast of future demand and energy needs already includes some level of energy efficiency, because WEPCO uses an econometric method that relies upon historical electric energy usage data. Incorporated in its historical usage data is the net impact of energy efficiency and the increased use of energy efficiency programs. While it is not possible to quantify how much energy efficiency is included in WEPCO's forecast, it assumes that the future impacts of energy efficiency will be similar to historical impacts. For this reason, in their testimony on energy efficiency potential, both the applicants and Commission staff attempted to estimate the amount of potential energy efficiency savings above that already included in the forecast, i.e., the "achievable potential."

The applicants' energy efficiency analysis consists of three scenarios, which reflect differing assumptions about the rate at which consumers will adopt energy efficiency measures based on the level of program intervention. The applicants' analysis suggests an achievable potential in 2008 for the Minimally Aggressive, Moderately Aggressive, and Highly Aggressive Scenarios of 23, 55, and 79 MW, respectively. The corresponding achievable potentials identified in 2016, the final year of the applicants' analysis, are 119, 172, and 186 MW. The applicants' energy efficiency witnesses testified that they are confident that, by 2008, over 50 MW of cost-effective energy efficiency will be achievable in WEPCO's service territory.

Commission staff also conducted an energy efficiency analysis. Commission staff calculated achievable energy efficiency potential in 2007, 2009, and 2011 of about 200, 400, and 600 MW, respectively. These are the upper bound of the range of estimates provided. The

estimates of energy efficiency potential provided by both the applicants and Commission staff have shortcomings related to the unknown amount of energy efficiency already included in WEPCO's forecast, restrictions on the measures included in the analysis, and the limited availability of current data on energy efficiency measures.

In the Commission's Port Washington order, the Commission highlighted the difficulty in attempting to substitute energy efficiency for needed intermediate load facilities. The Commission stated:

> The Commission lacks sufficient evidence on energy in this case on energy efficiency to make the judgment that energy efficiency gains—which will ultimately be in the hands of consumers and businesses—are either of a sufficient quantity or are demonstrably achievable such that they may serve as a substitute for traditional generation in a cost-effective way. The Commission's concern is that there is no way to dictate this type of behavior to consumers that it is both technically feasible and practically feasible to alleviate the need demonstrated in this proceeding. The testimony of the various parties indicates that it is not possible to evaluate all possible technologies and programs in order to ascertain their realizable potential as well as their accuracy.

The same reasoning is equally applicable in the present proceeding. The applicants' and Commission staff's estimates of achievable energy efficiency do not demonstrate that energy efficiency could reliably or cost-effectively serve to substitute, or postpone, the SCPC units. On the other hand, the record demonstrates that a moderate level of intervention in the energy efficiency market would produce at least 55 MW of cost-effective and technically feasible energy efficiency in WEPCO's service territory by 2008. As part of the PTF proposal, WEPCO has committed to spending $20 million over the next ten years to support energy efficiency activities. A key component to WEPCO's efforts is to work with other parties to support building code reforms that increase the energy efficiency of buildings. It is appropriate for WEPCO to implement energy efficiency programs to capture, at a minimum, this additional

55 MW of cost-effective energy efficiency by 2008 as identified by its consultants. Based on the consultants' estimate of a cost of about $60 million to capture this 55 MW, an additional commitment of dollars may be needed to capture this savings. Although WEPCO is now in a rate freeze, it can commence these energy efficiency programs without delay by using its conservation escrow. The associated expenditures will then be held for recovery in the utility's next rate proceeding. It is therefore reasonable for WEPCO to submit a plan to the Commission, by March 1, 2004, for capturing at least 55 MW of additional energy efficiency.

(Chairperson Bridge dissents and would capture at least 100 MW of additional energy efficiency.)

After energy conservation, the state Energy Priorities Law favors renewable resources. The two forms of renewable generation most likely to be cost-effective during the forecast period are wind and biomass combustion, both of which were reviewed in the record.

As part of the PTF proposal, WEPCO has committed to a goal of obtaining 5 percent of its energy from renewable resources by 2011. This is more than twice the renewable portfolio standard set forth under Wis. Stat. § 196.378, which requires that at least 2.2 percent of each electric provider's retail energy must be from renewable resources by this date. WEC has also declared its intent to spend up to $6 million per year for ten years on emerging technologies and activities, to encourage the development of renewable resources.

WEPCO has taken steps to meet its 5 percent goal by issuing two requests for proposals (RFPs). The first RFP was issued on December 18, 2002, for up to 200 MW of wind power capacity. In July 2003, the utility selected and signed power purchase agreements with three wind power projects having a total capacity of 214 MW. WEPCO issued the second RFP on

August 14, 2003, for 25 MW of biomass. The biomass proposals must be submitted to the utility by November 26, 2003.

The Commission does not believe that renewable resources are either cost-effective or technically feasible to meet WEPCO's baseload needs. The EGEAS model runs in the record select large quantities of wind during the forecast period, but these runs rely upon an assumption that much of these wind resources can be sited in Lake Michigan, a new location for wind turbines that has never previously been used. Furthermore, these runs assume that the existing federal production tax credit for wind energy will remain in effect indefinitely. This federal production tax credit allows a wind facility owner to take a 1.8 cent/kWh tax credit for a period of ten years, but is now available only to projects that go online by December 31, 2003.

Whether Congress will extend this credit again, and for how long, are unknown. It would not be prudent to rely upon a wind production tax credit, which may or may not continue to exist, to meet WEPCO's major baseload needs. Furthermore, the EGEAS runs do not show that significant quantities of biomass would be cost-effective during the forecast period. For these reasons, the Commission finds that renewable resources are not cost-effective, technically feasible alternatives.

(Chairperson Bridge dissents, and would direct WEPCO to implement its plan to install 200 MW of new wind resources by 2005 and 50 MW by 2011.)

The Commission also considered whether gas-fired generation is a cost-effective or technically feasible alternative that could replace the need for new baseload generating facilities. No gas-fired, baseload facilities were presented as either a cost-effective or technically feasible alternative in this record.

A critical part of the Commission's ultimate preference for coal-fired generation over gas-fired generation rests heavily on the discretion accorded to the Commission under the Energy Priorities Law and the Power Plant Siting Law. More significantly, the crux of this case is really about the appropriate timing to construct new baseload generation. A fundamental policy choice presented in this case is whether the Commission believes that WEPCO needs to take steps now to address needs for new baseload facilities over the next decade. The Commission believes that the applicants should take those steps now to ensure these facilities are in service in 2009 and 2010.

The quantitative evidence presented in this proceeding supports the construction of new baseload generation to address WEPCO's needs. Almost every EGEAS run shows the need for new baseload generation over the next decade.[6] Commission staff did conduct an "integrated alternative" EGEAS analysis that examines the feasibility of combining renewable resources with natural gas, while also reflecting a more aggressive energy efficiency approach. This modeling run includes all of the energy priority generation alternatives, while also reducing WEPCO's base demand forecast in 2011 by 600 MW in order to incorporate Commission staff's energy efficiency potential estimate. Even this integrated alternative run shows that an SCPC unit is needed during the forecasting period.

These EGEAS runs demonstrate that the energy priority resources, alone or in combination, cannot replace the need for new baseload, coal-fired units to serve WEPCO. EGEAS also shows the extent to which these resources can delay the need for additional

[6] The only EGEAS model runs that do not confirm a need for additional baseload capacity by 2012 or sooner are conditioned upon either a permanent federal tax credit for wind or upon the taxation of carbon dioxide emissions. The former is unlikely, given the amount of wind that would be produced as a result of an unlimited tax credit, and the record is too speculative to reach conclusions regarding the latter.

baseload units, and the Commission has considered this evidence in order to reach its conclusion that the first SCPC unit should be placed in service in 2009, rather than 2008 as proposed by WEC.

(Chairperson Bridge dissents and would authorize in service dates of 2010 and 2012 for SCPC 1 and 2.)

There are qualitative factors set forth in Wis. Stat. § 196.491(3)(d) that also support the Commission's conclusion that new coal-fired generation is in the public interest and that ERGS is the most cost-effective and technically feasible way to address WEPCO's baseload needs. The Commission's decision to approve SCPC 1 and 2 balances its obligations under the Energy Priorities Law and the Power Plant Siting Law. It also reflects the Commision's policy judgment that while natural gas-fired generating facilities may be better suited for peak and intermediate load generation, coal-fired generation provides the most practical means to serve WEPCO's needs for baseload capacity. The evidence in this proceeding demonstrates the advantages of using cleaner burning coal technologies like SCPC as a baseload resource over gas-fired generation.

The need for new baseload generation is the critical factor that distinguishes this decision from the Port Washington order. The Port Washington order addressed WEPCO's need for new intermediate capacity. The Commission has not approved construction of any new baseload, coal-fired generation in Wisconsin since 1980. The evidence presented reflects the fact that WEPCO's existing fleet of baseload plants is aging. WEPCO's aging baseload resources may be asked to maintain or even increase their historical production as older facilities are retired over the next decade and transmission constraints within WUMS continue to limit the ability of

Wisconsin load-serving entities to import electricity. In fact, in Phase I of PTF the Commission approved the retirement of 320 MW of existing baseload, coal-fired generation at Port Washington. The record in this docket demonstrates that WEPCO needs more baseload capacity.

The Commission believes it is in the public interest to have more reliable baseload generation in place sooner rather than later as a matter of public policy. Concerns over electric reliability are paramount today and the Commission concurs with the policy arguments raised by the applicants, transmission-dependent utilities and consumer groups that it is better to err on the side of planning for more baseload needs sooner rather than later. Based on a number of qualitative and quantitative factors, the Commission believes that coal-fired generation provides the most cost-effective, prudent and practical means of meeting WEPCO's baseload capacity needs over the next decade.

The Commission also considered qualitative environmental factors in concluding that the construction of SCPC 1 and 2 is in the public interest under the Energy Priorities Law and the Power Plant Siting Law. The applicants' proposed units utilize the best available control technology (BACT) that are designed to substantially reduce the amount of emissions from WEPCO's existing fleet of baseload, intermediate and peaking units. The applicants will install BACT for several emissions, including SO_2, NO_X and PM_{10}. Taken together with the applicants' other regulatory consent decrees and voluntary emissions reductions agreements that were presented in this record, the evidence also demonstrates that total air emissions will decrease substantially from current levels after the completion of all PTF projects.

Finally, the Legislature stated that compliance with its Energy Priorities Law is based upon "the overall pattern of decisions made by each agency." Since the enactment of that law in 1994, the Commission has authorized the construction of over 6,900 MW of natural gas-fired generation and 20 MW of wind-fired generation that have addressed peaking and intermediate capacity needs. The total mix of energy sources that the Commission has approved over this time period shows a pattern of decisions for baseload, intermediate and peaking generating facilities that complies with the state's energy policy.

Reasonable Needs of the Public; EGEAS Modeling Results

As in other Commission decisions over the past decade, including Part I of PTF, this docket relies extensively upon computer expansion plan modeling of the electric system to identify cost-effective means of meeting a utility's future electric demand. Both Commission staff and the applicants relied on the EGEAS model in this proceeding as the primary tool to consider optimal resource options on a quantative basis for WEPCO's future electric demand. The EGEAS model is a quantitative tool requiring three forms of inputs: data about the utility's existing generating system; economic and engineering data for proposed new generating units; and a variety of base forecasts for demand and fuel prices. The existing unit data reflect the operational characteristics of the utility's current generating fleet. New unit data, in this docket, concern the ERGS facilities, Calpine's projects, wind and biomass renewable resources, and generic gas-fired combustion turbines and combined-cycle units. The EGEAS model then uses these data to calculate the overall system cost of adding different new units to the electric system, ultimately producing an optimal expansion plan for a minimum period of 30 years.

WEC submitted the results of its EGEAS runs and introduced them into the record. Commission staff then conducted its own independent review of this submission, examining the reasonableness of the company's data inputs and preparing its own EGEAS model runs. The results of this work appear in the EIS and in other evidence that Commission staff introduced in the record. Commission staff concluded that the forecasts WEC submitted with respect to base demand, energy, and fuel were not unreasonable. Commission staff also built into its EGEAS model the Commission's approval of the 545 MW, natural gas-fired Port Washington facilities in 2005 and 2008, as well as WEPCO's commitment to procure up to 250 MW of wind resources by 2012.

After considering the quantifiable evidence presented in the EGEAS runs, the key question in this docket is not whether additional coal-fired baseload generation should be approved, but when it should be installed. The principal difference among the various EGEAS runs concerns the proper timing of such an addition. Almost every sensitivity run of the EGEAS model, including runs that integrate more energy conservation and lower demand and energy growth, demonstrate a need for additional baseload capacity by 2012. Even those runs that support the use of additional gas-fired generation in the next few years also point to a baseload coal capacity need for WEPCO.

Commission staff performed one EGEAS model run using inputs it considered reasonable within a central range of estimates, which it described as its "base case," and modeled ten other EGEAS scenarios. These ten additional runs used different data inputs regarding factors such as WEPCO's demand forecast or the cost of fuel, in order to demonstrate the sensitivity of the model to changes in input assumptions and to depict the results when different

forecasting assumptions are used. Under Commission staff's modeling approach, the base EGEAS runs pick the SCPC units in 2011 and 2013. WEC argues, based upon both its EGEAS runs and its qualitative concerns, that the proper timing should be 2008 and 2009 for these units.

The EGEAS model is an engineering tool that depends upon a great deal of numerical data inputs, assumptions, and forecast uncertainty. Although its results are complex estimates, EGEAS is a useful tool—albeit one important quantitative tool —for the Commission to use in deciding the timing of the proposed generating facilities. Power supply planning is not a science. Determining what resource options will ensure low cost, reliability and environmental sensitivity for the consuming public requires the exercise of judgment and consideration of a wide variety of qualitative factors. The complexity of the assumptions built into this docket's EGEAS runs make it reasonable to select an outcome that is within the range of years proposed by Commission staff's and WEC's results. Given the requirement that it must maintain a reliable electric system, the Commission finds it prudent to construct these units slightly sooner, rather than later. For these reasons the Commission approves a timeline that places SCPC 1 in service in 2009 and places SCPC 2 in service in 2010.

Some parties suggest that the Commission should focus its attention in this docket solely upon the utility's near-term needs, arguing that looking more than five years into the future is too speculative. Baseload projects, however, can take five years to construct after all permits are received, and the process of preparing the project applications and receiving the required state and federal permits may add years to this timeline, especially if litigation follows. For this reason alone, when a utility's baseload needs are under consideration a more appropriate

forecasting period would be approximately ten years. The EGEAS runs show that new baseload SCPC units are cost-effective within this time period.

With respect to the proposed IGCC unit, EGEAS demonstrates that the proposed IGCC unit is never cost-effective and must be denied. The EGEAS model does not select an IGCC unit in any of its optimal runs. When the EGEAS model is forced to take an IGCC unit in 2011, the expansion plan becomes $349 million more expensive in present value terms. The EGEAS model strongly dismisses the IGCC unit as non-economic because of its higher construction cost. An IGCC would cost $1,579/kW to build, as compared to the lower construction cost of an SCPC unit ($1,400 to $1,440/kW). The guaranteed heat rate for the IGCC units, 9,500 Btu/kWh, is also inferior to the guaranteed 8,850 Btu/kWh heat rate for the SCPC units. IGCC technology, while promising, is still expensive and requires more maturation. For these reasons, the application to construct the IGCC unit is denied.

S.C. Johnson criticizes a number of modeling inputs, alleging that WEC is using improper engineering and fuel data for existing WEPCO units, an improper common systems cost allocation to the OCPP units, a demand and energy forecast that is too high, an improper addition of 200 MW of demand obligations for WPPI and MEUW, overly favorable engineering assumptions for the proposed SCPC units, and an improper early retirement of certain OCPP and Presque Isle units, while it is also ignoring the likely availability of additional energy efficiency efforts that would reduce the growth in electric demand. Commission staff evaluated these concerns, revised some of its assumptions, and prepared an EGEAS run to demonstrate how these changes would affect the optimal expansion plan. Because it includes additional energy efficiency to control electric demand, in addition to generation options, Commission staff

described this run as an "integrated alternative" that integrates the energy priorities described in Wis. Stat. §§ 1.12(4) and 196.025. For example, this EGEAS run includes lower forecast demand and energy growth rates of 1.8 to 2.1 percent per year, instead of the 2.5 to 2.9 percent per year growth rates in the base forecast. In addition, a total of 600 MW of demand is stripped away from the WEPCO base electric demand forecast, in 200 MW increments every two years through 2011, to reflect a more aggressive approach to energy conservation. This integrated alternative also includes a less favorable 4 percent forced outage rate for the SCPC units.

Even with the revised input assumptions of this integrated alternative, the EGEAS model results are not significantly different. EGEAS still selects an SCPC unit, by the year 2012. In addition, the record would not support such an aggressive estimate of cost-effective energy conservation, nor does the Commission agree that the 200 MW of demand for the WPPI and MEUW should be excluded. These are continuing power sales arrangements; for WPPI, the relationship with WEPCO has spanned decades. S.C. Johnson's concern that WEC has improperly allocated common system costs to OCPP Units 5 and 6 (which WEC is proposing to retire early) does have merit, but Commission staff also identified that such an allocation would underestimate the actual costs of the SCPC units and modified its EGEAS cost figures accordingly.

Effect on Wholesale Competition

Under Wis. Stat. § 196.491(3)(d)7., the Commission may issue a CPCN for a proposed facility only if it "will not have a material adverse impact on competition in the relevant wholesale electric service market." Such a determination requires an analysis of market power, which is the ability of a firm to charge prices for its product above what a competitive market

would allow. Since WEPCO has turned over operational control of its transmission system to ATC, the analysis need only focus on horizontal market power issues associated with the construction and operation of ERGS. Vertical market power issues associated with the combined operation of proposed facilities and the transmission system do not need review, given the existence of the Midwest Independent System Operator and its control over the ATC transmission system. The relevant wholesale electric service market is the area designated by the WUMS because this region is an electric "island system," a limited market due to transmission constraints in which a large electric generating firm can obtain leverage over the prices paid for electricity.

Capacity and energy from ERGS will be provided to WEPCO via the Facility Lease, at rates this Commission regulates through its review of the lease's economic terms and conditions. This regulation prevents any material adverse impact on competition in WUMS. As the market power study conducted for the Commission in 2000 by Tabors, Caramanis and Associates found, fixed price contracts (such as the proposed Facility Lease) mitigate market power. In addition, the Federal Energy Regulatory Commission only allows WEPCO to sell in WUMS at cost-based rates. For these reasons, the Commission finds that approval of ERGS will not create material adverse impacts on competition.

Calpine and LS Power, however, express concern that approval of ERGS would have a material adverse impact on competition by preventing the development of a competitive wholesale generation sector and hindering further electric industry restructuring in Wisconsin. However, WEPCO plans to continue contracting for power with independent power producers. Furthermore, a stand-alone generation company such as W.E. Power LLC could more easily be

divested by WEC than generating assets that are held within WEPCO, should a future legislature split generating plant assets away from utilities. For these reasons, the Commission does not concur that ERGS would materially harm competition.

Competing IPP Proposals

LS Power argues that WEC should have conducted an RFP for the capacity represented by ERGS. The Commission does not agree. In an earlier ruling on the applicants' request for a declaratory ruling on Part I of PTF, the Commission expressly declined the opportunity to mandate a formal RFP process.[7] No statute, rule or order of this Commission requires such a process, even when purchasing from an affiliate. WEC has already used competition in its selection of an engineering vendor for this project, Bechtel Corporation.

The company also indicates that it will continue to use competitively bid contracts and subcontracts for various aspects of ERGS. Such competition will directly benefit ratepayers. At hearing, Commission staff indicated that the major component of ERGS not facing a market test per se was with respect to project financing. However, the Commission's selection of competitive financing terms can substitute for such a test. The Commission has broad experience in setting such financing terms in rate proceedings and other recent construction cases. The record, particularly as established in the affiliated interest docket, contains ample evidence on what the appropriate financing terms and conditions should be.

In Part I of PTF, the Commission compared WEC's PWGS project against several bids filed by IPPs. In this proceeding, one IPP filed a competing bid for Commission consideration.

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[7] *In the Matter of Wisconsin Electric Power Company's Request for Declaratory Ruling Approving a Proposed Plan to Increase Generation in Wisconsin*, Docket 6630-DR-104 (October 17, 2001).

On its own volition and as an alternative to the ERGS project, Calpine submitted a proposal to the Commission on February 19, 2003, offering to develop a 523 MW combined-cycle natural-gas-fired power plant in the town of Fond du Lac, Fond du Lac County, with similar additional 500 MW units located elsewhere in the state.[8] In addition, on June 20, 2003, Calpine updated its February 2003 proposal by including 260 MW of combined-cycle, natural gas-fired capacity from Calpine's recent purchase of the Fox Energy Center located in the town of Kaukauna. Construction on that project commenced in October 2003.[9] The Fox Energy Center is rated at 510 MW, with 250 MW of that capacity already under contract to Wisconsin Public Service Corporation. Calpine also submitted to the Commission a sample power purchase agreement, identifying and bidding relevant economic and engineering terms and conditions.[10]

Calpine's projects are natural gas-fired, combined-cycle units. Ordinarily, such units are considered intermediate load generating stations, with capacity factors up to 50 percent. Almost without exception, though, the EGEAS model runs in this record show that WEPCO needs additional baseload capacity within the next decade, in which generating stations must operate between 70 and 90 percent capacity factors. This is also the need for which the applicants have proposed the construction of ERGS.

Over a shorter forecasting period, WEPCO may need additional gas-fired, intermediate or peaking units. For example, some EGEAS runs identify a $57 million cost reduction if a 523 MW, combined-cycle Calpine plant is included in 2006 or 2007. Yet the EGEAS models demonstrate that approving such units would not replace the need for additional coal-fired,

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[8] In docket 9343-CE-100, the Commission issued a CPCN for Calpine's Fond du Lac Energy project on May 5, 2003.

[9] In docket 05-CE-115, the Commission issued a CPCN for the Fox Energy Center on November 7, 2002.

baseload generation. In addition, relying upon natural gas to meet WEPCO's baseload needs as well as its intermediate and peaking requirements would raise the risk of not properly diversifying the utility's fuel mix. Calpine may be an appropriate, cost-effective resource to meet intermediate load needs of WEPCO. However, this docket is focused upon the utility's baseload requirements and it is not necessary simultaneously to determine what intermediate facilities may be appropriate for WEPCO in the interim.

WPPI and MGE Ownership Options

Both WPPI and MGE have options to obtain 50 MW of ownership interests in each of the SCPC units. Historically, WPPI has met some of its baseload requirements through system power purchases from WEPCO, and MGE has acquired baseload capacity through joint ownership of power plants. As a result, the EGEAS model assumes that WEPCO only takes 515 MW from each of these 615 MW units. A decision by WPPI and MGE not to exercise their options would have significant financial consequences to WEPCO's ratepayers. For example, if the WPPI and MGE options are not exercised, WEC's modeling runs show total system costs increasing by approximately $80 million. The record indicates that WPPI and MGE do intend to acquire ownership, so the Commission finds it reasonable to authorize construction of the SCPC units at 615 MW. If WPPI or MGE fails to do so within nine months after the date when the Facility Lease becomes final, however, WEC must return to the Commission and provide a plan that eliminates the risk of WEPCO ratepayers acquiring and paying for too much capacity. One

[10] Calpine filed its power purchase agreement as a confidential document, due to the trade secret nature of its terms and conditions.

means of protecting ratepayers that WEC can consider is the sale of these ownership shares to another entity.

Cost of Construction; Approved Amounts

In approving construction of the SCPC units for 2009 and 2010, the Commission must ascertain the appropriate costs to be placed into each Facility Lease as the "Approved Amount." ERGS includes common facilities that would serve 1,800 MW of new coal-fired capacity as well as 1,200 MW of existing coal-fired capacity from OCPP, i.e., a 3,000 MW "campus" at this site. Although the Commission has rejected the IGCC unit, it finds that a 3,000 MW coal campus remains an appropriate size, because it affords future planning flexibility to WEC. The additional cost of sizing common systems at 3,000 MW, instead of 2,400 MW, is approximately $20 million, which is a modest amount to pay in order to provide additional planning flexibility.

(Chairperson Bridge dissents, and would size the common systems at 2,400 MW.)

The record does not describe the cost of constructing these units, with common facilities to serve 3,000 MW, in 2009 and 2010. It does, however, show the following cost structure under assumed construction dates of 2008 and 2009:

	Generating Unit and SCPC Common Systems	Site Common Costs Shared with OCPP	Inflation	Approved Amount
SCPC Unit 1	$922,140,000	$375,190,000	$129,344,000	$1,426,674,000
SCPC Unit 2	$623,470,000	$ 22,730,000	$ 77,932,000	$ 724,132,000
			Total:	$2,150,806,000

The right-hand column reflects values in year-of-occurrence dollars, meaning that a level of expected inflation is included. Since the Commission has moved the dates of construction back one year, the values in this table must be adjusted by one more year of inflation. Within 45 days after the date this Final Decision is signed, the applicants are instructed to submit to the Commission, for its approval, corrections to the above table to incorporate this adjustment. The EGEAS model uses a 1.87 percent general annual inflation rate during the 2008-2010 timeframe. The applicants shall use no more than 1.87 percent as the annual inflation rate when making this adjustment.

If the Commission approves this submitted correction, the amounts shown therein shall become the Approved Amounts to be used in each Facility Lease. Because these figures are in year-of-occurrence dollars, W.E. Power LLC assumes the risk that inflation will cause actual construction costs to exceed the Approved Amounts by more than the cost overrun collar that is discussed below.

In their Facility Leases the applicants propose that actual construction costs be allowed to exceed the Approved Amounts by up to 10 percent, if the Commission determines that the excess cost is prudent. The applicants describe this as a 10 percent cost "collar" and indicate that W.E. Power LLC incurs the risk of larger cost overruns. The cost estimates in this record, however, are based upon engineering estimates at a point in time when only 5 percent of the actual engineering has been completed. To protect ratepayers from the risk that these estimates are too high, the Commission finds it reasonable to reduce the allowable margin of prudently incurred cost overruns by imposing a smaller, 5 percent cost collar. Parties representing certain customer groups also recommended that the Commission only allow costs meeting the definition

of "Force Majeure," "Excused Event," or "Event of Loss" under a Facility Lease be billed to WEPCO if the Commission determines that such costs are prudently incurred. The Commission agrees that this revision to the Facility Lease is necessary to protect ratepayers. Finally, the Commission agrees with the recommendation of these parties that the Approved Amount recoverable through the Facility Lease may not exceed the unit's actual construction cost. The applicants concurred with this latter recommendation.

Financing Mechanism

Background

In its resource planning, WEC considered both utility-owned, rate-based generation, procurement from wholesale merchant plant suppliers, and leased generation financing. After reviewing these alternatives, WEC decided to pursue leased generation financing to fulfill WEPCO's supply needs.

One of the reasons a lease option needs to be pursued, according to WEC, is that WEPCO will not be allowed sufficient return on a traditional rate base investment to compensate investors for the risks associated with the plant. Although the rate-based option is clearly one feasible alternative based on the evidence presented in this case, the Commission concludes that leased generation financing is in the public interest and is a reasonable method to finance SCPC 1 and 2.

The lease approach presents an innovative opportunity for procuring capacity and, as modified by this Final Decision, the terms of the leases WEC has offered are reasonable. The plant owner acts as a passive investor and the utility, which will operate and maintain the plant, remains a regulated entity under the Commission's jurisdiction. This can provide ratepayers

with protections similar to those afforded under a rate-based paradigm. Moreover, the changes the Commission has made to the lease arrangement, as discussed in this Final Decision, provide further protection to ratepayers.

In addition, recent legislative changes in Wisconsin have fundamentally altered the regulatory landscape for utilities, their customers and regulators. Public utilities have an obligation to serve their customers and in this proceeding, the Commission needs to give WEPCO some flexibility in transacting for energy to meet those needs in a manner that results in low and stable rates for consumers. One of the means to fulfill the Commission's mandate to ensure just and reasonable rates and reliable service includes leased generation financing. The Commission finds that the inter-affiliate leased generation proposal is the most reasonable choice for this ERGS facility and provides certainty that consumers will have these needed baseload facilities in 2009 and 2010.

Review of the proposed leases

The PTF leases are affiliated interest agreements under Wis. Stat. § 196.52(9). WEC proposes financing and operating each ERGS unit with a Facility Lease, a Ground Lease, and a Ground Sublease. Taken together, these leases constitute a leased generation contract. The ERGS leases filed in this case are based upon the final leases approved in docket 05-AE-118 for PWGS.

In general, the Commission finds that the Ground Lease, Ground Sublease, and Facility Lease are reasonable, but some changes to the Facility Lease are needed to balance risk and responsibility properly between the parties to this contract. These modifications are discussed in this Final Decision.

Because a leased generation contract is an affiliated interest transaction, under Wis. Stat. § 196.52(3)(a) the Commission may approve such a contract "only if it shall clearly appear and be established upon investigation that it is reasonable and consistent with the public interest." This law grants the Commission continuing supervisory control over the terms and conditions of most affiliated interest contracts or arrangements, which means it can modify such agreements as needed to protect the public interest. Wis. Stat. § 196.52(9)(e), however, limits the Commission of this control over a leased generation contract unless the contract itself grants the Commission this authority, or unless the Commission specifically reserves continuing supervisory control in its order approving the contract. Therefore, the Commission's jurisdiction over these PTF leases will be limited by the terms of the leases themselves and by this Final Decision.

Financial terms

The Commission finds it reasonable to set the following financial terms of the Facility Lease:

1. Return on equity

To attract investment capital of the size and scope needed to construct the SCPC units, the Commission must include a return in the lease payments at a level that compensates investors for the risks they take by providing that capital. The record in this proceeding contains a wide range of estimates of what that return level should be. It is very difficult to determine precisely what return investors require, especially when the estimates of that return as developed by well-respected finance experts vary by hundreds of basis points. Given this difficulty, selecting the final return on equity figure involves as much art as science.

The applicants initially requested a return on equity of 12.9 percent. After a series of negotiations with representatives of customer groups took place, the applicants agreed to lower the requested return on equity to 12.7 percent.[11] This is the same return on equity the Commission authorized for PWGS. Others suggested that the compromise return was too high and that the SCPC units could be financed at a lower return on equity. While it is conceivable that the projects could be financed at a return on equity that is slightly lower than the negotiated figure, given the critical need for the SCPC capacity it is prudent to set the return on equity at a level sufficient to ensure that those units will be constructed rather than selecting a level that contains some risk that units could not be financed at reasonable terms for the applicants. The applicants were able to secure financing for the PWGS units at a 12.7 percent return on equity. The Commission therefore finds it reasonable to set this the return on equity at 12.7 percent in this proceeding as well.

(Chairperson Bridge dissents, as shown in the attached opinion.)

The dissent proposes to include in this order a condition requiring the Commission to revisit this provision of the lease, and others, after the conclusion of the first five years of the Facility Lease. The inclusion of this provision would introduce an unacceptable level of financial uncertainty into the lease. One of the principal advantages of affiliated lease generation financing terms is the certainty they provide ratepayers and the applicants over the next three decades to ensure that low-cost, reliable baseload generation is constructed in Wisconsin.

[11] The customer groups that negotiated and supported these lease provisions were the Wisconsin Industrial Energy Group, the Citizens' Utility Board, and the Customers First! Coalition (AARP-Wisconsin, Dairyland Power Cooperative, IBEW Locals 2150 and 2304, League of Wisconsin Municipalities, MGE, MEUW, National Federation of Independent Business-Wisconsin, RENEW Wisconsin, Wisconsin Alliance of Cities, Wisconsin Community Action Program Association, Wisconsin Electric Cooperative Association, Wisconsin Federation of Cooperatives, Wisconsin Merchants Federation, WPPI, Wisconsin Retired Educators' Association, and Wisconsin Towns Association).

2. Cost of long-term debt

The cost of long-term debt was an uncontested issue in this docket. As part of the Facility Lease rent calculation, a long-term debt cost is required. The Commission finds it reasonable to use the same computation method that it approved for the PWGS leases. That method requires that the long-term debt cost be determined within 180 days prior to the Facility Lease effective date and that the interest rate reflect an appropriate cost of long-term debt index from Moody's Investors Services for WEC's senior unsecured debt securities. The method also includes an appropriate refinancing or call option.

3. Capital structure

In its decision approving PWGS, the Commission found that a reasonable capital structure to be used in estimating the lease payments was 53 percent common equity and 47 percent long-term debt. In this proceeding the applicants initially requested a capital structure with 58 percent common equity and 42 percent long-term debt. The applicants maintain that, because ERGS would be coal-fired, the project needs a higher common equity ratio than the natural-gas-fired PWGS units. They contend that coal-fired units are inherently more risky than are natural-gas-fired units. A higher common equity ratio reduces the volatility associated with the earnings stream and thus mitigates the higher risk of the project to some extent. After negotiations with representatives of certain customer groups, the applicants agreed to reduce the common equity portion of the capital structure to 55 percent and to increase the long-term debt component to 45 percent.

The Commission finds that a 55 percent common equity, 45 percent long-term debt mix is a reasonable capital structure for the coal-fired SCPC units. This reflects three major risk

factors that cause coal-fired units to be more risky than natural-gas-fired units: (1) coal-fired units are more expensive to construct; (2) coal-fired units take longer to construct; and (3) coal-fired units need larger amounts of ongoing capital investment to maintain the facilities. These risk factors are large enough to require some additional equity in the capital structure, beyond the level that would be appropriate for natural-gas-fired units.

(Chairperson Bridge dissents, as shown in the attached opinion.)

4. Initial lease term

The initial term of the Facility Lease is 30 years. No party disagreed with this length of term, and the Commission finds it reasonable.

5. Rent reduction in first five years

At hearing, the applicants and parties representing certain customer groups supported a 5 percent rent reduction during the first five years of the respective Facility Leases, accompanied by an undefined present value true-up mechanism. The 5 percent rent reduction would be applied to the base rent calculation using the annuity approach, as found in the Facility Lease. After the five-year rent reduction period ends, some type of rent adder to that base annuity rent calculation would be required to maintain the original present value.

The Commission finds that this rent reduction approach is reasonable and will assist in reducing rate shock, but the record does not contain any potential present value true-up mechanism. WEPCO is therefore required to work with Commission staff to prepare, for Commission approval, an appropriate present value true-up mechanism.

(Commissioner Garvin dissents, concerning this rent reduction during the first five years.)

6. Renewal rent terms

The Facility Lease, as proposed, grants WEPCO the right to renew the lease upon its expiration at lower rates. For the first renewal period, the lease payments are reduced to 50 percent of the original payments. For subsequent lease extensions, assuming such extensions can be made,[12] the lease payments drop to 15 percent of the original rent. Parties representing certain customer groups recommended that a more appropriate allocation of risk would decrease the lease payments for the first renewal period to 25 percent of the original payments. The Commission agrees. Such a reduction would provide additional ratepayer protection in terms of overall cost-effectiveness and is therefore reasonable.

7. Damages amount

The Facility Lease, as proposed, provides that if the Lease Effective Date is not achieved due to a failure of WEPCO, the Lessor can terminate the lease and sell the generating plant to WEPCO. As part of the purchase price, the utility would be required to pay a "Damages Amount" that constitutes 60 months of lost return on capital. In order to protect ratepayers, this provision must be eliminated.

(Commissioner Garvin dissents, concerning the elimination of "Damages Amount" from the Facility Lease.)

8. Securitization of lease payments

The stream of rent payments that WEPCO will be making to W.E. Power LLC and its subsidiaries could be "securitized" by the Lessor, i.e., sold for a lump sum that could either be

used as a financing vehicle for other generation improvements or be passed up to the holding company as a special dividend. As the Commission determined in its PWGS order, any such securitization may only occur with the Commission's prior review and approval in order to ensure that securitization will not harm the utility or its ratepayers.

9. WEPCO credit quality degradation

In the PWGS Facility Lease, the Commission mandated certain restrictions regarding the transfer or assignment of the PWGS plant or Facility Lease and, to protect WEPCO's credit quality from degradation, required the inclusion of a "hold harmless" lease provision. This hold harmless provision would apply if a national rating agency downgrades the utility's debt as a result of the transfer or assignment, or if the utility is required to issue equity to avoid such a downgrading of debt. A copy of this "hold harmless" provision, approved for the PWGS leases, was introduced into this docket as part of Ex. 22. As with the PWGS Facility Leases, the Commission finds these terms reasonable and requires that they be included in the ERGS Facility Leases.

Other terms and conditions

1. General changes

The applicants agreed to make the following changes to the Facility Lease:

a. Modify the definition of "Loss Proceeds" in Schedule 1.1 to delete the phrase "pursuant to any insurance policies maintained pursuant to the Facility Lease."

b. Add the phrase "The Project's cost shall not exceed the Approved Amount" to the Development Protocol in Schedule 3.1(a), to conform the ERGS lease to the approved PWGS lease.

[12] In order to be considered a "true" lease for tax purposes, ERGS cannot be leased to WEPCO for more than 80 percent of its useful life. The Facility Lease provides that the length of any renewal period will be 80 percent of the then-estimated useful life of ERGS, as determined by an independent evaluator.

c. Delete Section 9.4 dealing with the Delegation of Operation and Maintenance to one or more agents.

d. Change subsection (a) of the definition of Approved Amount in Schedule 1.1 to read "(a) the specific amount determined to be reasonable in the CPCN Approval, plus."

2. Force Majeure, excused events and events of loss

As discussed above, all construction costs defined as Force Majeure, an Excused Event, or an Event of Loss must have prior Commission approval before being recovered from WEPCO.

3. Guaranteed heat rate; cooling towers

As part of its application, W.E. Power LLC is guaranteeing a heat rate of 8,850 Btu/kWh for the SCPC units. This heat rate assumes once-through cooling; a design that the applicants contend will be approved and successfully installed. This is an important fixed term in the Facility Lease because if the applicants are unable to install once-through cooling, the heat rate may degrade significantly. As a result, W.E. Power LLC and WEPCO may only propose to change this guaranteed heat rate in the Facility Lease if they offer equivalent, offsetting ratepayer benefits and savings.

4. Engineering, Procurement and Construction contract

To ensure that WEPCO ratepayers secure the benefits of all the protections that W.E. Power LLC gains through its Engineering, Procurement and Construction (EPC) contract with Bechtel Corporation, the following Facility Lease terms shall be modified to incorporate any terms found in the EPC contract that are more beneficial to ratepayers than those currently included in the Facility Lease:

a. Commercial Operation Test and Scheduled Commercial Operation Date Damages.

b. Guaranteed Performance Level tests (including heat rate and net electrical output).

c. Duration of construction, in months from the Decommissioning Completion Date to the Scheduled Commercial Operation Date and the Required Commercial Operation Date.

d. Dates on which the Construction Milestones are scheduled to occur.

e. Test Fuel and Test Power Procedures to the extent such procedures are addressed in the EPC contract.

5. Conforming leases

This Final Decision makes modifications to the PTF leases proposed by WEC. It is reasonable to require that WEC rewrite these leases for SCPC 1 and SCPC 2, making the changes specified herein. It is also reasonable to require that WEC return these final documents to the Commission for review and approval, with the revisions highlighted, no later than 45 days after the date this Final Decision is signed.

6. Statutory compliance

A leased generation contract must meet eleven separate conditions under Wis. Stat. § 196.52(9)(b), as well as requirements for land and property transfers under Wis. Stat. § 196.795(5)(k)3. The proposed leases for SCPC 1, as modified by this Final Decision, comply with these statutory requirements. The Commission also approves the modifications WEC proposes to convert these documents into a leased generation contract for SCPC 2. Pursuant to Wis. Stat. § 196.52(9)(f), the Commission shall maintain jurisdiction to ensure that the construction of ERGS is completed as provided in the leased generation contracts.

The Commission retains continuing supervisory control only over the terms and conditions specified in this Order and in each Facility Lease, Ground Lease, and Ground Sublease. This is reasonable and in the public interest, to balance properly the parties' risks and responsibilities, and to protect WEPCO's ratepayers. In addition, any future changes to these leases, whether mutually agreed upon or otherwise, and any transfer or assignment of a lease or of the ERGS facility, must first receive Commission approval.

Site Location

Wis. Stat. § 196.491(3)(d)3. requires that the Commission consider "alternate locations" before determining whether the location of a new project is in the public interest. In addition, Wis. Admin. Code § PSC 111.53(1)(e) requires that a CPCN application for a new generating plant contain "[a]t least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives." The Commission's rules further specify certain site-related information that must be provided for each proposed power plant site. Wis. Admin. Code § PSC 111.53(1)(f).

S.C. Johnson alleges that the four ERGS site alternatives, all located at OCPP, are simply different plant configurations on the same parcel of land and therefore do not satisfy the Commission's statutory and rule requirements. On January 14, 2003, S.C. Johnson and Wisconsin's Environmental Decade (now known as Clean Wisconsin) originally raised this issue by filing a petition with the Commission requesting that it reconsider a determination that WEC's CPCN application was complete. The petitioners alleged that the application failed to include information on at least two proposed sites. On April 17, 2003, the Commission issued an order denying this petition. The petitioners appealed, but Dane County Circuit Judge Moria

Krueger ruled that this order is a "preliminary, interlocutory decision that is not immediately reviewable under Wis. Stat. ch. 227, but is reviewable in an action for judicial review of the final decision." *Clean Wisconsin, Inc. and S.C. Johnson & Son, Inc. v. Wisconsin Public Service Commission*, Case No. 03-CV-1480 (Dane County Circuit Court: Final Order, July 8, 2003).

The completion of hearings and development of a record in this docket provide no new information that would be sufficient to cause the Commission to change its conclusions regarding the four site alternatives for ERGS. S.C. Johnson and Clean Wisconsin, among others, continue to maintain that site alternatives must be geographically distinct and that these site alternatives do not demonstrate real differences. As the Commission declared in its April 17, 2003, order, though, the fact that alternate sites may be geographically close together does not automatically render them unreasonable alternatives. The Commission has accepted CPCN applications for numerous other projects where the alternate sites have been close together, or even adjacent to each other. The Commission determines whether proposed site alternatives are reasonable by applying two standards: the site alternatives must each be feasible locations and they must be sufficiently distinct to offer different packages of costs and benefits. With the benefit of a fully developed record on these site alternatives, the Commission reaffirms its April 17, 2003, decision.

S.C. Johnson and Clean Wisconsin now raise a slightly different argument about the sufficiency of the site alternatives, involving their interpretation of Commission rules. They contend that these rules only allow the use of site alternatives that are all located at a single facility in two specific situations. S.C. Johnson and Clean Wisconsin refer to Wis. Admin. Code § PSC 111.53(2)(b), which states:

> **PSC 111.53(2)(b)1.** An application for a cogeneration facility may meet the requirement under sub. (1)(e) by filing information on 2 sites that are both located at the steam host's existing industrial plant, if the cogeneration facility will be a qualifying facility under 18 CFR 292.205 and none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11(2)(c), Stats.
>
> **2.** An application for repowering an existing generating facility may meet the requirement under sub. (1)(e) by filing information on 2 sites that are both located at the existing generating facility site, if none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11(2)(c), Stats.

These parties conclude that these must be the only conditions where alternate sites at the same general location are permissible, since they are the only exceptions to the "alternative sites" requirements specified in the Commission's rules.

This interpretation, however, mischaracterizes the exceptions. A "cogeneration" project is designed to use waste heat from an electric generating plant, heat that would otherwise be lost up the smokestack, in an industrial process such as paper making or food processing. Wis. Admin. Code § PSC 111.53(2)(b)1. recognizes that in order to achieve this increase in energy efficiency the electric generating unit must be combined with an existing industrial plant, which can only occur by locating the generating unit at the industrial plant site. The same is true when a utility proposes to "repower" a generating plant by removing and replacing the existing units. Wis. Admin. Code § PSC 111.53(2)(b)2. recognizes that the only location for such a project is at the existing electric site. These two exceptions therefore are driven by the first standard of the Commission's requirements for proposed site alternatives—that every alternative must be a feasible location. There are no other feasible locations for cogeneration and repowering projects, and these two exceptions codify that finding.

S.C. Johnson and Clean Wisconsin have improperly interpreted Wis. Admin. Code § PSC 111.53(2)(b). These two exceptions are not the entire universe of situations where the Commission will accept site alternatives that are located in close proximity. In other situations the Commission applies its general rule, examining proposed alternatives to ensure that they are each feasible sites and each provide different packages of costs and benefits, so that the Commission is presented with a real choice. The site alternatives for ERGS do provide such a choice.

The record demonstrates that any of the four sites proposed would meet the standards established under Wis. Stat. § 196.491 and could be selected for construction of ERGS. The North Sites, however, are principally located within the city of Oak Creek and that city, unlike the neighboring town of Caledonia where the South Sites are found, has clearly expressed its willingness to accept this project. Furthermore, the North Site—CUP alternative involves substantial compromise and agreement between the city and the applicants regarding the proper means of mitigating municipal concerns, such as noise, traffic and air emissions. The city of Oak Creek, which has already hosted a power plant for 50 years, favors use of the North Site—CUP alternative and locating ERGS within its municipal boundaries will ensure that the city is in a stronger position to enforce mitigation measures that protect its citizens from undue impact. The city has rezoned this site as being suitable for manufacturing and is both willing and able to provide potable water and sewage service to the site. The Commission finds these to be determining factors in choosing among the four alternatives, and selects the North Site—CUP alternative as the proper location for ERGS.

This site alternative moves the coal pile and coal handling facilities inside the existing OCPP rail loop, which means that a 138/345 kV substation already found in that area must be relocated. At the time of the technical hearing, the possible sites for this substation and the cost of relocation were not clearly defined, though one alternative would split this facility into two substations and place the 345 kV substation southeast of the rail loop, in a wooded wetland designated by the Southeast Wisconsin Regional Planning Commission as an Isolated Natural Resource Area. This location would have unnecessary environmental impacts and would require relocation of the federal/state shooting range, but the applicants have indicated that other locations for the substation are available and are willing to investigate better sites. It is reasonable to require that the applicants work with ATC, DNR, and the neighboring communities to find a suitable location for these substations, minimizing both the adverse environmental effects and the cost of relocation.

Although the two SCPC units would be placed within the city of Oak Creek, even with the selection of the North Site—CUP alternative some of the plant-related facilities will be constructed in the town of Caledonia: new access roads; railroad improvements; possibly the 345 kV substation. The record demonstrates that the town of Caledonia will also experience a variety of environmental and socioeconomic effects because of the construction of ERGS. These effects may include changes in local air quality, noise levels, traffic patterns, and traffic volume, among others. The applicants have committed to working with all neighboring communities to mitigate valid concerns, including the town of Caledonia, and it is reasonable to require that they do so.

Mitigation Payments

In a Development Agreement reached with the city of Oak Creek, WEC agreed to make annual mitigation payments to the city of $1.5 million for SCPC 1 and $750,000 for SCPC 2. In Part I of PTF, the Commission granted an annual mitigation payment of $500,000 to the city of Port Washington, though it reserved the right to review this approval if the state of Wisconsin's shared revenue program was revised and payments to municipalities increased.

The enactment of 2003 Wis. Act 31 on July 15, 2003, has significantly altered the state's shared revenue program. Prior to Act 31, compensation dollars to municipalities and counties were based on a power plant's net book value and declined over time, as the plant depreciated. The maximum payment to a municipality or county under this prior formula is $750,000 per year. This is the amount the city of Oak Creek currently receives for the existing OCPP. In contrast, payments under the new shared revenue program are based on a plant's megawatt capacity multiplied by $2,000 and do not decline over time. The new shared revenue program will pay municipalities double and triple what they would have received under the former program. Cities or villages with power plants that begin operation after December 31, 2003, will annually receive two-thirds of the plant's MW capacity multiplied by $2,000, while the host county will annually receive one-third of the MW capacity multiplied by $2,000.[13] Additional incentive shared revenue payments are also distributed to both the municipality and the county if the unit is non-nuclear and built on or adjacent to an existing or former plant site or on a brownfield site, if the unit is a baseload plant, if the unit derives energy from an alternative energy source, or if the unit is a cogeneration plant. A municipality can receive multiple incentive payments. Under this new law, the city of Oak Creek will also receive annual incentive payments in the amount of $1,200 multiplied by the plant's megawatt capacity.

This new shared revenue program commences the annual payments when a generating unit becomes operational. Shared revenue payments to the city of Oak Creek will be $1.6 million for the first SCPC unit and increase to $3.2 million for the second unit. These payments will be added to the shared revenue payments that the city is currently receiving for the existing OCPP.

Under Act 31, the annual state shared revenue payments to the city of Oak Creek when ERGS is completed will exceed the amount the city is requesting in the form of mitigation payments from WEPCO ratepayers. Thus, mitigation payments are not required while compensating shared revenue dollars for ERGS are forthcoming. The shared revenue payments, however, will not begin until 2009 when SCPC 1 is first scheduled to be in service, and the city has introduced evidence that it will begin incurring costs as soon as construction commences. For this reason, the Commission finds it appropriate to authorize annual mitigation payments, as described in the Development Agreement, for the period from the commencement of construction of SCPC 1 until the year when SCPC 2 enters service, which is scheduled for 2010. The shared revenue payments for ERGS that commence in 2009, however, will partially offset the city's costs and it is appropriate to reduce the annual mitigation payment by the amount of shared revenue that the city receives for ERGS. When ERGS is fully in service, the shared revenue payments will fully replace any mitigation payment under the Development Agreement, so any further mitigation payment cannot be billed to WEPCO. If, however, state shared revenue payments decrease during the course of the 30-year Facility Lease and are no longer sufficient to offset fully the mitigation payment that would have been paid under the Development

[13] The two-third/one-third relationship is reversed if the power plant is built in a town rather than a city or village.

Agreement, the Commission finds it reasonable for W.E. Power LLC to make a partial mitigation payment to the city that equals the remaining portion.

(Commissioner Garvin dissents, concerning the decision to award mitigation payments.)

DNR Permits

Before construction may proceed, a project site selected by the Commission must receive a corresponding air pollution control construction permit from DNR. WEC submitted four permit applications to DNR, one for each site alternative. Before it can issue a CPCN for a project, the Commission must make a number of determinations, including a finding that the project is in the public interest when considering environmental factors. However, if DNR declares that a project will meet the agency's air pollution requirements under Wis. Stat. ch. 285, the Commission loses its authority under Wis. Stat. §§ 196.491(3)(d)3. and 4. to determine that a project would have undue adverse air pollution impacts. DNR issued preliminary determinations that both the North Site and the North Site—CUP alternative should meet applicable criteria for permit approval under Wis. Stat. § 285.63 on October 6 and 9, 2003, and scheduled public hearings on these permit applications on October 28, 2003. DNR also declared that WEC's permit applications for the South Site and South Site—Exp are complete, but it has not yet issued preliminary determinations regarding whether they meet the criteria for permit approval.

The combustion of coal involves the release of numerous air pollutants. During the Commission hearings, health concerns relating to these pollutants were expressed both by expert witnesses testifying on behalf of the parties and by members of the public, particularly regarding the potential health impacts of mercury and particulate matter less than 2.5 microns in diameter

($PM_{2.5}$). Some parties urge the Commission to quantify the monetary cost of these adverse health effects as an additional cost of ERGS that was not included in the EGEAS model inputs.

Mercury emissions are regulated under DNR air pollution control construction permits. DNR considers mercury to be a hazardous pollutant, requiring the use of maximum achievable control technology to meet the emission limits set by permit. DNR's air pollution permits, though, do not yet address $PM_{2.5}$. This is because the U.S. Environmental Protection Agency (EPA) has set National Ambient Air Quality Standards for $PM_{2.5}$ emissions over a 24-hour episode and annually, but has not yet instituted a program for determining non-attainment areas and thus has not taken steps yet to reduce emissions. DNR currently intends to submit a State Implementation Plan to the EPA regarding $PM_{2.5}$ in 2005. S.C. Johnson and other parties requested that the Commission consider the health impacts caused by $PM_{2.5}$ emissions from ERGS and offered evidence regarding the monetary cost of these impacts. WEC introduced contrary evidence on these subjects.

The evidence in the record regarding the externalized health costs associated with air emissions will be valuable to DNR as it examines its air permit applications for ERGS, but the Commission does not have special expertise to render an independent judgment on this topic. To do so would require the Commission to pick appropriate methods for modeling emission dispersion, determine if a causal relationship exists between emissions and adverse health impacts, decide whether a threshold level exists below which no impacts occur, and establish how to translate any identified impacts into dollars. These are primarily the functions of the EPA and DNR, and these agencies have not yet spoken. Any conclusions the Commission might

reach would likely be rendered a nullity by the ultimate decisions of the EPA and DNR. In this docket, the Commission is willing to defer to these decisions of the EPA and DNR.

DNR must also issue a number of water-related permits and approvals before construction may commence. These include: permits for grading work for the generating facilities and for the railroad improvements; the approvals for dredging and for use of lakebed and shoreline structures to construct breakwater and harbor facilities; the approval for use of lakebed to install the cooling water intake and discharge structures; and the water quality certification needed for wetland fill. As of the date the record closed, DNR has deemed the joint state/federal application for water regulatory permits and approvals for ERGS to be incomplete. Five parties to this docket jointly filed with DNR a request for a contested case hearing on WEC's application for water regulatory permits and approvals, which DNR granted on October 6, 2003. A hearing date will not be set until DNR determines that the application is complete.

Section 316(b) of the federal Clean Water Act and Wis. Stat. § 283.31(6) require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts. In December 2001, the EPA published final regulations defining the federal requirements that apply to the construction of "new" facilities and, in April 2002, proposed regulations regarding "existing" facilities. On January 28, 2003, DNR determined that ERGS could be treated as an existing facility. Under this designation ERGS could utilize once-through cooling, as OCPP does now, if the applicants can demonstrate that the intake structure represents Best Technology Available for controlling impingement and entrainment of aquatic organisms.

If the EPA overrules DNR's preliminary decision about whether ERGS is a modification to an existing facility under Section 316(b) of the Clean Water Act, the applicants may not be able to build their proposed once-through cooling system for ERGS. Instead, ERGS would need to be redesigned to utilize cooling towers. The cooling towers would be new features in the plant layout, costing approximately $100 million per SCPC unit. Changes in the cooling efficiency could also change emissions and the environmental impact of the SCPC units, requiring alterations in air pollution control equipment. Because of these substantial effects that would result, if cooling towers are required the applicants must submit a redesigned or relocated plant to the Commission for approval.

DNR has not yet granted its approval for water withdrawal and water loss under Wis. Stat. §§ 281.35 and 281.41. The applicants must provide an accurate water balance for the ERGS facilities in order for DNR to complete its review. A Wisconsin Pollutant Discharge Elimination System (WPDES) permit for discharges related to stormwater during construction and an amendment of the existing OCPP stormwater pollution prevention plan are needed prior to beginning construction. These have not been issued, due to an incomplete application. Finally, DNR has not yet authorized modifications to the existing WPDES permit related to the new cooling water intake structure. The documentation submitted by the applicants, demonstrating that the new intake will meet Best Technology Available standards, is currently being reviewed by the DNR and EPA.

DNR's Bureau of Endangered Resources has indicated that incidental take permits for threatened or endangered species will not be required for the ERGS project. Based on completed surveys, it is unlikely that any rare animal species would be adversely affected by construction of

ERGS. Although it is anticipated that numerous state-endangered blue-stemmed goldenrod plants (*Solidago caesia)* and some yellow gentian (*Gentiana alba*), a state-threatened species, will be destroyed during construction, these plants are not protected on private property and a DNR permit is not required.

Adequacy of EIS

Wis. Stat. § 1.11(2) requires the Commission to prepare a detailed EIS for any "major action" it is considering that would significantly affect the quality of the human environment. The Commission has adopted rules that categorize the types of actions it undertakes, for purposes of complying with this statute. Wis. Admin. Code § PSC 4.10(1) and Table 1, item f., provide that a proposal to construct "an electric generation facility fueled by coal" is a major action, and an EIS is required. As a result, Commission staff collaborated with DNR staff to prepare an extensive EIS about ERGS, including holding scoping sessions in the Oak Creek community at which members of the public could learn about the project and could relate particular concerns about its environmental impacts to Commission and DNR staff. The Commission and DNR released a draft EIS dated April 21, 2003, 450 pages long, plus a second volume of 34 figures, which it distributed broadly to interested persons. The agencies encouraged people to respond with concerns and criticisms during a 45-day comment period, and held meetings with the public in the project area to receive these comments.

Following the comment period, Commission and DNR staff prepared a final EIS that took into consideration the comments received as well as new information collected. The final EIS substantially expanded the draft EIS, adding more figures to Volume 2 as well as a 300-page

Volume 3, which identifies and responds to the comments received. In all, the EIS now totals approximately 900 pages.

Several parties argue that the EIS's discussion of the environmental impacts of ERGS is inadequate. After hearing these concerns and reviewing the detailed record prepared in this case, much of which concerns environmental impacts, the Commission finds that this EIS properly discusses the significant aspects of probable environmental consequences. In those areas where the likely environmental consequences associated with ERGS are unknown, the EIS identifies these uncertainties. ERGS also remains under continuing regulatory review by DNR, the state's primary regulator for most purposes of environmental protection. During its review of numerous permit applications, DNR can respond to remaining areas of uncertainty. The Commission recognizes DNR's continuing regulatory oversight of this project and, by the conditions imposed in this order, defers to DNR's permitting decisions that will mitigate environmental impacts.

For these reasons, the Commission finds that the draft and final EIS comply with the requirements of Wis. Stat. § 1.11 and Wis. Admin. Code ch. PSC 4.

Certificate of Public Convenience and Necessity

W.E. Power LLC, through its subsidiaries ERGS-SCPC 1 LLC and ERGS-SCPC 2 LLC, may commence construction of two 615 MW SCPC electric generating units, as described in WEC's project application and modified by this Final Decision, at an estimated cost of $1,426,674,000 for SCPC 1 and $724,132,000 for SCPC 2 (year-of-occurrence dollars), plus any adjustment that is approved by this Commission for one year of additional inflation.

Order

ERGS Generating Plants

1. W.E. Power LLC and its subsidiaries may construct SCPC 1 and SCPC 2 at the North Site—CUP alternative. The in-service date for SCPC 1 shall be May 1, 2009; the in-service date for SCPC 2 shall be May 1, 2010. W.E. Power LLC and its subsidiaries shall construct these units in conformance with the design specified in the ERGS application, in conformance with the construction schedule specified in the application (as delayed one year by this Final Decision), and subject to the conditions specified in this Final Decision. Although the application to construct an IGCC unit is denied, W.E. Power LLC and its subsidiaries may construct common facilities with the SCPC units to accommodate up to 3,000 MW of generation at this site.

2. W.E. Power LLC and its subsidiaries shall commence construction of SCPC 1 within 12 months after receiving all necessary federal, state, and local permits and approvals. Before commencing construction of SCPC 2, the applicants shall file an updated demand and energy forecast and updated EGEAS computer modeling with the Commission.

3. Within three months of the date when SCPC 2 is fully operational, W.E. Power LLC shall repeat the noise measurements that were taken before project approval, shall measure the maximum noise generated at the site with all units on, and shall measure the noise at the site with all units off. W.E. Power LLC shall report its findings to the Commission, using the same format as its pre-approval noise studies.

4. W.E. Power LLC shall provide documentation to the Commission of all work with individuals who raise concerns about noise or interference with radio or television reception, and of the resolution of those concerns.

5. The applicants shall work with neighboring communities to mitigate valid concerns and impacts.

6. The applicants shall seek the approval of the Office of the Commissioner of Railroads to separate or eliminate the existing at-grade Union Pacific rail crossings at Seven Mile Road and Six Mile Road. The applicants shall also monitor the effect of train deliveries on road blockages at Four Mile Road crossing, following their construction of the new on-site rail facilities, and shall work with the town of Caledonia to address legitimate concerns it may have at this location.

7. The applicants shall work with ATC, DNR, and neighboring communities to minimize the cost and the environmental impact of moving and reconfiguring the 138 kV and 345 kV substations. The applicants shall inform the Commission of the results of this work, documenting the estimated cost involved, the new proposed layout of the substations, and the associated transmission line interconnection routes and routes for exiting from the plant site.

8. If the EPA or DNR determine that once-through cooling is not permittable, WEC shall submit a revised project application for the Commission's approval that redesigns or relocates ERGS, as needed.

Leased Generation Contracts

9. The Facility Lease for SCPC 1 shall use a construction cost of $1,426,674,000 as the Approved Amount and the Facility Lease for SCPC 2 shall use a construction cost of

$724,132,000 as the Approved Amount, but the applicants can alter these amounts by submitting to the Commission for its review and approval revised construction costs that include one year of additional inflation at an annual inflation rate of no more than 1.87 percent. Any such submission shall be provided to the Commission no later than 45 days after the date this Final Decision is signed.

10. W.E. Power LLC and its subsidiaries may only recover construction costs from WEPCO that exceed the amounts approved in this Final Decision if the Commission makes a prior determination, before billing, that the excess cost is prudently incurred. W.E. Power LLC and its subsidiaries may not recover from WEPCO more than 105 percent of the construction costs approved in this Final Decision, except that costs qualifying as Force Majeure, an Excused Event, or an Event of Loss under the definitions of the Facility Lease are not included in this calculation. W.E. Power LLC and its subsidiaries may only recover from WEPCO a cost that qualifies as Force Majeure, an Excused Event, or an Event of Loss if the Commission makes a prior determination, before the cost is billed, that it is prudently incurred. If the actual cost of constructing an ERGS unit is less than the Approved Amount defined in the Facility Lease, the Approved Amount shall be reduced to equal the actual cost.

11. Neither WEC nor any of its affiliates may securitize the lease payment stream under the Facility Lease without the Commission's prior review and approval.

12. WEPCO shall treat each Facility Lease, Ground Lease, and Ground Sublease approved in this docket as operating leases for ratemaking purposes. In future rate cases, WEPCO may not seek a higher authorized return on equity for its rate-based assets, or any other

capital structure adjustments, related to credit quality degradation resulting from a lease's classification as a capital, operating, or true tax lease.

13. WEPCO shall work with Commission staff to develop a tracking mechanism, and appropriate accounting practices, that prevent a double collection of costs from ratepayers through utility rates and lease payments.

14. WEPCO shall work with Commission staff to develop an appropriate present value true-up mechanism for Commission approval, to balance the 5 percent rent reduction in the first five years of each Facility Lease.

15. WEC shall revise the Facility Lease, Ground Lease, and Ground Sublease for SCPC 1 and SCPC 2, reflecting each of the lease modifications approved in this Final Decision. Within 45 days after the date this Final Decision is signed, WEC shall submit these revised leases to the Commission for its review and approval, with the revisions highlighted.

16. No future changes may be made to a Facility Lease, Ground Lease, or Ground Sublease, approved in this docket, whether mutually agreed upon or otherwise, without first receiving the Commission's review and approval. No interest in any of these leases or agreements or in the ERGS facility may be transferred or assigned, without first receiving the Commission's review and approval.

17. All books and records underlying any transaction made pursuant to a Facility Lease, Ground Lease, or Ground Sublease shall be provided to the Commission upon request.

18. The Commission retains limited continuing jurisdiction over those terms and conditions expressly set forth in each lease approved by the Commission and set forth in this Final Decision.

General Requirements

19. WEPCO shall submit a plan to the Commission by March 1, 2004, for capturing a minimum of 55 MW of additional cost-effective energy conservation by 2008.

20. W.E. Power LLC and its subsidiaries shall notify the Commission within five working days of the date when construction commences on each unit. W.E. Power LLC and its subsidiaries shall notify the Commission, in writing, within 24 hours of any decision not to proceed with any of the approved projects or to enter into any partnership or other arrangement with another entity with respect to the project.

21. W.E. Power LLC and its subsidiaries shall submit quarterly progress reports to the Commission that summarize the status of construction, the status of land acquisition, the status of environmental control activities, and the overall percent of physical completion for each unit. Each report shall include a summary of consultations with DNR and other agencies concerning the issuance of permits. The reports shall list dates, names, and the results of each contact and the company's progress in implementing prescribed environmental protection or control standards. The first report for SCPC 1 is due for the quarter ending December 2003; the first report for SCPC 2 is due for the quarter ending December 2004. The reports shall be filed within 31 days after the end of each quarter and shall continue until the certificate holder's project is fully operational.

22. W.E. Power LLC and its subsidiaries shall each provide the Commission with copies of all final executed agreements related to the construction, operation, or ownership of the project when they are obtained, including the final EPC contract with Bechtel Corporation.

23. W.E. Power LLC and its subsidiaries shall promptly inform the Commission of any substantial scope or design modifications in the approved facilities.

24. If WPPI or MGE fails to exercise its purchase option within nine months after the date when a Facility Lease becomes final, within the next 45 days WEC shall provide the Commission with a plan that eliminates the risk of WEPCO ratepayers acquiring and paying for too much capacity. One means of protecting ratepayers that WEC can consider is the sale of these ownership shares to another entity.

25. For each SCPC unit, upon completion of construction W.E. Power LLC and its subsidiaries shall file with the Commission a complete report of the final costs segregated by plant account and shall explain any variances between the authorized and actual costs.

26. This Final Decision takes effect on the day after it is mailed. The CPCN for the ERGS facility only takes effect when the DNR issues all permits and approvals that it identified, pursuant to Wis. Stat. § 196.491(3)(a)3.a., as being required prior to construction of the facility.

(A separate dissent from Chairperson Bridge follows.)

Dated at Madison, Wisconsin, November 10, 2003

By the Commission:

Lynda L. Dorr

Lynda L. Dorr
Secretary to the Commission

LLD:JAK:jlt:g:\order\pending\05-CE-130, 05-AE-118 Final draft.doc

See attached Notice of Appeal Rights

Attachment

Notice of Appeal Rights

Notice is hereby given that a person aggrieved by the foregoing decision has the right to file a petition for judicial review as provided in Wis. Stat. § 227.53. The petition must be filed within 30 days after the date of mailing of this decision. That date is shown on the first page. If there is no date on the first page, the date of mailing is shown immediately above the signature line. The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

Notice is further given that, if the foregoing decision is an order following a proceeding which is a contested case as defined in Wis. Stat. § 227.01(3), a person aggrieved by the order has the further right to file one petition for rehearing as provided in Wis. Stat. § 227.49. The petition must be filed within 20 days of the date of mailing of this decision.

If this decision is an order after rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not an option.

This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

Revised 9/28/98

CHAIRPERSON BURNEATTA BRIDGE
DISSENTING OPINION
Dockets 05-CE-130 and 05-AE-118
November 10, 2003

In this decision the Commission has authorized construction of the largest electric generation project in Wisconsin history. The $2.15 billion price tag used today will undoubtedly grow substantially by the time all related costs are included and construction is completed. This cost will be borne by families and businesses in southeastern Wisconsin. The promised benefit to them should be the assurance of reliable base load generation for the next 35 or 40 years.

The Commission has determined that W.E. Power, LLC is entitled to a return on equity of 12.7 percent, based on a capital structure of 55 percent common equity and 45 percent long-term debt. I believe that this return on equity is extraordinarily high when compared to historic rates and is not in step with current capital markets. Because I believe that the return the Commission has authorized is more generous than necessary to attract investors and will unduly burden future ratepayers, I respectfully dissent.

These lease provisions extend for 30 years. Factoring in the lease terms the Commission has already approved for the Port Washington plant, the result is that a major component of residential, commercial, and industrial customer rates will be locked in for almost two-thirds of W.E. Power, LLC's net investment in electric and gas facilities through the year 2040. Under the financing package approved by the Commission, W.E. Power, LLC's customers will be obligated to pay at least $233 million annually over that period of time.

I proposed that the return on equity be set at 12.1 percent, based on a capital structure of 53 percent common equity. I consider this rate of return and equity structure to be much more in line with current financial markets and with recent actions taken by other state commissions.

Under my proposal, ratepayers would pay approximately $100 million less over the term of the lease on a present value basis.

I also proposed that the Commission reserve the right to review these terms at the end of 5 years, when the total costs of the project are more certain. At that time, the Commission would have available much more accurate information about actual costs and would be in a much better position to evaluate an appropriate financial structure. In view of the size of the project, the enormous cost, and the attendant uncertainties of a venture of this magnitude, I believe that this approach would be a sound exercise of our responsibility to protect the people who will pay the bills.

Burneatta Bridge

Burneatta Bridge
Chairperson

BB:DJG:sp:G:\PTF-ELM\bb ptf dissent 11-10-03

APPENDIX A
(CONTESTED)

In order to comply with Wis. Stat. § 227.47, the following parties who appeared before the agency are considered parties for purposes of review under Wis. Stat. § 227.53.

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STATE OF WISCONSIN CIRCUIT COURT DANE COUNTY

Clean Wisconsin, Inc. et. al.,

Petitioners

vs. Case No. 03 CV 3478

Wisconsin Public Service Commission and Department of Natural Resources,

Respondents

WISCONSIN PUBLIC SERVICE COMMISSION
2004 DEC -6 A 10: 25
RECEIVED

ORDER UPON JUDICIAL REVIEW OF PUBLIC SERVICE COMMISSION ORDER

RECEIVED
DEC - 6 2004

Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E., Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Three Large Electric Generating Facilities, the Elm Road Generating Station, and Associated High Voltage Transmission Interconnection Facilities to be Located in Milwaukee and Racine Counties.

Public Service Commission Docket No. 05-CE-130

Table of Contents

		page
I.	**Statement of the Case**	3
II.	**Standard of Review**	5
III.	**WEC Application for Certificate of Public Convenience and Necessity Approval**	9
	A. Alternative Site Requirement	11
	B. Regulatory Approvals	16
	C. Transmission Line Agreements	19
	D. Identity of Contingent Owners	22
	E. Completeness of Application as of November 15, 2002	23
IV.	**Commission's Order**	25
	A. Energy Need Projections	25
	B. EGEAS Computer Model	26
	C. Health Care Costs	27
	D. Transmission Facility Design, Location and Cost	30
	E. Wisconsin Energy Priority Law	32
	1. Selection of High-Sulfur Coal over Natural Gas as the Primary Energy Source	34
	2. Lack of Consideration of Oil and Low Sulfur Coal	40
	F. Approval of Expansion Capacity	41
	G. Issuance of CPCN Prior to Obtaining Regulatory Approvals	43
	H. Adequacy of the Environmental Impact Statement	45
	I. Least Cost Alternative	47
	J. Wholesale Power Competition	49
	K. City of Oak Creek Mitigation Payment Agreement	50
V.	**Summary and Order**	52

I. Statement of the Case

This proceeding arises from a Final Decision and Order of the Public Service Commission (PSC), rendered November 10, 2003, (Order). In the Order, the PSC issues a Certificate of Public Convenience and Necessity (CPCN) for the construction of two large coal-fired electric power plants by the Wisconsin Energy Corporation (WEC). The two unit facility is known as the Elm Road Generating Station (ERGS) and is to be located on the shore of Lake Michigan at an existing Oak Creek Power Plant (OCPP) owned by Wisconsin Electric power Company (WEPCO). Each of the two new plants is to be a Super Critical Pulverized Coal unit (SCPC 1 and SCPC 2) and each is to be capable of producing 615 megawatts (MW) of electric power. WEC had sought authorization to build a third new coal-fired facility, that being a 600 MW Integrated Gasification Combined Cycle (IGCC) unit but the PSC, in the Order, declined to authorize construction of the third unit. The projected cost of the two new authorized units is 2.15 billion dollars and apparently will be the largest, most expensive generating facility ever constructed in Wisconsin.

The PSC Order resolves what has been designated as second and final part of a WEC proposal initially submitted to the PSC January 31, 2002 and known as Power the Future (PTF). The original combined proposal was a plan to construct five new power generating facilities, two natural gas-fired units at Port Washington and three new coal-fired units at the existing Oak Creek Power plant (OCPP) site. The Port Washington plants were approved[1] and, thereafter, the PSC undertook consideration of the remaining three proposed new facilities at the Oak Creek site. The new Oak Creek facilities, known

[1] Final Decision, Application of Wisconsin Electric Power Company, Wisconsin Energy Corporation and W.E. Power, LLC, PSCW docket 05-CE-117.

also as the Elm Road Generating Station (ERGS) thus became phase II of the PTF proposal.

This Circuit Court action is a consolidation of five separate petitions[2] for judicial review pursuant to sec. 227.52, Wis. Stats. in the Circuit Court of Dane County; Clean Wisconsin, Inc. and S.C. Johnson & Sons, Inc. v. Wisconsin Public Service Commission and Wisconsin Department of Natural Resources, 03 CV 3478; Clean Wisconsin, Inc. and S.C. Johnson & Sons, Inc. v. Wisconsin Department of Natural Resources, 03 CV 133; Calpine Corporation v. Public Service Commission of Wisconsin, Case no. 04 CV 149; Calpine Corporation v. Public Service Commission of Wisconsin and Wisconsin Department of Natural Resources, Case no. 04 CV 3731; City of Oak Creek v. Public Service Commission of Wisconsin, Case no. 04 CV 533. By order of March 11, 2004, the foregoing separate cases were consolidated into Case no. 03 CV 3478.

The record of the proceedings before the PSC is extensive. Hearings were held on nineteen days and the record contains some 5,945 pages of testimony transcript, of which 302 pages have been designated as confidential pursuant to secs. 134.90 and 196.14, Wis. Stats.

The record begins with a three volume application filed January 31, 2002 by WEC and includes twenty six volumes of testimony, correspondence and exhibits. The record contains a draft Environmental Impact Statement (EIS), issued April, 2003 and a final EIS, issued July, 2003, R. 77 and R. 119, respectively.

---

[2] Initially there was a sixth case which was part of the consolidated proceeding, Town of Caledonia v. Public Service Commission of Wisconsin and Wisconsin Department of Natural Resources, Dane County Case no. 04 CV 533. This case was filed in the Circuit Court of Racine County as Case no. 03 CV 2084 and venue was thereafter transferred to the Circuit Court of Dane County. The parties thereafter submitted a stipulation seeking dismissal and, by order of September 2, 2004, this matter was dismissed.

II. Standard of Review

The PSC Order is the product of extensive consideration of complex engineering, economic and environmental matters. Wisconsin must provide adequate electric power for the future and that requires careful, thoughtful planning for facilities needed many years down the road. Generation facilities cannot be built quickly. The planning must consider extremely complex technical, financial and environmental considerations. The PSC is charged by the legislature with oversight of state utilities and possesses both expertise and long experience in that role. In this particular proceeding, involving what is described as the largest utility construction proposal in the history of the state, the PSC has shared regulatory responsibility, as to environmental aspects of the proposal, with the Wisconsin Department of Natural Resources (DNR). This truly is an area where a specialized agency is likely to be far more qualified than any court to analyze the extraordinary volume of relevant factual information. Thus the role of the Circuit Court, in an action which seeks judicial review of an agency Order, should properly be limited. The overarching structure for this great administrative responsibility, however, is a framework of legal principle and while the discretion assigned to the Commission is very great, that discretion must work within the tangible, visible limits of the applicable law.

Section 227.52, Wis. Stats., authorizes a Circuit Court to review a Order of the PSC in this matter and sets forth statutory guidance for court review.

> 2) Unless the court finds a ground for setting aside, modifying, remanding or ordering agency action or ancillary relief under a specified provision of this section, it shall affirm the agency's action.
>
> (3) The court shall separately treat disputed issues of agency procedure, interpretations of law, determinations of fact or policy within the agency's

exercise of delegated discretion.

(4) The court shall remand the case to the agency for further action if it finds that either the fairness of the proceedings or the correctness of the action has been impaired by a material error in procedure or a failure to follow prescribed procedure.

(5) The court shall set aside or modify the agency action if it finds that the agency has erroneously interpreted a provision of law and a correct interpretation compels a particular action, or it shall remand the case to the agency for further action under a correct interpretation of the provision of law.

(6) If the agency's action depends on any fact found by the agency in a contested case proceeding, the court shall not substitute its judgment for that of the agency as to the weight of the evidence on any disputed finding of fact. The court shall, however, set aside agency action or remand the case to the agency if it finds that the agency's action depends on any finding of fact that is not supported by substantial evidence in the record.

(7) If the agency's action depends on facts determined without a hearing, the court shall set aside, modify or order agency action if the facts compel a particular action as a matter of law, or it may remand the case to the agency for further examination and action within the agency's responsibility.

(8) The court shall reverse or remand the case to the agency if it finds that the agency's exercise of discretion is outside the range of discretion delegated to the agency by law; is inconsistent with an agency rule, an officially stated agency policy or a prior agency practice, if deviation therefrom is not explained to the satisfaction of the court by the agency; or is otherwise in violation of a constitutional or statutory provision; but the court shall not substitute its judgment for that of the agency on an issue of discretion.

9) The court's decision shall provide whatever relief is appropriate irrespective of the original form of the petition. If the court sets aside agency action or remands the case to the agency for further proceedings, it may make such interlocutory order as it finds necessary to preserve the interests of any party and the public pending further proceedings or agency action.

(10) Upon such review due weight shall be accorded the experience, technical competence, and specialized knowledge of the agency involved, as well as discretionary authority conferred upon it. The right of the appellant to challenge the constitutionality of any act or of its application to the appellant shall not be foreclosed or impaired by the fact that the appellant has applied for or holds a license, permit or privilege under such act.

Section 227.57, Wis. Stats.,

Certainly the PSC Order reflects determinations of fact reached by the PSC as well as interpretations of law. The petitioners challenge factual determinations reached by the PSC and in undertaking judicial review as to such matters, the court is required to,

> accept findings of the agency if they can be supported by substantial evidence. Section 227.20(6), Stats. Substantial evidence does not mean the preponderance of evidence, but rather whether reasonable minds could reach the same conclusion reached by the agency.
>
> Citizens' Utility Board. v. Public Service Commission, 211 Wis.2d 537, 565 N.W.2d 554 (Ct App. 1997)

As to legal interpretations adopted by the PSC the court must determine, in each instance, the proper level of deference which should be given to the PSC interpretation. All parties recognize that the court should employ one of three levels of deference which may be regarded as a continuum; great weight, due deference and de novo review. If the court accords great weight deference, the court largely defers to the determination adopted by the agency.

> Great weight deference is afforded to an agency's decision under the following circumstances: (1) the agency was charged by the legislature with the duty of administering the statute; (2) that the interpretation of the agency is one of long-standing; (3) that the agency employed its expertise or specialized knowledge in forming the interpretation; and (4) that the agency's interpretation will provide uniformity and consistency in the application of the statute."
>
> Brauneis v. State, 236 Wis.2d 27, 612 N.W.2d 635, citing Hamischfeger Corp v. LIRC, 196 Wis.2d 650, 660, 539 N.W.2d 98 (1995)

Moreover, the court is obligated to regard an agency's interpretation of its own administrative regulation as controlling unless that interpretation is "inconsistent with the language of the regulation or clearly erroneous." Pfeiffer v. Board of Regents, 110

Wis.2d 146, 155, 328 N.W.2d 279 (1983), quoting Beal v. First Federal S. & L. Ass'n. 90 Wis. 2d 171, 183, 279 N.W.2d 693 (1979).

At the other end of the spectrum lies de novo review in which the court begins anew to determine independently what should be the proper legal interpretation. De novo review is the appropriate standard when the court is presented with a circumstance in which the agency's interpretation conflicts with the plain meaning of the statute.

> A court does not, however, give deference to an agency's interpretation of a statute when the court concludes that the agency's interpretation directly contravenes the words of the statute, is clearly contrary to legislative intent, or is otherwise unreasonable or without rational basis.
>
> State ex rel. Parker v. Sullivan, 184 Wis.2d 668, 669, 517 N.W.2d 449 (1994), see also, Lisney v. LIRC, 171 Wis.2d 499, 506, 493 N.W.2d 14, (1992)

De novo review is also proper "where there is no evidence that the agency used any special knowledge or expertise, the issue is clearly one of first impression, or the agency's position on an issue has been inconsistent." RURAL v. PSC, 239 Wis.2d 660, 679, 619 N.W.2d 888 (2000)

The middle of the road approach is for the court to give what is termed due weight to the agency's legal interpretation, a level of deference that is appropriate when the agency is acting within its jurisdictional area but with regard to a particular matter that is unusual or novel.

> Due weight deference, the middle ground between great weight deference and *de novo* review, is warranted where an agency has some experience in the area, but has not developed any particular expertise in interpreting and applying the statute at hand that positions the agency more favorably to interpret that statute than a reviewing court.
>
> RURAL v. PSC, supra, 239 Wis.2d at 678, 679

And finally, it must be noted that the burden is upon the petitioners to demonstrate a proper and adequate basis to modify, vacate or remand the Order of the Commission, Shoreline Park Preservation, Inc. v. DOA, 195 Wis.2d 750, 761, 537 N.W.2d 388 (Ct. App. 1995).

The challenges posed by the petitioners may usefully be placed in two groups. The petitioners argue that the Commission's proceeding began based upon an application for CPCN approval which was incomplete and thus legally insufficient. The petitioners also find fault with various aspects of the Order which resulted. This judicial review will discuss first the issues relating to the application and thereafter will consider the Commission's Order.

III. WEC Application for CPCN Approval

WEC is required to obtain from the PSC, prior to beginning construction of the proposed ERGS, a certification that the proposed new facilities that public convenience and necessity require the project (CPCN), sec, 196.49(3)(b); sec. 196.491(3)(a), Wis. Stats. The process of obtaining certification begins with an application in a form prescribed by the Commission, sec. 196.49(2), Wis. Stats. and Wis. Admin. Code. Section 196.491, Wis. Stats. creates a process whereby the PSC has a limited time to consider an application for authorization to construct a new electric generating facility. The procedure includes, at critical points, default provisions which provide to the applicant a favorable determination, if the Commission fails to act within statutorily determined periods.

The first step in the process is a determination by the PSC as to whether the application for a CPCN is complete. The Commission must review the application and

advise the applicant as to whether it is complete, within 30 days. The applicable statute provides,

> The commission shall determine whether an application filed under subd. 1. is complete and, no later than 30 days after the application is filed, notify the applicant about the determination. If the commission determines that the application is incomplete, the notice shall state the reason for the determination. An applicant may supplement and refile an application that the commission has determined to be incomplete. There is no limit on the number of times that an applicant may refile an application under this subdivision. If the commission fails to determine whether an application is complete within 30 days after the application is filed, the application shall be considered to be complete.
>
> Section 196.491(3)(a)(2), Wis. Stats.

Section 196.491(3)(g), Wis. Stats. provides that the PSC must take final action within 180 days from the point that the application is complete. The 180 day time limit can be extended one time, upon approval by a circuit court, by an additional 180 days. Thus, from the date that an application is complete, the PSC has no more than 360 days to take final action. If the Commission fails to do so the application is deemed approved.

The determination that the application is complete is a crucial element in this process. At that point, the statutory deadline for determination is fixed. 360 days appears to be a substantial period of time until consideration is given to the size, cost and complexity of the current proposal as well as the opportunity for public participation that the Commission must provide.

There is a compelling logic to the statutory process which is all the more apparent in this case where extraordinary factual complexity and the need for timely resolution confront the finite resources of a regulatory agency. It is significant and appropriate that the key date in the process, the starting gun as it may be envisioned, is in the hand of the party most interested in the application, the applicant utility. WEC

presumably has the best access to the information that must be assembled to produce a complete application. The applicant utility has the direct, immediate concern and is likely possesses the resources necessary to assemble the required information.

Petitioners now assert that the PSC improperly determined that the WEC application was complete and seek an order vacating the PSC Order upon that basis. The arguments that the application was incomplete evolve essentially to three primary assertions;

1. The application did not present at least two proposed sites as required by sec. 196.491(3)(d)3, Wis. Stats. and Wis. Admin. Code, sec. 111.53(1)(e).

2. The application did not contain the regulatory approvals required by Wis. Admin. Code, sec. 111.53(1)(f) 1.

3. The application did not contain the information about needed new transmission line facilities as required by Wis. Admin. Code, sec. 111.53(1)(f) 4.

A. Alternative Location/Site Requirement

The WEC application offers three proposed configurations of the three proposed new generating plants. The Final EIS describes a 1000 acre parcel owned by WEPCO and states the proposal is one for three new units, "all constructed on or adjacent to a site containing WEPCO's existing Oak Creek Power Plant (OCPP)." Ex. 274, Vol. 1, Final EIS, p. xvii. In the course of the proceeding, a fourth configuration, known as "North CUP", evolved and eventually was the choice of the PSC. This too is located within the 1000 acre parcel.[3]

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[3] At an earlier point, petitioners Clean Wisconsin and Johnson sought reconsideration of the determination that the multiple OCPP configurations were sufficiently separate sites. On April 17, 2003, the PSC issued an order denying the request for reconsideration and the petitioners sought review in the circuit court. The court ruled that the April 17, 2003 order was a

Wisconsin law directs the PSC to consider "alternative locations" for a proposed new power plant facility,

> Except as provided under par. (e) and s. 196.493, the commission shall approve an application filed under par. (a)1. for a certificate of public convenience and necessity only if the commission determines all of the following:
>
> ...
>
> 3. The design and location or route is in the public interest considering ... alternative locations...
>
> Sec. 196.491(3)(d), Wis. Stats. , in part.

Moreover, the Commission has adopted a rule which requires the applicant to identify "[a]t least two proposed sites" in order for an application to be deemed complete.

> (1) Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> ...
>
> (e) At least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives.
>
> Wis. Admin. Code, sec. 111.53, in part.

Finally, the Commission has also adopted a provision which provides that in specific circumstances, there is to be no requirement that an alternate location be identified and described in the application.

> 1. An application for a cogeneration facility may meet the requirement under sub. (1) e) by filing information on 2 sites that are both located at the steam host's existing industrial plant, if the cogeneration facility will be a qualifying facility under 18 CFR 292.205 and none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.
>
> 2. An application for repowering an existing generating facility may meet the requirement under sub. (1) (e) by filing information on 2 sites that are both

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preliminary decision not subject to judicial review prior to the issuance of a final decision, Clean Wisconsin, Inc. and S.C. Johnson & Son, Inc. v. Wisconsin Public Service Commission, Case No. 03-CV-1480, Dane County Circuit Court, Order, July 8, 2003.

> located at the existing generating facility site, if none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.
>
> Wis. Admin. Code, sec. 111.53(2)(b), in part.

The Order of the PSC acknowledges the requirement that alternative locations/sites must be considered and interprets that requirement as follows,

> the fact alternate sites may be geographically close together does not automatically render them unreasonable alternatives ... The Commission determines that whether proposed site alternatives are reasonable by applying two standards: the site alternatives must each be feasible locations and they must be sufficiently distinct to offer different packages of costs and benefits
>
> PSC Order, page 45

The Commission reads the statute and the rule to require only that the alternative sites be feasible locations which offer alternative costs and benefits. The present application presents three configurations each of which used the 1000 acre parcel, to some degree, in a different manner. Apparently, none of the three submitted alternatives used precisely the same portion of the parcel. But, using the commission's interpretation of the alternative locations/sites requirement, each of the three WEC alternatives could use precisely the exact same land so long as they were each feasible and involved different costs and benefits. Thus the PSC's interpretation of the law permits elimination of the core requirement, the presentation of at least two different locations.

This formulation is one of law and the question becomes one of determining first the degree of deference owed by the court to the PSC as to this determination. Interpretation of the alternative site provisions of sec. 196.491(3)(d), Wis. Stats. and Wis. Admin. Code sec. 111.53, are matters squarely within the jurisdiction of the PSC. It may be that the agency has called upon a degree of expertise in rendering this

interpretation but it does not appear that the interpretation is a matter of long standing. Nor does it appear that the interpretation will provide uniformity of interpretation.[4]

There is no ambiguity as to what is meant by "alternative locations" in sec. 196.491(3)(d)3, Wis. Stats. Similarly, there is no ambiguity as to what is meant by "[a]t least two proposed sites " in Wis. Admin. Code sec. PSC 111.53(1)(e). The statute and the rule require that not less than two distinct locations be submitted as proposed alternate sites. There is no ambiguity and therefore no need to look to other sources for assistance. If there was ambiguity, however, two other related rules adopted by the PSC make clear the intent of Wis. Admin. Code sec. PSC 111.53(1)(e). The PSC, by adopting Wis. Admin. Code secs. PSC 111.53(2)(b)1 and 111.53(2)(b)2 expressly provides for two specific situations where the logic of the alternate proposed sites rule is declared inapplicable. Those two exceptional situations arise when a utility may seeks to undertake a substantial renovation of an existing generation plant or seeks to build a co-generation facility to capture the energy otherwise wasted in steam produced by some other industrial process. In either instance, the proposal is by definition site-specific. In such situations, the Commission has acknowledged that the two site requirement cannot be applied, Wis. Admin. Code, secs. 111.53(2)(b) 2 and 3. If alternate configurations of the same parcel is a sufficient demonstration of alternatives, then these two specific exceptions are needless surplusage. The more reasonable interpretation is that the exceptions are necessary because Wis. Admin. Code sec. PSC

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[4] The decision approving a CPCN as to the Fond du Lac Energy Center includes a consideration of two separate, distinct proposed locations for the new facility, Application of Fond du Lac Energy Center, LLC, Final Decision, May 5, 2003, pp. 6-8, Docket 9343-CE-100, as does the decision in approving the Joint Application of Fox Energy Company, LLC and American Transmission Company, LLC, Final Decision, November 8, 2002, pp. 7, 8, Docket 05-CE-115.

111.53(1)(e) is intended to mean precisely what is clearly says, the applicant must propose at least two distinct, alternative sites for a new plant.

In argument submitted to this court, the PSC suggests that the alternate location requirement should be viewed as a "rule of reason" based upon a requirement in the Wisconsin Environmental Policy Act that state agencies consider "alternatives to the proposed action", sec. 1.11(2)(c)3, Wis. Stats. and caselaw interpreting that statute, together with a parallel provision within the National Environmental Policy Act, 42 U.S.C. sec. 4332 (1970), Wis. Environmental Decade v. Public Service Commission, 79 Wis.2d 161, 175, 255 N.W. 2d 917 (1977). The WEPA requirement is intended to offer general guidance to an extremely wide range of government actions. It is a broad, statement of an approach to be taken generally. By contrast, the statute and rule applicable here speak directly to the number of "proposed sites" or "alternative locations" that must be identified. The express requirement is that more than one must be included in the application and neither the WEPA nor the NEPA are intended to offer guidance of such specificity.

In the alternative, if the court accepts the interpretation offered in the PSC Order, there remains a question as to whether the three alternatives submitted in the WEC application actually meet the test stated, whether the record reflects sufficient evidence upon which the PSC could reasonably conclude that the sites really offer distinct costs and benefits. A fair review of the record reflects the clear picture that there is no significant distinction between the costs and benefits offered by each of the three alternatives. These are not alternative sites or locations; They simply are three

different configurations or utilizations of a single site which means that the application does not meet the legal minimum for consideration by the PSC.

The interpretation of sec. 196.491(3)(d)3, Wis. Stats. and Wis. Admin. Code sec. PSC 111.53(1)(e) is clearly erroneous. It is error for the PSC to deem the WEC application complete on November 15, 2002 because the application failed to include at least two alternative sites as required by applicable rule. The Order based upon that application is hereby vacated and the matter is remanded to the Commission to permit the applicant to submit an application which does comply with sec. 196.491(3)(d)3, Wis. Stats., and Wis. Admin. Code sec. PSC 111.53(1)(e).

B. Regulatory Approvals

The Commission requires that an application for CPCN must demonstrate that regulatory approvals, other than that of the PSC, have been obtained.

> (1) Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> ...
>
> (f) Site-related information for each proposed power plant site, including all of the following:
>
> 1. The regulatory approvals required for construction and operation of the facility.

Wis. Admin. Code, sec. 111.53, in part.

The WEC initial application was filed in January, 2002. WEC thereafter filed a series of four supplements to the application, the fourth on October 23, 2002. On November 15, 2002, PSC Electric Division Administrator Robert Norcross rendered a

determination that the WEC application was complete.[5] That determination was expressly based, however, upon the applicant's commitment to provide further data related to wetlands issues, subsurface sampling as well as aquatic, benthic and lake bottom information. Specifically, the Norcross correspondence stated,

> While the application is determined to be complete at this time, our determination is, in part, based on WE Energies' commitment to supply additional information related to items 6, 7, and 18 of the Commission's October 7, 2002, incompleteness letter. Substantial amounts of information relating to items 6, and 7 have been provided and will allow our review of the wetland delineations to begin. based upon the information contained in Supplement 4 and conversations with WE Energies staff, it is my understanding that the remaining information relative to items 6 and 7, consisting of final wetlands report from the Southeast Regional Planning Commission, will be available in approximately two weeks. In addition, the information relative to the subsurface drilling, sampling and resting survey, the wave/environmental climate date survey and the aquatic/benthic environmental and lake bottom characterization survey in item 18 will be available on the time line set out as answer 5-SUP-021 of Supplement 4.
>
> Norcross correspondence, November 15, 2002, in part.

There is no dispute that the application was deemed complete by Administrator Norcross despite the lack of certain environmental information which was to be submitted later. The Norcross letter speaks in terms of missing information rather than missing regulatory approvals but the PSC Order makes clear that all regulatory approvals still had not been obtained 360 days after the Norcross letter, as of the November 10, 2003 issuance of the Order.

> DNR must also issue a number of water-related permits and approvals before construction may commence. These include: permits for grading work for the generating facilities and for the railroad improvements; the approvals for dredging and for use of lakebed and shoreline structures to construct breakwater and harbor facilities; the approval for use of lakebed to install the cooling water intake and discharge structures; and the water quality certification needed for wetland

[5] The November 15, 2002 correspondence of Administrator Norcross is attached as Exhibit A to the April 30, 2004 brief of Clean Wisconsin/Johnson. This document, the authenticity of which is not challenged by any party, does not appear otherwise to be within the record.

> fill. As of the date the record closed, DNR has deemed the joint state/federal application for water regulatory permits and approvals for ERGS to be incomplete.
>
> Order, at page 53

With regard to air pollution, the legislature has expressly committed such matters to the DNR, sec. 196.491(3)(d) 3, Wis. Stats., but water-related approvals are to be part of the application. Specifically, the applicant is required to provide an engineering plan to the DNR not less than 60 days before the PSC application is submitted which then triggers an obligation by the DNR to list, within 30 days, the permits that will be required, sec. 196.491(3)(a) 3.a, Wis. Stats. This begins a time-limited application and approval process before the DNR, sec. 196.491(3)(a) 3. b., Wis. stats., which is similar to but shorter than that applicable before the PSC under sec. 196.491(3)(g), Wis. Stats. The coordination between the DNR application process and CPCN process before the PSC, particularly the requirement that the DNR process precede that of the PSC is readily apparent in the explicit requirement that the CPCN not issue until all required regulatory permits have issued.

> The commission may not issue a certificate of public convenience and necessity under this subsection until the department has issued all permits and approvals identified in the listing specified in par. (a)3.a. that are required prior to construction.
>
> Section 196.491(3)(g), Wis. Stats., in part.

Here the plain language of the applicable rule states that an application, in order

to be deemed complete, must include the regulatory approvals necessary for construction and operation of the proposed new facility, Wis. Admin. Code, sec. 111.53(1)(f) 1. The requirement of the administrative rule is plain and unambiguous.[6] The application does not contain the required regulatory approvals and thus to deem it complete is an action undertaken in violation of an applicable administrative regulation.

It is error for the PSC to deem the WEC application complete on November 15, 2002 because the application fails to include the regulatory approvals required by Wis. Admin. Code, sec. 111.53(1)(f)1. The Order based upon that application is hereby vacated and the matter is remanded to the Commission to permit the applicant to submit an application which does comply with Wis. Admin. Code sec. PSC 111.53(1)(f)1.

C. Transmission Line Agreements

The third primary area of objection to the completeness of the application is the question of transmission line facilities. The applicable administrative rule provides,

> Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> ...
>
> (f) Site-related information for each proposed power plant site, including all of the following:
>
> ...
>
> 4. Any required transmission line construction, agreements for use of the transmission system to deliver plant power, transmission losses, and effects on system reliability. If a certificate of authority under s. 196.49, Stats., is required to construct the transmission line, the location of termini, length in miles, and voltage for each transmission line.

[6] There is an obvious logic to this requirement. It is clear that the legislature has decreed that the PSC bats last, sec. 196.491(3)(g), Wis. Stats., and that the PSC has a limited period of time within which to consider an application. It follows therefore that the Commission should have before it a truly complete application before it undertakes its significant responsibility.

Wis. Admin Code, PSC, section 111.53(1), in part.

There are other administrative rules which appear to have application as well. A complete application is required to include,

> The estimated capital cost of the generating facility *and all related facilities*, broken down by major plant accounts. All cost escalation factors used in the estimate shall be identified.
>
> Wis. Admin. Code, sec. 111.53,(1)(c) 1, in part, emphasis added.

There is no dispute that the application did not contain agreements for the use of transmission lines for the 1230 MW of new power to be produced by the two proposed plants which were approved, nor does the record appear to contain the much of the other information required by Wis. Admin. Code, sec. 111.53(1)(f) 4.[7] The Commission offered an estimate of $166 million, Order, p. 10.[8] Potentially, construction of the required transmission facilities will require a CPCN from the PSC, Sec. 196.49, Wis. Stats.,Wis. Admin. Code, sec. 111.53(1)(f) 9,[9] which will in turn require a careful consideration of the technical, environmental and economic facts by the PSC, Wis. Admin. Code, sec. 111.55.

In argument, the PSC suggests that recent reorganization of the state utilities, involving the transfer of transmission lines to an entity known as the American Transmission Company (ATC) makes it difficult to obtain the information required by the

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[7] As will be discussed below, the Commission notes that the available transmission data is preliminary and contingent, for resolution at a later time, Order, p. 10, 11.

[8] The total estimate in the Final EIS is $266,216,753 but of that amount, $102,164,662, apparently is allocated for operation of the third, IGCC unit, as to which the PSC did not give approval which would produce an estimate of $164,052,091, Final EIS Vol 1, pp. 15, 126-132.

[9] Hearing transcript, Circuit Court, October 8, 2004, p. 62, ll. 2-7.

applicable rule.[10] The study of the need for transmission facilities does appear to be an on-going process, [11] however, and other recent orders do include transmission facility information.[12]

This is a matter of consequence. The substantial power to be produced is of no use without adequate facilities to transmit it for distribution. A related and necessary facility, required for the use of the power, with an estimated cost equal of $166 million, 7.5% of the cost of the largest utility construction project in the history of the state, appears to be one of the "related facilities" to be considered in the approval process, Wis. Admin. Code sec. PSC 111.53(1)(c)1. In any event, there is no dispute that the applicable Administrative rule requires that agreements for the use of transmission facilities be part of a complete application but that no such agreements are included in the WEC application. The requirement is both clear and unambiguous and it has not been complied with.

It is error for the PSC to deem the WEC application complete on November 15, 2002 because the application fails to include the transmission line agreements required by Wis. Admin. Code, sec. 111.53(1)(f)4. The Order based upon that application is hereby vacated and the matter is remanded to the Commission to permit the applicant

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[10] Hearing transcript, Circuit Court, October 8, 2004, p. 63, l. 1 to p. 64, l. 6.

[11] The Final EIS refers to a 10 year assessment update and interconnections studies relating to the ERGS project prepared by ATC, Final EIS, V. 1, p. 128, R. 119.

[12] Joint Application of Fox Energy Company LLC and American Transmission Company LLC, Final Decision, pp, 10-18, PSC Docket 05-CE-115; Application of Fond du Lac Energy Center, Final Decision, pp. 3, 7 & 8, PSC Docket 9343-CE-100.

to submit an application which does comply with Wis. Admin. Code sec. PSC 111.53(1)(f)4.

D. Identity of Contingent Owners

Petitioner Robert Owen submits that the WEC application was incomplete because it did not identify properly the contingent interests held by Wisconsin Public Power, Inc. (WPPI) and Madison Gas & Electric (MGE). WPPI is a wholesale supplier of power to thirty-seven Wisconsin communities and MGE is a utility located in Dane County. Both WPPI and MGE hold options each to purchase a 50 MW ownership interest in the proposed new facility and the Commission's Order contemplated both the probability that the options would be exercised as well as the possibility that they would not, Order, pp. 31, 32. With regard to the identity of utility owners, the applicable administrative regulation provides,

> Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> (a) The operating characteristics of the proposed facility, including all of the following:
>
> ...
>
> 4. The names and addresses of owners and investors and the percent of ownership.
>
> Wis. Admin Code, Sec. PSC 111.53(1), in part.

The PSC has interprets the above rule not to require the listing of the type of potential ownership interest, an option to become an owner, which were held by WPPI and MGE at the point that the application was filed. The question posed initially is the level of deference that this court should give to the interpretation adopted by the Commission.

This appears to be a question squarely within the Commission's jurisdiction and one which has been adopted by the Commission in the past. The interpretation adopted by the Commission is not in conflict with the plain meaning of the regulation and will promote uniformity of interpretation. Therefore the court believes great deference should be given to the Commission's interpretation, Pfeiffer v. Board of Regents, supra. The court concludes the Commission acted properly in its treatment of the ownership option interests of WPPI and MGE.

E. Completeness of the Application as of November 15, 2002

The PSC argues that it may properly deem an application substantially complete notwithstanding failure to include every item required by statute or rule. This is, however, a novel interpretation of the law by the Commission[13] and should properly be given no more than due deference, RURAL v. PSC, supra 239 Wis.2d at 679.

The petitoners question the wisdom of embarking upon this complex approval process without the required information but the question now presented is limited to whether the PSC holds the authority to forego the benefit of rules created to assure to the Commission that sufficient information is available in a timely manner to render a decision upon an application. If the PSC is intended to be the exclusive beneficiary of the information required to be included in an application, it might be possible for the Commission, in effect, to waive the right to receive the information in question. The consideration of CPCN is, however, very much a public process. The public is entitled

[13] Hearing transcript, Circuit Court, October 8, 2004, p. 17, L. 4-25

to participate in the process and full participation requires access to a full record of information, the first and perhaps the most critical element of which is a complete application. The PSC therefore must assure that the application be complete, not simply so it has before it all necessary information but also to provide to the public an opportunity to examine the basis for the proposed construction.

The requirements set forth in administrative law defining a complete application serve an important public purpose. The application pending on November 15, 2002, fails to identify at least two alternative locations, fails to include all required regulatory approvals and fails to set forth transmission line agreements. The November 15, 2002 determination by administrator Norcross is that the application was complete and the Commission's April 17, 2003 Order affirms that determination. Both determinations are in violation of the plain meaning of the applicable regulation and are therefore entitled to no deference, State ex rel. Parker v. Sullivan, supra, 184 Wis.2d at p. 669. It is the ruling of this court, as a matter of law, that the application is not complete within the meaning of sec. 196.491(3)(d), Wis. Stats. The law, sec. 196.491(3)(e), Wis. Stats., gives to the PSC only two choices when faced with the incomplete application, it can "reject the application or approve the application with such modifications as are necessary for an affirmative finding under" sec. 196.491(3)(d), Wis. Stats. The PSC chose a third course, however, and permitted the process to begin based upon an incomplete application. In doing so, the PSC acted in violation of the law and the Order which resulted from that procedure must therefore be vacated and the matter remanded to the PSC to do that which is required under sec. 196.491(3)(e), Wis. Stats. Specifically, the Commission must give the applicant an opportunity to submit an

application which meets the requirement of the Wis. Admin. Code secs. PSC 111.53(1)(e), 111.53(1)(f)1 and 111.53(1)(f)4.

IV. Commission's Order

A. Energy Need Projections

The touchstone of any petition for authorization to build a new generating facility is the obvious question of whether there will be a need for the power that will be produced. The WEC has included within its application, forecasts of growing demand over the period 2003 through 2012. Petitioners CW/Johnson and Robert Owen question the projections of need submitted by WEC and Mr. Owen, particularly, asserts that appropriate investment in alternative power sources could reduce the requirements asserted by the applicant. The PSC, in its order, concludes that the proposed plants would not be needed as quickly as WEC suggested and further directs that there be an increased reliance upon alternative sources. The PSC, however, does accept the fundamental position that more generation capacity will be needed both to replace aging facilities and to respond to increasing demand. This is a determination involving both fact and law, a determination squarely within the jurisdiction and expertise committed to the PSC. This clearly is an area as to which the court should properly accord great deference to the legal interpretation of the PSC and also an equivalent deference as to the fact determinations that were made. The criticism and suggestions offered by the petitioners as to projected need are plausible and reasonable. That, however, is not the test and for the court to intrude upon the PSC's determination of future need. That which the petitioners urge would be an improper interference with the agency's exercise

of its expertise and discretion as contemplated and protected by sec. 227.57(6), Wis. Stats. The court therefore affirms the Order of the Commission in this respect.

B. EGEAS Computer Model

The applicant, the PSC and the petitioners, in varying degree, all rely upon a computer program known as the Electric Generation Expansion Analysis System (EGEAS). The operator of the program introduces assumptions as to future power need together with estimates of construction cost, maintenance expense, fuel cost and fuel availability. The program is designed to calculate what are thought to be optimal plans to meet the needs defined. No party suggests that it is error for the PSC to rely, at least in part, upon the EGEAS model and indeed, the program appears to be simply a device that is able to describe and compare alternative future construction scenarios through consideration of a wide range of variables. All parties appear to acknowledge that the product of the AGEAS model can be no more valuable, accurate or complete than the assumed facts that are introduced into the program. As with the projection of future power need, the question of whether the data relied upon by the AGEAS model is reasonable or not, appears to be every bit as much within the PSC's area of responsibility and expertise. The petitioners offer reasonable critiques and suggestions but the test is whether the petitioners have shown that the choices made by the PSC, in selecting the data used in the various AGEAS reports, were unreasonable. That showing has not been made.

The petitioners suggest that the assumptions upon which AGEAS studies are based were inaccurate, improper or incomplete but no petitioner suggests that it was an error of law for the Commission to use the AGEAS program. In essence, the argument

is one of fact; the petitioners suggest that the factual basis for the AGEAS studies relied upon by the PSC began with erroneous assumptions. The question arguably evolves to whether or not the factual assumptions relied upon by the PSC, in utilizing the AGEAS program, are supported by substantial evidence, within the meaning of sec. 227.52(6), Wis. Stats. The burden to demonstrate the basis to vacate the Order is upon the petitioners, Shoreline Park Preservation, Inc. , supra, and it is the determination of the court that petitioners have not shown that the factual assumptions upon which the AGEAS studies were based to be lacking the support of substantial evidence, within the meaning of sec. 227.52(6), Wis. Stats.

C. Health Care Costs

The PSC Order does not attribute any health-related cost to the construction and operation of the two new facilities but instead suggests that the evidence offered as to health cost should be considered by the DNR as that agency considers air pollution permits applicable to the new facility, Order, p. 52.

Petitioners CW & Johnson submit that the record contains competent evidence that reflects that there will be a quantifiable economic impact, that is, a cost attributable to health care and disability caused by the proposed new facilities. The argument is that while there is dispute as to the magnitude of that cost, the Commission must determine there will be operating cost in some amount caused by a need for increased health care. The petitioners' argument flows to the assertion that the PSC does not hold the discretion simply to make no finding as to that cost; Cannot ignore it entirely.

Petitioners CW & Johnson argue that, as part of determining whether or not the PSC should approve a CPCN, the commission must include as an operational cost of

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Petitioners CW & Johnson submit that the record contains competent evidence that reflects that there will be a quantifiable economic impact, that is, a cost attributable to health care and disability caused by the proposed new facilities. The argument is that while there is dispute as to the magnitude of that cost, the Commission must determine there will be operating cost in some amount caused by a need for increased health care. The petitioners' argument flows to the assertion that the PSC does not hold the discretion simply to make no finding as to that cost; Cannot ignore it entirely.

Petitioners CW & Johnson argue that, as part of determining whether or not the PSC should approve a CPCN, the commission must include as an operational cost of

the project, the on-going health costs attributable to air emissions from the new facility. The petitioners assert that the PSC is not precluded from including the on-going economic impact upon health care caused by the operation of the new facilities and they go on to argue that it is reversible legal error to fail to include that as an element of project cost.[14]

The legislature has imposed upon the PSC an obligation to consider environmental issues by requiring that the Commission approve an application for CPCN only if it determines that the proposed facility "will not have an undue adverse impact on other environmental values, such as ... public health and welfare", sec. 196.491(3)(d)4, Wis. Stats., in part. Moreover, the legislature has limited that authority by providing that "[i]n its consideration of the environmental factors, the commission may not determine that the design and location or route is not in the public interest because of the impact of air pollution if the proposed facility will meet the requirements of ch. 285," Sec. 196.491(3)(d)3, in part. The limitation in sec. 196.4191(3)(d) 3, Wis. Stats. is specific and is focused upon the power to approve an application for CPCN. The statute does not expressly preclude the PSC, however, from considering quantifiable health care cost as an operating expense.[15]

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[14] If the DNR had issued air pollution permits pursuant to Chapter 285, it might be arguable that sec. 196.491(3)(d) 3, Wis. Stats. implies an absence of PSC jurisdiction for any consideration of air pollution matters. The petitioners observe correctly, however, that no DNR permit has been issued.

[15] Should the Commission choose to do, however, that would lead to other issues. Typically, operational cost estimates are directed in large part to determining the sums that may be recovered by the utility from rate-payers. In the case of future health care costs to be incurred, the question arises as to how such anticipated costs are to be measured and to whom are they to be paid.

It may be that the PSC could choose to include within its projection of operational cost, presumably as part of the effort to select between various equipment options and alternative locations, the costs attributable to public health matters. That is something very different, however, from the claim that the PSC must, as a matter of law, determine a health care cost whenever a record contains competent evidence as to such costs. Within the statute in question, Sec. 196.491(3)(d) 4, Wis. Stats., the term "public health and welfare" is part of a larger list of factors that the commission is to consider, including "ecological balance, ... geological formations, esthetics of land and water and recreational use," If there is a legal duty to include whatever quantification may be available as to public health, would not that same duty also apply to "esthetics of land ... use"? It may be that certain of the listed concerns can be measured in cost but it appears equally true that other concerns may not be quantifiable. Unquantifiable does not mean unimportant. Another, more reasonable interpretation of Sec. 196.491(3)(d) 4, Wis. Stats., is that the legislature identified important categories of concern which should properly be considered, even if it may not be possible to assign a clear economic value.

The language of the statute does not require quantification but rather directs the PSC to look to the overall impact of a proposal. Moreover, the legislature has not said that no adverse impact may be allowed. Rather it requires the Commission to withhold approval if it determines there to be an "*undue* adverse impact on ... public health", sec. 196.491(4)(d), Wis. Stats., emphasis added. This requirement is one which affords to the Commission substantial discretion to determine whether or not a particular impact is too great or "undue". The Commission has permitted evidence as to such costs to be

presented, apparently has even provided funding to assist the petitioners to prepare and present such evidence.

The court concludes that sec. 196.491(3)(d), Wis. Stats. cannot be read to impose a clear obligation upon the commission to include within the project cost calculation, any amount attributable to health costs. Further, in the alternative, if the statute could be so interpreted, the interpretation adopted by the Commission is one to which great deference should properly be given by this court, Brauneis v. State, supra.

D. Transmission Facility Design, Location and Cost

The cost of additional facilities to permit the transmission of the power generated by the approved plants poses a somewhat different question than that of projected health care costs. The proposed facility cannot serve any purpose whatsoever until sufficient transmission lines are constructed to distribute the power generated. As noted above, no application is complete until it contains whatever agreements are necessary for access to the transmission facilities and, again as noted above, the estimate of cost for these facilities is set at $166 million.[16] This is a cost of a necessary, directly related physical facility. The Commission is prohibited from granting the CPCN until it determines that,

> the design ... is in the public interest considering ... engineering, economic... and environmental factors...
>
> Sec. 196.491(3)(d) 3, Wis. Stats.

[16] The available information, described by the Commission as incomplete, Order, pp. 10 & 11, includes a Generation Interconnection Study Report, dated December 21, 2001, prepared by the American Transmission Company is in the Record at R.1, Vol. 3, Appendix Y.

As to design. cost and location of transmission facilities, the Commission essentially elects not to address the issue. In the Order, the Commission candidly states that it does not have the required information,

> American Transmission Company (ATC) has conducted several studies to determine the cost of interconnecting ERGS to the transmission system and the cost of up grading the transmission system so it can transmit power from ERGS. It has completed a partial transmission restudy of ERGS on July 25, 2003, estimating the transmission costs associated with SCPS 1 and SCPC 2 at $65.5 million and $100.5 million, respectively. Determining transmission system requirements for ERGS, though, depends upon the amount of forecasted generation in southeast Wisconsin and northern Illinois ... This will require ATC to restudy interconnection needs to minimize the amount fo transmission facilities installed and recalculate the costs involved. The analysis is quite complex, depends upon the site chosen, and requires several months of sequential computer model runs.
>
> Order, p. 10-11

Given the lack of definitive information, the Commission is able only to provide as follows in the Order,

> The applicants shall work with the ATC, DNR and neighboring communities to minimize the cost and the environmental impact of moving and reconfiguring the 138 kV and 345 kV substations. The applicants shall inform the Commission of the results of this work, documenting the estimated cost involved the proposed layout of the substations, and the associated transmission line interconnection routes for exiting the plant site.
>
> Order, p. 58, para. 7

The Commission is prohibited from granting the CPCN until it determines that the design of the proposed facility is in the public interest, with particular attention to the engineering, economic and environmental facts, sec. 196.491(3)(d)3, Wis. Stats. The Order, however, grants the CPCN approval while expressly stating that the Commission does not know what the cost or design of the required transmission facilities will be. This determination to approve construction of the largest generating facility in state

history without also determining the cost, design and location of the transmission facilities appears to be unprecedented and is, at best, puzzling. This determination to go forward without the transmission information is, nonetheless, a decision that is within the area of concern assigned to the PSC and it may well be the product of the special expertise possessed by the Commission. The granting of CPCN approval without considering the question of transmission facilities, however, does not appear to be an interpretation of long standing, nor does it appear that this approach will provide uniformity and consistency. It certainly is true that sec. Sec. 196.491(3)(d) 3, Wis. Stats., does not expressly compel the inclusion of transmission facilities but this court concludes that the those facilities are so integral and necessary to the planned generation plant that the decision to grant approval without determining the design, cost and location of those facilities to be contrary to the legislature's intent, sec. 196.491(3)(d) 3, Wis. Stats. and "otherwise unreasonable or without rational basis" within the meaning of State ex. rel. Parker, supra. It is therefore the order of the court that the Order is hereby vacated and the matter remanded to the Commission for a determination as to the design, cost and location of transmission facilities needed to serve the proposed new plant.

E. Energy Priority Law

The PSC Order approves the construction of two 615 MW plants which will use high sulfur coal as the fuel source. The Order considers the contribution that renewable energy sources, wind generation and energy conservation could make to the future energy needs of the state. The PSC also considers a competing proposal,

submitted by Calpine, which would have provided power using equipment that uses natural gas as the fuel. The Commission determines the following as fact,

> Energy conservation, renewable resources, or other energy priorities listed in Wis. Stat. Secs. 1.12 and 196.025, or their combination, are not cost-effective or technically feasible alternatives to the projects proposed in this docket.
>
> Finding of fact, no. 1, Order, p. 4

The petitioners argue that the PSC, in its process, fails to comply with the requirements of the Wisconsin Energy Priority Law, sec. 1.12, Wis. Stats. That statute provides,

> **(4) Priorities.** In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:
>
> (a) Energy conservation and efficiency.
> (b) Noncombustible renewable energy resources.
> (c) Combustible renewable energy resources.
> (d) Nonrenewable combustible energy resources, in the order listed:
> 1. Natural gas.
> 2. Oil or coal with a sulfur content of less than 1%.
> 3. All other carbon-based fuels.
>
> **(5) Meeting energy demands.** (a) In designing all new and replacement energy projects, a state agency or local governmental unit shall rely to the greatest extent feasible on energy efficiency improvements and renewable energy resources, if the energy efficiency improvements and renewable energy resources are cost-effective and technically feasible and do not have unacceptable environmental impacts.
>
> (b) To the greatest extent cost-effective and technically feasible, a state agency or local governmental unit shall design all new and replacement energy projects following the priorities listed in sub. (4).
>
> Sec. 1.12, Wis. Stats. in part.

Moreover, the foregoing fuel priority policy is reinforced in Chapter 196 where it is stated,

> To the extent cost-effective, technically feasible and environmentally sound, the commission shall implement the priorities under s. 1.12(4) in making all energy-

related decisions and orders, including advance plan, rate setting and rule-making orders.

Sec. 196.025(1), Wis. Stats.

The Order addresses the two top priorities, energy conservation and renewable energy, Order, pp. 16-19, but selects, for the great majority of the future power need, equipment which uses the lowest priority fuel, high sulfur coal.

The question of compliance with the Wisconsin Energy Priorities Law appears to resolve into two distinct issues; The selection of high-sulfur coal over natural gas as the primary energy source for baseload facilities and the lack of consideration of oil and low-sulfur coal as potential fuels.

1. Selection of High-Sulfur Coal over Natural Gas as the Primary Energy Source

The Order of the PSC bases the decision to use high-sulfur coal upon the need to provide what is termed, "baseload" power and a determination that high sulfur coal is substantially better suited to the production of baseload power than is the top priority fuel, natural gas, Order, pp. 19-22, and the petitioners argue that this is in violation of the Wisconsin Energy Priorities Act. . The term, "baseload" is not defined in the statutes, in the administrative regulations or in the Order of the PSC. In the argument submitted to this court, it has become apparent that the parties understand "baseload" to be a generating facility intended to provide power effectively on a constant basis, not less than 70% of the time, day in, day out. [17]

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[17] At hearing, the PSC indicated that the distinction is one of economics rather than technical capacity.

"What you need to recognize is the commission has never contested the fact that

The petitioner's objection is framed as a legal issue, whether the Order reflects PSC compliance with the obligations imposed by sec. 196.025(1), Wis. Stats. which requires the Commission to "implement" the fuel priorities of the Energy Priorities Law Wisconsin to the extent that it is "cost-effective, technically feasible and environmentally sound" to do so. The petitioners suggest that, as to each of the fuel sources listed, the Commission must require the applicant to begin with the highest priority fuel and rely upon that source unless it can be shown that the reliance is not cost effective, not technically feasible or not environmentally sound. The Commission asserts, in effect, that it need only consider or contemplate the priority concept without requiring an actual examination of each possibility.

The Energy Priorities Law lists four types of non-renewable fuels; natural gas, oil, low sulfur coal and everything else. The high sulfur coal that the applicant seeks to rely upon falls into the last and lowest priority. In the decision, the PSC repeatedly states that natural gas is not an appropriate fuel for a power plant intended to provide baseload power but does so without offering a clear factual basis. This appears to be in response to a competing proposal submitted by petitioner Calpine, the owner of a natural gas generating plant recently approved by the PSC to provide baseload power. Calpine submitted to the PSC, as a confidential exhibit pursuant to sec. 196.14, Wis.

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a gas plant is capable of running in baseload mode. It is not a question of whether or not the machinery is strong enough to run night and day. It is a question of whether the gas is available and at what price. And at this point the commission is worried that it would be over extending the use of gas because we are already using it for peakers, we are already using it for intermediate load plants. It is a slightly different question. When you go back are these plants capable of running at baseload? Yes, they are. We are not contesting that."

Hearing transcript, Circuit Court, October 4, 2004, p. 47, l. 19 to p. 48, l. 6

Stats., a proposal to provide the power needed by WEPCO, using natural gas-fired equipment located at Calpine's Fox Energy Center and Fond du Lac Energy Center, R-160, Exhibit 202(c); R-157, pp. 3366, 3367. Calpine argues that its proposal would have provided the power needed at less cost and through the use of a fuel determined to be a highest non-renewable fuel priority by sec. 1.12(4)(d), Wis. Stats.

The rationale for the Commission's preference for high-sulfur coal is not clear and appears to be more of an assumption than a determination of fact. Essentially, the Order simply states, repeatedly, that coal-fired equipment must be used because the need is for baseload power.

> The Commission also considered whether gas-fired generation is a cost-effective or technically feasible alternative that could *replace the need for new baseload generating facilities.*
>
> Order, p. 19, emphasis added

> A critical part of the Commission's ultimate preference for coal-fired generation over gas-fired generation rests heavily on the discretion accorded the Commission under the Energy Priorities Law and the Power Plant Siting Law. More significantly, the crux of this case is really about the appropriate timing to construct new baseload generation. A fundamental policy choice presented in this case is whether the Commission believes that WEPCO needs to take steps now to address needs for new baseload facilities over the next decade.
>
> Order, p. 20

> There are qualitative factors set forth in Wis. Stat. sec. 196.491(3)(d) that also support the Commission's conclusion that new coal-fired generation is in the public interest and that ERGS is the most cost-effective and technically feasible way to address WEPCO's baseload needs. The Commission's decision to approve SCPC 1 and 2 balances its obligations under the Energy Priorities Law and the Power Plant Siting Law.. .The evidence in this proceeding demonstrates the advantages of using cleaner burning coal technologies like SCPC as a baseload resource over gas-fired generation.
>
> Order, p. 21

The problem is that the "qualitative factors" alluded to above are not stated in the Order nor can they readily be inferred. The Commission candidly describes the preference for high-sulfur coal equipment as one which,

> reflects the *Commission's policy judgment* that while natural gas-fired generating facilities may be better suited for peak and intermediate load generation, coal-fired generation provides the most practical means to serve WEPCO's needs for baseload capacity
>
> Order, p. 21, emphasis added.

The above passage is revealing. The selection of the appropriate fuel is not a policy choice. The policy choice has been made by the legislature with the enactment of sec. 1.12, Wis. Stats. The role of the Commission is to implement that policy choice. What is required is a fair examination of fact in the context of the statutorily-enacted policy choice giving preference, where appropriate, to natural gas over high sulfur coal. There is to be a determination of fact as to whether natural gas or natural gas in combination with another fuel would produce power that is "cost-effective, technically feasible and environmentally sound", sec. 196.025, Wis. Stats.

No "policy" as to which fuel is always best for baseload operation has been identified. The Order itself says there has been no approval of "any new baseload, coal-fired generation in Wisconsin since 1980", Order, p. 21.[18]

It is not possible to escape the conclusion that sec. 196.025(1), Wis. Stats. imposes an obligation to make a determination as to each of the four fuel types. That is the plain, straightforward command of the statute. The argument is offered that the

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[18] Although the Order approving construction of the Calpine Fox Energy facility in Outagamie County finds that the gas-fired facility is capable of providing baseload power, Final Decision, p, 7, PSC Docket 05-CE-115 as did the Order approving construction of the Calpine Fond du Lac Energy facility, final decision, p. 5, PSC Docket 9343-CE-100.

PSC considered all priorities, but there is not a single word in the order to suggest that either oil or low sulfur coal[19] was ever, in any manner or degree, contemplated as a potential fuel.

The Commission Order looks to the prefatory note of the Energy Priorities Law to find language that suggests that an agency is to possess great flexibility in meeting the obligations created by the law. There is, however, no need to refer to secondary sources and it would be improper to do so when the language of the statute is as clear and plain as it now the case, City of Muskego, v. Godec, 167 Wis.2d 536, 545, 482 N.W.2d 79 (1992).

The Order further suggests that there is a need to harmonize the Energy Priorities Law and the Power Plant Siting Law but does not explain the need to do so. There is no obvious conflict between the two and each deals with an entirely separate question. The Commission, in argument, suggests the petitioners urge that there be two alternative locations identified for each of the priority list fuels. This claim attempts to mix together two entirely separate requirements. As noted above, the PSC must require the applicant to identify two separate proposed locations and there must be an examination as to feasibility of the various energy sources at each identified location. The minimum number of locations begins at two and does not increase.

The real world application of the Energies Priority Law by the Commission may well be complex and may require sophisticated technical and financial analysis but the intent of the law is extremely simple and clear. There is no ambiguity as to what the

[19] The court was advised during oral argument that the very substantial existing OCPP generating facility currently relies upon low sulfur coal. Hearing transcript, October 4, 2004, p. 20, l. 10.

legislature intended and, as a matter of law, there is no need nor any justification for looking to legislative history or other secondary materials to discern legislative intent.[20]

The PSC argues that it cannot be required to select a higher priority source which is not technically feasible or not cost-effective, Order, p. 15, and that is absolutely true. What is required by the statute as to non-renewable fuels, however, is precisely what the Commission actually did do in looking at renewable sources. As to both energy conservation and wind generation, the PSC carefully considered the extent to which it was feasible and cost-effective to rely upon each as a source of future power, Order, pp. 16-19. That is precisely what was required as to natural gas, oil and low sulfur coal.

Further, the Commission's determination that only high-sulfur coal may be considered as a fuel source to provide baseload power is not supported by facts identified with sufficient clarity in the Order.[21] It is the order of the court that the Order shall be remanded to the Commission to permit the Commission to offer further justification for the determination that only high-sulfur coal can be the fuel source for the proposed new facilities, Connecticut General Life Ins. Co. v. DILHR, 86 Wis.2d 393, 405, 273 N.W.2d 206 (1979).

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[20] Petitioner Clean Wisconsin seeks to buttress its statutory interpretation argument by reference to a transcript description of a public proceeding conducted October 29, 2003. Because, in the view of the court, the language of the Energies Priorities Law is plain and unambiguous, this court need not and does not base its determination as to the intent of the Energies Priorities Law upon any statement made at the October 29, 2003 proceeding.

[21] It may well be true, possibly self-evident, that if one starts with the premise that a demonstrated need for additional baseload capacity must be satisfied by new facilities located at the OCPP site, the logical choice would be additional coal-fired equipment given the existing coal-fired facilities at that location and potential for economies of scale. Sec. 196.491(3)(d)(3 and Wis. Admin. Code PSC sec. 111.53(1)(e), however, require that the analysis begin with not less than two realistic, alternative locations and that was done in this case.

It appears the Commission begins with a policy decision that the need for baseload power requires that the fuel must be high-sulfur coal. That may be a perfectly reasonable choice but the factual analysis to support that choice does not appear within the Order. The Order, in its determination as policy that only high-sulfur coal is an appropriate primary energy source, does not demonstrate compliance with the legislative mandate set forth at secs. 1.12 and 196.025, Wis. Stats. and must be remanded to the Commission for further proceedings. It is the order of the court that the Order shall be remanded to give to the Commission the opportunity to determine as fact, pursuant to sec. 196.025(1), Wis. Stats., the cost-effectiveness, technical feasibility and environmental impact of high sulfur coal in comparison to natural gas as a potential source for the future energy needs to be met.

2. Lack of Consideration of Oil and Low-Sulfur Coal as Potential Fuels

There is simply no basis whatsoever, for the court to infer that the Commission considered in any degree two of the higher priority fuels, oil and low sulfur coal. In rendering the Order without completing the required analysis, the Commission has acted upon an interpretation of law which is directly contrary to the plain meaning of sec. 196.025(4), Wis. Stats. and no deference to that interpretation is appropriate, State ex rel. Parker v. Sullivan, supra, 184 Wis.2d at p. 669. It is the order of the court that the Order shall be remanded to give to the Commission the opportunity to determine, as required by sec. 196.025(1), Wis. Stats., the cost-effectiveness, technical feasibility and environmental impact of oil and low-sulfur coal as potential sources for the future energy needs determined by the Commission to exist.

It is entirely possible that the required consideration will result in the conclusion that neither oil nor low sulfur coal would be both feasible, cost-effective or environmentally appropriate but the Order reflects no consideration, whatsoever, as to either. The Order is therefore vacated and the matter remanded to the Commission to undertake an examination, pursuant to sec. 196.025, Wis. Stats., as to whether either oil or low sulfur coal would be feasible, cost-effective and environmentally sound.

F. Approval of Expansion Capacity

The PSC concludes that CPCN is not demonstrated as to a third new generation facility that the applicant proposed to build, a 600 MW Integrated Gasification Combined Cycle (IGCC) unit and therefore the Order refuses authority to construct that unit, Order, p. 26. The Commission does, however, approve a total construction budget in a total amount which contemplated building "common systems" for 3000 MW capacity rather than the 2400 MW approved capacity at the OCPP site.[22] The Order indicates that this extra capacity would add an additional approved construction cost of "approximately 20 million", Order, p. 32.

The record reflects that the added capacity is in a cooling water structure which will extend from the site into Lake Michigan and also coal handling facilities.[23] The rationale offered is the possibility that there will be a future need to provide the full 3000 MW capacity and it will be far less expensive to include larger structures for that possibility as part of the current project. Further, the suggestion is offered that

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[22] The existing capacity at the OCPP site is 1200 MW. WEPCO sought CPCN authority to expand that site by an additional 1800 MW but the Commission only permitted expansion of an additional 1200 MW for a total site capacity of 2400 MW rather than the 3000 MW total capacity initially requested.

[23] R-157, Kenneth J. Detmer, Transcript, V. 14, pp. 4535 & 4640.

"approximately $20 million" is a negligible amount, "lost in the maze" in a $2.2 Billion dollar project. On the other hand, what is being done is that ratepayers are being assigned a construction cost for public utility facilities for which public convenience and necessity has not been determined, indeed has been expressly refused.

The argument offered in favor of enlarging the facility carries an immediate suggestion of prudent foresight and reasonableness. There is, however, another aspect of the problem. Preparation for yet another expansion of what is already the most expensive power plant in Wisconsin is very meaningful step toward selecting OCPP as the site for construction of future utility expansion. It does not completely control future site selection but it is likely to influence it. It does not preclude wholesale competition but, again, it is likely to confer advantage upon the owner of the OCPP facility.

The applicable statute is quite clear, there is to be no construction of any generating facility until there has been the issuance of a CPCN, sec. 196.491(3)(a) 1, Wis. Stats. There is no suggestion that the Commission has ever before interpreted its authority to include the power to permit partial construction of a facility for which CPCN has not been determined, let alone a facility as to which CPCN has been expressly denied by Commission order. It is clear that the PSC Order contemplates an extension of the Commission's authority in a manner which is directly contrary to the plain meaning of the applicable statute. This is an interpretation which should properly be reviewed on a de novo basis and, upon that review, it is the determination of the court that the Order, to the extent it approves ratepayer payment for construction

elements not necessary to operate a 2400 MW facility, is hereby vacated and the Order remanded for modification by the Commission to eliminate such approval.

G. Issuance of CPCN Prior to Obtaining Regulatory Approvals

The PSC issues the Order approving CPCN as to the construction of the two new 630 MW generating facilities while expressly acknowledging that necessary government permits had not been issued. The Order notes expressly that there were then water-related DNR permits which had not been issued, Order, p. 53, 54, and the following appears as a finding of fact,

> Requiring that ERGS-SCPC 1 LLC commence construction within 12 months after it receives all necessary government permits and approvals is reasonable, so the generating plant will satisfy the reasonable needs of the public for electric energy in a timely manner.
>
> Finding of Fact no. 15, in part, Order, p. 6

Wisconsin law provides,

> The commission may not issue a certificate of public convenience and necessity under this subsection until the department has issued all permits and approvals identified in the listing specified in par. (a)3.a. that are required prior to construction.
>
> Sec. 196.491(3)(e) Wis. Stats., in part.

The Commission's Order candidly describes the water-related permits that had not been issued as of the date of the Order.[24] Argument submitted by the PSC explains the administrative advantage of deferring to DNR wherein presumably superior expertise regarding water quality may be found. The Commission makes no attempt to respond to the problem posed by the express provisions of sec. 196.491(3)(d) 3. Wis.

[24] As noted earlier, air quality permits are treated entirely differently from water-related permits. The legislature has expressly decided that the PSC may not hold up issuance of CPCN based upon any concern that potential air pollution may not meet standards imposed by Chapter 285, enforced by the DNR, sec. 196.491(3)(d) 3, Wis. Stats.

Stats., above, and in argument suggests that what was done has been in this proceeding is a standard practice of the Commission.[25]

It is instructive to refer to the decision of RURAL v. PSC, 239 Wis.2d 660, 679, 619 N.W.2d 888 (2000), in which the court did consider a related matter. RURAL arose from a non-statutory legislative enactment, Section 96 of 1997 Wisconsin Act 204, which created a brief opportunity for particular utilities to seek CPCN approval as to a narrowly defined class of generation plants. Approval or rejection was to be determined by the PSC in a notably short, 90 day period. In the RURAL case, as in this one, the PSC issued a CPCN approval subject to a requirement that the applicant thereafter obtain DNR regulatory permits. An opponent to the application objected, arguing that the PSC could not issue a conditional CPCN. The PSC responded suggesting that the general authority of sec. 196.395, Wis. Stats.,[26] conferred the needed power to issue a conditional CPCN. The supreme court, in upholding the issuance of the conditional CPCN, noted that the Commission could do so because the CPCN was being approved pursuant to the non-statutory authority, not pursuant to the normal process set out in sec. 196.419, Wis. Stats.[27] The court suggested that if sec.

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[25] Hearing transcript, October 4, 2004, p. 34, ll. 3-13.

[26] Sec. 196.395, Wis. Stats., provides,

> The commission may issue an order calling for a test of actual results under requirements prescribed by the order, during which test period the commission may retain jurisdiction of the subject matter. The commission may issue conditional, temporary, emergency and supplemental orders. If an order is issued upon certain stated conditions, any party acting upon any part of the order shall be deemed to have accepted and waived all objections to any condition contained in the order.

[27] The CPCN in RURAL, supra, was issued pursuant to the authority of the non-statutory enactment, not pursuant to sec. 196.491, Wis. Stats.

196.491, Wis. Stats. had been the basis for the CPCN, then 196.491(3)(e), Wis. Stats., would control over sec. 196.395, Wis. Stats., and would not permit the Commission to issue a conditional CPCN.[28]

Here, the CPCN was issued pursuant to the authority given to the PSC by sec. 196.491, Wis. Stats. That statute plainly states that the Commission shall not do what is being done here, issue the CPCN before the regulatory permits have been obtained, sec. 196.491(3)(e), Wis. Stats. Potentially, this is a matter of substantial consequence. The Commission in its Order notes the possibility that the planned draw of 1.4 billion gallons of Lake Michigan water daily[29] is not approved, cost of the proposal will escalate by some $200 million and may even preclude project viability, Order, p. 54. The approval stated in the Order was issued in clear violation of sec. 196.491(3)(e), Wis. Stats. It is the Order of this court that the PSC Order is hereby vacated and the matter remanded to the Commission to permit the applicant to demonstrate that the required regulatory permits have been obtained.

H. Adequacy of the Final EIS

The Wisconsin Environmental Protection Act (WEPA) requires state agencies to take a "hard look" at the environmental consequences of a proposed new facility, Wis. Environmental Decade, v. PSC, 98 Wis.2d 682, 690, 298 N.W.2d 205 (Ct. App. 1980). The law provides that all state agencies shall include in every major action, a detailed statement, substantially following the guidelines of the National Environmental Protection Act, 42 U.S.C. sec. 4331 (NEPA), describing,

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[28] RURAL, 239 Wis.2d at p. 698-700, paras. 58-61.

[29] Order, p. 9; Final EIS, V. 1, p. 200, R. 119.

1. The environmental impact of the proposed action;
2. Any adverse environmental effects which cannot be avoided should the proposal be implemented;
3. Alternatives to the proposed action;
4. The relationship between local short-term uses of the human environment and the maintenance and enhancement of long-term productivity;
5. Any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented; and
6. Such statement shall also contain details of the beneficial aspects of the proposed project, both short term and long term, and the economic advantages and disadvantages of the proposal.

Sec. 1.11(2)(c), Wis. Stats. in part.

Moreover, the PSC has adopted an administrative rule to assure compliance with WEPA, Wis. Admin. Code, sec. PSC 4.10(1).

Petitioners argue that the EIS prepared in this proceeding does not meet the standard of the law. The EIS in this matter is comprised of a 446 page draft document, R. 77, together with a significantly larger final document, R. 119. The criticism of the EIS document includes the suggestion that alternatives were not adequately examined and the absence of information about necessary transmission facilities. These are matters which arguably could be considered in an EIS but, as noted above, for purpose of this proceeding, both issues are resolved based upon statutes specifically applicable to the Commission's process. As to a lack of quantified health care costs, as well as potential impact upon natural resources, local communities and transportation, these are matters which are within the range of matters committed by the legislature to the Commission. The interpretations of law adopted by the Commission to the effect that the draft and final EIS documents represent an adequate examination of environmental issues are not shown to be legal error.

I. Least Cost Alternative.

Petitioner Calpine is a wholesale producer of electric power that seeks to provide to WEPCO, using its own generating facilities, the power that the WEPCO claims will be needed. Calpine argues that it can provide the needed power at less cost and suggests the PSC has committed legal error by not selecting their 'least cost' proposal. Calpine argues that Wisconsin law requires the commission to select whichever proposal can be shown to result in the lowest cost to consumers. Calpine looks to the following provision as authority for that concept,

> the commission shall approve an application ... for a certificate of public convenience and necessity only if the commission determines all of the following:
>
> > 3. The design and location ... is in the public interest considering *alternative sources of supply*, alternative locations or routes, individual hardships, engineering, *economic*, safety, reliability and environmental factors ..."
>
> Sec. 196.491(3)(d), Wis. Stats., in part, emphasis added.

Calpine looks to the term, "alternative sources of supply", in conjunction with the term, "economic", to find a clear legal duty, incumbent upon the commission, to select whatever alternative proposal offers the least cost of operation. Calpine looks also to a prior commission decision which does offer language describing the successful proposal as being the one which appeared to offer the needed power at the "least cost".[30]

Calpine's least cost argument goes well beyond the requirement that there be a fair comparison between fuel sources. Returning briefly to the requirements of the

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[30] Application of Wisconsin Public Service Corporation For Authority To Increase Electric Generating Capacity (Stage One, Competition Among Alternative Suppliers), Docket No. 6690-CE-156, December 22, 1994, p. 6;

Wisconsin Energy Priority Law, sec. 1.12(5)(a), Wis. Stats, requires that the Commission consider alternative energy sources with the requirement that a selected source meet three separate requirements; cost effectiveness, technical feasibility and no unacceptable environmental impact. The Calpine least cost theory would look only to cost effectiveness and ignore the remaining two criteria.

The Calpine least cost argument embraces a factual element; the suggestion that the AGEAS computer model actually selected natural gas as the preferred fuel or would have done so if proper data entry had been made. The comparisons of cost, timing, equipment and fuel presented to the Commission are very complex and do not offer an obvious alternative which may be readily identified as the least cost option. What is asserted as the least cost alternative appears to be a plan of using Calpine capacity, in combination with some future WEC facility expansion so as to defer significantly the date at which the WEC expansion will be needed, R.119, Final EIS, pp. 72 and 73.[31] As with the earlier discussion of criticism of the AGEAS program, however, the reality here is that the court does not possess any expertise, let alone that of the Commission regarding the proper use of the computation and comparison of the complex elements cost and timing. Suffice it to say that this is an area where great deference should be given to Commission.

As a question of law, the PSC is obligated to consider and to balance numerous elements of cost, environmental impact and technical feasibility. The Commission argues that the applicable law requires that it consider a myriad of factors, cost being a

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[31] Calpine refers also to the testimony of Commission employee Randal Pilo, who described a Calpine proposal as the lower cost alternative but appears to be based upon what is described as a "snapshot for one year', that being 2007, R.167, V. 18, transcript V. 11, p. 3900, l. 3.

primary factor but not an exclusive factor. This is clearly an area in which the PSC has been assigned significant jurisdiction and discretion by the legislature. Petitioner Calpine does not demonstrate that the Commission has acted contrary to applicable law.

J. Wholesale Power Competition.

Calpine asserts that in approving the WEC application to build the two SCPC plants, the Commission has failed to take into account the harm that will be visited upon competition in the wholesale power market. Wisconsin law requires that the Commission not issue approval until it has determined that,

> The proposed facility will not have a material adverse impact upon on competition in the relevant wholesale electric service market.
>
> Sec. 196.491(3)(d) 7, Wis. Stats.

The Commission did render the following determination of fact,

> The two SCPC units will not have a material adverse impact on competition in the Wisconsin Upper Michigan (WUMS) wholesale electric service market.
>
> Finding of Fact, no. 9, Order, p. 5

The determination of impact upon competition is a matter which has been committed by the legislature to the Commission. The petitioners express disagreement with the conclusions reached by the Commission but they do not demonstrate a basis upon which this court could properly do other than have give great deference to the determinations and interpretations of the Commission in this area.

K. City of Oak Creek Mitigation Payment Agreement

WEC and petitioner City of Oak Creek reached an agreement whereby WEC will pay to the city annual mitigation payments of $1.5 million for SCPC 1 and $750,000 for SCPC 2. The PSC Order reviews that agreement and considers as well a significant modification in the formula by which shared revenue payments form the state to the city are now to be computed. Prior to the enactment of 2003 Wis. Act 31, shared revenue was based upon the net book value of a power plant and thus the initial shared revenue amount derived upon the commencement of generation, capped at a maximum of $750,000 annually, declined thereafter as the net book value declined through depreciation. 2003 Wis. Act 31, enacted July 15, 2003, and applicable to plants that begin operation after December 31, 2003, provides that shared revenue is to be based upon MW capacity and other factors which may not decline with time. The PSC calculates that the new shared revenue formula will produce revenue to the city of $1.6 million for SCPC 1, an amount that will rise to $3.2 million when SCPC 2 begins operation. The PSC notes that the new shared revenue amounts, when paid to the city upon completion and operation of the new facilities, will exceed the payment called for by the agreement between the city and WEC and the Commission therefore includes a provision in the Order which requires that the payments called for by the agreement are to be offset by shared revenue payments made to the city. Thus the PSC order permits mitigation payments to the city pursuant to the agreement but provides that payments are to be reduced by shared revenue received which presumably will eliminate all payment pursuant to the agreement at a future point. The City of Oak Creek petitions the court seeking review of that portion of the Order.

The parties agree that the agreement between the City of Oak Creek and WEC was submitted to the PSC before June 10, 2003 and involves a "mitigation payment" within the meaning of sec. 196.20(7), Wis. Stats., as amended by 2003 Wisconsin Act 33. The parties further agree that the treatment of the agreement by the PSC is to be governed by section 196.20, Wis. Stats., as amended by 2003 Wisconsin Act 89, Section 33, effective December 18, 2003, which enacted the following provision,

> (7)(a) In this subsection, "mitigation payment" means, as approved by the commission, an unrestricted or recurring monetary payment to a local unit of government in which an electric generating facility is located to mitigate the impact of the electric generating facility on the local unit of government. "Mitigation payment" does not include payments made or in-kind contributions for restricted purposes to directly address health or safety impacts of the electric generating facility on the local unit of government.
>
> (b) Except as provided in par. (c), an electric public utility may not recover in rates any of the following:
>
> 1. The cost of mitigation payments paid by the utility.
>
> 2. The cost of mitigation payments paid by the owner or operator of an electric generating facility that the owner or operator recovers from the utility by selling electricity to the utility, by leasing the facility to the utility, or by any agreement between the owner or operator of the electric generating facility and the public utility.
>
> (c) The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003, and, if the commission finds the agreement to be reasonable, shall not subsequently modify the agreement.
>
> Sec. 196.20(7), Wis. Stats., as created by 2003 Wisconsin Act 89, Section 33.

The petitioner city reads subsection (c) above to give to the PSC only two choices, to approve or to reject a mitigation payment agreement as submitted. The city submits that what the PSC Order did was first to modify the agreement and thereafter to

approve the modified agreement. The city asserts that sec. 196.20(7)(c), Wis. Stats. expressly precludes that modification. The PSC, by contrast, submits that subsection (c), above permits the modification of a submitted agreement at the point of initial approval but precludes modification thereafter.

The language chosen by the legislature in this instance is uncommonly plain and direct. It deals with "a mitigation payment agreement that is received by the commission" and confers authority to do one of two things, approve or reject that agreement. The modified agreement is not the agreement that the Commission received. An administrative agency may exercise only such authority as has been expressly conferred or necessarily implied. Here the clarity of the legislation is such that it cannot be read to imply the power that the Commission seeks to exercise, the authority to modify "a mitigation payment that is received by the commission." The court concludes, as a matter of law pursuant to sec. 227.57(8), Wis. Stats, that the portion of the PSC Order which modifies the mitigation agreement to require that future shared revenue is an act beyond the jurisdiction of the PSC. The court orders that, upon remand, the PSC re-consider the mitigation agreement and either approve or reject the agreement as submitted.

V. Summary and Order

On November 15, 2002, the Public Service Commission determined that an application submitted by Wisconsin Energy Corporation to construct the largest power plant in the history of the state at the Oak Creek Power Plant site met the legal requirements to be a "complete" application thereby beginning starting a process before the Commission in which the application was required to be resolved within no more

than 360 days. It is the conclusion of this court that the Wisconsin Energy Corporation application, as of November 15, 2002, does not meet the legal requirements in that it does not propose at least two alternative sites for the new plant, it does not present the required regulatory approvals and it does not include agreements for the use of the substantial transmission line facilities that inevitably must be constructed as an integral part of this project. It was therefore legal error to commence the approval process based upon that incomplete application and the resulting Order is hereby vacated and the matter remanded to the Commission to permit the applicant to submit a legally sufficient application.

On November 10, 2003, the Public Service Commission issued a Order modifying the proposed new Oak Creek facility and approving the application as modified. It is the conclusion of this court that the Order does not reflect adherence to the Wisconsin Energy Priorities Law nor does it include required cost and design information about substantial new power transmission lines that will be needed in order for the proposed new plant to operate. Moreover, the Order approves funding for construction intended to permit future expansion of the Oak Creek Power Plant site to accommodate new generation facilities that the Commission has determined there to be no present need to build and the approval order has been issued despite the fact that required regulatory approvals for the proposed new plants have not been obtained. For these reasons, the Order is hereby vacated and the matter remanded to the Commission for further proceedings consistent with the foregoing rulings.

Finally, the Order modified and thereafter approved an agreement whereby the City of Oak Creek agreed to accept from Wisconsin Energies Corporation, certain

annual payments to mitigate the cost to the city of the new facilities. It is the conclusion of the court that the applicable law required that the Commission either approve or reject the proposed agreement as submitted to the Commission. The modification of the agreement is therefore vacated and the matter is remanded to the Commission for further proceedings.

By the court this 29th day of November, 2004.

Judge David Flanagan

Public Service Commission of Wisconsin

Ave M. Bie, Chairperson
Joseph P. Mettner, Commissioner
Robert M. Garvin, Commissioner

610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

November 15, 2002

Mr. Larry Salustro, General Counsel
Wisconsin Energy Corporation
231 West Michigan Street
P.O. Box 2949
Milwaukee, WI 53201

Re: Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Three Large Electric Generation Facilities, the Elm Road Generating Station, and Associated High Voltage Transmission Interconnection Facilities to be Located in Milwaukee and Racine Counties

05-CE-130

Dear Mr. Salustro:

On February 1, 2002, Wisconsin Energy Corporation (We Energies) filed an application with the Public Service Commission of Wisconsin (Commission or PSCW) for authority to construct three large electric generating facilities and associated high voltage transmission interconnection facilities in Milwaukee and Racine Counties. The application was filed pursuant to Wis. Stat. § 196.491(3) and Wis. Admin. Code § PSC 111.53, which require the Commission to determine if a Certificate of Public Convenience and Necessity (CPCN) should be granted, and for other approvals. Commission staff and Department of Natural Resources (DNR) staff reviewed the CPCN application for completeness purposes.

The Commission reviewed the original CPCN application for both the Port Washington and Elm Road generating stations, found the application to be incomplete, and issued a letter determining incompleteness on March 4, 2002. Subsequent to the March 4, 2002, letter there were notable changes to the structure of the CPCN application review process for the Power The Future (PTF) case. In an April 19, 2002, order from the Commission, the PTF case was split into two phases, with the Port Washington case being processed as the first phase and the Elm Road case as the second phase. On April 25, 2002, the Commission issued a completeness determination letter for the Port Washington CPCN application declaring it complete. At that time the Elm Road CPCN application was still considered incomplete. On June 3, 2002, WEC submitted an addendum (Supplement 2) to the Elm Road CPCN application and a new 30-day review process was initiated, with the application being declared incomplete on July 3, 2002.

On September 6, 2002, WEC submitted an addendum (Supplement 3) to the Elm Road CPCN application and a new 30-day review process was initiated. The Commission issued a letter declaring the application incomplete on October 7, 2002. We Energies filed an addendum (Supplement 4) to the application on October 23, 2002. The Commission has reviewed We Energies' supplement to the application to construct the facilities described above as required by Wis. Stat. § 196.491(3)(a)2 and Wis. Admin. Code § PSC 111.53. The DNR also reviewed appropriate application materials for completeness purposes. Based on this review, the Commission determines that the application is complete and by this letter, notifies you of this determination as required by Wis. Stat. § 196.491(3)(a)2.

While the application is determined to be complete at this time, our determination is, in part, based on We Energies' commitment to supply additional information related to items 6, 7, and 18 of the Commission's October 7, 2002, incompleteness letter. Substantial amounts of information relative to items 6 and 7 have been provided, and will allow our review of the wetland delineations to begin. Based on the information contained in Supplement 4 and conversations with We Energies staff, it is my understanding that the remaining information relative to items 6 and 7, consisting of final wetland reports from the Southeast Regional Planning Commission, will be available in approximately two weeks. In addition, the information relative to the subsurface drilling, sampling and testing survey, the wave/environmental climate date survey and the aquatic/benthic environmental and lake bottom characterization survey in item 18 will be available on the time line set out as answer S-SUP-021 of Supplement 4.

While I fully expect to receive the remaining information on the established time frames, failure by We Energies to submit the information in a timely manner will likely delay the CPCN process as this information is necessary in order to complete our review of the proposed project and issue a joint PSCW/DNR Environmental Impact Statement. Prior to receipt and review of the necessary information, it would be extremely difficult to schedule hearings. I would also note that I expect that in the near future the Commission will petition the circuit court for Dane County for a 180-day extension of time for taking final action on this application, and I understand that WEC will not oppose this petition.

Please be aware that application information that is considered adequate now may require further development later in the Commission's review process. This additional information would be required to complete the record from which the Commission will make its decision whether to approve the application under Wis. Stat. § 196.491(3)(d). Such additional information may relate to need, engineering, environmental, and other issues. When such issues arise, Commission staff will promptly issue a data request for the specific information needed. Your immediate response to data requests will avoid delaying the Commission's review of this project.

If you have questions, please contact the case coordinator Jeff Kitsembel, at (608) 266-9658 or jeff.kitsembel@psc.state.wi.us.

Sincerely,

Robert Norcross
Administrator
Electric Division

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cc: Jackie Reynolds, PSCW
Scot Cullen, PSCW
Lauren Hambrook, WDNR
Jeff Kitsembel, PSCW

05-CE-117 / RM / MFC

Public Service Commission of Wisconsin

Ave M. Bie, Chairperson
Joseph P. Mettner, Commissioner
Robert M. Garvin, Commissioner

610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

April 25, 2002

MASTER FILE COPY

By First Class Mail and Facsimile

Mr. Larry Salustro
We Energies
231 West Michigan Street
P.O. Box 2949
Milwaukee, WI 53201-2949

Re: Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Two Large Electric Generation Facilities, the Port Washington Generating Station, and Associated High Voltage Transmission and Natural Gas Interconnection Facilities to be Located in Ozaukee and Washington Counties

05-CE-117
6650-CG-211

Dear Mr. Salustro:

On February 1, 2002, Wisconsin Energy Corporation (We Energies) filed an application with the Public Service Commission of Wisconsin (Commission or PSCW) for authority to construct two large electric generating facilities and associated high voltage transmission and natural gas facilities in Ozaukee and Washington Counties. The application was filed pursuant to Wis. Stat. § 196.491(3) and Wis. Admin. Code § PSC 111.53, which require the Commission to determine if a Certificate of Public Convenience and Necessity (CPCN) should be granted, and for other approvals. Commission staff and Department of Natural Resources (DNR) staff reviewed the CPCN application for completeness purposes.

The application was determined to be incomplete on March 4, 2002 and We Energies filed a supplement to the application on April 5, 2002. The Commission reviewed We Energies' supplement to the application to construct the facilities described above as required by Wis. Stat. § 196.491(3)(a)2 and Wis. Admin. Code § PSC 111.53. The DNR also reviewed appropriate application materials for completeness purposes. Based on this review, the Commission determines that the application is complete and by this letter, notifies you of this determination as required by Wis. Stat. § 196.491(3)(a)2.

Please be aware that application information that is considered adequate now may require further development later in the Commission's review process. This additional information would be required to complete the record from which the Commission will make its decision whether to approve the application under Wis. Stat. § 196.491(3)(d). Such additional information may

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relate to need, engineering, environmental, and other issues. When such issues arise, Commission staff will promptly issue a data request for the specific information needed. Your immediate response to data requests will avoid delaying the Commission's review of this project.

If you have questions, please contact the case coordinator Tim Jones, at (608) 266-1613 or Tim.Jones@psc.state.wi.us.

Sincerely,

Robert Norcross

Robert Norcross
Administrator
Electric Division

RN:TBJ:bap:G:\PTF\Letters\Salustro completeness 4-25-02

cc: Lauren Hambrook – DNR
Mike Thompson – DNR
Jay Hochmuth – DNR
Tom Steidl – DNR
Tim Jones – PSC
Jackie Reynolds – PSC
Jim Loock – PSC
Scot Cullen – PSC
Kathy Zuelsdorff – PSC
Jeff Kitsembel – PSC
Paul Rahn – PSC
Dan Sage – PSC
Michael John Jaeger –PSC
Jeff Rauh – ATC
Steve Parker - ATC

Date Mailed
April 19, 2002

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Approval of Affiliated Interest Transactions Between W.E. Power; LLC; Wisconsin Electric Power Company; and Wisconsin Energy Corporation	05-AE-109
Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Two Large Electric Generation Facilities, the Port Washington Generating Station, and Associated High Voltage Transmission and Natural Gas Interconnection Facilities to be Located in Ozaukee County	05-CE-117
Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Three Large Electric Generation Facilities, the Elm Road Generating Station, and Associated High Voltage Transmission Interconnection Facilities to be Located in Milwaukee and Racine Counties	05-CE-130
Application of Wisconsin Gas Company, as a Gas Public Utility, for Authority to Construct a High-Pressure Natural Gas Line in Washington and Ozaukee Counties, Wisconsin	6650-CG-211
Application of American Transmission Company for a Certificate of Authority to Rebuild and Upgrade Certain Transmission System Facilities to Support the Port Washington Generating Station	137-CE-104

ORDER

This is a class 1 contested case proceeding to consider the Application of Wisconsin Energy Corporations for Certificates of Convenience and Necessity and Other Related Authorizations and Approvals, filed January 31, 2002, by Wisconsin Electric Power Company,

Wisconsin Gas Company and W. E. Power, L.L.C. (collectively, WEC),[1] and the application of American Transmission Company (ATC) for a certificate of authority to rebuild and upgrade associated transmission facilities. The aggregate of the authorizations and approvals sought in this proceeding are being referred to as "Power the Future" (PTF).

By Notice of Proceeding issued February 22, 2002, the Commission separated the PTF applications into four applications, captioned dockets 05-AE-109 (affiliated interest transactions), 05-CE-117 (Port Washington facilities), 05-CE-130 (Elm Road facilities), 6650-CG-211 (natural gas line) and 137-CE-104 (transmission facilities). At the prehearing conference, held March 5, 2002, and in writing subsequently, the parties discussed differing proposals for how the Commission might process these dockets. The Commission considered the proposals at its April 9, 2002, meeting, and decided to separate these dockets into two phases, as discussed below.

WEC contends that the first gas unit at Port Washington needs to be in operation by 2005, to meet projected electric demand. It is reasonable, therefore, to consider the proposed gas units and associated gas line and transmission facilities and affiliated interest transactions at Port Washington in the first phase of this proceeding and to consider the proposed coal units and associated gas line and transmission interconnection facilities and affiliated interest transactions at Elm Road in a second phase.

The Commission has not yet made the necessary completeness determination under Wis. Stat. § 196.491(3)(a) 2. Because of the Commission's decision to consider the PTF applications in two phases, it is reasonable to make separate completeness determinations for Port

[1] Wisconsin Electric Power Company and Wisconsin Gas Company now do business as We Energies.

Washington and Elm Road. The Commission will make its determination for Port Washington first.

SO ORDERED.

Dated at Madison, Wisconsin, April 19, 2002

By the Commission:

Edward S. Marion
General Counsel
Assistant Secretary to the Commission

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Table 7 Potential Permits and Approvals Required

Agency	Proposed Activity	Type Of Approval
US Army Corps of Engineers	Placement of structures on lakebed & Dredge/fill	CWA s. 404 and Rivers & Harbors Act section 10 permits.
US Federal Aviation Administration	Construction of stack	Stack permit (14 CFR S77.13)
Public Service Commission of Wisconsin	Construction of Large Electric Generating Facility	CPCN (Wis. Stat. §196.491)
Department of Natural Resources	Construction and operation of new source of air emissions	Construction and operating permits (Wis. Admin. Code chs. NR 405 through 408 and 40 CFR Part 52.21) and acid rain permit (NR 409 and 40 CFR Part 75)
	Water intake, new discharges, consumptive water use	WPDES permit (s.283, Wis. Stats.), CWA s. 316(b), Ch. 30.18, NR 142
	Grading within 500 feet of a navigable water	NR 216 permit
	Placement of structures on the lakebed & Dredge/fill	NR 299 - Water Quality Certification
	Storm water management during construction and operation	Storm water discharge permit (Wis. Admin. Code ch. NR 216)
	Storage of coal combustion byproducts	Approval under NR 502.05(3)(l)
Department of Commerce	Installation of CTs and related equipment for IGCC	Approval of safety mechanisms and plans (Wis. Stats. §101.17)
	Construction of all buildings and structures	Approval of plans and specifications (Wis. Stats. §101.02)
	Installation of dust filtering and HVAC equipment	Approval of plans and specifications (Wis. Stats. §101.12)
City of Oak Creek	Construction of Large Electric Generating Facility	Conditional use permit
Racine County/Town of Caledonia	Construction of Large Electric Generating Facility	Conditional use permit
Department of Health and Social Services	Construction of plumbing facilities	Approval of plans and specifications (Wis. Stats. §H62.25)
U.S. Fish & Wildlife Service	Various construction activities	USFWS Clearance – Threatened & Endangered Species
State Historical Society of Wisconsin	Site preparation and grading	Approval of archaeological surveys. Wis Stats. 44.40 and Section 106 of National Historic Preservation Act

WISCONSIN PUBLIC SERVICE COMMISSION

AGREEMENT

THIS AGREEMENT is made and effective as of the 2 day of April, 2003, by and between the **City of Oak Creek** (the "City") and **Wisconsin Energy Corporation**, ("WEC"), on behalf of its subsidiaries, Wisconsin Electric Power Company ("Wisconsin Electric"), W.E. Power, LLC ("We Power"), WISPARK LLC ("WISPARK"), and Wisconsin Gas Company ("Wisconsin Gas") (collectively referred to as the "Subsidiaries").

WITNESSETH:

WHEREAS, WEC or one of the Subsidiaries is the current owner and operator of coal-based electric generating facilities located in the City.

WHEREAS, WEC desires, as a part of its "Power the Future" project for increasing electric generating facilities, to create three coal burning new electric generating facilities at the site of existing facilities in the City.

WHEREAS, it is anticipated that the construction and operation of the new facilities may have certain effects on the City.

WHEREAS, in order to mitigate any such effects on the City, WEC and the City desire to enter into this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, WEC, for itself and the Subsidiaries, and the City agree as follows:

1. AGREEMENT CONCERNING AIR QUALITY ISSUES.

   A. Purpose. The purpose of this paragraph 1 is to ensure that effective upon the date of this Agreement, the total actual annual air emissions from Oak Creek Units 5-8 ("Existing Facilities") and Elm Road Units 1-3 ("New Facilities") will not result in a net increase of the total actual annual air emissions as compared with the baseline condition. The parties recognize that the air pollution requirements established and implemented by the Wisconsin Department of Natural Resources "DNR" are designed to protect public health and welfare and that this Agreement is in furtherance of and not in conflict with those state requirements.

   B. Baseline Emission Level. For the purpose of establishing that there will be no net increase in total actual annual air emissions, WEC has used calendar year 2000 as the baseline condition, and determined that the baseline emission level from the facility is 38,400 tons per year ("Baseline Emission Level"). The Baseline Emission Level includes the actual annual air emissions in calendar year 2000 of sulfur dioxide ("SO_2"), nitrogen oxides ("NO_X"), particulate matter ("PM"), mercury ("Hg"), volatile organic compounds ("VOC"), hydrochloric acid ("HCl"), hydrofluoric acid ("HF"), and sulfuric acid ("H_2SO_4").

C. Measure of Compliance. WEC agrees that the total actual annual air emissions from the stacks of the Existing Facilities and New Facilities will not exceed the Baseline Emission Level. Compliance with the Baseline Emission Level will be measured on a rolling 12-month basis so that in each 12-month period the emissions shall not exceed the Baseline Emission Level.

D. Implementation and Enforcement.

1. WEC agrees that it will use all reasonable efforts to obtain enforceable limitations in the construction and operation air pollution control permit or equivalent order (state or federal) which includes emission limitations that will ensure that the total actual annual emissions from the Existing Facilities and New Facilities will not exceed the Baseline Emission Level ("Enforceable Permit Condition").

2. In the event for any reason the Department of Natural Resources or the U.S. Environmental Protection Agency does not include in the construction and operation air pollution control permit or equivalent order (state or federal) emission limitations that will ensure that the total actual emissions from the Existing Facilities and New Facilities will not exceed the Baseline Emission Level, the parties to this Agreement shall meet and agree to a local enforcement mechanism the validity and enforceability of which WEC agrees not to contest in any way.

E. Air Monitoring.

1. Elm Road Monitoring Site. WEC or its contractor agrees to install, maintain and operate an air monitoring station at a location to be mutually agreed upon between WEC and the City within 1200 feet of the intersection of Elm Road and the Chicago and Northwestern Railroad line to monitor for particulate matter measured as Total Suspended Particulates ("TSP"), PM_{10} and $PM_{2.5}$ consistent with appropriate state and/or federal ambient air quality monitoring requirements except that the monitoring shall occur on a daily basis. Meteorological data including wind speed, wind direction and temperature shall also be collected at this location. The air monitors at this location shall be operational as soon as practicable, but no later than 150 days after the date of this Agreement and shall continue for a period of no less than two years after commencement of construction of the first of any of the New Facilities approved by the PSC. If after two years following

commencement of construction of the first of any of the New Facilities no exceedences of state or national ambient air quality standards attributable to any WEC operations are detected, the frequency of the monitoring can be reduced to a sampling frequency of once every three days for each of the above air pollutants. Monitoring shall continue thereafter unless the provisions of Paragraph E.4 apply.

2. Carrollton Monitoring Site. WEC or its contractor agrees to install, maintain and operate air monitoring station at Carrollton Elementary School (8965 South Carrollton Drive) to monitor for SO_2 and NO_X consistent with appropriate state and/or federal ambient air quality monitoring requirements. Meteorological data including wind speed, wind direction and temperature shall also be collected at this location. The monitoring shall occur on a frequency consistent with state and/or federal ambient air quality monitoring requirements. The monitoring at this location shall be operational within 150 days of the granting of the CPCN for any of the New Facilities. Monitoring shall continue thereafter unless the provisions of Paragraph E.4 apply.

3. Data Reporting. The air emission and meteorological data from both of the monitoring sites under this paragraph shall be reported to the City after completion of QA/QC checks and shall be summarized in a quarterly report submitted to the City and DNR within 45 days after the end of the quarter. In addition to the Quarterly Report, the data shall also be available at the new Education and Visitors Center and City Hall as soon as practicable after the completion of QA/QC checks. It is anticipated that normal reporting time for PM_{10}, $PM_{2.5}$, SO_2, and NO_x will be the first business day within 24 hours after completion of the QA/QC checks, but, in any event, no later than 4 days after the sample date. TSP results will be furnished within 30 days after completion of QA/QC checks.

4. Exceptions to Monitoring Requirements. The monitors shall continue to be operated and maintained until (a) all of the New Facilities authorized by PSC Docket No. 05-CE-130 have been built and have been in operation for a period of not less than five years, (b) the emission data indicates that the emissions and ambient air quality are within state and/or national ambient air quality standards, all applicable permit limits and the Baseline Emission Level of this Agreement for three consecutive years, and (c) the concentration of air pollutants are at or less than the maximum concentrations modeled as part of WEC air modeling calculations submitted with the air pollution control permit

applications for the New Facilities for three consecutive years. If the requirements of this sub-paragraph are satisfied, paragraph E will no longer apply. If none of the New Facilities sought in PSC Docket No. 05-CE-130 has been approved by the PSC for construction in Oak Creek, or if WEC does not proceed with construction of the New Facilities, then the requirements of paragraph E will no longer apply.

2. REDEVELOPMENT OF PROPERTY.

A. Upon the signing of this Agreement and irrespective of whether WEC receives a CPCN from the PSC in docket #05-CE-130 for construction of any New Facilities, pursuant to Sec. 196.491(3), Wis. Stats., WEC shall at its sole cost and expense: (a) complete a Market Study; (b) complete an Environmental Site Conditions Analysis; and (c) develop a Land Use Plan for certain parcels within the City of Oak Creek, which parcels shall be selected by mutual Agreement of the Director of Community Development and WEC. The Environmental Analysis, Market Study and Land Use Plan shall be completed within twelve months of the signing of this Agreement, and shared with the Director of Community Development as soon as they are completed. In the event WEC does not proceed to develop, under paragraph 2B, the parcels studied, then thirty copies of the Environmental Analysis, Market Study and Land Use Plan together with all supporting documents shall be provided to the City of Oak Creek. Notwithstanding anything to the contrary contained herein, WEC's obligations to provide the analysis, study, and plan under this paragraph 2A are contingent upon WEC obtaining all necessary consents and/or access from the owner(s) of the proposed property.

B. For each of the first two New Facilities for which WEC receives a CPCN from the PSC in docket #05-CE-130, WEC shall be required to invest 10 million dollars, within ten years of the date of the granting of the CPCN by the PSC for each unit, to construct improvements of a type WEC deems appropriate on parcels within the City of Oak Creek, which WEC selects. WEC shall use its best efforts to invest such funds in as expeditious a manner as is reasonably prudent. For purposes of this Agreement, improvements include the following:

1. Demolition of existing structures.
2. Environmental remediation to the level necessary to construct and occupy the planned building(s), facility(s) and/or uses, in accordance with Wisconsin environmental statutes and Wisconsin Administrative Code Chapters NR 700 – NR 754 requirements and any federal environmental laws, regulations and guidance.
3. Construction of improvements, including buildings and structures.

4. Installation of public improvements, including, but not limited to sanitary sewer, water main, storm water facilities, streets, including curb and gutter, street lights, landscaping and other amenities all of which shall be as defined under the Oak Creek Municipal Code.
5. Marketing of properties until initial occupancy.
6. Other improvements proposed by WEC and agreeable to the City.
7. Acquiring all parcels necessary to undertake the aforementioned improvements.

3. PAYMENT OF MITIGATION COSTS. During the term (including any applicable extensions) of that certain Facility Lease (the "Facility Lease") between Elm Road Generating Station LLC and Wisconsin Electric for each unit of the New Facility (the "Lease Term"), We Power shall support, and shall use its best efforts to have approved, an annual mitigation payment to the City in the amount of $1.5 million for the first unit (Elm Road Unit 1), $750,000 for the second unit (Elm Road Unit 2), and $250,000 for the third unit (Elm Road Unit 3), respectively (a "Mitigation Payment"). If, and to the extent, approved by the PSCW, Mitigation Payments will be made on a calendar year basis. The first Mitigation Payment for each unit shall be made thirty days after commencement of construction (commencement of construction shall mean the start of earth moving or excavation at the site) of a unit. Thereafter, Mitigation Payments shall be paid in one annual payment on June 30th each year during the Lease Term. Mitigation Payments for partial calendar years during the Lease Term (including the year of the first Mitigation Payment) shall be prorated on a per-diem basis. The obligation to pay Mitigation Payments is independent of the receipt of shared revenue funds from the State of Wisconsin and of any future changes in state law pertaining to utility taxation. Notwithstanding anything to the contrary contained herein, in no event will WEC or any of the Subsidiaries have any obligation under this paragraph 3 in the event that (i) the PSCW determines that the payments described in this Section 3 may not be properly included in the rent payments under the Facility Lease, or (ii) a unit of the New Facility permanently ceases operation after start-up and is decommissioned.

4. NO THIRD PARTY BENEFICIARIES. None of the provisions of this Agreement is intended for the benefit of any person except the parties hereto and their respective successors and permitted assigns. No interest on behalf of any third-party beneficiary is created by this Agreement.

5. REIMBURSEMENT OF CITY EXPENSES. WEC agrees to reimburse the City for its reasonable out-of-pocket expenses incurred by the City in participating in all matters relating to the application for and approval of the New Facilities by the PSCW. The expenses to be reimbursed include the City's out-of-pocket expenses for attorneys and technical consultants. The expenses to be reimbursed will be

determined based on a budget to be prepared by the City, with a cap established above which WEC and the City will share expenses on an equal basis.

6. CITY APPROVALS. WEC, through the Subsidiaries, and the City agree to cooperate in good faith on all matters involving review and approval of the New Facilities by the City and any agencies or instrumentalities thereof. Without limitation, WEC's Subsidiaries will continue to work through the City's Planning and Conditional Use Permit processes to resolve issues raised by the City pertaining to the New Facility. The parties intend that the resolution of all such issues shall be presented to the PSCW as part of its certification process and included as a condition of the Certificate of Public Convenience and Necessity ("CPCN").

7. CITY SUPPORT. Upon execution of this Agreement, the City agrees to use its best efforts to support the construction of the New Facilities before the PSCW and other applicable regulatory or governmental bodies. Subject to the requirements of this paragraph 7, nothing in this Agreement shall be construed as an agreement by the City to grant City approvals, which shall remain subject to the Planning and Conditional Use Permit processes noted above.

8. COMPROMISE OF CITY CLAIMS. WEC and the City acknowledge and agree that the construction and operation of the New Facility, and other activities related thereto as described in the applications before the PSCW for CPCN approval, are anticipated to have a substantial effect on the City (the "Effects"). Without limitation, the Effects might include safety concerns, noise, or the need for additional fire, police and emergency medical service. WEC and the City agree that the obligations undertaken by WEC in this Agreement are designed to mitigate the Effects, and the City agrees not to sue WEC nor any of its Subsidiaries for the Effects except as set forth herein. Nothing in this Agreement shall be construed to preclude the City from taking any action, including the filing of legal actions, to enforce provisions of its ordinances, permits or approvals, or the provisions of this Agreement related to the New Facility; provided, however, that such actions shall not prevent the continued use or operation of the New Facility in accordance with paragraph 1 and all other state permits.

9. DEFAULT PROVISIONS. A party shall be in default under this Agreement if it fails to perform any of its obligations as set forth herein, and such failure continues for a period of sixty (60) days after the defaulting party's receipt of written notice of such failure from the non-defaulting party. In the event of such default, the non-defaulting party shall be entitled to exercise any or all available rights and remedies at law or in equity.

10. ASSIGNMENT. Neither party may assign its interest under this Agreement without the prior written consent of the other party hereto, which consent will not be unreasonably withheld or delayed.

11. NOTICES. All notices permitted or required by this Agreement shall be given in writing and shall be considered given upon receipt if hand delivered to the party or person intended, or upon facsimile transmission to the fax numbers set forth herein, or one business day after deposit with a nationally recognized overnight commercial courier service, air bill prepaid, or forty-eight (48) hours after deposit in the United States mail, postage prepaid, by certified mail, return receipt requested, addressed by name and address to the party or person intended as follows:

To WEC:	Wisconsin Energy Corporation 231 West Michigan Street Milwaukee, WI 53203 Attn: Larry Salustro, Esq. Fax No.: (414) 221-2140
To the City:	City of Oak Creek 8640 S. Howell Avenue Oak Creek, WI 53154 Attn: Robert Kufrin Fax: 414-768-6596

12. GOVERNING LAW. This Agreement concerns real property located in the State of Wisconsin, and shall be interpreted and construed according to the laws of the State of Wisconsin.

13. SEVERABILITY OF PROVISIONS. If any of the terms or conditions contained herein shall be declared to be invalid or unenforceable by the PSC in a court of competent jurisdiction, then the remaining provisions and conditions of this Agreement, or the application of such to persons or circumstances other than those to which it is declared invalid or unenforceable, shall not be affected thereby and shall remain in full force and effect and shall be valid and enforceable to the full extent permitted by law, except that as to any such provisions or conditions declared invalid or unenforceable, the parties agree to negotiate a comparable substitute provision.

14. CAPTIONS. The captions in this Agreement are inserted only as matters of convenience and for reference and in no way define or limit the scope or intent of the various provisions, terms or conditions hereof.

15. BINDING EFFECT. The terms and conditions of this Agreement shall be binding upon and benefit the parties hereto and their respective successors and assigns.

16. ENTIRE AGREEMENT. This Agreement may be modified, amended or terminated only by written instrument signed by both parties.

17. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which will be deemed an original.

18. ATTORNEYS' AND CONSULTANTS' FEES. In the event of litigation arising out of this Agreement, the prevailing party shall be entitled to court costs, out-of-pocket expenses and reasonable attorneys' and consultants' fees from the unsuccessful party.

19. REPRESENTATIONS AS TO AUTHORITY. Each party to this Agreement represents and warrants as follows:

    (a) It is duly organized, validly existing and in good standing under the laws of the state of its incorporation and has the power and authority to consummate the transactions contemplated by this Agreement.

    (b) All proceedings necessary for it to consummate the transactions contemplated by this Agreement have been duly taken in accordance with law.

    (c) The persons executing this Agreement on behalf of it have been duly authorized to execute this Agreement.

20. FAX SIGNATURES. The parties agree that fax signatures shall be binding on the parties hereto.

21. EFFECTIVENESS OF PROVISIONS. Except as specified in this paragraph 21, this Agreement is not effective until, and only so long as, the PSCW issues the CPCN for the New Facilities in the City, except that paragraphs 5, 18, and 21 are effective even if the New Facilities are not approved and survive this Agreement. Paragraphs 1E, 6, and 7 are effective immediately upon approval of the Agreement by WEC and the City, but continue in effect only if one or more New Facilities are approved by the PSCW within Oak Creek and WEC proceeds with the project.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

WISCONSIN ENERGY CORPORATION

By: _____
Print Name: LARRY SALUSTRO
Title: General Counsel, WEC

CITY OF OAK CREEK

By: _____
Print Name: DALE J. RICHARDS
Title: MAYOR

By: _____
Print Name: BEVERLY A. BURETTA
Title: CITY CLERK

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OFFICE OF THE CITY CLERK

Oak Creek, Wisconsin

June 10, 2003

I hereby certify that the attached is a true and correct copy of Ordinance 2250 passed and adopted by the Common Council of the City of Oak Creek at a regular meeting held on the 3rd day of June, 2003.

City Clerk

Exhibit_____ (RLK-3)

ORDINANCE NO. 2250

By: ALD. Charles Koehler

AN ORDINANCE TO APPROVE A REZONING OF THE PROPERTIES AT 4420, 4500, 4650, 4750 AND 4800 E. ELM ROAD AS WELL AS 4285, 4299, 4431, 4451R, 4503, 4513, 4541, AND 4541R E. OAKWOOD ROAD FROM A-1, AGRICULTURAL, P-1, PARK, M-1, MANUFACTURING AND RS-4, SINGLE FAMILY RESIDENTIAL TO M-1, MANUFACTURING.

(4th Aldermanic District)

WHEREAS, the Wisconsin Energy Corporation has requested that the properties at 4420, 4500, 4650, 4750 and 4800 E. Elm Road as well as 4285, 4299, 4431, 4451R, 4503, 4513, 4541, and 4541R E. Oakwood Road be rezoned from A-1, Agricultural, P-1, Park, M-1, Manufacturing and Rs-4, Single Family Residential to M-1, Manufacturing, and

WHEREAS, these properties are more precisely described as follows: Being part of the Northwest 1/4 and the Northeast Fractional 1/4 of Section 36, Town 5 North, Range 22 East and the Northwest Fractional 1/4 of Section 31, Town 5 North, Range 23 East, City of Oak Creek, Milwaukee County, Wisconsin, bounded and describes as follows:

Commencing at the Northwest corner of the aforesaid Northeast Fractional 1/4 of Section 36; thence N89°49'27'E along the North line of said Northeast Fractional 1/4 of Section 36, 2199.57 feet to a point on the East line of East Oakwood Road as delineated by the aforesaid City of Oak Creek, said point also being a meander corner on said North line and the point of beginning; thence N89°49'27"E along the North line of the aforesaid Northeast Fractional 1/4 of Section 36, 255.1 feet more or less to the Ordinary High Water Mark (OHWM) of the Westerly boundary of Lake Michigan as delineated by the Wisconsin Department of natural Resources in March of 2002; thence Southeasterly along said OHWM, 3213.1 feet more or less to the South line of the aforesaid Northwest Fractional 1/4 of Section 31; thence S89°11'23"W along said South line, 857.7 feet more or less to a point on the East line of East Elm Road as delineated by the aforesaid City of Oak Creek, said point also being a meander corner on the South line of the aforesaid Northwest Fraction 1/4 of Section 31; thence S89°11'23"W along said South line, 702.85 feet to the Southeast corner of the aforesaid Northeast Fractional 1/4 of Section 36; thence S89°44'16"W along the South line of the said Northeast Fractional 1/4 Section 36, 2389.50 feet to a point on the Easterly line of the Chicago and North Western Transportation Company right-of-way; thence N21°17'33"W along said Easterly line, 2803.75 feet to an iron pipe found and a point on the South line of the aforesaid East Oakwood Road; thence N89°49'19"E along said South line, 194.06 feet to the Westerly line of Lot 1, Certified Survey Map (C.S.M.) No. 5261; thence S21°17'33"E along said Westerly line, 911.31 feet to an iron rod found; thence N89°46'47"E along the South line of said Lot 1, 366.42 feet to a iron rod found; thence N00°40'16"W along the East line of said Lot 1 and the West line of Lot 2, C.S.M. No. 88, 822.89 feet to a point on the South line of the aforesaid East Oakwood Road, said point also being the Northwest corner of Lot 2, Certified Survey Map No. 88; thence N89°49'27"E along said South line, 528.00 feet to an iron pipe found; thence N00°40'16"W along said South line, 27.00 feet; thence N89°49'27"E along said South line, 1539.27 feet to a point on the aforesaid East line of East Oakwood Road; thence N00°10'33"W along said East line, 33.00 feet to the point of beginning, expecting the Southerly 33 feet West of the meander corner dedicated for road purposes, together with that part of the aforesaid Northeast Fractional 1/4 Section 36 and that part of the aforesaid Northwest Fractional 1/4 of Section 31 lying East of the aforesaid meander

lines and West of the Westerly boundary of Lake Michigan. Containing 193.8592 acres (8,444,507 Sq. Ft.) more or less of land. Subject to riparian rights, covenants, conditions, restrictions and easements of record.; and

WHEREAS, the Plan Commission reviewed the application and recommended that the rezoning be approved; and

WHEREAS, the Common Council held a public hearing on said application on June 3, 2003, at which time all interested parties appeared and were heard; and

WHEREAS, following said public hearing and with the favorable recommendation of the Plan Commission, the Common Council is of the opinion that the best interests of the City would be served if the rezoning was approved; and

NOW, THEREFORE, the Common Council of the City of Oak Creek does hereby ordain as follows:

SECTION 1: To promote the general welfare, public safety and general planning within the City of Oak Creek, the lands hereinabove described are hereby rezoned and the Zoning Map of Chapter 17 of the Municipal Code is hereby amended to reflect the rezoning.

SECTION 2: All ordinances or parts of ordinances and zoning district maps made a part of Chapter 17 of the Municipal Code of the City of Oak Creek in conflict herewith are hereby repealed.

SECTION 3: The several sections of this ordinance are declared to be severable. If any section shall be declared, by a decision of a court of competent jurisdiction, to be invalid, such decision shall not affect the validity of other provisions of this ordinance.

SECTION 4: The rezoning shall take place contemporaneously with the enactment of this ordinance and shall take effect immediately upon its passage and publication.

Passed and adopted this 3 day of June, 2003.

/s/ Elizabeth J. Kopplin
President, Common Council

Approved this 4 day of June, 2003

/s/ Richard R. Bolender
Mayor

ATTEST:

/s/ Beverly A. Buretta
City Clerk

VOTE: Ayes 6 Noes 0

OFFICE OF THE CITY CLERK

Oak Creek, Wisconsin

June 10, 2003

I hereby certify that the attached is a true and correct copy of Ordinance 2251 passed and adopted by the Common Council of the City of Oak Creek at a regular meeting held on the 3rd day of June, 2003.

City Clerk

Exhibit_____ (RLK-4)

WISCONSIN LEGISLATIVE COUNCIL
INFORMATION MEMORANDUM

"Power the Future-2 (PTF-2)" and the New Law Regarding Leased Generation Contracts for the Construction or Improvement of Electric Power Plants

INTRODUCTION

In recent years, there has been considerable concern about the adequacy of the electric power supply, in Wisconsin and across the county. The Legislature, the Public Service Commission (PSC) and the electric power industry have all taken steps to address these concerns and short-term power shortages so far have been avoided. However, no new base load power plants (large power plants that are designed to run full-time) have been built in Wisconsin since 1985, in spite of significant growth in demand for power since then. There is a general consensus that a substantial amount of new electric generation capacity, including base load facilities, must be built in the next 10 years to meet the projected demand for power.

An ambitious construction program announced by Wisconsin Energy Corporation (Wisconsin Energy), the parent company of Wisconsin Electric Power Company (Wisconsin Electric), has dominated recent discussion of construction in Wisconsin. Wisconsin Energy proposes to build as many as three 600 megawatt (MW) coal-fired power plants at Oak Creek and two 500 MW gas-fired combined cycle power plants at Port Washington. Regulatory innovations that Wisconsin Energy proposed along with its construction program have similarly dominated recent discussions of electric utility regulation.

This Information Memorandum describes the regulatory aspects of Wisconsin Energy's proposal and recent legislation enacted to allow implementation of those regulatory innovations.

POWER THE FUTURE-2

In the fall of 2000, Wisconsin Energy Corporation announced a proposed new approach to the organization and regulation of electric power generation, which it called, "Power the Future." In November 2000, Wisconsin Energy submitted a petition to the PSC requesting a declaratory ruling on various aspects of its proposal. The proposal was opposed at that time by the Customers First! Coalition (CFC). However, in February 2001, Wisconsin Energy and CFC announced an agreed-upon modified proposal, which was dubbed "Power the Future-2" (PTF-2). That same month, Wisconsin Electric filed a revised petition with the PSC requesting a declaratory ruling on various aspects of the modified proposal.

PTF-2 proposes to allow Wisconsin Energy to form a nonutility affiliate to build and own electric power generating facilities. This company would lease the generating facilities to Wisconsin Electric, which would operate the new facilities to produce electric power for its customers, much as it operates its current stock

of generating facilities. This ownership and lease arrangement is intended to allow Wisconsin Energy to build generation facilities outside of its public utility affiliate, taking advantage of various financing and contracting options this allows. At the same time, it keeps the generation function inside the public utility affiliate, ensuring the availability of the power to the utility's retail customers, providing the generated power at rates based on the cost of production and retaining regulatory jurisdiction at the state level.

A key element of the proposal is the lease, referred to as a "leased generation contract." The lease would specify a number of important terms, including the recovery by the nonutility affiliate of the construction cost of the facility and other costs, including capital improvements to the facility during the term of the lease.

Among other specifics, the proposal calls for the affiliate to be allowed to receive a greater rate of return on its investment in new generating plants than the PSC currently allows for similar investments by public utilities and to amortize the investments over a shorter time. It also would allow Wisconsin Energy's shareholders to receive 25% of the profit from opportunity sales (sales of excess capacity to entities outside the utility's service territory), something not currently allowed. The proposal also calls for measures to mitigate the potential market power of Wisconsin Energy and commits Wisconsin Energy to increase its investments in energy conservation and the development of renewable energy sources.

Finally, under the proposal, Wisconsin Energy would retain ownership of its current stock of electric generating plants, except for some old plants that are due for retirement. The proposal limits the ability of a utility to transfer real property to its affiliates under a leased generation contract.

Implementation of PTF-2 will require a number of PSC approvals. These approvals will come in steps as Wisconsin Electric and the PSC follow the existing process for the approval of new power plant proposals. In particular, each leased generation contract will require PSC approval under the affiliated interest statutes and construction approval will be required for each power plant to be built or modified. In a petition currently under consideration by the PSC, Wisconsin Electric is requesting assurances that it will be allowed to recover expenses it incurs before final construction approval is given. This docket is particularly significant because in it Wisconsin Electric is asking the PSC to declare that it is "prudent," as that term is used in its regulatory sense, for Wisconsin Electric to pursue implementation of the PTF-2 proposal. A ruling on this petition is expected soon.

In addition, certain statutory changes were required to allow certain aspects of the proposal. The legislation making these changes, which was enacted as part of 2001 Wisconsin Act 16, the 2001-03 Biennial Budget Act, is the subject of the remainder of this Information Memorandum.

While PTF-2 was designed to apply specifically to Wisconsin Energy's plans for the development of new electric power generating facilities, the concepts of the proposal could be applied to other utility holding companies, as well as to public utilities that are not in holding companies. What is more, the legislation described in the next section is written in general terms that apply to any electric utility.

For a fuller description of PTF-2, see the materials referenced at the end of this Information Memorandum.

NEW LAW REGARDING LEASED GNERATION CONTRACTS (ACT 16)

As noted above, Act 16 makes certain statutory changes that are necessary to allow implementation of PTF-2. Specifically, the Act authorizes leased generation contracts between public utilities and their affiliates and authorizes the transfer of land or facilities from a public utility to a nonutility affiliate of the public utility for the purpose of implementing a leased generation contract. In addition, it implements a number of points in PTF-2 by specifying conditions under which the PSC may approve leased generation contracts.

LEASED GENERATION CONTRACTS UNDER THE AFFILIATED INTEREST LAW

Under the affiliated interest law, any contract or arrangement between a public utility and an affiliated interest of the public utility must be approved by the PSC. [s. 196.52, Stats.] (An "affiliated interest" is any entity that has control or influence over a public utility, as determined by controlling at least 5% of the public utility's stock or as determined by the PSC, or any entity over which the public utility has such control. Note that the entities do not have to be in a holding company system to be affiliated interests.) This statute establishes procedural requirements for obtaining this approval, and standards the PSC must consider in determining whether to grant the approval. A leased generation contract would be subject to this statute.

The Act establishes additional limitations on the approval of leased generation contracts, exceptions to existing limitations, and other requirements regarding such contracts.

Definitions and Terminology

The Act defines "*leased generation contract*" as "a contract or arrangement or set of contracts or arrangements under which an affiliated interest of a public utility agrees with the public utility to construct or improve an electric generating facility and to lease to the public utility land and the facility for operation by the public utility."

The Act defines "*electric generating facility*" to mean, in effect, an entire power plant. It defines "*electric generating equipment*" very precisely to include only the equipment that actually converts a fuel or source of energy into electricity. For example, in a coal-fired plant, this would include the boiler, turbine and generator, but would not include other facilities, such as the building shell, rail spurs and other coal handling facilities, or water intake structures and other cooling facilities. It also includes fuel cells and photovoltaic cells.

The definition of "*leased generation contract*" refers to both the ***construction*** and the ***improvement*** of a power plant. This allows application of the leased generation contract mechanism to the construction of an entire new power plant or to the replacement of an existing component or the construction of a new component of an existing power plant. For example, an affiliated interest may install a new turbine or electric generator or build a new air pollution control system on an existing plant owned by a utility; the affiliated interest would then own that component of the power plant and lease it to the utility.

The Act amends the definition of "*public utility*" to specify that a person who owns a facility that is subject to a leased generation contract is not a public utility unless the person otherwise qualifies as such. This appears to have the same effect as prior law. The Act also amends the definition of "*wholesale merchant plant*" to specify that a facility that is subject to a leased generation contract is not a wholesale merchant plant. This also appears to have the same effect as prior law.

General Provisions

The Act establishes a number of general requirements and limitations regarding leased generation contracts. It limits the application of leased generation contracts to projects for which, as of January 1, 2002, the PSC has not approved the construction or improvement that will be conducted under the contract and, as of January 1, 2002, the construction or improvement has not started. It also limits application of these contracts to projects for which the estimated gross cost of the construction or improvement is at least $10 million. Projects smaller than this could not be financed under a leased generation contract. It also prohibits the application of a leased generation contract to the construction or improvement of nuclear powered plants.

The Act specifies that the term of a leased generation contract for construction of a gas-fired facility be at least 20 years and, for construction of a coal-fired facility, at least 25 years. The Act does not specify the term of contracts for improvements to existing facilities, leaving this determination to the PSC. Presumably, the PSC would base the term of such a contract on the projected useful life of the improvement.

At the end of a contract, the public utility has the option to renew the contract or to purchase the power plant or equipment that is subject to the contract. The new lease or the sale would be based on the fair market value of the plant or equipment, as determined by a valuation process specified in the contract and conducted by a third party. If the utility chooses to exercise this option, the affiliated interest may require that the utility extend the contract, rather than purchase the property, if extension of the contract will avoid material adverse tax consequences and if the extension of the contract provides terms and conditions that are economically equivalent to a purchase. If the utility does *not* exercise this option, the power plant or equipment remains the property of the affiliated interest, with no further obligation to the utility.

The Act specifies that a leased generation contract does not take effect until the date on which the affiliated interest starts construction or improvement of the power plant. If a contract applies to more than one construction project, the contract does not take effect with respect to an individual project until the date on which the affiliated interest starts that project. It also directs the PSC to maintain jurisdiction to ensure that the power plant or equipment is constructed and placed in service as provided in the contract.

The Act specifies that the new statute regarding leased generation contracts does not prohibit electric cooperatives and municipal electric utilities from acquiring an interest in a power plant that is constructed under a leased generation contract or the land on which the plant is located.

Utility Rates

The Act provides that, in setting rates of a public utility, the PSC may not consider any income, expenses, gains, or losses that are received or incurred by an affiliated interest as a result of its ownership of a power plant under a leased generation contract. This is essentially a restatement of the general policy that underlies the affiliated interest law, which is that the finances of a public utility and its affiliates should be strictly separated and the financial condition of the affiliate should not affect the utility or its rates.

The Act requires the PSC to allow a utility to fully recover, in its retail rates, the portion of payments it makes under a leased generation contract and of prudent costs related to the operation and maintenance of a power plant or equipment under the contract that relate to the provision of retail utility service. This, too, is a

restatement of a general policy of utility regulation, which is that a utility is entitled to recover through its rates the prudently incurred costs of providing the service to which the rates apply. It does not state, but implies that the costs incurred under a contract that are allocable to wholesale power sales must be recovered through those sales.

Transfer of Real Property

The Act prohibits the transfer from a public utility to its affiliated interest of any "electric generating facility, electric generating equipment, or associated facilities, held or used by the public utility for the provision of electric service" under a leased generation contract. It provides an exception for the transfer of specified facilities between a public utility affiliate and nonutility affiliate within a holding company system, as described below. However, that exception does not apply to affiliated interests that are not subject to the holding company law. As a consequence, a utility that is not subject to the holding company law is not allowed to transfer any of the described facilities to its affiliated interest under a leased generation contract.

The Act requires that any transfer of real property from a utility to its affiliate under a leased generation contract must be made at the book value of the property at the time of the transfer. (Book value is the original cost of the real property, minus accumulated depreciation.) It also requires that any property that is transferred be transferred back to the utility, on the same terms and conditions as the original transfer, if the construction or improvement is not completed as provided in the contract.

Modification of Contracts

Under the affiliated interest law, when approving any contract or arrangement between a public utility and its affiliated interest, the PSC is required to "reserve the power of the commission to revise the terms and conditions of the contract or arrangement to protect and promote the public interest." [s. 196.52 (5) (a), Stats.] The Act states that, notwithstanding this provision, the PSC may not modify a leased generation contract that it has approved, except as specified in the contract or in the PSC order approving the contract.

TRANSFER OF REAL PROPERTY UNDER THE HOLDING COMPANY LAW

Under the holding company law, in general, a public utility may not transfer, sell or lease real property to its nonutility affiliate except by public sale or by offering to the highest qualified bidder. [s. 196.795 (5) (k), Stats.] (A "nonutility affiliate" is a company in a public utility holding company system that is not a public utility.)

The Act provides that a public utility may transfer certain real property to its nonutility affiliate at book value for the purpose of implementing a leased generation contract. The utility may transfer land that is held and used for the provision of utility service.

In addition, it may transfer electric generating equipment or associated facilities if all of the following apply: (a) the equipment or facilities are located on the land on which an electric generating facility subject to a leased generation contract is to be constructed; and (b) the equipment or facilities are part of an electric generating facility on that land that is no longer used and useful for the provision of utility service and that has been retired from the provision of utility service. In other words, only land or parts of a retired power plant on the site where a new power plant will be built may be transferred. An entire power plant may not be transferred; neither may equipment that is used or held by a utility for future use nor equipment that is not on the site of the proposed new construction.

INITIAL APPLICATION

The provisions of the Act first apply to a leased generation contract that is entered into, modified, renewed or extended on September 1, 2001.

ADDITIONAL RESOURCES

For a fuller description of PTF-2, see Wisconsin Electric's formal filings with the PSC, in particular its Petition, dated February 23, 2001, and its Reply to Comments, dated March 30, 2001.

For discussion and analysis of PTF-2 by PSC staff, including a summary of testimony presented to the PSC in formal hearings, see two memoranda from Robert Norcross, Electric Division Administrator, and others to the PSC, both titled, *In the Matter of Wisconsin Electric Power Company's Request for Declaratory Ruling Approving a Plan to Increase Generation In Wisconsin,* dated April 26 and August 21, 2001.

Copies of these documents can be obtained from the PSC or from the author of this Information Memorandum.

This memorandum, prepared on October 15, 2001, by ***David L. Lovell, Senior Analyst.***

This information memorandum is not a policy statement of the Joint Legislative Council or its staff.

WISCONSIN LEGISLATIVE COUNCIL
One East Main Street, Suite 401 • P.O. Box 2536 • Madison, WI 53701-2536
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Email: leg.council@legis.state.wi.us
http://www.legis.state.wi.us/lc

STATE OF WISCONSIN

CIRCUIT COURT
BRANCH 4

DANE COUNTY

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MASTER
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PUBLIC SERVICE COMMISSION
OF WISCONSIN
2004 SEP 29 1 A 9 34
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FRIENDS OF RESPONSIBLE ENERGY,
Petitioner,

RECEIVED
SEP 2 9 2004
OGC

Case No. 03-CV-3389

vs.

PUBLIC SERVICE COMMISSION OF WISCONSIN,
WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
UNIVERSITY OF WISCONSIN BOARD OF REGENTS,
WISCONSIN DEPARTMENT OF ADMINISTRATION,
Respondents.

FILED
SEP 28 2004
CIRCUIT COURT
DANE COUNTY, WI

and

MADISON GAS & ELECTRIC CO.
GE POWER WEST CAMPUS LLC, and
WISCONSIN PUIBLIC SERVICE CORPORATION.
Intervenors,

DECISION AND ORDER

BACKGROUND

This case was initiated by the petitioner seeking an administrative review of a decision of the Public Service Commission (PSC), dated October 9, 2003 and corrected October 27, 2003; and a decision of the Department of Natural Resources (DNR), dated July 29, 2003. The PSC decision of October 9, 2003 approved construction of the West Campus Cogeneration Facility (WCCF).

The proposed location of the WCCF is adjacent to the existing UW West Campus Heating Plant on the 500 block of Walnut Street on the UW Campus. The petitioner,

Friends of Responsible Energy (FORE) is an unincorporated citizen association consisting of Wisconsin residents, UW students, facility, staff, financial and technical professionals and residents in close proximity to the proposed site. The respondents are the PSC whose responsibilities include the regulation of electric utilities; the DNR whose responsibilities include air pollution control, wastewater permits and water loss registration, and approvals relating to the WCCF; the UW Board of Regents (UW) who owns the real property at the WCCF site and was a co-applicant in the PSC proceeding; and the Department of Administration (DOA) who was involved in the decision making process leading to the application for a certificate of public convenience and necessity (CPCN) from the PSC. The interveners are Madison Gas and Electric Company and MGE Power West Campus, LLC (collectively MGE) who were applicants and parties to the proceedings before the PSC. MGE will own lease and operate the electric generation facilities of the WCCF. Another intervener, Wisconsin Public Service Corporation, participated as a party at the PSC.

FORE is concerned about numerous potential environmental impacts including increased air pollution, water quantity and quality and increased noise emissions. FORE's issues are summarized as follows:

1. DOA and UW failed to comply with the Wisconsin Environmental Impact Act, §1.11 (WEPA).
2. The PSC's completeness determination was erroneous.
3. The joint PSC-DNR Final Environmental Impact Statement (FEIS) was incomplete and failed to comply with WEPA.

4. PSC's CPCN failed to comply with §196.491(3)(d)3 & 4 by failing to consider at least two alternative sites, and because the WCCF would cause excessive noise, increased safety risks and increased air pollution.

Because the record is voluminous, as are the pleadings and briefs, the court will not go into detail in developing the factual background. All parties are intimately acquainted with the facts and process before the PSC. Facts will be stated as necessary.

A brief chronological history reveals the following dates and events:

06/14/02	MGE, MGE Power and MGE Energy applied to the PSC for a CPCN per §196.491(3) to construct and operate a large electric power generating facility per §196.52(4).
10/21/02	PSC determined the application was complete.
04/25/03	FORE submitted comments on the DEIS and requested that PSC reconsider its 10/21/02 determination.
05/09/03	ALJ Whitcomb requested responsive pleadings by 06/11/03.
06/10/03	FORE supplemented its 04/25/03 filing.
06/19/03	PSC Electric Division Administrator Norcross submitted a memorandum with four possible alternative considerations; three would reopen the case per §196.39(1) and one would deny FORE's request for reconsideration.
06/26/03	PSC denied FORE's request to reconsider without providing a rationale.
07/29/03	DNR issued a Final Decision on WEPA compliance.
10/09/03	PSC issued Final Decision approving WCCF with conditions.
10/27/03	PSC issued a corrected Final Decision.

The respondents addressed the various issues raised, sometimes overlapping each other. Wisconsin Public Service Corporation (WPSC) responded to the two alternate site rule contending that the PSC's consideration of the rule was reasonable and satisfied the PSC's regulatory obligation under § PSC 111.53.

The DOA and the UW argued that FORE's petition was untimely, that FORE lacked standing and that the petition failed to state a claim against DOA and the UW Board of Regents under the ruling of City of Oak Creek v. Milwaukee Metro. Sewerage Dist., 576 F.Supp. 482 (E.D.Wis 1983), and Milwaukee Brewers v. DH & SS, 130 Wis. 2d 56 (1986).

MGE agreed that the WCCF review was thorough and proper inasmuch as the PSC considered alternate sites as required and there was substantial evidence of no undue adverse environmental impacts and that only one EIS was required.

The PSC-DNR responded supporting the DOA-UW's positions as well as arguing that the CPCN was complete and sections 1.11(2) and 1.12(2), Stats., were complied with.

STAND OF REVIEW

The court is being asked to review the decisions of two administrative agencies, the PSC and the DNR. In reviewing their legal conclusions and statutory interpretations there are different standards of review. The courts grant "great difference" where (1) the agency is charged with administering the statute or regulations being interpreted; (2) where the agency's interpretation of the regulation is long standing; (3) where the agency employed its expertise in arriving at its interpretation; and (4) where the agency's interpretation will provide uniformity and consistency. If the agency's interpretation is reasonable, it will be upheld. Barron Elec. Coop. V. Public Service Comm., 212 Wis.2d

752 (Ct. App. 1997).

FORE challenges the final EIS prepared jointly by the PSC and DNR, which they found to be adequate under WEPA. Both found the EIS to be proper and consistent with §1.11, Stats. These determinations are applications and interpretations of §1.11, Stats., and, therefore, entitled to great deference. The great deference standard applies because the PSC is charged with regulating electric utilities, administering § PSC 111.53, (the two alternative sites requirement); the PSC has a history of interpretation of the rule; the PSC used its expertise throughout the process; and the PSC's interpretation is reasonable. The DNR also meets the standard for great deference. FORE does not challenge this.

If the decisions of the PSC and DNR, based upon the record, contain a sufficient basis so that a reasonable person, acting reasonably, could have made the same factual findings, there is substantial evidence under §227.57(6), Stats. The decision, based upon substantial evidence, may not be arbitrary and capricious. The agency decision will be presumed to be valid and the burden of overturning such action rests on the party challenging it. City of La Crosse v. DNR., 120 Wis.2d 168 (Ct. App. 1984).

ISSUES

I. Standing of FORE.

FORE's petition is entitled to a liberal construction . To have standing, FORE must be aggrieved by the challenged decisions. To be aggrieved there must be a demonstrable threat of immediate danger of sustaining some direct injury due to the agency decision. The injury must also be to an interest protected by law. Milwaukee Brewers v. DH&SS, 130. Wis.2d 56 (1986).

The DOA and UW argue that FORE fails to show an injury in fact caused by a decision of the DOA or UW, therefore, FORE is not aggrieved by their decisions.

FORE's allegation is that the DOA and UW's own failure to provide an EIS pursuant to statute adversely affects FORE's members' quality of life due to the expected negative environmental impacts of increased air pollution, water quantity and quality impacts and increased noise emissions. Under the rationale of Friends of the Earth v. Laidlaw, 528 U.S. 167 (2000), Wisconsin's Environmental Decade, Inc. v. PSPC, 69 Wis. 2d 1 (1975) and Fox vs. DH&SS, 112 Wis.2d 514 (1983), the petitioner has met the first prong of being an aggrieved party. I also find that FORE has satisfied the second prong since the law recognizes that the state's environment and citizens are entitled to protections through WEPA. Therefore, the DOA and UW's motion to dismiss based on a lack of standing is denied.

II. FORE fails to state a claim upon which relief may be granted with respect to DOA and the UW

Simply put, FORE states that the DOA and UW failed to follow the mandate that all state agencies consider environmental impacts and alternatives pursuant to WEPA, § 1.11(2), Stats. The DOA and UW seek dismissal arguing that they were not required to evaluate the alternatives because the legislature had already determined the parties and purpose of the project, the design and size of the plant and the general site depending upon negotiations. 2001 Act 109 §9156. The language of that Act reiterates the PSC's authority and responsibility under chapter 196. 2001 Act 109 §9156 (2z)(g).

The DOA and UW contend that, because WEPA is procedural only and does not impose substantive requirements, it must give way when it conflicts with other legislation. Flint Ridge Dev. Co. v. Scenic Rivers Assoc. of Oklahoma, 426 U.S. 776 (1976). The courts have recognized that WEPA is subject to reasonable interpretation by an agency when the legislature

has become involved, for instance, in site selection. Milwaukee Brewers and Shoreline Pack Preservation, Inc., v. DOA, 195 Wis.2d 750 (Ct. App. 1995). The rule of reason may be applicable. Izaak Walton League of America v. Marsh, 655 F. 2d 346, 372 (D.L. Cir. 1981), cert. denied, 454 U.S. 1092. Site selection of a public building is within the province of the legislature. Outagamie Co. v. Smith, 38 Wis.2d 24 (1968).

Because the legislature selected the general site of the UW-Madison Campus through specific legislation it would not make sense to require the DOA and UW to conduct an independent alternative site review. They need only be concerned that an EIS address whether there are any adverse effects on the environment. The EIS actually prepared by the PSC and DNR addressed the legislative requirements in compliance with Milwaukee Brewers and Shoreline. The EIS did consider siting locations on the campus.

The City of Oak Creek case held that actions preliminary to actual construction may commence without an EIS since no final action may occur absent an EIS. In other words, an EIS is required when the critical agency decision is made which results in irreversible and irretrievable commitments of resources to an action that will affect the environment. Sierra Club v. Peterson, 717 F.2d 1409 (D.C. Cir. 1983). City of Oak Creek warned against undue judicial involvement and the preparation of unnecessary impact statements. Since actual construction of the WCCF was subject to approval by the PSC and DNR and these agencies prepared an EIS in compliance with §1.11, Stats., it would not be reasonable to require the DOA and UW to also prepare an EIS. This would amount to undue judicial involvement and would require the preparation of unnecessary impact statements.

FORE cites Larsen v. Munz Corp., 167 Wis.2d 583 (1992) which discusses the importance of the opportunity for public participation in the process and having a reviewable

record. In the instant case there was significant opportunity for public participation. The implicit determination made by DOA and the UW was that an EIS prepared by the real decision makers, the PSC and DNR, satisfied the procedural aspect of WEPA. Under the circumstances the DOA and UW sufficiently complied with the spirit of the procedural requirements of WEPA. This was reasonable under the circumstances.

Under the unique circumstances of this case the DOA and UW are not necessary or proper parties. They are dismissed from this actions.

III. Completeness of the CPCN

FORE complains that the PSC's completeness determination was premature because it failed to consider a full range of other reasonable alternatives, thus, FORE was denied due process of law and meaningful public participation. This is claimed to be in violation of § PSC 111.53 and § 196.491(3)(a)2, Stats. FORE also alleges that the PSC could not rely on § 194.491(3)(d)3 and 4, Stats., because no alternative locations for the WCCF were presented.

Section 196.491(3), Stats., and related provisions govern the CPCN application process for the construction and operation of a facility that generates 100 mw or more of electricity. Section PSC 111.53 governs the application process for a CPCN. Section PSC 111.53(1)(e) requires information on at least two proposed cites for the proposed facility. However, § PSC 111.53(2)(b)1 provides an exception to § PSC 111.53(1)(e) for a cogeneration facility where two sites are both located at the steam host's existing industrial plant.

FORE challenged the completeness determination at the PSC prior to the October 21, 2002 determination and raised several issues for consideration. The fundamental error alleged by FORE is that the PSC should have followed § PSC 111. 53(1) rather than § PSC

111.53(2)(b)1. This is because MGE was proposing building a new facility at a different location than the existing Walnut Street plant. Additionally, MGE did not file information on "two sites" as required by § PSC 111.53(2)(b)1. MGE actually provided two alternative plant configurations on the same site immediately adjacent to the existing Walnut Street facility. FORE seeks a ruling that the PSC erred in issuing the CPCN prematurely and on an incorrect legal basis. Thus, the CPCN should be vacated and remanded for further consideration.

Intervenors MGE and WPSC respond that the PSC did consider two alternative sites and acted reasonably. Under a "great deference" standard the PSC interpretation of § PSC 111.53 must be sustained if it is reasonable, even if an alternative interpretation is more reasonable. The PSC is generally entitled to great deference in its decisions to grant or deny a CPCN and in interpreting § PSC 111.53(2)(b)1. The PSC found that the WCCF qualified as a cogeneration facility which allows MGE to file information on two sites if both are located at the steam host's existing plant. Since the UW is the steam host, the UW campus was considered to be the existing plant which was specifically located at the Walnut Street site. The PSC found that the proposed site adjoining the existing Walnut Street plant is the only appropriate location on campus due to many factors including required infrastructure in place and the lack of suitable building sites elsewhere.

The PSC has been consistent in its interpretation of § PSC 111.53 (2)(b) as it applies to the "two site" rule. It has found that even the normal two site requirement may be satisfied by two sites in close proximity to one another in Docket 9346-CE-100, Docket 05-CE-130 and Docket 05-CE-128. In those cases the alternate sites were either contiguous or separated by relatively short distances.

The burden is on FORE to show that the PSC acted unreasonably. The PSC determined, for all the reasons stated in its decision, that the chosen site was the only feasible location on campus available for the WCCF due to its proximity to the UW's steam and chilled water loops and other infrastructure requirements. In addition, other environmental problems existed on vacant locations on campus. MGE presented alternative configurations and the PSC made a choice based on the configuration not shading the University greenhouses located just north of the site and because it offered a more compact layout, with larger taller buildings located away from residential areas.

If there is only one feasible location for the proposed site and the reviewing court should not substitute its judgment for the PSC's application of an administrative rule if a rational basis exists, I find that the PSC has complied with the "two site" rule by considering alternative configurations at the same location. Such an interpretation promotes uniformity and consistency. It is reasonable and that is sufficient to uphold the PSC determination.

IV. The Joint PSC-DNR Final Environmental Impact Statement

FORE contends that the PSC-DNR Final Environmental Impact Statement failed to evaluate a full range of reasonable alternatives to the UW's energy needs pursuant to §1.11(2)(c)3, Stats. Rather, FORE claims, the WCCF was "rammed through" the approval process.

Chapter 5 of the FEIS is titled "Alternatives to the Proposed Project". This chapter discusses various alternatives including "No Action," "Energy Efficiency," "Renewable Resources," "Merchant Power Plants," and EGEAS scenarios. Although considered, FORE argues they were not considered "in depth". The petitioner states that the smaller alternative

power generating options should have been fully evaluated. It is true that the FEIS states "none of these four options were filed with the Commission or analyzed by PSC staff".

FORE also claims that the PSC erroneously qualified the WCCF as a cogeneration facility entitled to a more circumscribed review under § PSC 111.53(2)(b)1. This error contributed to the failure to conduct an appropriately detailed FEIS. Lastly, FORE raises the issue in its brief that the FEIS did not adequately evaluate the WCCF under §1.12, Stats.

As stated above, the FEIS did consider various alternatives to construction of the WCCF. The "no action" alternative included discussion of negotiating new power purchase agreements, developing alternative sources of steam and chilled water and electricity. It was also noted that developing separate plants for steam and chilled water as well as electric generating plants to meet the energy needs of the UW and MGE would increase air omissions, and perhaps water use, above the predicted levels of the WCCF.

Energy efficiency was considered and the alternatives of conservation, load management and fuel switching were addressed. Renewable resource alternatives included consideration of solar power, wind power, hydroelectric power and biomass fuels. Cost comparisons of renewable resources were also considered in the PSC review. Merchant power plants would require reliance on an independent power producer and the issue of cost was raised as a potential issue for public hearings. The PSC also used the Electric Generation Expansion Analysis System (EGEAS) to evaluate alternatives to the WCCF.

The respondents assert that they complied with the requirement to evaluate a full range of alternatives to the WCCF and did so within the 'rule of reason", relying on the authority provided by case law.

> The range of alternatives that must be considered need not include those whose effect cannot be reasonably ascertained, whose implementation is deemed remote or speculative, or which are not reasonably related to the purposes of the proposed agency action.

Wisconsin's Environmental Decade, Inc. v. PSC, 79 Wis.2d 161, 175 (1977).

The PSC's consideration and evaluation of alternatives should include feasible alternatives rather than every alternative that can be conceived. Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, 435 U.S. 519, 551-553 (1978). Within the bounds of feasibility the PSC also considered the stated needs and criteria of the UW. In doing so the PSC may rely on exercising its considerable discretion. Citizens Against Burlington, Inc. v. Busey, 438 F.2d 190 (D.C. Cir. 1991). The range of alternatives considered by the PSC-DNR FEIS was reasonable, particularly in light of the limitations of 2001 Act 109's language regarding the construction of a cogeneration plant of a certain size within a relatively small location.

Because FORE failed to raise the issue that the PSC evaluation was inadequate under §1.12, Stats., MGE asserts that FORE has waived the right to raise this issue now. Bunker v. Labor & Industry Review Com', 258 Wiks.2d 255 (Ct. App. 2002) does hold that such a failure is ordinarily found to constitute waiver of the right to review the issue in the reviewing court. This is a discretionary decision for the reviewing court. If the issue was not raised before the PSC it is difficult to make a pryer record for review. I agree with respondent MGE that this issue is waived for failure to raise it at the PSC, FORE's "substantial justice" argument notwithstanding. Furthermore, the basis for the argument at this time is that the PSC failed to appropriately compare various alternatives within the EGEAS. This issue has already been resolved to FORE's detriment.

V. The WCCF Doesn't Qualify for a CPCN Under §196.491(3)(d)3&4.

Sections 196.491(3)(d)3&4, Stats., generally provide that the PSC shall approve a CPCN when the design and location of the facility is in the public interest considering certain alternatives, and the proposed facility will not have an undue adverse impact on other enumerated environmental values.

The first issue raised relates to the "two site" requirement that has been discussed previously and will not be rehashed here. The second set of issues relate to undue adverse impacts as they relate to (1) noise emission, (2) safety, and (3) air quality.

The PSC decision under review is the result of a contested case hearing where the PSC made certain factual findings. That being the case, this court may not substitute its judgment for the PSC's as to the weight and credibility of the evidence on disputed facts. If there is substantial evidence in the record to support the PSC action, it will not be set aside. Section 227.57(6), Stats. If the evidence before the PSC was relevant, credible and sufficient for a reasonable fact finder to act upon, it is substantial. Substantial is not equated with "preponderance" and it is up to the agency, and not the court, to evaluate the credibility and weight of the evidence. Bucyrus-Eric Co. v. Dep't of Indus. Labor and Human Relations, 90 Wis2d 408 (1979). If the PSC's conclusions are reasonable, they must be upheld.

1. Noise Emissions:

FORE states that noise emissions have a potential undue adverse impact on nearby residents. In this regard the PSC heard testimony from a "noise panel" of experts presented by MGE and a noise expert presented by FORE. In that testimony there was agreement, that the WCCF would cause increased noise levels and disagreements as to how significant the increased noise levels would be at various locations, times, and under various weather conditions. That

testimony is contained in the PSC record. (R. Item 64, Trans. At 430-547 and R. Item 65, Trans. 813-849).

That testimony, which will only be recounted briefly, supported MGE's application in that MGE designed the WCCF for minimal acoustical impact in the surrounding community; the mitigation technologies applied exceeded the applicable Madison noise ordinances; and ambient noise level modeling was conducted at seven locations on or near the WCCF site. MGE's experts opined that during a typical day the noise would be imperceptible to residents, that very late at night and early mornings low level plant noises will be audible outdoors in the residential community but would not be perceptible inside a single-family residence with open or closed windows. While FORE's expert witness disagreed with respect to the noise testing and modeling, MGE's testing was conducted in accordance with industry standards.

There was disagreement between a representative of the cooling tower manufacturer and the FORE expert over increased noise emissions on windy days, however, the tower manufacturer witness denied providing disputed information which the expert relied upon. That credibility determination was the PSC's to make.

2. Safety

FORE called as a witness a doctoral candidate at the UW. The record is unclear, however, it does not appear that she testified as an expert witness. That witness' testimony concerned public health and safety risks associated with accidents and the possibility of terrorism. There is evidence in the record that the PSC noted and considered various safety factors in preparing the FEIS, notably at R.69, Item 35 pp. 43-47, 2270, 229. Section 196.491(3)(d)3, Stats., requires consideration of safety. The record supports a finding that the PSC did consider safety and concluded the WCCF was in the public interest.

3. Air Quality.

The PSC concluded that the WCCF will meet all air quality standards applicable in the state. FORE is concerned with a net increase in fine particulate and other pollutant concentrations in the vicinity of the plant as measured at University Avenue and Franklin Street. MGE and the UW have entered into several various memoranda of understandings (MOU) with the City of Madison, the Regent Neighborhood Association and other interested entities regarding the mitigation of additional air pollution and the reduction of other sites' emissions. The MOU's are agreements entered into which go beyond the requirements relating to the PSC approval process. FORE's desired "no net increase" in emissions is simply not the relevant standard. If the WCCF will meet the requirements of chapter 285 – Air Pollution, the PSC may not determine that the proposed facility will have an undue adverse impact because of the impact of air pollution. Expert testimony and evidence before the PSC supported the position that the WCCF will comply with all state and federal air quality standards. The weight and credibility of that testimony is appropriately determined by the PSC. DNR's investigation and report concluded that there would be no undue adverse impact due to air pollution. The FEIS is part of an adequately developed record created by the PSC and DNR, which this court may rely upon. City of New Richmond v. DNR, 145 Wis.2d 535 (Ct. App. 1988).

Conclusion

The DOA and UW are dismissed. They are not proper parties and the complaint fails to state a claim against them.

Under the great deference standard of review I find that the PSC's completeness determination was not erroneous. I also find that the joint PSC-DNR FEIS was complete and in compliance with WEPA. Lastly, I find that the PSC correctly interpreted § PSC 111.53 and complied with §196.491(d), Stats. Therefore, the PSC's Order dated October 9, 2003, and the Corrected Final Decision dated October 28, 2003 and the DNR's Decision on WEPA Compliance dated July 29, 2003 are affirmed. The petition is dismissed.

IT IS SO ORDERED.

Dated this 28th day of September, 2004.

The Honorable Steven D. Ebert
Circuit Court Judge, Branch 4

THE FOREGOING ORDER IS THE FINAL ORDER ON THE PETITION. NO SUBSEQUENT DOCUMENT IS CONTEMPLATED BY THE COURT.

Cc: Glenn M. Stoddard
Mary M. Stevens
Mark A. Edwards
Kathleen M. Ptacek
Richard K. Nordeng

Date Mailed
April 18, 2003

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Three Large Electric Generation Facilities, the Elm Road Generating Station, and Associated High Voltage Transmission Interconnection Facilities to be Located in Milwaukee and Racine Counties

05-CE-130

ORDER DENYING PETITION TO REVIEW INTERIM DETERMINATION

At its open meeting on March 20, 2003, the Commission considered a petition from S.C. Johnson & Son, Inc., and Wisconsin's Environmental Decade. In this docket Wisconsin Energy Corporation (WEC) is seeking authority to construct three new coal-fired generating facilities as part of its "Power The Future" program, known as the Elm Road Generating Station. The petitioners ask the Commission to reconsider its determination that WEC's Certificate of Public Convenience and Necessity (CPCN) application is complete.

On November 15, 2002, the Electric Division stated its findings that the CPCN application is complete. This determination was made under Wis. Stat. § 196.491(3)(a)2, and it triggered the statutory review cycle that directs the Commission to render a decision regarding the application in no more than 180 days (360 days, if Dane County Circuit Court grants an extension for good cause).

The petitioners allege that WEC's application does not meet the Commission's requirements under Wis. Admin. Code § PSC 111.53(1)(e), which requires an applicant to describe "at least two proposed sites for the proposed facility." The petitioners contend that

WEC's three alternate sites, all located on the grounds of WEC's existing Oak Creek Generating Plant, are functionally identical. They seek a rescission of the Commission's completeness determination and a declaration by the Commission that WEC must propose at least one site at a new location, other than Oak Creek.

Because a completeness determination is an interlocutory decision, the petitioners cannot request a rehearing under Wis. Stat. §§ 196.39(2) and 227.49. The latter statute specifies that only a person aggrieved by a final order can seek a rehearing. Instead, the petitioners must rely upon the Commission's authority to reopen a case at its own discretion under Wis. Stat. § 96.39(1). This statute declares, "The commission at any time, upon notice to the public utility and after opportunity to be heard, may rescind, alter or amend any order fixing rates, tolls charges or schedules, or any other order made by the commission, and may reopen any case following the issuance of an order in the case, for any reason."

Both state and federal law provide guidance as to what constitutes an acceptable "alternative." Wisconsin's Environmental Policy Act (Wis. Stat. § 1.11(2)(e)) requires state agencies to study, develop, and describe in an Environmental Impact Statement "appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." Ultimately, the rule of reason guides the range of alternatives that an agency must examine. *Milwaukee Brewers v. DHSS*, 130 Wis. 2d 56, 73, 387 N.W.2d 245 (1986); *City of Carmel-by-the-Sea v. U.S. Department of Transportation*, 123 F.3d 1142, 1155 (9th Cir. 1997). As the Wisconsin Supreme Court declared in *Wis. Environmental Decade v. Public Service Commission*, 79 Wis. 2d 161, 175, 255 N.W.2d

917 (1977), "The range of alternatives that must be considered need not include those . . . which are not reasonably related to the purposes of the proposed agency action."

The Commission's standard for reviewing site alternatives in a CPCN application is based upon both the rule of reason and the principle that alternatives must serve the public purpose underlying the issuance of a CPCN. The Commission first reviews a CPCN application to determine that each proposed site is "reasonable," i.e. is a feasible location for the project that would not directly conflict with any of the criteria for granting a CPCN expressed in Wis. Stat. § 196.491(3). In addition, the Commission's practice is to require that the sites are sufficiently distinct to offer different packages of costs and benefits, and thus present the Commission with a choice.

The fact that alternate sites may be geographically close to each other does not render them unreasonable. The Commission has accepted CPCN applications for several projects where the alternate sites were close together or even adjacent to each other. Instead, the Commission looks at the characteristics of the sites in their entirety. The alternate sites requirement of Wis. Admin. Code § PSC 111.53(1)(e) is also distinct from the requirement that a CPCN application describe alternate forms of engineering, which is found in Wis. Admin. Code § PSC 111.53(1)(d). Paragraph (d) requires the applicant to provide information about alternate sources of supply—in particular, demand-side management and resources with a higher ranking under the energy priorities laws, Wis. Stat. §§ 1.12 and 196.025. While par. (e) does require that two or more sites be discussed in the application, it does not demand that at least one site be designed for an alternate source of supply. Paragraph (e) allows an applicant to propose sites that are all designed to use the applicant's preferred fuel.

Because of the complexity of a coal-fired electric generating plant, which requires a great deal of infrastructure in the form of transmission facilities, coal handling equipment, rail or ship transportation for coal and other materials, and means of supplying large quantities of water, very few sites for such a project are actually feasible. These infrastructure requirements place a premium on existing brownfield locations, where generating plants are already in place and facilities can be shared. As a result, the range of site alternatives tends to be smaller and the packages of costs and benefits that the site alternatives offer may be more similar than for other types of projects.

At least two of the three sites WEC has included in its CPCN application meet the Commission's standards. The petitioners allege that 11 or more different characteristics of these sites are functionally identical, but this situation is difficult to avoid when searching for locations to install a new coal-fired plant where generation already exists. The similarities highlight the fact that each site alternative is relying on existing infrastructure at a brownfield generating site, and the Commission has encouraged the use of such locations because they tend to make electric generation projects less expensive and less environmentally damaging. The Commission also notes two significant distinctions among the sites WEC is proposing. The primary site is located in the city of Oak Creek, Milwaukee County, while the alternate sites are found in the town of Caledonia, Racine County. In addition, construction at the primary site would require WEC to cut and fill 10 million cubic yards of earth, while at Alternate Site A it would only need to move 7.3 million cubic yards.

The site alternatives WEC is proposing are "different enough" to meet the Commission's requirements in Wis. Admin. Code § PSC 111.53(1)(e). The Commission will therefore not

reopen its determination that the CPCN application is complete. The Commission further notes that, at hearings on this project, the petitioners will have the opportunity to challenge directly whether any of the proposed sites is in the public interest.

The Petition for Review of Interim Determination is DENIED.

Dated at Madison, Wisconsin, _____

By the Commission:

_____

Lynda L. Dorr
Secretary to the Commission

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See attached Notice of Appeal Rights

Notice of Appeal Rights

Notice is hereby given that a person aggrieved by the foregoing decision has the right to file a petition for judicial review as provided in Wis. Stat. § 227.53. The petition must be filed within 30 days after the date of mailing of this decision. That date is shown on the first page. If there is no date on the first page, the date of mailing is shown immediately above the signature line. The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

Notice is further given that, if the foregoing decision is an order following a proceeding which is a contested case as defined in Wis. Stat. § 227.01(3), a person aggrieved by the order has the further right to file one petition for rehearing as provided in Wis. Stat. § 227.49. The petition must be filed within 20 days of the date of mailing of this decision.

If this decision is an order after rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not an option.

This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

Revised 9/28/98

However, all applicants must be ready to accept service prior to November 15, 1977. A customer willing to accept service is defined as one with a gas consuming appliance on his premises prior to November 15, 1977.

Due to the conditions which have arisen, an emergency exists which reasonably requires the further restriction of Northern States Power Company's undertaking of natural gas service to the public as hereinafter provided.

Conclusion of Law

THE COMMISSION CONCLUDES:

That it has jurisdiction under Chapter 196, Wis. Stats., to issue an order at this time authorizing the limitations on the sale of natural gas by Northern States Power Company of Wisconsin in accordance with the foregoing Findings of Fact; and that such an order should be issued.

Order

THE COMMISSION THEREFORE ORDERS:

1. That the limitations on the sale of natural gas by Northern States Power Company in its Southern and Indianhead Divisions (La Crosse, Onalaska, Holmen, Hudson, North Hudson and environs) for which it purchases natural gas service from the Northern Natural Gas Company be and it hereby is amended as follows:

The sale of natural gas to all customers is limited as follows:

a. The company will cease attaching new customers under all rate schedules, including both firm and interruptible services.

b. Firm gas sales and deliveries to all existing firm customers of daily and annual quantities essentially comparable to their present use.

c. Existing interruptible customers with maximum sales and deliveries of daily and annual quantities limited to current usage with further curtailment of sales and deliveries in accordance with appropriate filed rate schedules.

d. Replacement of appliances with equivalent input rating will be allowed.

2. That this Order shall be effective on the date of issuance.

3. That jurisdiction is retained.

Joint Application of Wisconsin Electric Power Company, Wisconsin Power and Light Company, and Wisconsin Public Service Corporation for Authority to Construct, Install and Place in Operation a Nuclear Power Plant Together With the Necessary Transformation Facilities in the Town of Koshkonong, Jefferson County, and Related Transmission Lines

CA-5491

Wisconsin Public Service Commission
July 26, 1977

ELECTRICITY, § 3 — Generating plant — Nuclear power plant construction — Withdrawal of plan.

[WIS.] The commission accepted a petition for withdrawal of a plan of nuclear power plant construction that had been jointly submitted by three electric utilities.

FINDINGS OF FACT AND ORDER

By letter dated July 7, 1977, from counsel, Wisconsin Electric Power Company, Wisconsin Power and Light Company, and Wisconsin Public Service Corporation, as joint applicants, have requested the withdrawal of their application for the construction of a nuclear electric generating facility at the proposed Koshkonong site.

Accordingly, and recognizing the continuing urging of several intervenors for Commission action on the status of this application, the Commission will consent to the joint applicants' request for the withdrawal of their application for construction of a nuclear generating facility at the Koshkonong site. This docket will continue open for the completion of the Commission's consideration of the joint applicants' pre-decision expenditures.

Order

THE COMMISSION THEREFORE ORDERS:

1. That the Commission consents to the request of Wisconsin Electric Power Company, Wisconsin Power and Light and Wisconsin Public Service Corporation, as joint applicants, for withdrawal of their joint application for authority to construct, install and place in operation a nuclear power plant together with the necessary transformation facilities in the town of Koshkonong, Jefferson County, and related transmission lines.

2. That this docket remain open for the purpose of completing the Commission's investigation of the joint applicants' pre-decision expenditures in this matter.

3. That jurisdiction is retained.

Application of Wisconsin Electric Power Company for Authority to Construct and Place in Operation a Coal-Fired Power Plant and Related Facilities in the Town of Pleasant Prairie, Kenosha County and Certain Related Transmission and Substation Additions

CA-5489

Wisconsin Public Service Commission
August 18, 1977

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1. ELECTRICITY, § 3 — Generating plant — Construction authority — Factors and limitations.

[WIS.] An electric utility was authorized to construct and place in operation only one unit of a proposed two-unit coal-fired intermediate load range power plant and related facilities, and the utility was ordered to submit a revised proposal outlining the minimum transmission and substation additions required to provide an outlet for that first unit's generation; due to the continuing pressure of increasing energy costs and other voluntary and involuntary conservation and utilization efficiency improvements, authorization of the second unit was deferred without prejudice.

p. 134.

2. ELECTRICITY, § 3 — Generating plant — Construction authority — Multi-unit proposals — Common plant.

[WIS.] Although only one unit of an electric utility's proposed two-unit coal-fired power plant was authorized for construction, the commission stated that it would be prudent to allow appropriate expenditures for common equipment, such as a make-up water system, chimney, and certain coal and ash handling facilities, as proposed for future development of the deferred second unit should it eventually be needed, where the present incremental costs were not expected to be large in comparison to the additional future costs that would be required to enlarge or duplicate facilities for the second unit.

p. 136.

3. CERTIFICATES, § 76 — Factors affecting grant or refusal — Environmental considerations — Electric plant.

[WIS.] Where the commission did not consider the theoretical potential of an electric utility's power plant emissions to increase ozone concentrations to be sufficiently conclusive of expected actual environmental impact to warrant denial of an entire certificate application for two coal-fired units, the uncertainties remaining on the ozone question and air quality were of such a magnitude in the decision to impose a deferral of authorization of the second unit.

p. 138.

4. ELECTRICITY, § 4 — Generating plant — Operating practices — Air quality concerns.

[WIS.] Where there were unresolved questions concerning air quality, it was reasonable that a proposed electric facility, together with other generating stations under the influence or control of the applicant utility, be granted authority to operate based on an environmental dispatch mode to minimize the effects on air quality at times of high incidence of air pollution, whenever the commission so desired.
p. 139.

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i. ELECTRICITY, § 3 — Generating plant — Construction authority — Conditions.

[WIS.] Statement, in a concurring opinion, that the instant decision represented three major steps by the commission that would change the way power plants were approved; the commission (1) placed restrictions on rate structure and load management as a necessary quid pro quo for approval of necessary expenditures, (2) restored the practice of requiring continuous on-site engineering and auditing review of major investment, and (3) extended its authority over environmental matters once a plant was in operation.
p. 147.

FINDINGS OF FACT, CERTIFICATE AND ORDER

On February 19, 1975, Wisconsin Electric Power Company, 231 West Michigan Street, Milwaukee, Wisconsin, 53201, completed filing of an application with the Commission under sections 1.11 and 196.49, Wis. Stats., and Chapter PSC 112, Wis. Adm. Code, to construct, install, and place in operation a two-unit coal-fired power plant and related facilities in the Town of Pleasant Prairie, Kenosha County, and certain transmission line and substation additions connecting the plant to the transmission system of the Applicant. *Application granted in part subject to conditions to authorize Unit 1 and associated facilities only. Authorization with respect to the application for Unit 2 is deferred without prejudice.*

Pursuant to due notice, initial hearings were held June 2 and 3, 1975 and then adjourned until an Environmental Impact Statement could be prepared as required by section 1.11, Wis. Stats. (the Wisconsin Environmental Policy Act, enacted in 1972).

On April 6, 1976, Wisconsin Electric Power Company filed a supplemental application citing section 196.395, section 196.49, Wis. Stats. and section PSC 112, Wis. Adm. Code, requesting emergency authorization to perform certain field construction activities at the proposed plant site for the purpose of beginning site clearing and preliminary construction. Applicant represented that these activities were essential to maintain its construction schedule, and that without maintaining the schedule there would be insufficient capacity to meet the 1980 summer peak requirements of its customers for electrical energy.

Pursuant to due notice, hearings were held on the supplemental application on May 4, 5 and 12, 1976. At those hearings, a motion was filed by intervenor Wisconsin's Environmental Decade, Inc., to sever the requested authorization for relocation of a short segment of transmission line that crosses the proposed plant site. In an order dated May 27, 1976, the Commission granted the said motion to sever and authorized the transmission line relocation. This action was taken without prejudice to any other issues in this docket.

On July 8, 1976, the Commission issued Findings of Fact and Emergency Order granting, subject to certain conditions, Applicant's request to proceed with certain site clearing and preliminary construction activities on Unit 1 which were necessary to maintain the proposed construction schedule in advance of the completion of regulatory review and final certification.

The Preliminary Environmental Report (PER) was issued on July 16, 1976. Under a condition of the Commission's July 8, 1976 Emergency Order, hearings were held on August 16 and 17, 1976 at Pleasant Prairie to

consider agency and public testimony and comment on all issues raised by the PER.

On April 21, 1977, the Environmental Impact Statement (EIS) was issued. Final hearings were held on May 23 and 24, 1977 at Pleasant Prairie to complete testimony and public comment on the project and the EIS.

The appearances at the hearings are listed in the attached Appendix A.

Description of Applicant

Applicant is a public service corporation organized under the laws of the State of Wisconsin, and is engaged principally in the business of operating an electric utility in the southeastern section of Wisconsin, including the metropolitan Milwaukee area. Its subsidiary, Wisconsin Michigan Power Company, is also a public service corporation organized under the laws of the State of Wisconsin, and is engaged principally in the business of operating an electric utility in east-central and northeastern Wisconsin and in the Upper Peninsula of Michigan.

The Applicant and Wisconsin Michigan operate their electric properties as an integrated system. Pursuant to an agreement made effective January 1, 1973 between Applicant and Wisconsin Michigan, the generation and transmission facilities of both companies are included in a Bulk Power Supply System which is coordinated and operated in such a manner as to effect reliable operation and the lowest overall system electric energy cost.

Power Pools

To coordinate and promote the joint planning, design, construction and utilization of electric generating and transmission facilities, utilities have entered into agreements establishing power pools. Power pools are engaged in coordination and exchange of information among their members, coordinated system planning, and sometimes coordinated system operation and are established in various geographical groupings.

In eastern Wisconsin and a portion of Michigan's upper peninsula, the Wisconsin Upper Michigan System (WUMS) is an informal planning pool consisting of Wisconsin Electric Power Company, Wisconsin Michigan Power Company, Upper Peninsula Power Company (Michigan), Madison Gas & Electric Company, Wisconsin Power & Light Company and Wisconsin Public Service Corporation. Also the latter three Wisconsin utilities jointly comprise a formal (planning and operating) power pool known as the Wisconsin Power Pool (WPP). Applicant's system together with WPP systems is sometimes referred to as the Wisconsin Utilities Group (WUG).

The electric transmission systems of the WUMS utilities are interconnected at many points and power is supplied and exchanged under the terms of several filed agreements. Power is also purchased, sold and exchanged between other adjacent public utilities over other transmission interconnections. Wisconsin member companies of WUMS supply approximately 85 percent of the electric demand and energy in Wisconsin.

For the purposes of this proceeding the data and information presented relate primarily to Applicant Wisconsin Electric Power System and the Wisconsin Utilities Group, but it should also be mentioned that WUMS utilities are also members of the Mid-America Interpool Network (MAIN), a midwest regional planning organization which, in turn, is part of the National Electric Reliability Council (NERC). These groups are concerned primarily with bulk power supply reliability on a regional basis.

Description of the Proposed Facility

Applicant proposes to construct and place in operation a coal-fired intermediate-load-range power plant and related facilities in the Town of Pleasant Prairie, Kenosha County.

The Plant

The plant proposed in the application was to have consisted of two identical generating units, each having net capacity of about 580 Megawatts (MW). Unit 1 was proposed to be

scheduled for operation in the spring of 1980 and Unit 2 in the spring of 1982. As authorized herein the plant will consist of one 580 MW unit scheduled for operation in 1980.

The plant site comprises approximately 550 acres in sections 9, 16 and 21 of the Town of Pleasant Prairie, Kenosha County, located about 3 miles southwest of the City of Kenosha. In addition, a portion of a small tract of land owned by Applicant on the west shore of Lake Michigan in sections 7 and 18 will be used for the installation of make-up water facilities.

The generating unit approved here will consist of a steam generator (boiler) supplying about 4.4 million pounds of steam per hour at 1800 psig pressure to a single turbine generator. A closed-cycle cooling system with one round mechanical-draft cooling tower will be provided. Make-up water for this condenser cooling system and water requirements for other incidental plant uses will be pumped from Lake Michigan through an off-shore lake intake and a pumphouse located near the shore and on to the plant through an underground pipeline about 5 miles long.

The Department of Natural Resources (DNR) proposed alternative water systems, one utilizing effluent from the City of Kenosha and another using a cascade and recycle system within the plant. These proposals are still being discussed at staff level by the utility and the DNR. The advantage to the re cycle system is reduced water consumption. The advantage of using sewage effluent is a reduced impact on the water quality of the lake. The utility testified that the use of sewage effluent created technical difficulties, but their proposed intake is in close proximity to the sewage treatment plant outfall, and some of these difficulties may exist in the plant water supply as proposed.

Coal handling facilities will be provided to handle the low sulphur western coal which will be delivered to the plant by unit trains from Wyoming. The cost of proposed railroad cars is included in the estimated project cost, but a decision has not yet been made concerning whether the cars will be purchased or leased.

The boiler will be equipped with a high-efficiency electrostatic precipitator to remove fly-ash which, together with bottom ash, will be disposed of in an on-site ash pit. A single 450 foot high chimney will serve the boiler. Although a flue gas desulphurization (scrubber) system is not expected to be needed and is not proposed, space reservation and layout design will allow for the installation of a sulphur removal system if required in the future.

The plant substation will include one 655 MVA, 24/345kV step-up transformer, circuit breakers and associated electrical equipment.

Transmission Facilities

Applicant proposes to tie the plant to its transmission system through rearrangement of an existing 345 kV circuit at the plant site and installation of the following facilities which were sized and designed to serve the ultimate output of the two units proposed for this site:

(a) One 345 kV circuit of transmission line, approximately 57.3 miles in length, from the plant to the Arcadian Substation.

(b) Two 345 kV circuits of transmission line from the plant to the new Bain Substation, to be located on the plant site.

(c) One 138 kV circuit of transmission line, approximately 2 miles in length, from the Bain Substation to the Kenosha Substation.

(d) One 138 kV circuit of transmission line, approximately 6.1 miles in length, from the Bain Substation to Albers Substation.

(e) Circuit breakers and associated equipment at the new Bain Substation and at four existing substations, namely Arcadian, Kenosha, Albers and Racine.

These transmission line additions total about 68.3 miles in length. Most would be built on existing right-of-way with only about 3 miles of new right-of-way required.

[1] Since only Unit 1 is to be authorized at this time, the Order will require Applicant to submit a revised proposal outlining the minimum transmission and substation additions required to provide an outlet for Unit 1 generation.

Site Selection

The Applicant's Environmental Report filed with its application outlines the selection evaluation for Pleasant Prairie and the six alternative sites of Haven (Sheboygan County), Milwaukee Harbor, Kenosha, Port Washington, Lakeside and Oak Creek. The last three sites are locations of existing power plants. Two additional sites, Koshkonong in Jefferson County and Paris in Kenosha County were evaluated in separately filed environmental reports and were considered as possible alternatives.

In economic and engineering areas such as foundation conditions, coal transportation, cooling water and electric transmission requirements, Applicant ranked the Pleasant Prairie site as either the best selection or in the most favorable group. The only major engineering disadvantage is the distance from Lake Michigan from which make-up water is pumped for the cooling systems. Strong advantages are the close proximity to existing railroads (2) and existing transmission lines.

In environmental areas of land use, air quality, water quality, and noise and ash disposal requirements, the Pleasant Prairie site was also ranked by the Applicant as one of the most favorable locations. Air quality is somewhat of a problem for all of these sites, with the exception of Haven and Koshkonong, because of their location in the generally urbanized area of southeastern Wisconsin. During the review of this application a major air quality issue developed concerning the potential impact of the plant's emissions on the existing high levels of ozone in southeastern Wisconsin. The ozone problem and other specific environmental considerations will be evaluated in further detail in a later section on environmental impacts.

Based on an overall comparison of economic, engineering and environmental factors, Applicant selected the Pleasant Prairie site as the most desirable for its proposed plant.

Costs and Accounting Procedures

The estimated total cost for approved Unit #1 is $311,874,000 (including estimated Allowance for Funds Used During Construction) distributed as follows:

Plant Account	*Item*	*Amount in Thousands of Dollars*
Steam Production Plant		
310 Land and Land Rights (Plant Site & Pipeline Route)		1,627
311 Structures and Improvements		24,823
312 Boiler Plant Equipment		93,519
314 Turbogenerator Unit		32,321
315 Accessory Electric Equipment		13,726
316 Miscellaneous Power Plant Equipment		3,895
353 Main Power Transformer		2,102
391 Office and Machine Shop Equipment		325
Subtotal		172,338

Plant Account	*Item*	*Amount in Thousands of Dollars*
Indirect Costs		20,892
Allowance for Construction Overhead		31,729
Allowance for Escalation		39,228
Allowance for Tax on Equipment		520
Contingency		16,800
Total		281,507
Transmission Plant (On Power Plant Site)		
352 Structures and Improvements		27
353 Station Equipment		3,443
Subtotal		3,470
Contingencies		67
Escalation		1,099
Total		4,636
Total Production and Transmission Plant		286,143
Transmission Plant (Lines)		*
Substation Plant (New and Additions to Existing)		*

*To be considered for separate authorization later when Unit 1 transmission and substation needs are determined.

Plant total	$286,143,000
AFDC**	25,731,000
Grand total	$311,874,000

**The amount of Allowance For Funds Used During Construction (AFDC) involves the financing costs (primarily interest) associated with the plant and depends on accounting procedures, the annual levels of expenditures on other construction programs, etc. Applicant was requested by staff to estimate AFDC charges to this project which might appropriately be capitalized under the present accounting practice followed by this Commission based on reasonable assumptions of its proposed future construction program during this period. Applicant estimated AFDC for Unit 1 at $25,731,000.

[2] The above plant costs listed for Unit 1 contain several significant items of common equipment which were sized and designed on the basis of a two-unit plant as the application proposed. These would be the make-up water system (lake intake and discharge, pump-house, and pipeline), chimney, and certain coal and ash handling facilities. While the Commission is authorizing only Unit 1 construction at this time, it believes it prudent to allow appropriate expenditures for such common equipment as proposed for future development of a second unit at this site should it eventually be needed. The present incremental costs of these facilities is not expected to be large in comparison to the additional future costs required if smaller separate equipment is provided now for Unit 1 and enlarged or duplicated later for a second unit.

Environmental Impact

In compliance with section 1.11, Wis. Stats., the staffs of the Commission (Division of System Planning, Environmental Review and Consumer Analysis — SPERCA) and the Department of Natural Resources (DNR) (Bureau of Environmental Impact) prepared and distributed an Environmental Impact Statement (EIS) on April 21, 1977. In developing the EIS, the staffs first prepared a Preliminary Environmental Report (PER) which was circulated to other agencies and made available on July 16, 1976 to the public at libraries and to town and county clerks. Notification of the availability of the PER and EIS was sent to various parties, local groups and media.

After the PER was issued, public hearings to consider agency and public testimony and comment on all issues were held at the Pleasant Prairie Town Hall on August 16 and 17, 1976. Written comments were also submitted by agencies and the public. Following the review of comments received and the development of further analysis, the final EIS was prepared, incorporating changes and additions made as a result of the comments and new information. All of the environmental review and analysis was based on the impact of two 580 MW units at this site as proposed in the Application. The EIS was introduced into evidence in the public hearings and both PSC and DNR sponsoring staffs provided testimony on issues raised in the EIS.

The single most significant environmental issue raised during the course of the review and hearings involved the general impact of the proposed plant on the air quality in Southeastern Wisconsin, and specifically its impact on ambient concentration levels of ozone. The Commission acknowledged this concern in its July 8, 1976 Emergency Order (page 20).

Ozone is a photochemical oxidant and a pollutant for which primary standards have been established by the Federal Environmental Protection Agency (EPA) due to potential adverse health effects (involving the respiratory system) at atmospheric concentrations above those levels. Power plants do not emit ozone *per se*. Oxides of nitrogen, however, are major constituents of emissions from fossil-fired boilers and these oxides have the potential to mix with hydrocarbons in the air, and in the presence of sunlight the mixture reacts to form ozone.

Ozone levels are monitored by the DNR. Relatively high levels already exceeding primary standards have resulted in a significant number of ozone alerts in Southeastern Wisconsin during summer months in recent years. Existing conditions have shown ozone to be a problem pollutant in this area. This fact amplified the concerns of the PSC, the DNR and others regarding the question of the contribution to the problem by the proposed plant. Further study was recommended, and as a result, in July 1976, Washington State University (WSU) was contracted by the Commission, in conjunction with DNR which directed the study, to perform field investigations into the matter. The purpose was to establish the area's existing air quality in relation to the ozone problem and determine the ozone producing potential of air masses coming into the region. As a part of the experiments, WSU recorded continuous ground level ambient air quality data from August 4 to September 30, 1976 at the Kenosha Municipal Airport which is located approximately 4 miles northwest of the proposed plant site. The recorded data confirmed the seriousness of the known ambient ozone problem in Southeastern Wisconsin, with ambient ozone concentrations equalling or exceeding the federal and state standards at some time during 23 out of the 58 days monitored.

In addition to the acquisition of ground level data, WSU obtained air-borne samples of the ambient air for experiments attempting to quantify the ozone production potential of the ambient air under varying meteorological conditions. WSU personnel prepared a report on the ozone issue (Exhibit 40). The gist of the ozone report and the testimony of one of its authors, Dr. H. H. Westberg, (TR, 1722-1766) is that while the WSU experiments suggested the theoretical possibility of increased ozone concentrations under certain meteorological conditions, (Exh. 40, Pgs 45-51) the WSU experiments concluded:

1) that the percentage of time the ozone producing potential of the air in Southeastern Wisconsin would actually be enhanced by the power plant emissions would be relatively small (Exh. 40 pg xiii, 32-39, 45-51) although such occurrences would admittedly be primarily during situations when ozone concentrations would already be expected to be near or exceeding standards, and

2) that the percentage increase in ozone producing potential caused by the power plant emissions would be small (Exh. 40 pgs xiii, 45-51).

These two conclusions of the study's authors were questioned on the record by both Dr. Cole and DNR staff (TR-1635-1643, 1674-1675) on the basis that the simulation of the effects of the power plant emissions in only a few experiments achieved the "optimum" combination of pollutants for the production of ozone which was, in retrospect, indicated by the experiments.

Even with the results of the study, DNR representatives testified that a major unknown in addressing the ozone question as it might be affected by this plant remains because methods are not presently available to translate those data from static experiments into ground level ozone concentrations in the actual dynamic atmosphere with continuous dilution. (Tr. 1675). In other words it is essentially impossible to estimate the magnitude or location of ozone increase or decrease on the ground.

[3] While the Commission acknowledges the seriousness of the ozone problem in Southeastern Wisconsin, the Commission does not consider the *theoretical* potential of the power plant emissions to increase ozone concentrations to be sufficiently conclusive of expected *actual* environmental impact to warrant denial of the entire application. Nevertheless, the uncertainties remaining on the ozone question and air quality generally are a factor in the Commission's decision that Unit 2 be deferred to the extent possible.

The Commission also notes that Professor Henry Cole, whose prior testimony was instrumental in convincing the Commission and the DNR of the need for an ozone study, did not recommend denial of the application but rather a continuation of study on the ozone formation process (TR 1665-1666). With regard to Professor Cole's recommendation for a continuation of study on the ozone formation process, the Commission deems it more appropriate for the DNR or its federal counterpart, the Environmental Protection Agency (EPA), to perform such generic or regional studies rather than the Commission. The Commission staff is aware that the EPA and DNR are, in fact, working on the development of ozone control strategies on a regional basis. Also, it may be that such strategies will result in an emphasis on control of pertinent emissions other than nitrogen oxides from power plants. Under the circumstances, the Commission believes it is unnecessary for it to pursue this effort directly or to require the utility to conduct further site specific air studies in connection with its application in this case.

The other major plant emission constituents affecting air quality are particulates and sulphur dioxide. The plant's boilers will be equipped with high efficiency electrostatic precipitators to control fly ash emissions. Ambient air quality modeling analysis results projecting the impact of both Units 1 and 2 emissions *and* the existing emissions sources indicate compliance with the primary particulate standard, although the secondary standard is predicted to be exceeded when additional dust or soil from cultivated fields is agitated by wind or human activities. (TR pg. 1711, EIS, pg 154) The modeling analysis indicated, however, only minimal increases in particulate concentrations due to plant operation. (EIS, pg 5.2-13-14)

The Applicant's approach to sulphur dioxide emission control is through the purchase and use of low-sulphur western coal. Based on the predicted range of sulphur content in the prospective coal to be used, modeling analysis results indicate that ambient sulphur dioxide concentrations should not exceed any air standard or significant deterioration increments. As mentioned above, although further sulphur emission control is not expected to be necessary at this time, the design will accommodate retrofitting of a sulphur removal (scrubber) system if ever required in the future.

There is a possibility that the contribution which the plant will make to the ambient sulphur oxide levels may contribute to the limitation of future industrial growth which generates sulphur oxides in the area. This possibility is not major with respect to Unit 1, but will be weighed by the Commission in its consideration of Unit 2.

[4] In view of the unresolved questions concerning air quality, which cannot be resolved at this time, and of the continuing concern for public health, it is reasonable to allow for the possibility of adjusting plant operations to minimize effects on air quality at times of high incidence of air pollution. One method of achieving this end is by using bulk generating system dispatch criteria which are based on minimizing environmental impact rather than economic cost of production. In the future, and particularly as the mechanisms by which air quality significantly deteriorates in a geographical area become better understood, the Commission may want to require the Applicant to operate this generating station, together with other generating stations under its control or influence, in an environmental dispatch mode designed to minimize overall impact on regional air quality. Authorization of this proposed plant shall be conditioned on the requirement that it, together with other generating stations controlled by Applicant, be operated according to an approved environmental dispatch mode when so directed by the Commission.

A site-specific problem involving adverse groundwater impact related to the preliminary construction authorized in the July 8, 1976 Emergency Order (T-1433-36, 1442-46.) was raised by two intervenors at the final sessions of the hearings. *Mr. Robert Schaffer and Mr. John Weigel* farm in the area and have small parcels adjacent to the site. The crops here were seriously stunted last summer and this spring apparently due to a lack of moisture. While surface and subsurface soil moisture levels have been naturally low recently due to abnormally dry weather, it is possible that the soil moisture deficiency and surface dust problem experienced here was compounded by construction activity at the nearby plant site.

Due to the groundwater levels at the site it was necessary that the Applicant's contractors install and operate a temporary dewatering system to allow excavation and proper preparation of subsurface foundation materials, work on the plant substructure and to facilitate the construction of transmission line structure foundations. The dewatering system, as is its function, depresses the groundwater table at the excavation site, and to a degree also in nearby areas, possibly including in this case Mr. Schaffer's alfalfa field and Mr. Weigel's field.

Applicant responded in testimony at the hearing that this problem results from a construction related impact which is temporary and that as soon as the Unit 1 foundation and substructure work is completed the dewatering can be discontinued (T. 1563). Some additional periods of temporary dewatering may be required for the coal handling system. The permanent plant water requirements will come from Lake Michigan, from the City of Kenosha Sewage Treatment Plant, or from the Town of Pleasant Prairie water system (EIS pg 33).

Although this problem caused by unavoidable construction requirements was possibly responsible in part for Mr. Schaffer's and Mr. Weigel's poor crops last year and this year, the nature of the impact is such that it is temporary and limited to relatively short periods and relatively small areas immediately adjacent to the construction site.

As mentioned above, of the 68.3 miles of new transmission lines proposed for two-unit operation most would be built on existing right-of-way with only about 3 miles of new right-of-way required. This results in a relative minimization of environmental impacts related to transmission requirements associated with the plant and no significant issues or problems with proposed transmission lines were raised during the review or hearings. It is possible that the transmission system will be modified in connection with the possible reduced requirement associated with the authorization of only one unit at this time.

On balance, the probable air pollution or other environmental impacts identified in the

State's App. 281

EIS and elsewhere in the record do not appear to be so severe as to indicate that Unit 1 of the proposed power plant should not be built at this site.

Demand Forecasts

At the time this application was filed in February of 1975, Applicant based its need for power analysis on the lowest set of peak demand values from its then current ten-year forecast which contained three projection sets (low, mid-range, and high) based on various assumptions and representing various growth rates. These were consolidated forecasts developed using Applicant's forecasting methodology which is described in the Applicant's Environmental Report and the staff's PER.

In the PER, SPERCA staff indicated a preference for a method which separates the electric demand into individual components and derives sector-by-sector projections.

At the May 12, 1976 hearing on the emergency application, SPERCA staff presented testimony that future application of load control, mandatory appliance standards, building code standards, interruptible rates and other efficiency improvement measures might further reduce future load growth (Tr. 999-1004). Applicant defended its forecast indicating that its choice of the low growth projection was already conservative in that it did include an amount for a planned water heater load control program and a qualitative assessment of a combination of other conservation measures. It also argued that fuel substitution which was not specifically included could result in higher than estimated demands. Other testimony called attention to the general energy situation since about 1972, which has caused dramatic changes in electric load growth patterns and made the adequacy and accuracy of forecasting future electrical requirements more questionable and difficult.

This criticism of imprecision in the demand forecasts was discussed in some detail in the July 8, 1976 Emergency Order and as a condition of that order the Commission directed Applicant to develop new demand forecasts which explicitly considered and individually quantified the impact on future demand of (1) conservation, (2) load control, (3) conversion from natural gas, (4) rate structure reform, and (5) improvements in energy utilization. (This requirement was later extended to other major electric utilities under the Advance Plan provisions of section 196.491, Wis. Stats.) The new forecast was submitted to the Commission late in December 1976 (complete data in January, 1977). So revised, it resulted in a further reduction in Applicant's projected peak demands. Applicant's annual peak demand forecast 1977-1989 as reproduced from the EIS (Table 2.1) is attached for reference herein as *Appendix B*.

While this forecast details expected peak reduction due to the use of load control, this reduction reflects the control of residential water heaters only. The Commission believes that there is a pool of additional load that could be controlled to further reduce system peaks. These loads include commercial and central residential air conditioners and commercial water heating. This controllable air conditioning load has been estimated at about 600 MW at the time of system peak.

Also during the last few years, the other Wisconsin utility members of WUMS (or WUG) were revising their forecasts. The coincident peak demand forecasts of WUG were also presented and reviewed in this case because joint planning and the capability to interchange power on an area or regional basis affects the various capacity addition schedules.

Reserves and Reliability

Generating reserves are defined as the total generation capacity minus peak demand expressed as a percentage of the peak demand. Generation reserves are required so that service can be continued in the event of unscheduled outages of generation or transmission equipment and plant shut downs for scheduled maintenance. Reserves are also necessary to accommodate underestimations of forecasted peak loads or delays in bringing new capacity on line, or other events that may result in

insufficient generating capacity. Factors which affect the desired reserve margin include individual unit reliability, capacity of the largest unit on the system, maintenance requirements and scheduling, interconnections among electric utilities, and demand forecasts.

The Applicant testified that, based on loss of load probability studies, the WUMS utilities generally regard a reserve of 15% to be the minimum desirable and have planned on that basis for a number of years. A 15% reserve in conjunction with the availability of reasonable amounts of emergency purchase capacity has been found to approximate a loss of load of no more than one day in 10 years. Also, the MAIN regional reliability council has recently adopted a 15% minimum reserve criterion as an interim guideline for the region as a whole. Although this is only a consensus guide and does not necessarily translate into a 15% reserve requirement for each member system, Applicant believes itself and other members should be generally obligated to plan for this reserve criterion. It is, however, the position of SPERCA that planned reserve should be calculated on a probabilistic basis, rather than as a flat unvarying percentage.

As a result of the revised forecast described in the previous section, Applicant and WUG also made revisions to their proposed generation capacity addition schedule. For the period of concern, now through 1982, the schedule retained Pleasant Prairie as proposed with Unit 1 in 1980 and Unit 2 in 1982. Applicant essentially cancelled a proposed addition of 227 MW of combustion turbine peaking capacity at Lakeside for 1978. For the years prior to the Pleasant Prairie addition in 1980, the construction of a proposed 213 MW peaking plant (Germantown) in 1979 and purchases from other utilities are proposed to meet Applicant's indicated demand and reserve requirements.

The capability, demand and reserve data (both with and without Pleasant Prairie Units 1 and 2) for both Applicant and WUG and based on their most recent forecasts can be summarized as follows:

WE-WM CAPABILITY, DEMAND AND RESERVE DATA
1980-1982

Year	Generating Capability (MW)	Native Peak Demand (MW)	Net Firm Sales (Purchases) (MW)	Adjusted Demand (MW)	Reserve (MW)	Reserve (%)	Required Firm Purchases for 15% Reserve (MW)
With Pleasant Prairie Units 1 and 2							
1980	4,363	3,724	63	3,787	576	15.2	—
1981	4,363	3,901	68	3,969	394	9.9	175
1982	4,684	4,085	74	4,159	525	12.6	85
With Pleasant Prairie Unit 1 Only							
1980	4,363	3,724	63	3,787	576	15.2	—
1981	4,363	3,901	68	3,969	394	9.9	175
1982	4,104	4,085	74	4,159	(55)	(1.3)	590
Without Pleasant Prairie Units 1 or 2							
1980	3,783	3,724	63	3,783	(4)	(0.1)	497
1981	3,783	3,901	68	3,969	(186)	(4.7)	679
1982	3,524	4,085	74	4,159	(635)	(15.3)	1,095

WISCONSIN UTILITIES CAPABILITY, DEMAND AND RESERVE DATA
1980-1982

Year	Generating Capability (MW)	Peak Demand (MW)	Net Firm Sales (Purchases) (MW)	Adjusted Demand (MW)	Reserve (MW)	Reserve (%)	Required Firm Purchases for 15% Reserve (MW)
With Pleasant Prairie Units 1 and 2							
1980	8,040	6,752	63	6,815	1,225	18.0	—
1981	8,040	7,086	68	7,154	886	12.4	175
1982	8,661	7,429	74	7,503	1,158	15.4	—
With Pleasant Prairie Unit 1 Only							
1980	8,040	6,752	63	6,815	1,225	18.0	—
1981	8,040	7,086	68	7,154	886	12.4	175
1982	8,081	7,429	74	7,503	578	7.7	476
Without Pleasant Prairie Units 1 or 2							
1980	7,460	6,752	63	6,815	645	9.5	328
1981	7,460	7,086	68	7,154	306	4.3	667
1982	7,501	7,429	74	7,503	(2)	(0.03)	980

NOTES: 1) Parentheses indicate negative reserve or capacity deficient in meeting load.

2) Last column represents *additional* firm capacity purchased from outside the system to meet 15% reserve level. Applicant indicates the availability of the relatively modest amounts needed in 1981 and 1982 even with Pleasant Prairie in service.

3) Data assume:

a) Construction of 213 NW of generating capacity (Germantown combustion turbines) prior to the 1980 peak

b) Construction of 300 MW of generating capacity (Weston Unit #3) prior to the 1982 peak (Wisconsin utilities data only)

c) Retirement of 259 MW of generating capacity (Lakeside) prior to the 1982 peak. The Lakeside units are oil-fired units installed during the 1920's.

The Commission's SPERCA staff presented testimony (T. 994-999) at the May 12, 1976 hearing on the emergency application, critical of Applicant's reliability analysis — primarily the loss of load probability (LOLP) approach. Using a different methodology, SPERCA staff's results indicated in essence that equivalent reliability could be achieved under an alternative plan not requiring Pleasant Prairie Unit 1 to be completed by 1980 as proposed. As mentioned in the section on demand forecasts, SPERCA staff's plan would require significant conservation measures, a considerable amount of load control, additional reliance on other utilities through interconnections, and perhaps emergency operating measures such as voltage reduction and voluntary load reduction appeals during peak load periods.

SPERCA staff amplified on its reliability assessment method (mean time between failures — MTBF) later in the PER and used it, together with a cost evaluation, to analyze Applicant's generation expansion plan (as proposed at that time) in comparison with three alternative plans it developed based on somewhat different assumptions. Staff concluded that one of its alternate plans, represented by two 300 MW units plus 100 MW of additional load control, would provide equivalent reliability at a lower overall cost than Applicant's proposal.

Subsequent changes in Applicant's forecast and the associated expansion plan as

described previously rendered SPERCA staff's analysis out of date. These reductions in demand forecast and elimination of 227 MW of combustion turbine capacity previously proposed confirmed some of staff's criticisms and concerns about Applicant's overall plan for the period covering the need for Pleasant Prairie. Because of these factors and time constraints, staff did not develop a new cost and reliability analysis based on the new data in the EIS. It stated in the EIS, however, that it believed its earlier conclusions on the adequacy of its alternative expansion plan still hold. SPERCA staff testified further at the last hearing that it believed that it would be reasonable to implement load control on enough commercial air conditioning load to achieve the 100 MW of additional load control by 1980 indicated by staff's alternate generation plan. (T. 1813-1814).

Applicant challenged these conclusions by SPERCA staff in further testimony at the final hearing sessions on May 23-24, 1977. (Tr. 1468-1471) Briefly, Applicant restated its position toward reliability based on a need for a minimum reserve level of 15% and its conclusion that 100 MW of additional load control could not be implemented in its system by the early 1980's.

In comments on the PER and testimony at the PER hearings, the Commission's Engineering staff also questioned certain aspects and conclusions of the reliability analysis in the PER and emphasized the general need for adequate generation reserve margins. (Tr. 1329-1337)

The tables presenting demand projections (based on Applicant's forecast) and reserve margins for Applicant and WUG, show that the reserve margins in 1980 and 1981 without Pleasant Prairie Unit 1 and in 1982 without Units 1 and 2 will be considerably below 15%, and may be negative (capacity deficiency) in Applicant's system even in 1980 or in the WUG combined system in 1982.

The Commission believes that the newly revised forecasts are adequate with respect to 1980 demands and provide an adequate base for an affirmative decision with respect to Unit 1 in this case. Independent staff forecasts are being prepared at this time and should be available for use in determining the need for a possible second unit.

With respect to Unit 2, the Commission believes that the continuing pressure of increasing energy costs (including electric rates) and other voluntary and involuntary conservation and utilization efficiency improvements hold the potential to reduce demand growth by 1982. A number of measures to control or reduce demand in 1980 and beyond were reviewed by Applicant in its December 1, 1976 submittal in compliance with condition 8 of the Emergency Order. The results, however, were non-specific as to the feasibility or effect on demand of their application. Directives relative to Applicant's pursuit of implementing various affirmative actions to control or reduce demand growth, such as load control and interruptible rates, will be included in the Order. The Commission will continue to seek to reduce load growth by encouraging or ordering reasonable actions to achieve this effect in a reasonable time period for Applicant and others. The Commission will also, however, closely watch actual demand growth and monitor trends with respect to the need for timely consideration of Unit 2 at Pleasant Prairie or other proposed capacity additions.

Consequently, the Commission is satisfied that the public interest requires that this application be approved in part by authorizing Unit 1, and that authorization of Unit 2 should be deferred at this time.

Outstanding Matters

Two items related to this (and other) applications, but not determinative of it relative to Unit 1 approval, were initiated by the Commission staff during the review of this case. These were spelled out in specific requirements of Applicant in conditions 8 and 10 of the Emergency Order. As mentioned above in the sections on Demand Forecasts and Reserves and reliability, relative to condition 8, the Commission continues to be concerned about encouraging conservation and efficiency improvement

and will pursue Applicant's and others' proposals as well as its own through this and other appropriate channels such as pending and future rate cases.

The second item was contained in condition 10 requiring Applicant and staff to consult on a study of large-versus-small generating unit additions. Although to a degree an issue in this case, time did not allow results of a comprehensive study to be completed prior to decision on Unit 1. Applicant staff and a consultant are presently engaged in this study and it is expected to be completed in October 1977 (T. 1459). The Commission remains actively interested in this issue and will review the study and its findings when available.

This study is also to include consideration of the potential for cogeneration. Applicant was requested to furnish additional information in this case on the potential of redesigning the Pleasant prairie units for steam extraction for possible future uses. In brief, it was concluded that schedule and cost limitations precluded significant redesign for Unit 1. The Commission requires further exploration of the possibilities for redesigning Unit 2 for cogeneration or waste heat utilization.

Ultimate Findings of Fact

THE COMMISSION FINDS:

1. That Applicant Wisconsin Electric Power Company is a public utility engaged in rendering electric public utility service in Wisconsin pursuant to Chapter 196, Wis. Stats.

2. That Unit 1 (580 MW) of the proposed facility is necessary to satisfy the reasonable needs of the public for an adequate supply of electric energy. Transmission and substation facilities needed to serve Unit 1 will be authorized by supplemental order when modified system needs are determined.

3. That the design and location or route is in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability and environmental factors.

4. That the construction and operation of Unit 1 of the proposed facility will not have undue adverse impact on other environmental values such as, but not limited to, ecological balance, public health and welfare, historic sites, geological formations, the aesthetics of land and water, and recreational use.

5. That Unit 1 of the proposed facility will not unreasonably interfere with the orderly land use and development plans of the area.

6. That the general public interest and public convenience and necessity require that Applicant, as an electric public utility, purchase, construct, install and place in operation a one (580 MW) unit, coal-fired electric power plant and related facilities in the Town of Pleasant Prairie, Kenosha County, at an estimated total cost of $311,874,000.

7. That construction and operation of Unit 1 of the proposed facilities at the cost estimated will not impair the efficiency of Applicant's service, will not provide facilities unreasonably in excess of probable future requirements, and will not add to the cost of service without proportionately increasing the value or available quantities thereof.

8. The Commission will require a continuing on site review of the auditing and engineering functions during the construction of the project.

9. That continuing concern for the public health and maintenance of the quality of the human environment require the implementation of strategies to reduce peak demand and minimize the effects of Unit 1 on air and water quality.

10. That the regional air quality problems in Southeastern Wisconsin require that the proposed facility, together with other generating stations under the influence or control of Applicant, be operated in an environmental dispatch mode (as discussed above) whenever the Commission so directs.

11. That Applicant should continue its discussions with DNR of alternative water supply and water systems, to make a final choice which wisely balances environmental and economic parameters.

State's App. 284

Conclusion of Law

THE COMMISSION CONCLUDES:

That the Commission has jurisdiction under sections 1.11, 196.395, 196.49, and 196.491, Wis. Stats., and Chapter PSC 112, Wis. Admin. Code, to issue a certificate authorizing Wisconsin Electric Power Company to purchase, construct, install and place in operation the facilities described at the estimated cost of $311,874,000 subject to such conditions as are necessary to meet the requirements of such sections and chapter; and that such a certificate should be issued.

Certificate

THE COMMISSION THEREFORE CERTIFIES:

That Wisconsin Electric Power Company, as an electric public utility, be and is authorized to purchase, construct, install and place in operation a single 580 MW unit, coal-fired electric power plant with related facilities as described herein at an estimated cost of $311,874,000, and that said utility is authorized to proceed and is granted a certificate evidencing the same upon the following conditions:

1. That Applicant notify and obtain approval from this Commission before proceeding with any major change in design, size, cost or location of the proposed facilities.

2. That Applicant obtain any needed authorization from the Wisconsin Department of Natural Resources in the areas in which that department has jurisdiction.

3. That Applicant obtain all other necessary authorization from any other governmental authorities.

Order

THE COMMISSION THEREFORE ORDERS:

1. That the certificate be valid only if construction is started within 1 year of its date.

2. That with the exception of site development and common equipment designed for two-unit operation as described in the Findings and included in the Unit 1 cost estimate, no construction shall proceed on Unit 2 unless and until specifically authorized by the Commission.

3. That Applicant submit a revised proposal outlining the minimum reasonable transmission and substation additions required to provide an outlet for generation from Unit 1 as authorized. This submittal should include load flow and stability analysis results supporting the indicated additions proposed, a tabulation of their cost, and the scheduling requirements to meet the scheduled 1980 in-service date of the plant.

4. That Applicant is directed to develop and implement a program to achieve at least 100 MW of physically interruptible load control by the 1980 peak, this capability to be in addition to that currently included in Applicant's load forecasts. This program is to be submitted to the Commission no later than December 31, 1977. Commission staff is available for consultation to aid in development of a viable program.

5. That Applicant shall continue to develop a study of large vs. small generating unit additions dealing with questions of economics, system reliability, environmental effects, energy efficiency, and conservation and consumer impact, such study to be submitted not later than October 15, 1977. Additional studies past October 15, 1977 may be required by the Commission in its discretion.

6. That Applicant submit to the Commission by December 31, 1977 an estimate of the current and future potential market for steam and hot water sales and specific information relating to cogeneration for the following 3 possible cogeneration alternatives specifically for Unit #2:

1) Extraction of steam from the turbine without major turbine redesign (i.e., from feedwater heaters or steam reheat lines to the extent feasible).

2) Extraction of steam including turbine redesign to provide for the maximum reason-

ably anticipated steam load.

3) Utilization of elevated temperature water to provide district heating.

For each of the above alternatives provide information relating to:

a) The estimated capital cost increase associated with inplant costs, and the costs associated with distribution of the steam/hot water.

b) The effect, if any, of the design changes on Unit #2's originally proposed construction schedule.

c) The effect, if any, of the design changes on Unit #2's efficiency, electrical output and fuel consumption.

d) The estimated amount of time per year that heat output from the plant would be available based on economic dispatch operation of the plant for electricity production.

e) An estimate of the delivered cost per million BTU of steam and hot water.

7. Applicant shall continue to advise the Commission of any subsequent efforts to negotiate firm power commitments and of the changing availability of such power insofar as it may affect the years 1981 through 1984; such information shall be provided the Commission at least 2 weeks prior to the first hearing on the deferred Unit #2 and at such times thereafter as the Commission may direct.

8. That, as a condition of this Order, the Applicant shall operate this facility, together with other generating stations under its influence or control, in an environmental dispatch mode where so directed by the Commission. Such direction may be in the form of written, oral or telephonic communication, and will not require any notice or hearing to the Applicant. The Commission staff and the Applicant shall study and recommend a plan for implementation of environmental dispatch, in consultation with the DNR. However, failure of the staff and company to submit such a plan does not preclude the Commission from directing the Applicant to use an environmental dispatch mode under this provision.

9. That as part of the contracts, the Applicant shall require that the suppliers and subcontractors provide detailed information to permit quick and accurate cost breakdown and allocation for continuing property records and to meet the requirements of the prescribed Uniform System of Accounts.

10. That a written procedure covering construction cost accounting for this project be submitted to the Commission.

11. That monthly construction progress reports and monthly expenditure reports as prescribed by the Commission be submitted to the Commission.

12. That contractual agreements covering authorization of so-called "premium time" labor costs be submitted to the Commission.

13. That the recorded costs of construction not include ad valorem taxes which may be deemed to be applicable to construction work in progress investments in the project.

14. That allowances for funds used during construction recorded as a cost of the project shall not exceed an interest rate of 7% applied to project investment, on an annual basis, which is part of Applicant's recorded construction work in progress which exceeds on a weighted basis, for each calendar year, 10% of net investment rate base.

15. That Applicant, in recording construction overheads other than ad valorem taxes and allowance for funds used during construction, shall not include any construction overheads which, under Applicant's most recent proceeding for rates for electric utility service, have been included in revenue requirement.

16. That the Commission be notified upon determination of lease or ownership of the proposed unit-train coal cars.

17. That the Commission be notified of any additional pollution-control measures (new equipment or changes in operation) necessary to meet state or federal regulations which will affect the capacity, availability or cost of Unit 1.

18. That upon completion of the project, Applicant inform the Commission of the date these facilities were placed in service and submit a report of actual costs segregated by plant accounts.

19. That further information shall be submitted, and further hearings shall be held, with respect to authorization for the remaining transmission and generating facilities proposed in the application and not specifically approved in this order.

20. That Applicant shall continue planning of the water supply and water system with DNR, and shall inform the Commission of the final plan.

21. That jurisdiction is retained.

Concurring opinion by Chairman Charles J Cicchetti and a separate opinion by Commission Matthew Holden, Jr. are attached.

CHARLES J. CICCHETTI, CHAIRMAN CONCURRING: CA-5489

I am pleased to concur with the Commission decision in the matter of approving unit 1 of the coal-fired Pleasant Prairie Power Plant.

[i] In my opinion, this case represents three major steps by the Public Service Commission of Wisconsin that will change the way power plants are approved in the state of Wisconsin. First, the Commission has placed restrictions on the company with respect to rate structure and load management as a necessary *quid pro quo* for the approval of this $311,874,000 expenditure. Specifically, the company is required to develop an interruptible load control and tariff in order to reduce its 1980 peak generation requirements by 100 MW or 2.5 percent of its peak. (This represents more than one sixth of the load to be supplied by a 580 MW unit such as Pleasant Prairie.) Additionally, the Commission is requiring the company to encourage the use of steam and waste heat to achieve energy and economic savings.

In my opinion, this action recognizes the important interrelationships between load growth, power plant approval, and rate increases. The Public Service Commission too often in the past was forced to ignore this interrelationship and was placed in a reaction mode with very few, if any choices. By making this decision the Commission is taking a more active and assertive role.

Second, the Commission is restoring the practice of requiring continuous on-site engineering and auditing review of this major investment in order to control and reduce needless cost overruns. In recent years this practice was eliminated, and in this decision the Commission is reasserting its commitment to hold down cost overruns.

Third, the Commission has extended its authority in environmental matters by indicating that the environmental effects of the plant, once it is placed in operation, *may* result in further action by the Commission. This would take the form of restrictions, which may be placed upon the hours of operation of Pleasant Prairie (or any other plants in the generation system), if air pollution and health related problems are found to exist. The method suggested is called environmental dispatch and is a totally new concept in regulation.

Let me further indicate that the consequence of the Commission becoming more assertive in these matters is not to soften the effect of major decisions that some may question. In my opinion, this case represents an expanded commitment in which the Commission is beginning to take a more active stance in defining energy policy as associated with our State's utilities. We make this choice and fully accept its burden. We do not expect the company to treat our new involvement lightly, nor do we expect them to react as they may have in the past by asserting that what we really need is an emergency approval of unit 2.

In my opinion, emphasis must be placed on reducing demand to postpone the proposed unit 2. If the company has made commitments on this unit without Commission approval and thus confronts us with another no choice decision, it has badly misread the intentions and resolve of this commissioner.

Charles J. Cicchetti
Chairman

SEPARATE OPINION OF COMMISSIONER MATTHEW HOLDEN, JR. — CA5489

This case expands a commitment that this Commission has made, over the past four years and through several Commissioners to a very active role in energy policy. This commitment is expressed in a variety of electric (as well as gas) cases.*

My chief reservation is that the majority decision does not, in my view, place appropriate weight on expeditious decisionmaking on the proposed Unit 2. While I do *not* agree with the Applicant's view that such a decision *must* be made by November 1977, *I also do not agree that it is reasonable to postpone decision beyond one year from the present*. Timing is a judgment call, here, and my judgment is that the majority decision may risk too much on the prospect that all studies, plans, and operations *will* go well. If that should turn out to be correct, we will be in good shape and I, happily, will turn out to have been wrong here. But if it should turn out otherwise, then we may face adaptations to power shortages that would, on my preferred approach, hopefully be avoidable.

In most other respects, I agree with the decision in this case.

Matthew Holden, Jr.
Commissioner

FOOTNOTES

*In Re Wisconsin Electric Power Company (Docket No. CA-5489) dated July 8, 1976, Conditions 8-12; *Madison Gas & Electric Company* (Docket No. 2-U-7423) August 8, 1974; *Wisconsin Power & Light Company* (Docket No. CA-5468) March 27, 1975; *Madison Gas & Electric Company* (Docket No. CA-5434) October 30, 1975; and *Wisconsin Power and Light Company* (Docket No. CA-5433) October 30, 1975.

Request of Wisconsin Gas Company to Include in its Rules and Regulations Priorities for the Offering of Additional Service in the Event of Shortages of Natural Gas

2-U-7640

Wisconsin Public Service Commission
September 6, 1977

PROCEDURE, § 33 — Reopenings — Grounds for granting — Response to late-filed exhibit.

[WIS.] Where the commission had allowed an intervenor to submit a late-filed exhibit after the close of hearings in a gas curtailment case, the commission authorized a reopening of the record to allow the gas utility to respond to the delayed exhibit.

ORDER FOR REOPENING

At the conclusion of hearings held in June, 1977, in the above-referenced docket, the Examiner permitted one of the intervening parties, Oil Jobbers of Wisconsin, an opportunity to file a delayed exhibit after the close of the hearing. That document was timely filed.

On July 15, 1977, applicant, Wisconsin Gas Company, sent a motion to the Examiner that the record be reopened in order to permit it to file a response to exhibit 13. Such a response will be permitted; therefore, the response will be designated a delayed exhibit, exhibit No. 14, and will be received into the record. The record will then be closed.

Order

THE COMMISSION THEREFORE ORDERS:

That the record be reopened for purposes of admitting applicant's exhibit 14.

Application of Badger Telephone Company, Inc., Chippewa County Telephone, Inc., Cream Valley Telephone Company, Cuba City Telephone Exchange Company, Forestville Telephone Company, Inc., Frederic Telephone Company, Gleason Telephone Company, Hammond Telephone Company, Lakeland Telephone Company, Larsen-Readfield Telephone Company, Monroe County Telephone Company, Ogema Telephone Company, Osceola Telephone Company, Poplar Telephone Company, Inc., Solon Springs Telephone Company, and Universal Telephone Company of Northern Wisconsin, Inc., for Approval of an Affiliated Interest Contract in Respect to Rent

290-AT-1

Application of Badger Telephone Company, Inc., Chippewa County Telephone, Inc., Cream Valley Telephone Company, Cuba City Telephone Exchange Company, Forestville Telephone Company, Inc., Frederic Telephone Company, Gleason Telephone Company, Hammond Telephone Company, Lakeland Telephone Company, Larsen-Readfield Telephone Company, Monroe County Telephone Company, Ogema Telephone Company, Osceola Telephone Company, Poplar Telephone Company, Inc., Solon Springs Telephone Company, and Universal Telephone Company of Northern Wisconsin, Inc., for Approval of an Affiliated Interest Contract in Respect to Rent

290-AT-3

Wisconsin Public Service Commission
September 8, 1977

PROCEDURE, § 25 — Hearings — Adjournment or continuance — Factors.

[WIS.] The commission overruled a hearing examiner's denial of an applicant's motion to adjourn hearings and continue the matter for presentation of the applicant's rebuttal evidence, where there appeared to have been some confusion by the applicant's attorney as to when rebuttal testimony had to be ready.

ORDER UPON REVIEW OF RULINGS OF EXAMINER and NOTICE OF HEARING

Hearing in the above-captioned matter was held May 3, 1977 at Madison before Examiner James G. Lawrence. At the close of the hearing the applicants requested that the matter be adjourned for the purpose of presenting further evidence in rebuttal to that presented by the Commission staff.

It was the staff's position that the applicants had had ample and sufficient opportunity to present whatever evidence they wished to present in the matter, and accordingly it objected to the adjournment. After listening to the argument the examiner ruled that the applicants were not entitled to an adjournment and accordingly the record was closed subject to the receipt of briefs.

Counsel for the applicants took an exception to the ruling of the examiner.

Counsel for the applicants also made a motion that the proceeding be designated as a class 2 proceeding instead of as a class 1 proceeding, on the ground that a penalty or forfeiture was forthcoming. The examiner denied this motion and an exception was taken by counsel for the applicants.

The transcript was mailed July 8, 1977 and the exception was perfected by a brief filed July 13, 1977.

After review of the matter, the commission overrules the examiner's denial of the applicants' request for a continuance for preparation of rebuttal testimony on the ground that, although it agreed with the examiner that applicants had more than ample time to prepare a

county jail or both. Each violation and each day of violation constitutes a separate offense.

SECTION 3008mc. 196.52 (9) of the statutes is created to read:

196.52 (9) (a) In this subsection:

1. "Electric generating equipment" means any of the following:

a. An electric generator.

b. A machine that drives an electric generator, including an engine, turbine, water wheel, or wind mill.

c. Equipment that converts a fuel or source of energy into energy that powers a machine that drives an electric generator, including a boiler, but not including a nuclear reactor.

d. A fuel or photovoltaic cell.

2. "Electric generating facility" means electric generating equipment and associated facilities that, together, constitute a complete facility for the generation of electricity.

3. "Leased generation contract" means a contract or arrangement or set of contracts or arrangements under which an affiliated interest of a public utility agrees with the public utility to construct or improve an electric generating facility and to lease to the public utility land and the facility for operation by the public utility.

(b) The commission may approve a leased generation contract under sub. (3) only if all of the following apply:

1. The commission has not issued a certificate under s. 196.49 or a certificate of public convenience and necessity under s. 196.491 (3) before January 1, 2002, for any construction or improvement that is subject to the leased generation contract.

2. Construction or improvement of the electric generating facility that is subject to the leased generation contract commences on or after January 1, 2002.

3. Except as provided in s. 196.795 (5) (k) 3., no electric generating facility, electric generating equipment, or associated facilities, held or used by the public utility for the provision of electric service, is transferred to the affiliated interest.

4. The estimated gross cost of the construction or improvement that is subject to the leased generation contract is at least $10,000,000.

5. The construction or improvement is not to a nuclear–powered facility.

6. Any real property that the public utility transfers to the affiliated interest for the purpose of implementing the leased generation contract is transferred at book value, which is determined on the basis of the regulated books of account at the time of the transfer.

7. If the public utility transfers real property to the affiliated interest for the purpose of implementing the leased generation contract, the leased generation contract provides for transferring that real property back to the public utility, on the same terms and conditions as the original transfer, if the commission determines that the construction or improvement that is subject to the leased generation contract has not been completed.

8. The leased generation contract provides that, upon termination of the contract, all of the following apply:

a. The public utility shall have the option, subject to commission approval, to extend the contract, or purchase the electric generating facility or the improvements to an electric generating facility, at fair market value as determined by a valuation process that is conducted by an independent third party and that is specified in the contract.

b. If the public utility exercises the option specified in subd. 8. a., the affiliated interest may require the public utility to extend the contract, rather than purchase the facilities or improvements, if the affiliated interest demonstrates to the commission that the extension avoids material adverse tax consequences and that the extension provides terms and conditions that are economically equivalent to a purchase.

9. For any gas–fired electric generating facility that is constructed under the leased generation contract, the term of the lease is 20 years or more.

10. For any coal–fired electric generating facility that is constructed under the leased generation contract, the term of the lease is 25 years or more.

11. The leased generation contract does not take effect until the date on which the affiliated interest commences construction or improvement of the electric generating facility, except that, if the leased generation contract relates to the construction or improvement of more than one electric generating facility, the leased generation contract does not take effect with respect to the construction or improvement of an individual electric generating facility until the date on which the affiliated interest commences construction or improvement on that electric generating facility.

(c) Except as provided in par. (d), the commission may not increase or decrease the retail revenue requirements of a public utility on the basis of any income, expense, gain, or loss that is received or incurred by an affiliated interest of the public utility and that arises from the ownership of an electric generating facility or an improvement to an electric generating facility by an affiliated interest under a leased generation contract.

(d) The commission shall allow a public utility that has entered into a leased generation contract that has been approved by the commission under sub. (3) to recover fully in its retail rates that portion of any payments under the leased generation contract that the commission allocates to the public utility's retail electric service, and that portion of all other costs that is prudently incurred in the public utility's operation and maintenance of the electric generating facility or improvement that is subject to the leased generation contract and that the commission allocates to the public utility's retail electric service.

(e) Notwithstanding sub. (5) (a), the commission may not modify or terminate a leased generation contract approved under sub. (3) except as specified in the leased generation contract or the commission's order approving the leased generation contract.

(f) The commission shall maintain jurisdiction to ensure that the construction or improvement under a leased generation contract approved under sub. (3) is completed as provided in the leased generation contract.

(g) Nothing in this subsection prohibits a cooperative association organized under ch. 185, a municipal utility, as defined in s. 196.377 (2) (a) 3., or a municipal electric company, as defined in s. 66.0825 (3) (d), from acquiring an interest in an electric generating facility that is constructed pursuant to a leased generation contract or from acquiring an interest in land on which such an electric generating facility is located.

Vetoed In Part

[redacted]

SECTION 3011g. 196.795 (5) (k) 1. of the statutes is amended to read:

196.795 **(5)** (k) 1. Except as provided under subd. 2. or 3., no public utility affiliate may transfer, sell, or lease to any nonutility affiliate with which it is in a holding company system any real property which, on or after November 28, 1985, is held or used for provision of utility service except by public sale or offering to the highest qualified bidder.

SECTION 3011jc. 196.795 (5) (k) 3. of the statutes is created to read:

196.795 **(5)** (k) 3. For the purpose of implementing a leased generation contract, as defined in s. 196.52 (9) (a) 3., that is approved under s. 196.52 (3), a public utility affiliate may transfer to a nonutility affiliate, at book value determined on the basis of the regulated books of account at the time of the transfer, any of the following:

a. Land that is held or used for the provision of utility service.

b. Electric generating equipment or associated facilities that are located on the land on which an electric generating facility subject to a leased generation contract is to be constructed, and that are part of an electric generating facility on that land that is no longer used or useful for the provision of utility service and that has been retired from the provision of utility service.

SECTION 3012. 196.85 (1) of the statutes is renumbered 196.85 (1) (a) and amended to read:

196.85 **(1)** (a) If the commission in a proceeding upon its own motion, on complaint, or upon an application to it deems it necessary in order to carry out the duties imposed upon it by law to investigate the books, accounts, practices, and activities of, or make appraisals of the property of any public utility, power district, or sewerage system or to render any engineering or accounting services to any public utility, power district, or sewerage system, the public utility, power district, or sewerage system shall pay the expenses attributable to the investigation, including the cost of litigation, appraisal, or service. The commission shall mail a bill for the expenses to the public utility, power district, or sewerage system either at the conclusion of the investigation, appraisal, or services, or during its progress. The bill constitutes notice of the assessment and demand of payment. The public utility, power district, or sewerage system shall, within 30 days after the mailing of the bill, pay to the commission the amount of the special expense for which it is billed. Ninety percent of the payment shall be credited to the appropriation account under s. 20.155 (1) (g). ~~The~~

(b) Except as provided in sub. (1m) (a), the total amount in any one calendar year for which any public utility, power district, or sewerage system is liable under this subsection, by reason of costs incurred by the commission within the calendar year, including charges under s. 201.10 (3), may not exceed four–fifths of one percent of its gross operating revenues derived from intrastate operations in the last preceding calendar year.

(c) Nothing in this subsection shall prevent the commission from rendering bills in one calendar year for costs incurred within a previous year.

(d) For the purpose of calculating the costs of investigations, appraisals, and other services under this subsection, 90% of the costs determined shall be costs of the commission and 10% of the costs determined shall be costs of state government operations.

SECTION 3013. 196.85 (1m) (a) of the statutes is amended to read:

196.85 **(1m)** (a) For the purpose of direct assessment under sub. (1) of expenses incurred by the commission in connection with its activities under s. 196.491, the term "public utility" includes electric utilities, as defined in s. 196.491 (1) (d). Subsection (1) (b) does not apply to assessments for the commission's activities under s. 196.491 related to the construction of wholesale merchant plants.

SECTION 3014b. 196.85 (2g) of the statutes is repealed.

SECTION 3015. 196.85 (3) of the statutes is amended to read:

196.85 **(3)** If any public utility, sewerage system, joint local water authority, ~~mobile home park operator~~ or power district is billed under sub. (1), (2), or (2e) ~~or (2g)~~ and fails to pay the bill within 30 days or fails to file objections to the bill with the commission, as provided in this subsection, the commission shall transmit to the state

Date of enactment: **December 3, 2003**
Date of publication*: **December 17, 2003**

2003 Senate Bill 300

2003 WISCONSIN ACT 89

AN ACT *to repeal* 196.491 (3) (g) 1m.; *to renumber* 85.02 and 196.491 (3) (h); *to renumber and amend* 30.025 (1), 196.491 (3) (g) 1. and 196.491 (4) (c); *to amend* 15.795 (1), 16.969 (4), 30.02 (1), 30.02 (2), 30.025 (title), 30.025 (2), 30.025 (3) (intro.), 30.025 (4), 66.0119 (1) (a), 79.04 (7) (c) 1m., 91.75 (4), 196.025 (2) (intro.), 196.491 (3) (a) 1., 196.491 (3) (a) 3. a., 196.491 (3) (b), 196.491 (3) (d) (intro.), 196.491 (3) (e), 196.491 (3) (gm) and 196.491 (3) (j); and *to create* 1.12 (6), 23.09 (22m), 30.025 (1b), 30.025 (1e), 30.025 (1m), 30.025 (1s) (title), 30.025 (1s) (b), 30.025 (2g), 30.025 (2s), 30.025 (3m), 30.206 (1m), 32.03 (5) (c), 79.04 (6) (c) 3., 79.04 (7) (d), 85.02 (2), 196.02 (5m), 196.025 (1m), 196.025 (2m), 196.20 (7), 196.49 (4), 196.491 (3) (d) 8., 196.491 (3b), 196.491 (4) (c) 2., 196.491 (4) (c) 3. and 196.491 (6) (title) of the statutes; **relating to:** construction of certain public utility facilities, utility aid payments, utility condemnations, and granting rule–making authority.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. 1.12 (6) of the statutes is created to read:

1.12 (6) SITING OF ELECTRIC TRANSMISSION FACILITIES. In the siting of new electric transmission facilities, including high–voltage transmission lines, as defined in s. 196.491 (1) (f), it is the policy of this state that, to the greatest extent feasible that is consistent with economic and engineering considerations, reliability of the electric system, and protection of the environment, the following corridors should be utilized in the following order of priority:

(a) Existing utility corridors.

(b) Highway and railroad corridors.

(c) Recreational trails, to the extent that the facilities may be constructed below ground and that the facilities do not significantly impact environmentally sensitive areas.

(d) New corridors.

SECTION 2. 15.795 (1) of the statutes is amended to read:

15.795 (1) OFFICE OF THE COMMISSIONER OF RAILROADS. There is created an office of the commissioner of railroads which is attached to the public service commission under s. 15.03, provided that s. 85.02 (1) does not apply to the office of the commissioner of railroads. The commissioner of railroads shall have expertise in railroad issues and may not have a financial interest in a railroad, as defined in s. 195.02 (1). The commissioner may not serve on or under any committee of a political party. The commissioner shall hold office until a successor is appointed and qualified.

SECTION 3. 16.969 (4) of the statutes is amended to read:

16.969 (4) A county, town, village, or city that receives a distribution under sub. (3) (b) may use the distribution only for park, conservancy, wetland or other similar environmental programs, unless the commission approves a different use under this subsection. A county,

* Section 991.11, WISCONSIN STATUTES 2001–02 : Effective date of acts. "Every act and every portion of an act enacted by the legislature over the governor's partial veto which does not expressly prescribe the time when it takes effect shall take effect on the day after its date of publication as designated" by the secretary of state [the date of publication may not be more than 10 working days after the date of enactment].

town, village, or city that receives a distribution may request in writing at any time that the commission approve a different use. The commission shall make a decision no later than 14 days after receiving such a request. The commission shall approve a request if it finds that the request is in the public interest.

SECTION 4. 23.09 (22m) of the statutes is created to read:

23.09 (22m) SITING OF ELECTRIC TRANSMISSION FACILITIES. The department shall implement the policy specified in s. 1.12 (6) in making all decisions, orders, and rules affecting the siting of new electric transmission facilities.

SECTION 5. 30.02 (1) of the statutes is amended to read:

30.02 (1) ~~In~~ Except as provided in s. 30.025, in any proceeding under this chapter where public notice is required, the department shall follow the procedures in subs. (3) and (4).

SECTION 6. 30.02 (2) of the statutes is amended to read:

30.02 (2) ~~In~~ Except as provided in s. 30.025, in any proceeding under this chapter where public notice is not required, the department shall follow the procedures in subs. (3) and (4) if it determines that substantial interests of any party may be adversely affected by the proceeding.

SECTION 7. 30.025 (title) of the statutes is amended to read:

30.025 (title) ~~**Optional permit**~~ **Permit procedure for** ~~**certain electric generating facilities and high-voltage transmission lines**~~ **utility facilities.**

SECTION 8. 30.025 (1) of the statutes is renumbered 30.025 (1s) (a) and amended to read:

30.025 (1s) (a) Any ~~electric utility, as defined in s. 196.491 (1) (d),~~ person proposing to construct a utility facility~~, as defined in s. 196.491 (1) (e), which facility is to be located adjacent to a waterway in such a manner as to require one or more permits to be issued under this chapter and ch. 31 may~~ to which this section applies shall, in lieu of separate application for permits ~~under those chapters~~, submit ~~an engineering plan~~ one application for permits together with any additional information required by the department. ~~Such plan~~ The application shall be filed with the department ~~within 20 days after~~ at the same time that an application for a certificate ~~of public convenience and necessity~~ is filed with the ~~public service~~ commission under s. 196.49 or in a manner consistent with s. 196.491 (3) and shall include the detailed information that the department requires to determine whether an application is complete and to carry out its obligations under sub. (4). The department may require supplemental information to be furnished thereafter.

SECTION 9. 30.025 (1b) of the statutes is created to read:

30.025 (1b) DEFINITIONS. In this section:

(a) "Commission" means the public service commission.

(b) "Permit" means a permit or approval required under this chapter or ch. 31, a storm water discharge permit required under s. 283.33 (1) (a), or a water quality certification required under s. 281.36 or under rules promulgated under subch. II of ch. 281 to implement 33 USC 1341 (a).

(c) "Utility facility" means a project, as defined in s. 196.49 (3) (a), or a facility, as defined in s. 196.491 (1) (e).

SECTION 10. 30.025 (1e) of the statutes is created to read:

30.025 (1e) APPLICABILITY. (a) Except as provided in par. (b), this section applies to a proposal to construct a utility facility if the utility facility is required to obtain one or more permits.

(b) This section does not apply to a proposal to construct a utility facility if the only permit that the utility facility is required to obtain from the department is a storm water discharge permit under s. 283.33 (1) (a).

SECTION 11. 30.025 (1m) of the statutes is created to read:

30.025 (1m) PREAPPLICATION PROCESS. Before filing an application under this section, a person proposing to construct a utility facility shall notify the department of the intention to file an application. After receiving such notice, the department shall confer with the person, in cooperation with the commission, to make a preliminary assessment of the project's scope, to make an analysis of alternatives, to identify potential interested persons, and to ensure that the person making the proposal is aware of all of the following:

(a) The permits that the person may be required to obtain.

(b) The information that the person will be required to provide.

(c) The timing of information submissions that the person will be required to provide in order to enable the department to participate in commission review procedures and to process the application in a timely manner.

SECTION 12. 30.025 (1s) (title) of the statutes is created to read:

30.025 (1s) (title) APPLICATION FOR PERMITS.

SECTION 13. 30.025 (1s) (b) of the statutes is created to read:

30.025 (1s) (b) A person who applies to the commission for a certificate under s: 196.49 or 196.491 (3) is eligible to apply under par. (a) for any permit that the utility facility may require and to receive such permit.

SECTION 14. 30.025 (2) of the statutes is amended to read:

30.025 (2) HEARING. Once ~~electric utilities have met~~ the applicant meets the requirements of sub. ~~(1)~~ (1s) (a), the department ~~shall~~ may schedule the matter for a public

hearing. Notice of the hearing shall be given to the applicant and shall be published as a class 1 notice under ch. 985. The department may give such further notice as it deems proper, and shall give notice to persons requesting same. One copy of the application shall be available for public inspection at the office of the department, at least one copy in the ~~district~~ regional office of the department, and at least one copy at the main public library, of the area affected. Notwithstanding s. 227.42, the hearing shall be an informational hearing and may not be treated as a contested case hearing nor converted to a contested case hearing.

SECTION 15. 30.025 (2g) of the statutes is created to read:

30.025 **(2g)** PARTICIPATION IN COMMISSION PROCEEDINGS. (a) The department shall review every proposed utility facility subject to this section, including each location, site, or route proposed for the utility facility, to assess whether each proposed location, site, or route can meet the criteria for obtaining the required permits, and shall provide that information to the commission.

(b) The department shall participate in commission investigations or proceedings under s. 196.49 or 196.491 (3) with regard to any proposed utility facility that is subject to this section. In order to ensure that the commission's decision is consistent with the department's responsibilities, the department shall provide the commission with information that is relevant to only the following:

1. Environmental issues that concern the proposed utility facility.

2. Public rights in navigable waters that may be affected by the proposed utility facility.

3. Location, site, or route issues concerning the proposed utility facility, including alternative locations, sites, or routes.

SECTION 16. 30.025 (2s) of the statutes is created to read:

30.025 **(2s)** CONSIDERATION OF ALTERNATIVES. (a) The department shall treat the commission's decision under s. 196.49 or 196.491 (3) as concluding that there is no practicable alternative for the utility facility if all of the following apply:

1. The department has participated in the commission's investigations or proceedings under sub. (2g).

2. The commission's decision under s. 196.49 or 196.491 (3) is consistent with the department's assessment and information under sub. (2g) considering those factors required to be considered by the commission under s. 196.49 or 196.491 (3).

(b) If par. (a) applies, the department may not require the applicant for the proposed utility facility to undertake further analysis of any utility facility alternatives, including an analysis of alternative methods of meeting the need for the project or alternative locations, sites, or routes in order to satisfy the criteria under sub. (3). The department may identify adjustments that may be required to address permitting issues within the location, site, or route approved by the commission under s. 196.49 or 196.491 (3).

SECTION 17. 30.025 (3) (intro.) of the statutes is amended to read:

30.025 (3) PERMIT ISSUANCE. (intro.) The department shall grant the necessary permits if~~, after hearing,~~ it finds that the applicant has shown that the proposal:

SECTION 18. 30.025 (3m) of the statutes is created to read:

30.025 **(3m)** ENVIRONMENTAL ASSESSMENTS FOR CERTAIN PROJECTS. The department is not required to prepare an environmental impact statement under s. 1.11 (2) (c) for the construction of a project that is specified in s. 196.491 (4) (c) 1. and for which one or more permits are required, but shall prepare an environmental assessment regarding the construction if the department's rules require an environmental assessment.

SECTION 19. 30.025 (4) of the statutes is amended to read:

30.025 **(4)** PERMIT CONDITIONS. The permit may be issued upon stated conditions deemed necessary to assure compliance with the criteria designated under sub. (3). The department shall grant or deny the application ~~within the time limit applicable under s. 196.491 (3) (a) 3. b.~~ for a permit for the utility facility within 30 days of the date on which the commission issues its decision under s. 196.49 or 196.491 (3).

SECTION 20. 30.206 (1m) of the statutes is created to read:

30.206 **(1m)** The department shall issue a general permit under this section for the construction of projects for which the commission is considered to have issued a certificate under s. 196.491 (3b).

SECTION 21. 32.03 (5) (c) of the statutes is created to read:

32.03 **(5)** (c) This subsection does not prohibit an electric utility from negotiating with the owner, or one of the owners, of a property, or the representative of an owner, before the issuance of a certificate of public convenience and necessity, if the electric utility advises the owner or representative that the electric utility does not have the authority to acquire the property by condemnation until the issuance of a certificate of public convenience and necessity.

SECTION 22. 66.0119 (1) (a) of the statutes is amended to read:

66.0119 (1) (a) "Inspection purposes" ~~include~~ includes such purposes as building, housing, electrical, plumbing, heating, gas, fire, health, safety, environmental pollution, water quality, waterways, use of water, food, zoning, property assessment, meter and obtaining data required to be submitted in an initial site report or feasibility report under subch. III of ch. 289 or s. 291.23, 291.25, 291.29 or 291.31 or an environmental impact

statement related to one of those reports. "Inspection purposes" also includes purposes for obtaining information specified in s. 196.02 (5m) by or on behalf of the public service commission.

SECTION 23. 79.04 (6) (c) 3. of the statutes is created to read:

79.04 (6) (c) 3. For the purpose of determining the amount of the payment under par. (b), if a production plant is located in more than one county, the payment amount under par. (b) shall be divided among the counties in which the plant is located based on the net book value of that portion of the plant located in each county as of December 31, 2004, or as of the date on which the plant is operational, whichever is later.

SECTION 24. 79.04 (7) (c) 1m. of the statutes, as created by 2003 Wisconsin Act 31, is amended to read:

79.04 (7) (c) 1m. Beginning with payments in 2005, if a cogeneration production plant, as described in sub. (6) (a), is built and completed after December 31, 2003, and has a name–plate capacity of at least one megawatt, each municipality and county in which such a cogeneration production plant is located shall receive annually from the public utility account a payment in an amount that is equal to the number of megawatts that represents the cogeneration production plant's name–plate capacity, multiplied by $1,000. Any municipality or county that receives a payment under this subdivision in any year may not receive a payment under subd. 1. in that year, if the payment under subd. 1. is based on the same production plant as the payment under this subdivision.

SECTION 25. 79.04 (7) (d) of the statutes is created to read:

79.04 (7) (d) For the purpose of determining the amount of any payment under this subsection, if a production plant is located in more than one municipality or county, the payment amount shall be divided among the municipalities or counties in which the plant is located based on the net book value of that portion of the plant located in each municipality or county as of December 31, 2004, or as of the date on which the plant is operational, whichever is later.

SECTION 26. 85.02 of the statutes is renumbered 85.02 (1).

SECTION 27. 85.02 (2) of the statutes is created to read:

85.02 (2) The department shall implement the policy specified in s. 1.12 (6) in making all decisions, orders, and rules affecting the siting of new electric transmission facilities.

SECTION 28. 91.75 (4) of the statutes is amended to read:

91.75 (4) Such ordinances shall be considered local ordinances for purposes of s. 196.491 (3) (i) and (4) (c) 3. and shall provide that gas and electric utility uses not requiring authorization under s. 196.491 (3) are special exceptions or permitted or conditional uses and are uses that are consistent with agricultural use.

SECTION 29. 196.02 (5m) of the statutes is created to read:

196.02 (5m) PROPERTY INSPECTIONS. The commission may inspect property for the purpose of obtaining any information related to the preparation or review of an application for a certificate under s. 196.49 or 196.491 (3), including any information necessary to evaluate any environmental features or effects that are relevant to such an application.

SECTION 30. 196.025 (1m) of the statutes is created to read:

196.025 (1m) The commission shall implement the policy specified in s. 1.12 (6) in making all decisions, orders, and rules affecting the siting of new electric transmission facilities.

SECTION 31. 196.025 (2) (intro.) of the statutes is amended to read:

196.025 (2) (intro.) The commission shall promulgate rules establishing requirements and procedures for the commission to carry out the duties under s. 1.11. Rules promulgated under this subsection shall include requirements and procedures for the commission to comply with sub. (2m) and for each of the following:

SECTION 32. 196.025 (2m) of the statutes is created to read:

196.025 (2m) (a) In this subsection:

1. "Department" means the department of natural resources.

2. "Project" means a project or construction requiring a certificate under s. 196.49 or 196.491 (3) and requiring a permit or approval from the department.

(b) The commission and the department shall coordinate the execution of their respective duties under s. 1.11 for any action of the commission or department regarding a project as follows:

1. If the rules of either the commission or the department require the commission or the department to prepare an environmental impact statement on the project, the commission and the department shall cooperatively prepare an environmental impact statement.

2. If subd. 1. does not apply and the rules of either the commission or the department require the commission or the department to prepare an environmental assessment on the project, the commission and the department shall cooperatively prepare an environmental assessment.

3. The environmental impact statement or environmental assessment under subd. 1. or 2. shall include all of the information required for both the commission and the department to carry out their respective duties under s. 1.11.

(c) Paragraph (b) does not waive any duty of the commission or the department to comply with s. 1.11 or to take any other action required by law regarding a project,

except that, in the consideration of alternative locations, sites, or routes for a project, the commission and the department are required to consider only the location, site, or route for the project identified in an application for a certificate under s. 196.49 and no more than one alternative location, site, or route; and, for a project identified in an application for a certificate under s. 196.491 (3), the commission and the department are required to consider only the location, site, or route for the project identified in the application and one alternative location, site, or route.

SECTION 33. 196.20 (7) of the statutes is created to read:

196.20 (7) (a) In this subsection, "mitigation payment" means, as approved by the commission, an unrestricted or recurring monetary payment to a local unit of government in which an electric generating facility is located to mitigate the impact of the electric generating facility on the local unit of government. "Mitigation payment" does not include payments made or in–kind contributions for restricted purposes to directly address health or safety impacts of the electric generating facility on the local unit of government.

(b) Except as provided in par. (c), an electric public utility may not recover in rates any of the following:

1. The cost of mitigation payments paid by the utility.

2. The cost of mitigation payments paid by the owner or operator of an electric generating facility that the owner or operator recovers from the utility by selling electricity to the utility, by leasing the facility to the utility, or by any agreement between the owner or operator of the electric generating facility and the public utility.

(c) The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003, and, if the commission finds the agreement to be reasonable, shall not subsequently modify the agreement.

SECTION 34. 196.49 (4) of the statutes is created to read:

196.49 (4) The commission may not issue a certificate under sub. (1), (2), or (3) for the construction of electric generating equipment and associated facilities unless the commission determines that brownfields, as defined in s. 560.13 (1) (a), are used to the extent practicable.

SECTION 35. 196.491 (3) (a) 1. of the statutes is amended to read:

196.491 (3) (a) 1. ~~No~~ Except as provided in sub. (3b), no person may commence the construction of a facility unless the person has applied for and received a certificate of public convenience and necessity ~~from the commission as provided in this section~~ under this subsection. An application for a certificate issued under this subsection shall be in the form and ~~containing~~ contain the information required by commission rules ~~for such certificate~~ and shall be filed with the commission not less than 6 months prior to the commencement of construction of a facility. Within 10 days after filing ~~the~~ an application under this subdivision, the commission shall send a copy of the application to the clerk of each municipality and town in which the proposed facility is to be located and to the main public library in each such county.

SECTION 36. 196.491 (3) (a) 3. a. of the statutes is amended to read:

196.491 (3) (a) 3. a. At least 60 days before a person files an application under subd. 1., the person shall provide the department with an engineering plan ~~showing~~ if the facility is a large electric generating facility or a detailed project plan if the facility is a high–voltage transmission line. The engineering or project plan shall show the location of the facility, a description of the facility, including the major components of the facility that have a significant air, water or solid waste pollution potential, and a brief description of the anticipated effects of the facility on air ~~and~~ quality, water quality, wetlands, solid waste disposal capacity, and other natural resources. Within 30 days after a person provides an engineering or project plan, the department shall provide the person with a listing of each department permit or approval which, on the basis of the information contained in the engineering or project plan, appears to be required for the construction or operation of the facility.

SECTION 37. 196.491 (3) (b) of the statutes is amended to read:

196.491 (3) (b) The commission shall hold a public hearing on an application filed under par. (a) 1. that is determined or considered to be complete in the area affected pursuant to s. 227.44. A class 1 notice, under ch. 985, shall be given at least 30 days prior to the hearing.

SECTION 38. 196.491 (3) (d) (intro.) of the statutes is amended to read:

196.491 (3) (d) (intro.) Except as provided under par. (e) and s. 196.493, the commission shall approve an application filed under par. (a) 1. for a certificate of public convenience and necessity only if the commission determines all of the following:

SECTION 39. 196.491 (3) (d) 8. of the statutes is created to read:

196.491 (3) (d) 8. For a large electric generating facility, brownfields, as defined in s. 560.13 (1) (a), are used to the extent practicable.

SECTION 40. 196.491 (3) (e) of the statutes is amended to read:

196.491 (3) (e) If ~~the~~ an application filed under par. (a) 1. does not meet the criteria under par. (d), the commission shall reject the application or approve the application with such modifications as are necessary for an affirmative finding under par. (d). The commission may not issue a certificate of public convenience and necessity under this subsection until the department has issued all permits and approvals identified in the listing specified in par. (a) 3. a. that are required prior to construction.

SECTION 41. 196.491 (3) (g) 1. of the statutes is renumbered 196.491 (3) (g) and amended to read:

196.491 (3) (g) The commission shall take final action on an application filed under par. (a) 1. within 180 days after the application is determined or considered to be complete under par. (a) 2. If the commission fails to take final action within the 180–day period, the commission is considered to have issued a certificate of public convenience and necessity with respect to the application, unless the commission, within the 180–day period, petitions the circuit court for Dane County for an extension of time for taking final action on the application and the court grants an extension. Upon a showing of good cause, the court may extend the 180–day period for no more than an additional 180 days . If the commission fails to take final action within the extended period, the commission is considered to have issued a certificate of public convenience and necessity with respect to the application.

SECTION 42. 196.491 (3) (g) 1m. of the statutes is repealed.

SECTION 43. 196.491 (3) (gm) of the statutes is amended to read:

196.491 (3) (gm) The commission may not approve an application filed after October 29, 1999, under this ~~section~~ subsection for a certificate of public convenience and necessity for a high–voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more unless the approval includes the condition that the applicant shall pay the fees specified in sub. (3g) (a). If the commission has approved an application under this ~~section~~ subsection for a certificate of public convenience and necessity for a high–voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more that was filed after April 1, 1999, and before October 29, 1999, the commission shall require the applicant to pay the fees specified in sub. (3g) (a). For any application subject to this paragraph, the commission shall determine the cost of the high–voltage transmission line, identify the counties, towns, villages and cities through which the high–voltage transmission line is routed and allocate the amount of investment associated with the high–voltage transmission line to each such county, town, village and city.

SECTION 44. 196.491 (3) (h) of the statutes is renumbered 196.491 (6).

SECTION 45. 196.491 (3) (j) of the statutes is amended to read:

196.491 (3) (j) Any person whose substantial rights may be adversely affected or any county, municipality or town having jurisdiction over land affected by a certificate of public convenience and necessity for which an application is filed under par. (a) 1. may petition for judicial review, under ch. 227, of any decision of the commission regarding the certificate.

SECTION 46. 196.491 (3b) of the statutes is created to read:

196.491 (3b) EXPEDITED REVIEW. (a) A person who proposes to construct a high–voltage transmission line may apply for a certificate under this subsection if the construction is limited to adding conductors to existing transmission poles or towers and if all related construction activity takes place entirely within the area of an existing electric transmission line right–of–way.

(b) The commission shall promulgate rules specifying the information that must be included in an application under this subsection. If the commission receives an application that complies with rules, the commission shall, as soon as practicable, notify the applicant that the commission has received a complete application.

(c) The commission is considered to have issued a certificate of public convenience and necessity under sub. (3) for construction specified in an application under par. (a) unless the commission notifies the applicant, no later than 30 business days after the date on which the commission notifies an applicant under par. (b) that the application is complete, that the commission has determined that the public interest requires the applicant to obtain a certificate under s. 196.49.

SECTION 47. 196.491 (4) (c) of the statutes is renumbered 196.491 (4) (c) 1. and amended to read:

196.491 (4) (c) 1. A certificate under sub. (3) is not required for a person to construct a high–voltage transmission line designed for operation at a nominal voltage of less than ~~230~~ 345 kilovolts if all related construction activity takes place entirely within the area of an existing electric transmission line right–of–way.

SECTION 48. 196.491 (4) (c) 2. of the statutes is created to read:

196.491 (4) (c) 2. The commission is not required to prepare an environmental impact statement under under s. 1.11 (2) (c) for construction that is specified in subd. 1., but shall prepare an environmental assessment regarding the construction if an environmental assessment is required under the commission's rules.

SECTION 49. 196.491 (4) (c) 3. of the statutes is created to read:

196.491 (4) (c) 3. If construction or utilization of a high–voltage transmission line described in subd. 1. is precluded or inhibited by a local ordinance, the construction and utilization of the line may nevertheless proceed.

SECTION 50. 196.491 (6) (title) of the statutes is created to read:

196.491 (6) (title) WAIVER.

SECTION 51. Initial applicability.

(1) UTILITY AID PAYMENTS. The treatment of section 79.04 (6) (c) 3. and (7) (c) 1m. and (d) of the statutes first applies to distributions made on the 4th Monday of July 2005.

(2) DEPARTMENT OF NATURAL RESOURCES PROCEDURES. The treatment of sections 30.02 (1) and (2), 30.025 (title), (1), (1b), (1e), (1m), (1s) (title) and (b), (2), (2g), (2s), (3) (intro.), (3m), and (4), and 30.206 (1m) of the statutes first applies to applications for permits, as defined in section 30.025 (1b) (b) of the statutes, as created by this act, filed with the department of natural resources on the effective date of this subsection.

(3) PUBLIC SERVICE COMMISSION PROCEDURES. The treatment of sections 196.49 (4) and 196.491 (3) (a) 1. and 3. a., (b), (d) (intro.) and 8., (e), (g) 1. and 1m., (gm), and (j), (3b), and (4) (c) 2. and 3. of the statutes and the renumbering and amendment of section 196.491 (4) (c) of the statutes first apply to applications submitted on the effective date of this subsection.

agency shall hold the hearing in the area affected. Notice of the hearing shall be given by publishing a class 1 notice, under ch. 985, at least 15 days prior to the hearing in a newspaper covering the affected area. If the proposal has statewide significance, notice shall be published in the official state newspaper;

(e) Study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources;

(h) Initiate and utilize ecological information in the planning and development of resource–oriented projects.

(j) Annually, no later than September 15, submit a report to the chief clerk of each house of the legislature for distribution to the legislature under s. 13.172 (2), including the number of proposed actions for which the agency conducted an assessment of whether an impact statement was required under par. (c) and the number of impact statements prepared under par. (c).

(4) Nothing in this section affects the specific statutory obligations of any agency:

(a) To comply with criteria or standards of environmental quality;

(b) To coordinate or consult with any other state or federal agency; or

(c) To act, or refrain from acting contingent upon the recommendations or certification of any other state or federal agency.

(5) The policies and goals set forth in this section are supplementary to those set forth in existing authorizations of agencies.

History: 1971 c. 274; 1973 c. 204; 1979 c. 89, 262; 1985 a. 29, 332; 1991 a. 273; 1993 a. 184, 213; 2001 a. 103.

Cross Reference: See also chs. NR 150, PSC 4, TCS 4 and ss. Adm 60.01, ATCP 3.07, Comm 1.01, DOC 335.01, HFS 18.01, NR 2.085, and Trans 400, Wis. adm. code.

The Wisconsin Environmental Protection Act, while not creating a public trust analogous to the public trust in the state's navigable waters, recognizes an interest sufficient to grant a person standing to question compliance with its provisions when it is alleged that agency action will harm the environment in the area where the person resides. Wisconsin's Environmental Decade, Inc. v. PSC, 69 Wis. 2d 1, 230 N.W.2d 243 (1975).

Counties are not "agencies of the state" within meaning of sub. (2) (c). Robinson v. Kunach, 76 Wis. 2d 436, 251 N.W.2d 449 (1977).

Sub. (2) (e) is applicable to proceedings involving authorization of priority systems for the curtailment of natural gas service. Wisconsin Environmental Decade, Inc. v. PSC, 79 Wis. 2d 161, 255 N.W.2d 917 (1977).

On judicial review of a state agency's decision not to prepare an environmental impact statement, the agency has the burden of producing a reviewable record reflecting a preliminary factual investigation into relevant areas of environmental concern and of showing a reasonable determination based on the same. Wisconsin Environmental Decade, Inc. v. PSC, 79 Wis. 2d 409, 256 N.W.2d 149 (1977).

The lack of a DNR prepared environmental impact statement did not invalidate a DNR order to close a landfill site. Holtz & Krause, Inc. v. DNR, 85 Wis. 2d 198, 270 N.W.2d 409 (1978).

DNR's decision to limit the scope of a threshold decision to consideration of the impact of a segment of a proposed sewer interceptor was reasonable when the segment had: 1) independent utility; 2) a main purpose of fulfilling a local need; 3) logical termini, and construction of the first segment did not compel construction of the second segment. Wisconsin Environmental Decade, Inc. v. DNR, 94 Wis. 2d 263, 288 N.W.2d 168 (Ct. App. 1979).

An agency determination that an EIS was adequately prepared is reviewed under s. 227.20. Wisconsin Environmental Decade, Inc. v. PSC, 98 Wis. 2d 682, 298 N.W.2d 205 (Ct. App. 1980).

The court erred in finding that this section applied to the department's code compliance review procedure. Wisconsin Environmental Decade, Inc. v. DILHR, 104 Wis. 2d 640, 312 N.W.2d 749 (1981).

An order establishing depreciation rates for a utility's nuclear plant did not require an environmental impact statement. Wisconsin Environmental Decade, Inc. v. PSC, 105 Wis. 2d 457, 313 N.W.2d 863 (Ct. App. 1981).

Standing to challenge a final EIS requires that the agency decision directly cause injury to the interest of the petitioner, which must be an interest recognized by law. Fox v. DHSS, 112 Wis. 2d 514, 334 N.W.2d 532 (1983).

An EIS is not required when the project will have minor impacts on the environment, but will have possible socio–economic impacts. Wisconsin Environmental Decade, Inc. v. DNR, 115 Wis. 2d 381, 340 N.W.2d 722 (1983).

Increased traffic congestion was a sufficient allegation of injury to acquire standing to challenge a final EIS. Milwaukee Brewers v. DHSS, 130 Wis. 2d 56, 387 N.W.2d 245 (1986).

When a state action did not come within an action type listed in DOA rules, an environmental assessment was required. A determination following an assessment that an EIS was not required for a building constructed for the state by a private developer under a lease/purchase agreement was reasonable under the circumstances. Larsen v. Munz Corp. 167 Wis. 2d 583, 482 N.W.2d 583 (1992).

The test as to whether an EIS should be conducted is one of reasonableness and good faith. When conditions for approval that compensate for any adverse environmental impacts are imposed, the statutory threshold of significant environmental impact is not crossed and no EIS is required. State ex rel. Boehm v. DNR, 174 Wis. 2d 657, 497 N.W.2d 445 (1993), 184.

Section 227.42 (1) does not grant a right to a contested case hearing regarding the need for an EIS. North Lake Management District v. DNR, 182 Wis. 2d 500, 513 N.W.2d 703 (Ct. App. 1994).

When the legislature has selected a specific project site, consideration of alternative sites is too remote and speculative and not reasonably related to the proposed project. Shoreline Park Preservation, Inc. v. DOA, 195 Wis. 2d 750, 537 N.W.2d 388 (Ct. App. 1995), 94–2512.

The burden of proving the adequacy of an environmental impact statement is discussed. CUB v. PSC, 211 Wis. 2d 537, 565 N.W.2d 554 (Ct. App. 1997), 96–0867.

It was reasonable to suspend the requirement for a draft EIS and the corresponding comment period, when legislatively imposed time constraints could not have been met if they were not suspended. RURAL v. PSC, 2000 WI 129, 239 Wis. 2d 660, 619 N.W.2d 888, 99–2430.

Agency decision–making under the Wisconsin environmental policy act. 1977 WLR 111.

1.12 State energy policy. (1) DEFINITIONS. In this section:

(a) "Local governmental unit" has the meaning given in s. 19.42 (7u).

(b) "State agency" means an office, department, agency, institution of higher education, the legislature, a legislative service agency, the courts, a judicial branch agency, an association, society or other body in state government which is created or authorized to be created by the constitution or by law, for which appropriations are made by law.

(2) CONSERVATION POLICY. A state agency or local governmental unit shall investigate and consider the maximum conservation of energy resources as an important factor when making any major decision that would significantly affect energy usage.

(3) GOALS. (a) *Energy efficiency.* It is the goal of the state to reduce the ratio of energy consumption to economic activity in the state.

(b) *Renewable energy resources.* It is the goal of the state that, to the extent that it is cost–effective and technically feasible, all new installed capacity for electric generation in the state be based on renewable energy resources, including hydroelectric, wood, wind, solar, refuse, agricultural and biomass energy resources.

(c) *Afforestation.* It is the goal of the state to ensure a future supply of wood fuel and reduce atmospheric carbon dioxide by increasing the forested areas of the state.

(4) PRIORITIES. In meeting energy demands, the policy of the state is that, to the extent cost–effective and technically feasible, options be considered based on the following priorities, in the order listed:

(a) Energy conservation and efficiency.

(b) Noncombustible renewable energy resources.

(c) Combustible renewable energy resources.

(d) Nonrenewable combustible energy resources, in the order listed:

1. Natural gas.
2. Oil or coal with a sulphur content of less than 1%.
3. All other carbon–based fuels.

(5) MEETING ENERGY DEMANDS. (a) In designing all new and replacement energy projects, a state agency or local governmental unit shall rely to the greatest extent feasible on energy efficiency improvements and renewable energy resources, if the energy efficiency improvements and renewable energy resources are cost–effective and technically feasible and do not have unacceptable environmental impacts.

(b) To the greatest extent cost–effective and technically feasible, a state agency or local governmental unit shall design all new and replacement energy projects following the priorities listed in sub. (4).

(6) SITING OF ELECTRIC TRANSMISSION FACILITIES. In the siting of new electric transmission facilities, including high–voltage transmission lines, as defined in s. 196.491 (1) (f), it is the policy of this state that, to the greatest extent feasible that is consistent with economic and engineering considerations, reliability of the

electric system, and protection of the environment, the following corridors should be utilized in the following order of priority:

(a) Existing utility corridors.

(b) Highway and railroad corridors.

(c) Recreational trails, to the extent that the facilities may be constructed below ground and that the facilities do not significantly impact environmentally sensitive areas.

(d) New corridors.

History: 1977 c. 29; 1993 a. 414; 2003 a. 89.

NOTE: 1993 Wis. Act 414, which creates subs. (1) and (3) to (5), contains extensive explanatory notes.

Cross Reference: See also ch. NR 150 and s. PSC 4.30, Wis. adm. code.

1.13 Land use planning activities. (1) In this section:

(a) "Local governmental unit" has the meaning given in s. 1.12 (1) (a).

(b) "State agency" has the meaning given in s. 1.12 (1) (b).

(2) Each state agency, where applicable and consistent with other laws, is encouraged to design its programs, policies, infrastructure and investments of the agency to reflect a balance between the mission of the agency and the following local, comprehensive planning goals:

(a) Promotion of the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial and industrial structures.

(b) Encouragement of neighborhood designs that support a range of transportation choices.

(c) Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open spaces and groundwater resources.

(d) Protection of economically productive areas, including farmland and forests.

(e) Encouragement of land uses, densities and regulations that promote efficient development patterns and relatively low municipal, state governmental and utility costs.

(f) Preservation of cultural, historic and archaeological sites.

(g) Encouragement of coordination and cooperation among nearby units of government.

(h) Building of community identity by revitalizing main streets and enforcing design standards.

(i) Providing an adequate supply of affordable housing for individuals of all income levels throughout each community.

(j) Providing adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential, commercial and industrial uses.

(k) Promoting the expansion or stabilization of the current economic base and the creation of a range of employment opportunities at the state, regional and local levels.

(L) Balancing individual property rights with community interests and goals.

(m) Planning and development of land uses that create or preserve varied and unique urban and rural communities.

(n) Providing an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit–dependent and disabled citizens.

(3) Consistently with other laws, each state agency, whenever it administers a law under which a local governmental unit prepares a plan, is encouraged to design its planning requirements in a manner that makes it practical for local governmental units to incorporate these plans into local comprehensive plans prepared under s. 66.1001.

History: 1999 a. 9, 148; 2001 a. 30.

The PSC has authority to order a utility to refund compensation collected in violation of its filed tariffs. GTE North Inc. v. PSC 176 Wis. 2d 559, 500 N.W.2d 284 (1993).

Public service commission ordered rebates for inadequate service. 1976 WLR 584.

196.025 Duties of the commission. **(1)** To the extent cost–effective, technically feasible and environmentally sound, the commission shall implement the priorities under s. 1.12 (4) in making all energy–related decisions and orders, including advance plan, rate setting and rule–making orders.

(1m) The commission shall implement the policy specified in s. 1.12 (6) in making all decisions, orders, and rules affecting the siting of new electric transmission facilities.

(2) The commission shall promulgate rules establishing requirements and procedures for the commission to carry out the duties under s. 1.11. Rules promulgated under this subsection shall include requirements and procedures for the commission to comply with sub. (2m) and for each of the following:

(a) Standards for determining the necessity of preparing an environmental impact statement.

(b) Adequate opportunities for interested persons to be heard on environmental impact statements, including adequate time for the preparation and submission of comments.

(c) Deadlines that allow thorough review of environmental issues without imposing unnecessary delays in addressing the need for additional electric transmission capacity in this state.

(2m) (a) In this subsection:

1. "Department" means the department of natural resources.

2. "Project" means a project or construction requiring a certificate under s. 196.49 or 196.491 (3) and requiring a permit or approval from the department.

(b) The commission and the department shall coordinate the execution of their respective duties under s. 1.11 for any action of the commission or department regarding a project as follows:

1. If the rules of either the commission or the department require the commission or the department to prepare an environmental impact statement on the project, the commission and the department shall cooperatively prepare an environmental impact statement.

2. If subd. 1. does not apply and the rules of either the commission or the department require the commission or the department to prepare an environmental assessment on the project, the commission and the department shall cooperatively prepare an environmental assessment.

3. The environmental impact statement or environmental assessment under subd. 1. or 2. shall include all of the information required for both the commission and the department to carry out their respective duties under s. 1.11.

(c) Paragraph (b) does not waive any duty of the commission or the department to comply with s. 1.11 or to take any other action required by law regarding a project, except that, in the consideration of alternative locations, sites, or routes for a project, the commission and the department are required to consider only the location, site, or route for the project identified in an application for a certificate under s. 196.49 and no more than one alternative location, site, or route; and, for a project identified in an application for a certificate under s. 196.491 (3), the commission and the department are required to consider only the location, site, or route for the project identified in the application and one alternative location, site, or route.

(3) The commission shall promulgate rules establishing requirements and procedures for electric utilities, as defined under s. 196.491 (1) (d), to file reports with the commission, on a frequency that the commission determines is reasonably necessary, on their current reliability status, including the status of operating and planning reserves, available transmission capacity and outages of major operational units and transmission lines. A report filed under the rules promulgated under this subsection is subject to inspection and copying under s. 19.35 (1), except that the commission may withhold the report from inspection and copying for a period of time that the commission determines is reasonably necessary to prevent an adverse impact on the supply or price of energy in this state.

(4) (a) In consultation with the department of administration and the department of revenue, the commission shall study the establishment of a program for providing incentives for the development of high–efficiency, small–scale electric generating facilities in this state that do either of the following:

1. Provide benefits in the form of support for electric distribution or transmission systems, power quality or environmental performance.

2. Employ technologies such as combined heat and power systems, fuel cells, microturbines, or photovoltaic systems that may be situated in, on, or next to buildings or other electric load centers.

(b) No later than January 1, 2001, the commission shall submit a report of its findings and recommendations under par. (a) to the chief clerk of each house of the legislature for distribution to the appropriate standing committees under s. 13.172 (3).

(5) (ag) In this subsection, "electric cooperative" means a cooperative association organized under ch. 185 for the purpose of generating, distributing or furnishing electric energy at retail or wholesale to its members only.

(ar) The commission shall contract with an expert consultant in economics to conduct a study on the potential for horizontal market power, including the horizontal market power of electric generators, to frustrate the creation of an effectively competitive retail electricity market in this state and to make recommendations on measures to eliminate such market power on a sustainable basis. The study shall include each of the following:

1. An assessment of the effect of each recommendation on public utility workers and shareholders and electric cooperative workers and members.

1m. An assessment of the effect of each recommendation on rates for each class of public utility customers and electric cooperative members.

2. An evaluation of the impact of transmission constraints on the market power of electric generators in local areas.

(b) No later than January 1, 2001, the commission shall submit a report of the results of the study under par. (ar) to the chief clerk of each house of the legislature for distribution to the appropriate standing committees under s. 13.172 (3).

History: 1993 a. 414; 1999 a. 9; 2001 a. 38; 2003 a. 89.

NOTE: 1993 Wis. Act 414, which creates this section, contains extensive explanatory notes.

Cross Reference: See also PSC, Wis. adm. code.

196.027 Environmental trust financing. **(1)** DEFINITIONS. In this section:

(a) "Ancillary agreement" means any bond insurance policy or other financial arrangement entered into in connection with the issuance of environmental trust bonds.

(b) "Assignee" means any person to which an interest in environmental control property is sold, assigned, transferred, or conveyed and any successor to such a person.

(c) "Energy utility" means a public utility engaged in the transmission, delivery, or furnishing of natural gas by means of pipes or mains or of heat, light, or power.

(d) "Environmental control activity" means any of the following:

1. The construction, installation, or otherwise putting into place of environmental control equipment in connection with an energy utility plant that, before March 30, 2004, has been used to provide service to customers.

that are small telecommunications utilities, or if the party is a small telecommunications utility, the forfeiture under this subdivision shall be not more than $7,500. For purposes of this subdivision, each day that a party fails to comply with an interconnection agreement is a separate failure to comply.

2. The maximum forfeiture that may be imposed under subd. 1. shall be trebled if either of the following conditions is satisfied and shall be sextupled if both of the following conditions are satisfied:

a. The party's failure to comply causes death or life–threatening or seriously debilitating injury.

b. The party's failure to comply continues after the party receives written notice of the commission's order requiring compliance with the interconnection agreement.

3. In addition to a forfeiture imposed under subd. 1., a party to an interconnection agreement, approved by the commission, who has willfully failed to comply with the agreement shall forfeit an amount equal to not more than 2 times the gross value of the party's economic gain resulting from the failure to comply.

(b) A court shall consider each of the following in determining the amount of a forfeiture under par. (a):

1. The appropriateness of the forfeiture to the volume of business of the party that failed to comply with the agreement.

2. The gravity of the failure to comply.

3. Any good faith attempt to comply with the agreement after the party receives notice of a failure to comply

4. Any other factor that the court determines is relevant.

(c) In an action to recover a forfeiture under par. (a), a finding by the commission in a proceeding under this subsection that a party to an interconnection agreement has failed to comply with the agreement shall be, subject to review under s. 227.52, conclusive proof that the party failed to comply with the agreement.

History: 1997 a. 218; 2003 a. 33.

Cross Reference: See also ch. PSC 179, Wis. adm. code.

196.20 Rules on service; changes in rates. (1) The rate schedules of any public utility shall include all rules applicable to the rendition or discontinuance of the service to which the rates specified in the schedules are applicable. No change may be made by any public utility in its schedules except by filing the change as proposed with the commission. Except for a telecommunications utility, no change in any public utility rule which purports to curtail the obligation or undertaking of service of the public utility shall be effective without the written approval of the commission after hearing, except that the commission, by emergency order, may make the rule, as filed, effective from the date of the order, pending final approval of the rule after hearing.

(1m) (a) A telecommunications utility may discontinue a service to an exchange if the service is optional and not essential to the provision of basic local exchange service, business access line and usage service within a local calling area or access services, or if one or more other telecommunications providers, whether or not the telecommunications providers are telecommunications utilities or otherwise subject to this chapter, are furnishing substantially the same telecommunications service to customers in the exchange, or if reasonable alternative services are available from the utility or other telecommunications providers.

(b) A telecommunications utility proposing to discontinue a service to an exchange shall file a notice of discontinuance of service with the commission, publish the notice in a newspaper of general circulation within the exchange, and provide other notice as reasonably required by the commission. Written notice of the discontinuation of a service under this subsection shall be given to affected customers.

(c) Within 30 days after the date of publication of the notice, the commission, on its own motion or on the application of a person or other telecommunications utility, may initiate an investigation to determine if the discontinuance of service is authorized under this subsection. Following an opportunity for hearing, the commission may order the continued provision of any service not authorized to be discontinued.

(d) The commission shall determine when and under what conditions a telecommunications utility may discontinue basic local exchange service, basic message telecommunications service or any element of universal service to an exchange or part of an exchange.

(2) (a) Except for a telecommunications utility, a proposed change which constitutes a decrease in rates shall be effective at the time specified in the change as filed but not earlier than 10 days after the date of filing the change with the commission, unless any of the following occurs:

1. During the 10–day period the commission, either upon complaint or upon its own motion, by order, suspends the operation of the proposed change.

2. The commission, upon application of any public utility, directs that a proposed reduction in rates be made effective less than 10 days after filing the proposed reduction.

(am) For telecommunications utilities, a proposed change which constitutes a decrease in rates shall be effective at the time specified in the tariff as filed unless the commission, either upon complaint or upon its own motion, finds after investigation and hearing that the rate reduction violates s. 196.204 or 196.219. Upon such a finding, the commission may order changes in the rates, terms and conditions.

(b) 1. A suspension under par. (a) 1. shall be effective for a period not exceeding 4 months, during which period the commission shall investigate any matter relative to the reasonableness or lawfulness of any change in schedule as filed. After the investigation the commission, by order, shall approve or disapprove the change, except as provided under subd. 2. The commission shall give the public utility proposing the change an opportunity for hearing prior to issuing any order disapproving a change. If the commission disapproves the change, the change shall be ineffective.

2. If the commission orders a suspension under par. (a) 1., the commission, after notice to the public utility of its objections to the change and after giving the public utility an opportunity to be heard on the objections, may prescribe a schedule which, revised on the basis of the objections, the commission finds to be lawful and reasonable instead of disapproving the schedule under subd. 1.

(2m) Except as provided under sub. (5) and ss. 196.193, 196.195 (12) and 196.196, no change in schedules which constitutes an increase in rates to consumers may be made except by order of the commission, after an investigation and opportunity for hearing. The commission may waive a hearing under this subsection for a proposed change in a telecommunications utility schedule. By rule or order, the commission shall specify the notice and procedural requirements applicable to a telecommunications utility proposal for which a hearing is waived.

(2r) In setting the rates charged for basic residential local exchange telecommunications service under this section in local exchange areas served by the same telecommunications utility, the commission may investigate those areas where changes in these rates may be warranted because of the number of access lines accessible from the local exchange area.

(3) Except as provided in subs. (1m) and (5) (a), this section does not apply to telecommunications cooperatives or small telecommunications utilities unless made subject to this section under s. 196.205 or 196.215 (2).

(4) (a) In this subsection:

1. "Automatic adjustment clause" means a provision included in the rate schedule of an electric public utility after investigation, notice and hearing which permits the electric public utility to recover in rates, without prior hearing and order of the

commission, an increase in costs incurred by the electric public utility.

2. "Electric public utility" means a public utility whose purpose is the generation, transmission, delivery or furnishing of electric power but does not include a public utility owned and operated wholly by a municipality or cooperative and does not include any public utility which purchases, under federal or state approved wholesale rates, more than 50% of its electric power requirements from other than an affiliated interest as defined under s. 196.52. "Electric public utility" does not include any Class A utility, as defined under s. 199.03 (4), whose electric generation equipment has a total capacity of less than 30 megawatts.

(b) An electric public utility may not recover in rates any increase in cost, including fuel, by means of the operation of an automatic adjustment clause.

(c) If an increase in fuel costs is of an extraordinary or emergency nature, the commission, after a hearing limited in scope to the question of the increase in fuel costs, may grant a rate increase to an electric public utility.

(d) The commission shall promulgate a rule.

(5) (a) This subsection applies to any of the following:

1. A small telecommunications utility subject to this section under s. 196.215 (2) that files with the commission a proposed change in its rate schedules that constitutes an increase in rates, tolls or charges to consumers.

2. A small telecommunications utility subject to this subsection under s. 196.215 (5) to (7).

(b) 1. If a small telecommunications utility files a proposed change in rate schedule with the commission, it shall file with the proposed change, on a form prescribed by the commission by rule, information sufficient for the commission to consider the proposed change.

1g. If the commission orders a review of a proposed rate increase under s. 196.215 (5), the small telecommunications utility shall file information sufficient for the commission to consider rates, tolls and charges within 120 days after the date on which the small telecommunications utility receives notice from the commission that it is subject to this subsection.

1r. If the commission orders a review of rates, tolls or charges under s. 196.215 (6) or (7), the small telecommunications utility shall file information sufficient for the commission to consider rates, tolls and charges within 120 days after the small telecommunications utility receives notice from the commission that it is subject to this subsection.

2. Within 30 days after a small telecommunications utility files information under subds. 1. to 1r., the commission shall inform the small telecommunications utility if any additional information is necessary. The commission may dismiss a proposed rate increase if the small telecommunications utility fails to submit information requested by the commission. A proposed rate increase dismissed under this subdivision may be refiled at any time.

(c) 1. No later than 14 days after a small telecommunications utility files information under par. (b) 1. to 1r., unless the commission grants an extension, the small telecommunications utility shall send a written notice to all of its consumers and to any other person requesting notice. The notice shall designate a period of time during which the commission will receive written comments in favor of or against the small telecommunications utility's proposed rate increase or the small telecommunications utility's rates, tolls or charges and during which a request for a hearing may be submitted under subd. 2.

2. After a small telecommunications utility sends the notice under subd. 1., any person may submit to the commission a written objection to the proposed rate increase or to rates, tolls or charges or may request a hearing.

3. The commission shall give the small telecommunications utility, commission staff and all parties an opportunity to propose stipulations of facts, identify any issue between the parties and submit arguments in writing on such issues. Unless the commission and the small telecommunications utility agree to a later date, the commission shall serve any proposed stipulation on all parties and shall give any notice required under subd. 4. within 120 days after the commission receives the application for the proposed rate increase or receives the information under par. (b) 1r.

4. The commission shall give any person submitting a written objection or requesting a hearing under subd. 2. notice of a proposed stipulation by regular mail. Within 10 days after the commission mails the notice, a person may submit to the commission a written request for a hearing, specifying his or her interest in the proceeding. If the commission determines that the person is entitled to have all rights of a party under s. 227.44, the commission shall conduct a hearing under s. 227.44. If the notice is returned undelivered or if a person does not request a hearing under this subdivision within 10 days after the commission mails the notice, the person waives the right to request a hearing.

5. The commission shall conduct a hearing under this subsection if a stipulation is not reached on all issues, if the commission determines that a hearing is required under subd. 4. or if the small telecommunications utility or the commission staff requests a hearing. The small telecommunications utility and the commission staff shall serve proposed testimony on all parties at least 10 days before a hearing.

(d) If the commission does not conduct a hearing under this subsection, a proposed rate increase or change in a rate schedule becomes effective as proposed and any rates, tolls or charges under review under s. 196.215 (6) or (7) may not be altered unless the commission issues a final order no later than 150 days after the commission receives the application or receives the information under par. (b) 1g. and 1r. If the commission conducts a hearing, a proposed rate increase or change in a rate schedule becomes effective as proposed and any rates, tolls or charges under review under s. 196.215 (6) or (7) may not be altered unless the commission issues the final order no later than 180 days after the commission receives the application or receives the information under par. (b) 1g. and 1r. If the commission conducts a hearing, the hearing examiner may extend the time for issuing a final order up to 30 additional days. The commission and the small telecommunications utility may agree in writing to extend the time for issuing a final order.

Cross Reference: See also chs. PSC 116 and 164, Wis. adm. code.

(6) If a telecommunications utility that is not a small telecommunications utility and that has 150,000 or less access lines in use in this state files with the commission an application for a rate change that constitutes an increase in rates, the rate change becomes effective as proposed unless the commission issues the final order on the application no later than 180 days after the commission receives the application. The hearing examiner may extend the time for issuing a final order up to 30 additional days. The commission and the telecommunications utility may agree in writing to extend the time for issuing a final order.

(7) (a) In this subsection, "mitigation payment" means, as approved by the commission, an unrestricted or recurring monetary payment to a local unit of government in which an electric generating facility is located to mitigate the impact of the electric generating facility on the local unit of government. "Mitigation payment" does not include payments made or in–kind contributions for restricted purposes to directly address health or safety impacts of the electric generating facility on the local unit of government.

(b) Except as provided in par. (c), an electric public utility may not recover in rates any of the following:

1. The cost of mitigation payments paid by the utility.

2. The cost of mitigation payments paid by the owner or operator of an electric generating facility that the owner or operator recovers from the utility by selling electricity to the utility, by leasing the facility to the utility, or by any agreement between the

owner or operator of the electric generating facility and the public utility.

(c) The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003, and, if the commission finds the agreement to be reasonable, shall not subsequently modify the agreement.

History: 1981 c. 148; 1983 a. 27, 53, 461, 502; 1985 a. 182 s. 57; 1985 a. 297; 1989 a. 344; 1993 a. 496; 1995 a. 27, 363; 1997 a. 27; 2003 a. 89.

A utility's expanded adjustment clause violated the requirement of public hearings prior to rate increases under sub. (2) [now sub. (2m)]. Wisconsin Environmental Decade, Inc. v. PSC, 81 Wis. 2d 344, 260 N.W.2d 712.

The inclusion of nuclear fuel in an adjustment clause did not violate sub. (2) [now sub. (2m)]. Wisconsin Environmental Decade, Inc. v. PSC, 105 Wis. 2d 457, 313 N.W.2d 863 (Ct. App. 1981).

Sub. (2m) requires a utility to charge only those rates that have been filed with the PSC in conformity with applicable statutes. Filed rates are those rates filed in compliance with applicable statutes, including those under sub. (2m) for changes in schedules that increase rates. CenturyTel of the Midwest–Kendall, Inc. v. PSC, 2002 WI App 236, 257 Wis. 2d 837, 653 N.W.2d 130, 02–0053.

Utility rate increases granted under automatic fuel adjustment clauses, without hearing, probably would not be illegal if the clauses were limited to purchased fuel or power. 70 Atty. Gen. 108.

196.201 Regulation of private shared telecommunications systems. **(1)** DEFINITION. In this section, "private shared telecommunications system" means plant or equipment used to provide telecommunications service through privately owned customer premises equipment to a user group located in a discrete premises, such as in a building complex or a large multitenant building, or used to provide telecommunications service where the cost of service is shared among 2 or more persons who are not affiliated interests under s. 196.52, and where the plant or equipment is not used to offer telecommunications service for sale directly or indirectly to the general public.

(2) REQUEST FOR ACCESS. At the request of any person who receives telecommunications service from a private shared telecommunications system, or at the request of a telecommunications utility or telecommunications carrier seeking to provide telecommunications service requested by any such person, the owner or manager of the private shared telecommunications system shall make facilities or conduit space available to any telecommunications utility or telecommunications carrier for the purpose of providing telecommunications service.

(3) COMMISSION MAY ORDER. If the commission finds that the owner or manager of a private shared telecommunications system has failed to comply with a request under sub. (2), it may order the owner or manager to make facilities or conduit space available to any telecommunications utility or telecommunications carrier making a request under sub. (2) at reasonable prices and on reasonable terms and conditions, under the procedures of s. 196.04.

History: 1985 a. 297; 1993 a. 491, 496.

196.202 Exemption of commercial mobile radio service providers. **(2)** SCOPE OF REGULATION. A commercial mobile radio service provider is not subject to ch. 201 or this chapter, except as provided in sub. (5), and except that a commercial mobile radio service provider is subject to s. 196.218 (3) if the commission promulgates rules that designate commercial mobile radio service providers as eligible to receive universal service funding under both the federal and state universal service fund programs. If the commission promulgates such rules, a commercial mobile radio service provider shall respond, subject to the protection of the commercial mobile radio service provider's competitive information, to all reasonable requests for information about its operations in this state from the commission necessary to administer the universal service fund.

(5) BILLING. A commercial mobile radio service provider may not charge a customer for an incomplete call.

History: 1985 a. 297; 1987 a. 27; 1991 a. 39; 1993 a. 36, 496; 1997 a. 27, 140, 218; 1999 a. 32, 150; 2001 a. 16.

Cross Reference: See also chs. PSC 170 and 172, Wis. adm. code.

196.203 Exemption of alternative telecommunications utilities. **(1)** Alternative telecommunications utilities are exempt from all provisions of ch. 201 and this chapter, except as provided in this section and except that an alternative telecommunications utility that is a local government telecommunications utility, as defined in s. 196.204 (5) (ag) 1., is subject to s. 196.204 (5).

(1m) Any person claiming to be a cable telecommunications service provider under this section shall annually file with the commission any information required by the commission to determine the gross income of the person which is derived from the operation of a cable television system.

(2) No person may commence providing service as an alternative telecommunications utility unless the person petitions for and the commission issues a determination that the person is an alternative telecommunications utility. The commission shall maintain information on authorized alternative telecommunications utilities and on applicants for alternative telecommunications utility status and make that information available to any person, upon request.

(3) (a) In response to a petition from any interested person, or upon its own motion, the commission shall determine whether the public interest requires that any provision of ch. 201 or this chapter be imposed on a person providing or proposing to provide service as an alternative telecommunications utility in a relevant market. In making this determination, the commission may consider factors including the quality of service, customer complaints, concerns about the effect on customers of local exchange telecommunications utilities and the extent to which similar services are available from alternative sources.

(b) The commission may not deny a petition filed under par. (a) by a provider of cable television service for alternative telecommunications utility status in a particular geographical area as not being in the public interest if basic local exchange service is provided in the same geographical area by any of the following:

1. A telecommunications utility with more than 50,000 access lines in use in this state.

2. Subject to par. (c), a telecommunications utility with 50,000 or less access lines in use in this state which also provides cable television service in that geographical area, if provision of cable television service began after September 1, 1994.

(c) Paragraph (b) 2. shall not apply if the telecommunications utility's provision of cable television service is limited to the provision of satellite cable programming, as defined in s. 943.47 (1) (b).

(d) Section 196.50 (1) (b) applies to an alternative telecommunications utility except for a provider of cable television service.

(dm) Section 196.197 applies to an alternative telecommunications utility.

(e) 1. If a provider of cable television service files a petition under par. (a) for alternative telecommunications status to offer local exchange service, as defined in s. 196.50 (1) (b) 1., in a geographical area served by a telecommunications utility with less than 50,000 access lines in use in this state on September 1, 1994, or at any time thereafter, the commission may not deny the petition as not being in the public interest and shall do any of the following:

a. Eliminate the telecommunications utility's obligation to be the provider of last resort.

b. Allocate universal service fund moneys available under s. 196.218 (5) (a) 1. to the telecommunications utility to offset the obligation to be the provider of last resort under a formula that reimburses the telecommunications utility for 90% of the difference calculated by subtracting 110% of the weighted average basic single–party residential monthly rate for all telecommunications utilities in this state from the eligible telecommunications utility's average basic single–party residential rate and for 90% of the difference calculated by subtracting 110% of the weighted average single line business access line monthly rate for all telecommunications utilities in this state from the eligible telecommunications utility's single line business access line monthly rate.

rule or order prescribes. The commission shall prescribe the form of notice, to whom the notice shall be given, and how notice shall be given.

(c) A petition under par. (b) may include one or more municipalities, may be made by one or more public utilities as a joint petition, by any other interested person or by a public utility and any other interested person. The commission may direct the consolidation, separation or consideration of separate petitions as it deems necessary or expedient to a prompt hearing and disposition of the issue.

(d) Upon the filing of a petition under par. (b), notice of hearing on the petition shall be given by the person filing the petition by publication of a class 2 notice, under ch. 985, or by mailing or personal service, as the commission directs by the order under par. (b). Notice under this paragraph shall be given at least 2 weeks prior to hearing on the petition. Proof of notice shall be filed as directed by the commission.

(e) The commission, with or without an order, prior to or during any hearing under this subsection, may frame and prescribe special issues and limit the issues or the nature and extent of proof so as to avoid unnecessary duplication. The commission, with or without an order, may proceed with the hearing as to part of a petition under par. (b) as it may find desirable to a full but speedy hearing upon the petition.

(f) The commission may accept as presumptive evidence in a commission proceeding the facts found in findings and orders of the federal energy regulatory commission or any federal agency having jurisdiction as to the availability of adequate supplies of natural gas, the adequacy or sufficiency of equipment and facilities to be employed in the delivery or storage of natural gas for any public utility, and any similar findings or determinations affecting the seller or person furnishing natural gas to any public utility and material to the ultimate determination of the issues in the proceeding. The commission may accept and take judicial notice of its own files and records, including all proceedings and the evidence therein which it finds to be material and relevant. The commission shall give notice of the taking of judicial notice under this paragraph prior to the conclusion of final hearings upon any proceeding so as to give interested parties the right to object to acceptance of the evidence or to contradict the evidence by other competent evidence.

(g) A certificate granted under par. (a) shall be authorized by an order following a hearing. The order shall contain any condition or limitation which the commission deems necessary or practicable, including, but not limited to, exceptions or regulations as to specific communities or public utilities, provision for protection of employees under existing labor contracts, as well as other employees, so as to avoid unemployment, regulations for accounting for expenses for change–over to the use of natural gas where necessary and to the extent necessary, provision for amortization of any expenditure or other items, and any other regulation, condition and limitation which the commission considers necessary in the public interest.

(h) The commission by order may extend a certificate under par. (a) to more than one public utility or municipality. The commission may prescribe different conditions and regulations for each public utility or municipality if the commission deems the different conditions and regulations necessary to carry out the purposes of this section.

(i) In making a determination under this section, the commission shall consider all appropriate factors affecting the public interest, including, but not limited to, when the substitution of natural or a mixture of natural and manufactured gas is involved, the likelihood of substantial rate reduction from the substitution and the effect of the substitution upon employment, existing business and industries, railroads and other transportation agencies and facilities, upon conveniences, economies and savings to consumers, upon existing gas utilities and their ability to continue to serve the public and upon the state, any of its political subdivisions or any citizen or resident of the state.

(6) If the commission finds that any public utility has taken or is about to take an action which violates or disregards a rule or special order under this section, the commission, in its own name either before or after investigation or public hearing and either before or after issuing any additional orders or directions it deems proper, may bring an action in the circuit court of Dane County to enjoin the action. If necessary to preserve the existing state of affairs, the court may issue a temporary injunction pending a hearing upon the merits. An appeal from an order or judgment of the circuit court may be taken to the court of appeals.

History: Sup. Ct. Order, 67 Wis. 2d 585, 775 (1975); 1977 c. 187; 1979 c. 110 s. 60 (9); 1983 a. 53; 1985 a. 60; 1993 a. 496; 1995 a. 227; 2003 a. 89.

Cross Reference: See also chs. PSC 112, 113, 114, and 162, Wis. adm. code.

There is no hearing requirement for the issuance of a certificate authorizing service. Adams–Marquette Electric Cooperative v. PSC. 51 Wis. 2d 718, 188 N.W.2d 515 (1971).

The "public" in sub. (3) (b) includes all electric consumers in the state, not only the ratepayers of the utility seeking authorization. Wisconsin Power & Light Co. v. PSC, 148 Wis. 2d 881, 437 N.W.2d 888 (Ct. App. 1989).

196.491 Strategic energy assessment; electric generating facilities and transmission lines. (1) DEFINITIONS. In this section:

(am) "Affiliated interest" has the meaning given in s. 196.52 (1).

(b) "Commencement of construction" means site clearing, excavation, placement of facilities or any other substantial action adversely affecting the natural environment of the site, but does not mean borings necessary to determine foundation conditions or other preconstruction monitoring to establish background information related to site or environmental suitability.

(bm) "Cooperative association" means a cooperative association organized under ch. 185 for the purpose of generating, distributing or furnishing electric energy at retail or wholesale to its members only.

(c) "Department" means the department of natural resources.

(d) "Electric utility" means any public utility, as defined in s. 196.01, which is involved in the generation, distribution and sale of electric energy, and any corporation, company, individual or association, and any cooperative association, which owns or operates, or plans within the next 3 years to construct, own or operate, facilities in the state.

(e) "Facility" means a large electric generating facility or a high–voltage transmission line.

(f) Except as provided in subs. (2) (b) 8. and (3) (d) 3m., "high–voltage transmission line" means a conductor of electric energy exceeding one mile in length designed for operation at a nominal voltage of 100 kilovolts or more, together with associated facilities, and does not include transmission line relocations that the commission determines are necessary to facilitate highway or airport projects.

(g) "Large electric generating facility" means electric generating equipment and associated facilities designed for nominal operation at a capacity of 100 megawatts or more.

(w) 1. "Wholesale merchant plant" means, except as provided in subd. 2., electric generating equipment and associated facilities located in this state that do not provide service to any retail customer and that are owned and operated by any of the following:

a. Subject to the approval of the commission under sub. (3m) (a), an affiliated interest of a public utility.

b. A person that is not a public utility.

2. "Wholesale merchant plant" does not include an electric generating facility or an improvement to an electric generating facility that is subject to a leased generation contract, as defined in s. 196.52 (9) (a) 3.

(2) STRATEGIC ENERGY ASSESSMENT. (a) The commission shall prepare a biennial strategic energy assessment that evaluates the

adequacy and reliability of the state's current and future electrical supply. The strategic energy assessment shall do all of the following:

3. Identify and describe large electric generating facilities on which an electric utility plans to commence construction within 3 years.

3g. Assess the adequacy and reliability of purchased generation capacity and energy to serve the needs of the public.

3m. Identify and describe high–voltage transmission lines on which an electric utility plans to commence construction within 3 years.

3r. Identify and describe any plans for assuring that there is an adequate ability to transfer electric power into the state and the transmission area, as defined in s. 196.485 (1) (g), in a reliable manner.

4. Identify and describe the projected demand for electric energy and the basis for determining the projected demand.

7. Identify and describe activities to discourage inefficient and excessive power use.

9. Identify and describe existing and planned generating facilities that use renewable sources of energy.

10. Consider the public interest in economic development, public health and safety, protection of the environment and diversification of sources of energy supplies.

11. Assess the extent to which the regional bulk–power market is contributing to the adequacy and reliability of the state's electrical supply.

12. Assess the extent to which effective competition is contributing to a reliable, low–cost and environmentally sound source of electricity for the public.

13. Assess whether sufficient electric capacity and energy will be available to the public at a reasonable price.

(ag) The commission shall promulgate rules that establish procedures and requirements for reporting information that is necessary for the commission to prepare strategic energy assessments under par. (a).

(b) On or before July 1, 2000, and on or before July 1 of each even–numbered year thereafter, the commission shall issue a draft of the biennial strategic energy assessment that it prepares under par. (a) to each of the following:

1. Department of administration.

2. Department of commerce.

3. Department of health and family services.

4. Department of justice.

5. Department of natural resources.

6. Department of transportation.

7. The director or chairperson of each regional planning commission constituted under s. 66.0309 which has jurisdiction over any area where a facility is proposed to be located or which requests a copy of such plan.

8. The lower Wisconsin state riverway board if the draft includes an assessment of the construction, modification or relocation of a high–voltage transmission line, as defined in s. 30.40 (3r), that is located in the lower Wisconsin riverway as defined in s. 30.40 (15).

9. Each person that is required to report information to the commission under the rules promulgated under par. (ag).

10. The clerk of each city, village, town and county that, as determined by the commission, is affected by the assessment.

(e) Any state agency, as defined in s. 560.9810 (1), county, municipality, town or person may submit written comments to the commission on a strategic energy assessment within 90 days after copies of the draft are issued under par. (b).

(f) Section 1.11 (2) (c) shall not apply to a strategic energy assessment prepared under par. (a) but the commission shall prepare a single environmental assessment on the strategic energy assessment, which shall include a discussion of generic issues and environmental impacts. The commission shall make the environmental assessment available to the public at least 30 days prior to the hearing under par. (g).

(g) No sooner than 30 and no later than 90 days after copies of the draft are issued under par. (b), the commission shall hold a hearing on the draft which may not be a hearing under s. 227.42 or 227.44. The hearing shall be held in an administrative district, established by executive order 22, issued August 24, 1970, which the commission determines will be significantly affected by facilities on which an electric utility plans to commence construction within 3 years. The commission may thereafter adjourn the hearing to other locations or may conduct the hearing by interactive video conference or other electronic method. Notice of such hearing shall be given by class 1 notice, under ch. 985, published in the official state newspaper and such other regional papers of general circulation as may be designated by the commission. At such hearing the commission shall briefly describe the strategic energy assessment and give all interested persons an opportunity, subject to reasonable limitations on the presentation of repetitious material, to express their views on any aspect of the strategic energy assessment. A record of the hearing shall be made and considered by the commission as comments on the strategic energy assessment under par. (e).

(gm) Based on comments received on a draft, the commission shall prepare a final strategic energy assessment within 90 days after a hearing under par. (g). The commission shall provide copies of the final strategic energy assessment to any state agency, county, municipality, town or other person who submitted comments on the draft under par. (e) and to the persons specified in par. (b).

(2r) LOCAL ORDINANCES. No local ordinance may prohibit or restrict testing activities undertaken by an electric utility for purposes of determining the suitability of a site for the placement of a facility. Any local unit of government objecting to such testing may petition the commission to impose reasonable restrictions on such activity.

(3) CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY. (a) 1. Except as provided in sub. (3b), no person may commence the construction of a facility unless the person has applied for and received a certificate of public convenience and necessity under this subsection. An application for a certificate issued under this subsection shall be in the form and contain the information required by commission rules and shall be filed with the commission not less than 6 months prior to the commencement of construction of a facility. Within 10 days after filing an application under this subdivision, the commission shall send a copy of the application to the clerk of each municipality and town in which the proposed facility is to be located and to the main public library in each such county.

2. The commission shall determine whether an application filed under subd. 1. is complete and, no later than 30 days after the application is filed, notify the applicant about the determination. If the commission determines that the application is incomplete, the notice shall state the reason for the determination. An applicant may supplement and refile an application that the commission has determined to be incomplete. There is no limit on the number of times that an applicant may refile an application under this subdivision. If the commission fails to determine whether an application is complete within 30 days after the application is filed, the application shall be considered to be complete.

3. a. At least 60 days before a person files an application under subd. 1., the person shall provide the department with an engineering plan if the facility is a large electric generating facility or a detailed project plan if the facility is a high–voltage transmission line. The engineering or project plan shall show the location of the facility, a description of the facility, including the major components of the facility that have a significant air, water or solid waste pollution potential, and a brief description of the anticipated effects of the facility on air quality, water quality, wetlands, solid waste disposal capacity, and other natural resources. Within 30

days after a person provides an engineering or project plan, the department shall provide the person with a listing of each department permit or approval which, on the basis of the information contained in the engineering or project plan, appears to be required for the construction or operation of the facility.

b. Within 20 days after the department provides a listing specified in subd. 3. a. to a person, the person shall apply for the permits and approvals identified in the listing. The department shall determine whether an application under this subd. 3. b. is complete and, no later than 30 days after the application is filed, notify the applicant about the determination. If the department determines that the application is incomplete, the notice shall state the reason for the determination. An applicant may supplement and refile an application that the department has determined to be incomplete. There is no limit on the number of times that an applicant may refile an application under this subd. 3. b. If the department fails to determine whether an application is complete within 30 days after the application is filed, the application shall be considered to be complete. The department shall complete action on an application under this subd. 3. b. for any permit or approval that is required prior to construction of a facility within 120 days after the date on which the application is determined or considered to be complete.

(b) The commission shall hold a public hearing on an application filed under par. (a) 1. that is determined or considered to be complete in the area affected pursuant to s. 227.44. A class 1 notice, under ch. 985, shall be given at least 30 days prior to the hearing.

(d) Except as provided under par. (e) and s. 196.493, the commission shall approve an application filed under par. (a) 1. for a certificate of public convenience and necessity only if the commission determines all of the following:

2. The proposed facility satisfies the reasonable needs of the public for an adequate supply of electric energy. This subdivision does not apply to a wholesale merchant plant.

3. The design and location or route is in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability and environmental factors, except that the commission may not consider alternative sources of supply or engineering or economic factors if the application is for a wholesale merchant plant. In its consideration of environmental factors, the commission may not determine that the design and location or route is not in the public interest because of the impact of air pollution if the proposed facility will meet the requirements of ch. 285.

3m. For a high–voltage transmission line, as defined in s. 30.40 (3r), that is to be located in the lower Wisconsin state riverway, as defined in s. 30.40 (15), the high–voltage transmission line will not impair, to the extent practicable, the scenic beauty or the natural value of the riverway. The commission may not require that a high–voltage transmission line, as defined in s. 30.40 (3r), be placed underground in order for it to approve an application.

3r. For a high–voltage transmission line that is proposed to increase the transmission import capability into this state, existing rights–of–way are used to the extent practicable and the routing and design of the high–voltage transmission line minimizes environmental impacts in a manner that is consistent with achieving reasonable electric rates.

3t. For a high–voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more, the high–voltage transmission line provides usage, service or increased regional reliability benefits to the wholesale and retail customers or members in this state and the benefits of the high–voltage transmission line are reasonable in relation to the cost of the high–voltage transmission line.

4. The proposed facility will not have undue adverse impact on other environmental values such as, but not limited to, ecological balance, public health and welfare, historic sites, geological formations, the aesthetics of land and water and recreational use. In its consideration of the impact on other environmental values, the commission may not determine that the proposed facility will have an undue adverse impact on these values because of the impact of air pollution if the proposed facility will meet the requirements of ch. 285.

5. The proposed facility complies with the criteria under s. 196.49 (3) (b) if the application is by a public utility as defined in s. 196.01.

6. The proposed facility will not unreasonably interfere with the orderly land use and development plans for the area involved.

7. The proposed facility will not have a material adverse impact on competition in the relevant wholesale electric service market.

8. For a large electric generating facility, brownfields, as defined in s. 560.13 (1) (a), are used to the extent practicable.

(dm) In making a determination required under par. (d), the commission may not consider a factual conclusion in a strategic energy assessment unless the conclusion is independently corroborated in the hearing under par. (b).

(e) If an application filed under par. (a) 1. does not meet the criteria under par. (d), the commission shall reject the application or approve the application with such modifications as are necessary for an affirmative finding under par. (d). The commission may not issue a certificate of public convenience and necessity under this subsection until the department has issued all permits and approvals identified in the listing specified in par. (a) 3. a. that are required prior to construction.

(g) The commission shall take final action on an application filed under par. (a) 1. within 180 days after the application is determined or considered to be complete under par. (a) 2. If the commission fails to take final action within the 180–day period, the commission is considered to have issued a certificate of public convenience and necessity with respect to the application, unless the commission, within the 180–day period, petitions the circuit court for Dane County for an extension of time for taking final action on the application and the court grants an extension. Upon a showing of good cause, the court may extend the 180–day period for no more than an additional 180 days . If the commission fails to take final action within the extended period, the commission is considered to have issued a certificate of public convenience and necessity with respect to the application.

(gm) The commission may not approve an application filed after October 29, 1999, under this subsection for a certificate of public convenience and necessity for a high–voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more unless the approval includes the condition that the applicant shall pay the fees specified in sub. (3g) (a). If the commission has approved an application under this subsection for a certificate of public convenience and necessity for a high–voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more that was filed after April 1, 1999, and before October 29, 1999, the commission shall require the applicant to pay the fees specified in sub. (3g) (a). For any application subject to this paragraph, the commission shall determine the cost of the high–voltage transmission line, identify the counties, towns, villages and cities through which the high–voltage transmission line is routed and allocate the amount of investment associated with the high–voltage transmission line to each such county, town, village and city.

(i) If installation or utilization of a facility for which a certificate of convenience and necessity has been granted is precluded or inhibited by a local ordinance, the installation and utilization of the facility may nevertheless proceed.

(j) Any person whose substantial rights may be adversely affected or any county, municipality or town having jurisdiction over land affected by a certificate of public convenience and necessity for which an application is filed under par. (a) 1. may

Unofficial text from 03–04 Wis. Stats. database. See printed 03–04 Statutes and 2005 Wis. Acts for official text under s. 35.18 (2) stats. Report errors to the Revisor of Statutes at (608) 266–2011, FAX 264–6978, http://www.legis.state.wi.us/rsb/

petition for judicial review, under ch. 227, of any decision of the commission regarding the certificate.

(k) No person may purchase, or acquire an option to purchase, any interest in real property knowing that such property is being purchased to be used for the construction of a high–voltage transmission line unless the person gives written notice to the prospective seller of the size, maximum voltage and structure type of any transmission line planned to be constructed thereon and the person by whom it will be operated. Contracts made in violation of this paragraph are subject to rescission by the seller at any time prior to the issuance of a certificate of public convenience and necessity for the high–voltage transmission line by the commission.

(3b) EXPEDITED REVIEW. (a) A person who proposes to construct a high–voltage transmission line may apply for a certificate under this subsection if the construction is limited to adding conductors to existing transmission poles or towers and if all related construction activity takes place entirely within the area of an existing electric transmission line right–of–way.

(b) The commission shall promulgate rules specifying the information that must be included in an application under this subsection. If the commission receives an application that complies with rules, the commission shall, as soon as practicable, notify the applicant that the commission has received a complete application.

(c) The commission is considered to have issued a certificate of public convenience and necessity under sub. (3) for construction specified in an application under par. (a) unless the commission notifies the applicant, no later than 30 business days after the date on which the commission notifies an applicant under par. (b) that the application is complete, that the commission has determined that the public interest requires the applicant to obtain a certificate under s. 196.49.

(3c) COMMENCEMENT OF CONSTRUCTION OF LARGE ELECTRIC GENERATING FACILITIES. (a) Except as provided in par. (b), an electric utility that has received a certificate of public convenience and necessity under sub. (3) for constructing a large electric generating facility shall commence construction no later than one year after the latest of the following:

1. The date on which the commission issues the certificate of public convenience and necessity.

2. The date on which the electric utility has been issued every federal and state permit, approval, and license that is required prior to commencement of construction.

3. The date on which every deadline has expired for requesting administrative review or reconsideration of every federal and state permit, approval, and license that is required prior to commencement of construction.

4. The date on which the electric utility has received the final decision, after exhaustion of judicial review, in every proceeding for judicial review described in sub. (3) (j).

(b) Upon showing of good cause, the commission may grant an extension to the deadline specified in par. (a).

(c) If an electric utility does not commence construction of a large electric generating facility within the deadline specified in par. (a) or extended under par. (b), the certificate of public convenience and necessity is void, and the electric utility may not commence construction of the large electric generating facility.

(3g) FEES FOR CERTAIN HIGH–VOLTAGE TRANSMISSION LINES. (a) A person who receives a certificate of public convenience and necessity for a high–voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more under sub. (3) shall pay the department of administration an annual impact fee as specified in the rules promulgated by the department of administration under s. 16.969 (2) (a) and shall pay the department of administration a one–time environmental impact fee as specified in the rules promulgated by the department of administration under s. 16.969 (2) (b).

(b) A person that pays a fee under par. (a) may not use the payment to offset any other mitigation measure that is required in an order by the commission under sub. (3) regarding the certificate of public convenience and necessity specified in par. (a).

(3m) WHOLESALE MERCHANT PLANTS. (a) *Commission approval required.* Except as provided in par. (e), an affiliated interest of a public utility may not own, control or operate a wholesale merchant plant without the approval of the commission. The commission shall grant its approval only if each of the following is satisfied:

1. The public utility has transferred control over its transmission facilities, as defined in s. 196.485 (1) (h), to an independent system operator, as defined in s. 196.485 (1) (d), that is approved by the federal energy regulatory commission or the public utility has divested its interest in the transmission facilities to an independent transmission owner, as defined in s. 196.485 (1) (dm).

2. The commission finds that the ownership, control or operation will not have a substantial anticompetitive effect on electricity markets for any classes of customers.

(b) *Duty to promulgate rules.* 1. The commission shall promulgate rules that establish requirements and procedures for an affiliated interest to apply for an approval under par. (a). The rules shall do each of the following:

a. Describe the showing that an applicant is required to make for the commission to grant an approval under par. (a).

am. Establish screening tests and safe harbors for proposed wholesale merchant plant projects, including projects in which an affiliated interest is a passive investor and over which the affiliated interest is not able to exercise control or influence and projects in which an affiliated interest's ownership interest is less than 5%.

b. Describe the analytical process that the commission shall use in determining whether to make a finding under par. (a) 2. and describe the factors specified in subd. 3.

c. Allow an interested person to request a hearing on an application under s. 227.42.

2. The analytical process specified in subd. 1. b. shall, to the extent practicable, be consistent with the analytical process described in the merger enforcement policy, as defined in s. 196.485 (1) (dr).

3. The commission shall use the following factors in determining whether to make a finding under par. (a) 2.:

a. The degree of market concentration resulting from the affiliated interest's proposed ownership, operation or control.

b. The extent of control that the affiliated interest proposes to exercise over the wholesale merchant plant.

d. Any other factor that the commission determines is necessary to determine whether to make a finding under par. (a) 2.

(c) *Sales by affiliated interests.* 1. In this paragraph:

a. "Electric sale" means a sale of electricity that is generated at a wholesale merchant plant that is owned, operated or controlled by an affiliated interest.

b. "Firm sale" means an electric sale in which electricity is intended to be available to a purchaser at all times during a specified period on an uninterruptible basis.

2. The commission shall review any electric sale by an affiliated interest to a public utility with which the affiliated interest is affiliated. If the commission finds that an electric sale is not in the public interest, the commission shall do any of the following:

a. Disallow the public utility's costs related to the sale in a rate–setting proceeding.

b. Order the public utility to provide a refund, in an amount determined by the commission, to its customers.

c. Order the public utility or affiliated interest to take any action that the commission determines is in the public interest,

except that the commission may not order the public utility or affiliated interest to void the sale.

3. An affiliated interest may not make any firm sale to a public utility with which the affiliated interest is affiliated if the firm sale satisfies any of the following:

a. The period of the firm sale is 3 years or more.

b. The period of the firm sale is less than 3 years and either the public utility or the affiliated interest has an option to extend the period to 3 years or more.

(d) *Retail sales outside this state.* The commission may not promulgate rules or issue orders that prohibit owners or operators of wholesale merchant plants from providing electric service to retail customers in another state.

(e) *Exemption.* An approval under par. (a) is not required for an affiliated interest to own, operate or control a wholesale merchant plant in Grant County if the affiliated interest owned, operated or controlled the wholesale merchant plant before January 1, 1998.

Cross Reference: See also s. PSC 100.11, Wis. adm. code.

(4) EXEMPTIONS. (b) Subsection (3) does not apply to a person that constructs electric generating equipment and associated facilities if the person satisfies each of the following:

1. The person is not a public utility or a cooperative association organized under ch. 185 for the purpose of generating, distributing or furnishing electric energy at retail or wholesale to its members only.

2. The person shows to the satisfaction of the commission that the person reasonably anticipates, at the time that construction of the equipment or facilities commences, that on each day that the equipment and facilities are in operation the person will consume no less than 70% of the aggregate kilowatt hours output from the equipment and facilities in manufacturing processes at the site where the equipment and facilities are located.

(c) 1. A certificate under sub. (3) is not required for a person to construct a high–voltage transmission line designed for operation at a nominal voltage of less than 345 kilovolts if all related construction activity takes place entirely within the area of an existing electric transmission line right–of–way.

2. The commission is not required to prepare an environmental impact statement under under s. 1.11 (2) (c) for construction that is specified in subd. 1., but shall prepare an environmental assessment regarding the construction if an environmental assessment is required under the commission's rules.

3. If construction or utilization of a high–voltage transmission line described in subd. 1. is precluded or inhibited by a local ordinance, the construction and utilization of the line may nevertheless proceed.

(5) SERVICE STANDARDS FOR ELECTRIC GENERATION, TRANSMISSION AND DISTRIBUTION FACILITIES. The commission shall promulgate rules that establish all of the following:

(a) Standards for inspecting, maintaining and repairing each of the following:

1. Electric generation facilities in this state that are owned by public utilities or provide service to public utilities under contracts with terms of 5 years or more.

2. Electric transmission or distribution facilities in this state that are owned by public utilities.

(b) Standards that the commission determines are necessary for the safe and reliable operation of each of the following:

1. Electric generation facilities in this state that are owned by public utilities or provide service to public utilities under contracts with terms of 5 years or more.

2. Electric transmission or distribution facilities in this state that are owned by public utilities.

(6) WAIVER. The commission may waive compliance with any requirement of this section to the extent necessary to restore service which has been substantially interrupted by a natural catastrophe, accident, sabotage or act of God.

History: 1975 c. 68, 199; 1979 c. 221, 361; 1983 a. 53 s. 114; 1983 a. 192, 401; 1985 a. 182 s. 57; 1989 a. 31; 1993 a. 184; 1995 a. 27 ss. 9116 (5), 9126 (19); 1995 a. 227, 409; 1997 a. 27, 35, 204; 1999 a. 9; 1999 a. 150 s. 672; 2001 a. 16; 2003 a. 33, 89.

Cross Reference: See also ch. PSC 112, Wis. adm. code.

It was reasonable for the PSC to issue a certificate conditioned on the issuance of DNR permits when legislatively imposed time constraints could not have been met if sub. (3) (e) had been strictly followed and all permits required before the issuance of the certificate. Responsible Use of Rural & Agricultural Land v. PSC, 2000 WI 129, 239 Wis. 2d 660, 619 N.W.2d 888.

196.493 Construction of nuclear power plants limited. (1) DEFINITION. In this section, "nuclear power plant" means a nuclear–fired large electric generating facility as defined under s. 196.491 (1) (g).

(2) LIMITS ON CERTIFICATION. The commission may not certify under s. 196.49 (3) (b) or 196.491 (3) any nuclear power plant unless the commission finds that:

(a) A federally licensed facility, or a facility outside of the United States which the commission determines will satisfy the public welfare requirements of the people of this state, with adequate capacity to dispose of high–level nuclear waste from all nuclear power plants operating in this state will be available, as necessary, for disposal of the waste; and

(b) The proposed nuclear power plant, in comparison with feasible alternatives, is economically advantageous to ratepayers, based upon:

1. The existence of a reliable and adequate nuclear fuel supply;

2. The costs for construction, operation and decommissioning of nuclear power plants and for nuclear waste disposal; and

3. Any other factor having an impact on the economics of nuclear power plants, as determined by the commission.

History: 1983 a. 401; 1997 a. 204.

Cross Reference: See also ch. PSC 111, Wis. adm. code.

196.494 Regional transmission planning. (1) In this section:

(a) "Electric utility" means a public utility, other than a municipal utility, as defined in s. 196.377 (2) (a) 3., that provides retail electric service to customers in this state.

(b) "Transmission facility" means any pipe, pipeline, duct, wire, line, conduit, pole, tower, equipment or other structure used for the transmission of electric power as determined by the commission.

(2) The commission shall conduct a study on identifying and relieving any constraint on an intrastate or interstate electric transmission system that adversely affects the reliability of transmission service provided to electric customers in this state and shall, no later than September 1, 1998, submit a report on the results of the study to the legislature in the manner provided under s. 13.172 (2).

(3) The commission shall, under this subsection, issue an order requiring the transmission company, as defined in s. 196.485 (1) (ge), or an electric utility to construct or procure, on a competitive basis, the construction of transmission facilities specified by the commission in its order if the commission determines that such construction is necessary to relieve a constraint on a transmission system and the construction will materially benefit the customers of the transmission company or electric utility or other electric utilities or of an independent system operator, as defined in s. 196.485 (1) (d), or independent transmission owner, as defined in s. 196.485 (1) (dm).

(4) The commission shall allow an electric utility to recover in its retail electric rates any costs that are prudently incurred by the utility in complying with an order under sub. (3).

(5) The governor may, on behalf of this state, enter into an interstate compact that establishes a joint process for the states in the upper midwest region of the United States to determine the

(1) SPENDING. Dollars spent on energy conservation activity affecting any Wisconsin customer.

(2) ENERGY AND DEMAND SAVINGS. Energy savings in kWh and demand savings in kW, excluding direct load control and interruptible load impacts specified in s. PSC 111.11 (2) (a) 2. and 3., reported for any Wisconsin customer.

(3) ENERGY CONSERVATION PROGRAM DESCRIPTIONS. A comprehensive description of all planned activities to discourage inefficient and excessive power use.

History: Cr. Register, June, 2000, No. 534, eff. 7–1–00.

Subchapter V — Transmission System Operation Data

PSC 111.41 Transmission system reservations data from electricity providers. For each capacity resource reported under s. PSC 111.21, delivery of which requires transmission system reservations, and for each capacity purchase reported under s. PSC 111.11 or 111.23, the electricity provider shall submit information on the transmission arrangements to be used to deliver the capacity, including all of the following:

(1) SERVICE PROVIDER. The provider of transmission service.

(2) PERIOD AND TYPE OF SERVICE. The period and type of each transmission reservation, and any other service attributes defined by the provider of transmission service.

(3) DATES. The starting and ending dates of service.

(4) PATH. The transmission path, if point–to–point service is being used.

(5) STATUS OF REQUEST. The status of the request for transmission service.

(6) SIZE OF RESERVATION. The size of the transmission service reservation, in MW.

(7) LOSSES. Amount of incremental losses associated with transmission service, as determined by the transmission provider.

History: Cr. Register, June, 2000, No. 534, eff. 7–1–00.

PSC 111.43 Data from transmission providers. Each transmission provider shall submit all of the following data, except that if the data have been previously filed with the commission, the transmission provider may identify the applicable filing instead of providing duplicate data:

(1) NEW HIGH–VOLTAGE TRANSMISSION LINES. A complete description of each high–voltage transmission line that the transmission provider intends to own in whole or in part, on which construction is planned to commence within 3 years, including all of the following:

(a) Endpoints of the line.

(b) Proposed corridors.

(c) Nominal operating voltage.

(d) Nominal voltage of construction class.

(e) Needed substation modifications.

(f) Estimated cost.

(2) PLANS FOR PRESERVING TRANSMISSION ADEQUACY. (a) In this subsection, "long–term" study excludes all of the following:

1. Routine, commercial transfer capability and operations studies.

2. Customer–specific transmission studies.

(b) The results and assumptions of each long–term study undertaken by transmission providers, jointly or individually, within the past 2 years or subsequent to the data filing for the last SEA, that examines future transmission transfer capabilities across boundaries of reliability council regions, subregions, or control areas or across the borders of Wisconsin. The results and assumptions of each long–term study about the effect of transmission system reinforcement on transfer capability shall be included in the data submitted under this paragraph.

(c) A complete FERC Form 715 for each of the most recent 2 years available, and any documents or data cited on Form 715 that are not published by the Wisconsin commission.

(d) The results and assumptions of each long–term, local load serving study the transmission provider used to establish the need for the high–voltage transmission lines described in sub. (1), including all discussions of project need and alternatives that may be part of the study.

(3) POWER FLOW CASES. (a) For each of the 3 years encompassing the SEA, the most recent power flow base case undertaken by the reliability council in which the transmission provider is located, for each of the following conditions:

1. Summer peak.

2. Winter peak.

3. Off–peak.

(b) The base cases in par. (a) need only be submitted if the commission requests that they be filed.

(4) USE OF THE TRANSMISSION SYSTEM. If the transmission provider charges a tariffed amount for use of its transmission system, monthly data, for the 3–year period encompassing the SEA, on total transfer capability, available transfer capability and confirmed reservations for the use of the transmission system. Total transfer capability and available transfer capability shall be calculated in accordance with the provider's obligations, under 18 CFR Part 37, to calculate these values. Reservation data under this subsection shall concern only those reservations that are firm and of monthly duration or longer. Data shall include any transmission margins applied in the calculation of available transfer capability and any other use of the transmission system relevant to the calculation of monthly available transfer capability, including use by the transmission provider to meet existing commitments.

History: Cr. Register, June, 2000, No. 534, eff. 7–1–00.

Subchapter VI — CPCN Applications

PSC 111.51 CPCN applications for facilities – general. (1) COMMENCEMENT OF CONSTRUCTION. Construction on a facility may not commence until the commission issues a CPCN for the facility.

(2) ACTIONS BEFORE FILING A CPCN APPLICATION. At least 60 days before filing a CPCN application for a large electric generating facility, the applicant shall do all of the following:

(a) Notify the department and the commission of its intent to apply for a CPCN.

(b) Consult with commission staff to determine what additional information will be required as part of the CPCN application.

(3) COPIES OF THE APPLICATION. The applicant shall file 10 copies of its CPCN application. The applicant shall promptly provide additional copies as may be requested by the commission.

History: Cr. Register, June, 2000, No. 534, eff. 7–1–00.

PSC 111.53 CPCN applications for large electric generating facilities. (1) CONTENTS OF A CPCN APPLICATION. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:

(a) The operating characteristics of the proposed facility, including all of the following:

1. The number of generating units to be included in the facility.

2. A description of each generating unit, including type, size, and fuel.

3. The expected hours of operation and lifetime of the facility.

4. The names and addresses of owners and investors and the percent of ownership.

Unofficial Text (See Printed Volume). Current through date and Register shown on Title Page.

5. The fuel source and availability. If the facility uses fossil fuel, the fuel's heating value and chemical analysis, the type of transportation to be used, and the approximate capacity of on–site storage shall be provided.

6. The facility's estimated capacity factors, for each generating unit, and the basis for the estimates.

7. The estimated rate of discharge of pollutants for appropriate time intervals, as related to applicable regulatory standards.

8. The heat rates over the range of operating capacity for each generating unit.

(b) The need for the proposed facility in terms of demand and energy.

(c) The economic aspects of the proposed facility, including all of the following:

1. The estimated capital cost of the generating facility and all related facilities, broken down by major plant accounts. All cost escalation factors used in the estimate shall be identified.

2. The projected unit fuel cost, in cents per million Btu, both for the first year of operation and levelized in nominal terms over the life of the unit or facility. All cost escalation factors used in the estimate shall be identified.

3. The estimated annual production cost, calculated as operating, maintenance and fuel costs for the first year of operation and levelized in nominal terms over the life of the facility. All cost escalation factors used and other significant supporting data shall be included.

4. The estimated annual total cost, calculated as capital and production costs for the first year of operation, in mills per net kWh generated, and levelized in nominal terms over the life of the facility. All cost escalation factors used and other significant supporting data shall be included.

5. The estimated useful life of facility, based on depreciation rates established by the commission.

(d) The alternative sources of supply considered, including information about all of the following alternatives:

1. Energy conservation and efficiency.

2. Any alternative whose energy source has a higher priority ranking under s. 1.12 (4) (b) to (d), Stats., than the fuel proposed to used for the facility.

3. For any facility that will use a combustible energy resource but not provide cogeneration, an explanation regarding why cogeneration is not feasible.

4. Purchased power.

(e) At least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives.

(f) Site–related information for each proposed power plant site, including all of the following:

1. The regulatory approvals required for construction and operation of the facility.

2. The construction schedule and timeline, showing construction activities and permitting expectations from the beginning of construction to the in–service date.

3. The availability of transportation for fuel delivery and requirements for gas pipeline construction. If a certificate of authority under s. 196.49, Stats., is required to construct the gas pipeline, the location, termini, length in miles, size of pipe, and pressure.

4. Any required transmission line construction, agreements for use of the transmission system to deliver plant power, transmission losses, and effects on system reliability. If a certificate of authority under s. 196.49, Stats., is required to construct the transmission line, the location of termini, length in miles, and voltage for each transmission line.

5. Other auxiliary facilities, including fuel storage and water storage.

6. Natural resources at each site, including all of the following:

a. Air quality.

b. General soil associations.

c. Geology, noting active mines and quarries.

d. Water, including wetlands, rivers, streams and groundwater.

e. Vegetative cover, including wildlife habitat.

f. Endangered, threatened, and special–concern species and communities.

7. Community–related information, including all of the following:

a. Site history.

b. Existing and proposed land uses at the sites.

c. Local infrastructure, including sewer, water, police, and fire protection.

d. Historical and archeological sites.

e. Potential health impacts.

f. Secondary impacts, including effects on revenue, jobs, and development.

g. Visual and noise impact.

8. Aesthetics.

9. If a CPCN is needed for construction of transmission lines as part of this application, the required information under s. PSC 111.55.

(g) Any additional information the commission may request, including information necessary for it to make the determinations listed in s. 196.491 (3) (d), Stats., or to prepare an environmental assessment or an environmental impact statement under s. 1.11, Stats.

(2) EXCEPTIONS TO FILING REQUIREMENTS. (a) An application for a wholesale merchant plant need not include the information identified in sub. (1) (b) to (d). In addition, an application for a wholesale merchant plant that will be owned, controlled, or operated by an affiliated interest of a public utility, shall include any additional information required by the commission in order to make a determination under s. 196.491 (3m) (a), Stats.

(b) 1. An application for a cogeneration facility may meet the requirement under sub. (1) (e) by filing information on 2 sites that are both located at the steam host's existing industrial plant, if the cogeneration facility will be a qualifying facility under 18 CFR 292.205 and none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.

2. An application for repowering an existing generating facility may meet the requirement under sub. (1) (e) by filing information on 2 sites that are both located at the existing generating facility site, if none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.

History: Cr. Register, June, 2000, No. 534, eff. 7–1–00.

PSC 111.55 CPCN applications for high–voltage transmission lines. A CPCN application for a high–voltage transmission line is not complete until the applicant has filed all of the following information with the commission:

(1) NEED. The need for the proposed project, including all planning criteria, assumptions, historical outage data, stability, and power–flow studies that address need.

(2) DESIGN. The physical design characteristics, including structure type, design span length, conductor size and type, foundation type, operating voltage, and feasibility of future increases in operating voltage.

(3) BASIS FOR DESIGN SELECTION. The basis for selection of physical design characteristics.

(4) EMF LEVELS. The estimated magnetic field levels.

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OF WISCONSIN

STATE OF WISCONSIN
SUPREME COURT

CLEAN WISCONSIN, INC.
p/k/a Wisconsin's Environmental
Decade Institute, Inc.,
SC JOHNSON & SON, INC. and
CALPINE CORPORATION
Petitioners-Respondents-Cross-
Appellants-Cross-Respondents,

Appeal No. 04-3179

TOWN OF CALEDONIA,
Petitioner-Cross-Respondent,

Circuit Court Case Nos.
03CV003478, 03CV003731,
04CV000133, 04CV000149,
04CV000530, 04CV000533

v.

PUBLIC SERVICE COMMISSION OF
WISCONSIN and WISCONSIN
DEPARTMENT OF NATURAL RESOURCES,
Respondents-Co-Appellants-
Cross-Respondents,

WISCONSIN ELECTRIC POWER
COMPANY, W.E. POWER, LLC and
WISCONSIN ENERGY CORPORATION,
Interested Parties-Appellants-
Cross Respondents,

(Caption continued on following pages)

APPEAL FROM A DECISION OF THE CIRCUIT COURT OF DANE
COUNTY, THE HONORABLE DAVID FLANAGAN, PRESIDING

BRIEF OF INTERESTED PARTIES-APPELLANTS-CROSS RESPONDENTS WISCONSIN ELECTRIC POWER COMPANY, W.E. POWER, LLC AND WISCONSIN ENERGY CORPORATION

DAIRYLAND POWER COOPERATIVE,
Interested Party-Cross-Respondent,

MADISON GAS & ELECTRIC COMPANY
AND WISCONSIN PUBLIC POWER, INC.,
Interested Parties-Co-Appellants-
Cross-Respondents,

CITY OF OAK CREEK,
Interested Party-Respondent-
Cross-Appellant,

ROBERT H. OWEN,
Interested Party-Respondent-
Cross-Respondent.

CALPINE CORPORATION,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF
WISCONSIN and WISCONSIN
DEPARTMENT OF NATURAL RESOURCES,
Respondents,

WISCONSIN ELECTRIC POWER
COMPANY, W.E. POWER, LLC and
WISCONSIN ENERGY CORPORATION,
DAIRYLAND POWER COOPERATIVE,
MADISON GAS & ELECTRIC COMPANY,
ROBERT H. OWEN, JR., and
CITY OF OAK CREEK,
Interested Parties.

CLEAN WISCONSIN, INC.
p/k/a Wisconsin's Environmental
Decade Institute, Inc.,
SC JOHNSON & SON, INC. and
CALPINE CORPORATION,
Petitioners,

v.

WISCONSIN DEPARTMENT OF
NATURAL RESOURCES,
Respondent,

WISCONSIN PUBLIC POWER, INC.,
CITY OF OAK CREEK, DAIRYLAND
POWER COOPERATIVE, MADISON
GAS & ELECTRIC COMPANY,
WISCONSIN ELECTRIC POWER
COMPANY, WISCONSIN ENERGY
CORPORATION and W.E. POWER, LLC,
Interested Parties.

CALPINE CORPORATION,
Petitioner,

v.

WISCONSIN DEPARTMENT OF
NATURAL RESOURCES,
Respondent,

CITY OF OAK CREEK, DAIRYLAND
POWER COOPERATIVE, MADISON GAS
& ELECTRIC COMPANY, WISCONSIN
PUBLIC POWER, WISCONSIN ELECTRIC
POWER COMPANY, WISCONSIN ENERGY
CORPORATION and W.E. POWER, LLC,
Interested Parties.

CITY OF OAK CREEK,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF
WISCONSIN,
Respondent.

TOWN OF CALEDONIA,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent,

WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION, W.E. POWER, LLC, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, ROBERT H. OWEN, JR., and WISCONSIN PUBLIC POWER, INC.,
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TABLE OF CONTENTS

Page

ISSUES PRESENTED FOR REVIEW vii

INTRODUCTION 1

STATEMENT OF THE CASE 2

The Application 3

The Environmental Impact Statement 4

Contested Case Proceedings 4

Final Decision and Order 5

SUMMARY OF THE CIRCUIT COURT DECISION 6

STANDARDS OF REVIEW 8

A. The Commission's Final Decision Is Reviewed Directly With No Deference To The Circuit Court. 8

B. The Commission's Findings Of Fact Are Reviewed Under The "Substantial Evidence" Standard. 8

C. The Commission's Interpretation And Application Of The Statutory Requirements At Issue Are Entitled To Great Weight Deference. 8

D. The Commission's Interpretation And Application Of Its Own Rule Is Accorded Great Weight. 9

ARGUMENT 10

I. There Is No Valid Basis To Vacate The Final Decision Based Upon The Commission's Threshold Decision To Accept The Application And Commence The Statutory Review Process. 12

A. The Form and Content Of An Application Is A Preliminary Matter Delegated To The Commission. 12

B. The Commission Correctly Accepted The Application. 15

1. Permits Need Not Be Obtained And Submitted At The Time Of The Application. 15

2. Transmission Agreements Need Not Be Signed At The Time Of The Application. 16

3. The Commission Properly Determined That The Application Contained "Two Proposed Sites For The Proposed Facility." 17

a. The Commission's interpretation of its own rule is reasonable. 17

b. Substantial evidence supports the Commission's determination that the application presented "two proposed sites." 21

C. Even Were The Application Somehow Deficient, Threshold Acceptance Of The Application For Review Did Not Undermine The Commission's Final Decision 23

II. The Commission's Final Decision Approving The CPCN Comported With The Energy Priorities Law And The CPCN Statute. 25

A. The Commission's Final Decision Complies With The Energy Priorities Law. 25

1. The Commission Has Broad Discretion To Determine Whether Priorities Are "Cost-Effective" or "Technically Feasible." 25

2. The Commission Properly Determined That Coal Was The Appropriate Fuel To Meet The Identified Baseload Power Needs. 28

3. The Record Reflects That The Commission Properly Rejected Oil and Low Sulfur Coal. 32

B. The Commission Properly Considered The Potential Impacts Of Related Transmission Facilities....33

1. Section 196.491(3)(d)3 Does Not Require The Commission To Determine The Specific Design, Cost And Location Of Related Transmission Facilities....34

2. The Record Includes Sufficient Information Concerning Transmission Matters....35

C. The Commission's Final Decision And Order Satisfies § 196.491(3)(e) And Makes Clear That The CPCN "Takes Effect" Only After The DNR Permits Required "Prior To Construction" Have Issued....36

1. The Final Decision And Order Is Consistent With § 196.491(3)(e)....36

2. The Final Decision Approving The Application Was Proper Even If The Form Of The Order Was Incorrect....40

D. The Commission Did Not Err In Allowing WE To Build "Common Facilities" Large Enough To Accommodate Possible Future Expansion At The ERGS Site....41

CONCLUSION....43

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Cases

Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190 (D.C. Cir. 1991) 20

Citizens' Utility Bd. v. *PSC*, 211 Wis. 2d 537, 565 N.W. 2d 554 (Ct. App. 1997) 9

City of New Richmond v. DNR, 145 Wis. 2d 535, 428 N.W.2d 279 (Ct. App. 1988) 30

Esparza v. DILHR, 132 Wis. 2d 402, 393 N.W.2d 98 (Ct. App. 1986) 8

Falkner v. Northern States Power Co., 75 Wis. 2d 116, 136, 248 N.W.2d 885 (1977) 29

Georgia-Pacific Corp. v. EPA, 671 F.2d 1235 (9th Cir. 1982) 41

Harnischfeger Corp. v. LIRC, 196 Wis. 2d 650, 539 N.W.2d 98 (1995) 9

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RURAL v. PSC, 2000 WI 129, 239 Wis. 2d 660, 619 N.W.2d 888 ..... *passim*

Sauk County v. WERC, 165 Wis.2d 406, 477 N.W.2d 267 (1991) 8, 9, 34

Seebach v. PSC, 97 Wis. 2d 712, 295 N.W.2d 753 (Ct. App. 1980) 14, 24

Shoreline Park Preservation, Inc. v. DOA, 195 Wis. 2d 750, 537 N.W.2d 388 (Ct. App. 1995) 20

State ex rel. Parker v. Sullivan, 184 Wis. 2d 668, 517 N.W.2d 449 (1994) 9

State ex rel. WEPCO v. Bardwell, 71 Wis. 2d 718, 239 N.W.2d 78 (1976) 16

State v. Outagamie County Bd. of Adjustment, 244 Wis. 2d 613, 628 N.W.2d 376 (2001) 15, 17

UFE, Inc. v. LIRC, 201 Wis. 2d 274, 548 N.W.2d 57 (1996) 39

Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519 (1978) 20

Vonasek v. Hirsch & Stevens, Inc., 65 Wis. 2d 1, 221 N.W.2d 815 (1974) 9, 15

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Wisconsin Bell, Inc. v. PSC, 2004 WI App 8, 269 Wis. 2d 409, 675 N.W.2d 242 28

Wisconsin's Environmental Decade, Inc. v. DNR, 115 Wis. 2d 381 (1983) 20

Wisconsin's Environmental Decade, Inc. v. PSC, 98 Wis. 2d 682, 298 N.W.2d 205 (1980) 32

Wisconsin's Environmental Decade, Inc. v. PSC, 79 Wis. 2d 161, 255 N.W.2d 917 (1977) 20

Zip Sort, Inc. v. DOR, 2001 WI App 185, 247 Wis. 2d 295, 634 N.W.2d 99 8

Statutes

§ 1.12, Wis. Stats. 25, 26, 28, 29

§ 30.025, Wis. Stats. (2003) 38

§ 196.02(9), Wis. Stats. 41

§ 196.025(1), Wis. Stats. 25, 26, 28, 32

§ 196.378, Wis. Stats. 30

§ 196.485, Wis. Stats. 17

§ 196.491, Wis. Stats. (1975) 17

§ 196.491(3), Wis. Stats. ..... *passim*

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§ 227.57(6), Wis. Stats. 8, 21

§ 227.57(10), Wis. Stats. 8, 34

§ 902.03(1)(b), Wis. Stats. 23

Miscellaneous

1993 Wisconsin Act 414, Prefatory Note 26, 27, 28

Webster's Third New Int'l Dictionary (1993) 19

Wisconsin Admin. Code § PSC 111.53 13-18

Wisconsin Legislative Council Information Memorandum 2004-5 ..... 37, 38

Wisconsin Legislative Council Information Memorandum 75-8 39

ISSUES PRESENTED FOR REVIEW

1. Does Wis. Admin. Code § PSC 111.53(1)(f) require an applicant for a Certificate of Public Convenience and Necessity ("CPCN") to obtain all regulatory permits before an application can be accepted for review?

   Answered by the Circuit Court: Yes

2. Does Wis. Admin. Code § PSC 111.53(1)(f) require an applicant for a CPCN to enter into final transmission agreements before an application can be accepted for review?

   Answered by the Circuit Court: Yes.

3. Does the requirement of Wis. Admin. Code § PSC 111.53 that an application for a CPCN contain information regarding "at least two proposed sites" preclude alternative sites on the same large parcel of property?

   Answered by the Circuit Court: Yes.

4. Did the Public Service Commission ("Commission") violate the Energy Priorities Law, §§ 1.12 and 196.025(1), Wis. Stats., when it concluded that coal was the appropriate fuel source to meet the identified baseload energy needs?

   Answered by the Circuit Court: Yes.

5. Does § 196.491(3)(d)3, Wis. Stats., require the Commission, before it can issue a CPCN, to "determine" the "design, cost and location" of transmission facilities?

   Answered by the Circuit Court: Yes.

6. Did the Commission violate § 196.491(3)(e), Wis. Stats., by rendering a Final Decision and Order stating that the CPCN is not effective until the Department of Natural Resources ("DNR") issues all permits identified as required prior to construction?

   Answered by the Circuit Court: Yes.

7. Did the Commission err in authorizing the applicants to build certain "common facilities" large enough to accommodate future expansion at an approved site?

   Answered by the Circuit Court: Yes.

STATEMENT REGARDING ORAL ARGUMENT AND PUBLICATION

Oral argument has been scheduled for March 30, 2005. Publication of the opinion is appropriate because the decision will clarify Wisconsin law regarding the regulatory process for approval of a CPCN and the discretion appropriately accorded the technical expertise of the Wisconsin Public Service Commission with respect to that highly complex process.

INTRODUCTION

"Concerns over electric reliability are paramount today." PSC Final Decision ("*Final Dec.*") at 22. The Legislative Council observed in 2001 that "[t]here is a general consensus that a substantial amount of new electric generation capacity, including base load facilities, must be built in the next 10 years to meet the projected demand for power." (State's App. 249).

Consistent with "the requirement that it must maintain a reliable electric system," the Public Service Commission ("Commission") approved on November 10, 2003, the construction of two major electric generating units necessary to meet this State's baseload energy needs for the next decade. *Final Dec.* at 25. The Commission's approval of this $2.15 billion project followed a lengthy review process, involving extensive submissions and thorough technical and community hearings. In light of the complete record, and given both the needs of the Wisconsin energy system and the period necessary for construction of the units, the Commission determined that approval was necessary "now to ensure these facilities are in service in 2009 and 2010." *Id.* at 20, 25. The Final Decision and Order of the Commission is set forth in a comprehensive 65-page opinion addressing its statutory responsibilities. (State's App. 101-165).

On November 29, 2004, however, the Circuit Court, based on errors of law and a failure to accord proper deference to the Commission, vacated the Final Decision and held that the entire administrative process must start over. If the Commission's Final Decision is not promptly reinstated, the Circuit Court's erroneous ruling will undercut the ability to meet Wisconsin's future power needs and obstruct the Legislature's intent for efficient and timely approval of power plant development through appropriate deference to the Commission's exercise of its delegated authority and expertise.

STATEMENT OF THE CASE

This case arises from the Final Decision of the Commission — then consisting of Burneatta Bridge, Ave Bie and Robert Garvin — approving a Certificate of Public Convenience and Necessity ("CPCN"), pursuant to § 196.491(3), Wis. Stats. (the "CPCN statute")[1], for the construction of two electric generating units in Oak Creek. The proposed facility is referred to as the Elm Road Generating Station ("ERGS").

Wisconsin Energy Corporation, Wisconsin Electric Power Company ("WEPCO"), and W.E. Power, LLC (collectively "WE") filed the CPCN application on January 31, 2002. (WE App. 101-161). The Final Decision approving the CPCN, with certain modifications and conditions, was entered November 10, 2003. (State's App. 101-165).

Challenges pursuant to Chapter 227 were consolidated before Dane County Circuit Court Judge David Flanagan. (R.33). Judge Flanagan issued an Order vacating the Commission's decision on November 29, 2004 ("*Order*") (State's App. 172-226).

The Commission and WE timely filed Notices of Appeal. (R.85, 86). Other appeals and cross appeals have been filed. The Commission and WE petitioned this Court for bypass and expedited appeal. The petitions were granted by Order dated January 5, 2005.

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[1] For the Court's convenience, copies of the relevant statutes and administrative rule are appended to this brief at pages 46-51. Unless otherwise specified, all statutory references are to the 2002 statutes applicable to this CPCN proceeding.

STATEMENT OF FACTS

The Application

On January 31, 2002, WE applied for a CPCN authorizing construction of power plants under its multi-faceted "Power the Future" ("PTF") Proposal. (R.18-1).[2] The PTF Proposal included plans to construct two natural gas-fired units in Port Washington and three advanced coal technology units in Oak Creek, to retire an older coal-fired facility, to undertake environmental upgrades at other existing facilities, and a commitment to various renewable resources and efficiency measures. (WE App. 120-122, 136-137).

The Commission divided the PTF proceeding into two phases. In Phase I, the Commission approved construction of the gas-fired units in Port Washington. *Final Dec.* at 2. Those facilities are under construction.

The generating units in Phase II included two 615 MW Super-Critical Pulverized Coal ("SCPC") units. *Final Dec.* at 1, 7-8 (a third "IGCC" unit was rejected by the Commission). Unlike gas-fired units designed to address intermediate load needs, coal-fired units are designed to provide "baseload" power. "A utility's baseload energy demand is driven by high load factor customer needs, i.e. electric uses such as commercial lighting, refrigeration, and industrial loads that run constantly." *Final Dec.* at 7 n.4.

The Commission deemed the initial ERGS application incomplete and requested additional information on more than 200 topics. (R.18-34, 18-38, 18-46, 18-67). WE submitted four separate additional volumes of information. (R.18-12, 18-27, 18-41, 18-47). The Commission accepted the application on November 15, 2002. *Final Dec.* at 2.

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[2] Record references are to Case No. 03-CV-3478, which includes the full administrative record at item 18. References to the administrative record are denoted "R.18-___:___" and include the PSC record number and page.

The Environmental Impact Statement

The Commission and DNR jointly prepared a draft Environmental Impact Statement ("EIS"), which was submitted for public comment. *Final Dec.* at 3. The agencies received written comments from over 270 individuals. (R.18-119:Vol. 3, at 1). The agencies thereafter issued a final EIS comprised of three volumes and over 900 pages, reflecting the work of 38 PSC and DNR staff members. (R.18-119:Vol. 1, at xv-xvi).[3]

The EIS addressed numerous topics, including:

- Regulatory Requirements (Ch. 1)
- PTF Costs and Financing Mechanism (Ch. 2)
- Need for Baseload Capacity in Southeastern Wisconsin (Ch. 3)
- Alternatives to the Proposed Project (Ch. 4)
- Fuels Diversity Perspectives (Ch. 5)
- Proposed Sites and Technologies (Ch. 6)
- Air Emissions (Ch. 7)
- Water Resources (Ch. 8)
- Solid and Hazardous Waste Disposal and Remediation (Ch. 9)
- Land Resources (Ch. 10)
- Community Impacts (Ch. 11)

(WE App. 163-167).

Contested Case Proceedings

The contested hearing phase introduced substantial information, from various sources, beyond that originally set forth in the CPCN application and addressed in the final EIS. During technical hearings, the Commission heard from 68 witnesses. (R.18-157, R.18-158). Much of that testimony was by technical experts addressing engineering, financial,

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[3] The EIS is available on the PSC website, http://psc.wi.gov/electric/cases/ptfElmRd/ind-ptfElm.htm. Relevant portions of the EIS are included in WE's Appendix at 162-243.

conservation, and environmental matters. The Commission also considered an alternative proposal by Calpine Corporation to construct gas-fired generation facilities in Fond du Lac, Kaukana, and elsewhere. *Final Dec.* at 30-31.

Technical hearings lasted 11 days, with nearly 6,000 pages of transcript and 302 exhibits. (R.18-157; R.18-158; R.18-160). Community hearings were held in Oak Creek and Racine. *Final Dec.* at 4. Interested parties submitted briefs to the Commission. *Id.* The Commission also addressed the matter in oral deliberations at an open meeting on October 29, 2003. *Id.*

Final Decision and Order

On November 10, 2003, the Commission rendered a Final Decision approving, in part, the CPCN application, subject to various specified conditions. (State's App. 101-171).

The Commission concluded, *inter alia*, that "[t]he public convenience and necessity require WEC to construct the two SCPC units," and that "[t]he North Site-CUP[4] alternative is in the public interest after considering alternative locations, individual hardships, engineering, economic, safety, reliability, and environmental factors." *Final Dec.* at 5. This site was developed in conjunction with Oak Creek and is designed to mitigate environmental and local impacts. *Id.* at 12. The Commission further determined that, in order to meet future baseload energy needs, the first unit shall begin operation by May 1, 2009, and the second unit by May 1, 2010. *Id.* at 4. The approved construction cost is $2.15 billion. *Id.* at 32.

The Final Decision summarizes the Commission's technical, legal, and policy determinations in light of the record developed through the EIS and contested case proceedings. As the Commission noted,

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[4] "CUP" refers to the Conditional Use Permit proceedings from which this site alternative was developed. (WE App. 170).

> the crux of this case is really about the appropriate timing to construct new baseload generation. A fundamental policy choice presented in this case is whether the Commission believes that WEPCO needs to take steps now to address needs for new baseload facilities over the next decade. The Commission believes that the applicants should take those steps now to ensure these facilities are in service in 2009 and 2010.

Id. at 20. The Commission also determined that, "[b]ased on a number of qualitative and quantitative factors, . . . coal-fired generation provides the most cost-effective, prudent and practical means of meeting WEPCO's baseload capacity needs over the next decade." *Id.* at 22.

The Order accompanying the Final Decision specified that the CPCN "only takes effect when the DNR issues all permits and approvals that it identified, pursuant to Wis. Stat. § 196.491(3)(a)3.a., as being required prior to construction of the facility." *Id.* at 62.

SUMMARY OF THE CIRCUIT COURT DECISION

The Circuit Court assessed the decision under two categories: (1) challenges to the "completeness" of the application; and (2) challenges to the Final Decision and Order.

As to "completeness" of the application, the Court accorded no deference to the Commission's interpretation of its own rule or its factual findings and held the application deficient as a matter of law for three reasons:

(1) the application did not contain all regulatory permits required for construction and operation of the plant;

(2) the application did not include finalized agreements for the use of transmission lines; and

(3) the application did not present sufficiently "distinct locations" to constitute "two proposed sites."

Order at 11, 14, 19-20. Based upon these findings, the Court vacated the Final Decision, requiring that the entire process begin anew.

As to the Final Decision and Order approving the facilities under § 196.491(3), the Court found three fatal flaws:

(1) the Commission violated the Energy Priorities Law by failing to explain adequately why coal was selected over natural gas and failing to specifically discuss oil or low sulfur coal;

(2) the Commission failed to "determine" the design, cost, and location of related transmission line improvements; and

(3) the Commission violated § 196.491(3)(e) by issuing a CPCN before DNR issued all required construction permits.

Order at 30-45, 53. Based upon these findings, the Court vacated the Final Decision and remanded to the Commission.

The Circuit Court also held the Commission erred by approving the sizing of common systems to accommodate possible future expansion. *Order* at 41-43. This issue is addressed in Section II(D). The Court rejected other challenges which are the subject of the cross-appeal. *Id.* at 25, 45-46.

STANDARDS OF REVIEW

A. The Commission's Final Decision Is Reviewed Directly With No Deference To The Circuit Court.

"In an appeal following an administrative agency decision, we review the decision of the agency, not that of the circuit court." *Zip Sort, Inc. v. DOR*, 2001 WI App 185, ¶ 11, 247 Wis. 2d 295, 304, 634 N.W.2d 99. *See also Esparza v. DILHR*, 132 Wis. 2d 402, 405, 393 N.W.2d 98 (Ct. App. 1986) ("This court owes no deference to the decision of the circuit court.").

B. The Commission's Findings Of Fact Are Reviewed Under The "Substantial Evidence" Standard.

An agency's findings of fact are reviewed under the "substantial evidence" standard. § 227.57(6), Wis. Stats. "[T]he test is whether, taking into account all the evidence in the record, 'reasonable minds could arrive at the same conclusion as the agency.'" *Madison Gas & Elec. Co.* v. *PSC*, 109 Wis. 2d 127, 133, 325 N.W.2d 339 (1982) (citation omitted).

A reviewing court may not overturn an agency's finding of fact "even if it may be against the great weight and clear preponderance of the evidence." *Holtz & Krause, Inc. v. DNR*, 85 Wis. 2d 198, 204, 270 N.W.2d 409 (1978). Consistent with the "due weight [that] shall be accorded the experience, technical competence, and specialized knowledge of the agency involved, as well as discretionary authority conferred upon it," a reviewing court "shall not substitute its judgment for that of the agency" on questions of fact. *See* §§ 227.57(6) and (10), Wis. Stats.

C. The Commission's Interpretation And Application Of The Statutory Requirements At Issue Are Entitled To Great Weight Deference.

An agency's interpretation and application of statutory requirements are generally given "great weight." *Sauk County v. WERC*, 165 Wis. 2d 406, 413, 477 N.W.2d 267

(1991). Under this standard, an agency's interpretation is upheld as long as it is "rational." *Id.* at 415. Such deference reflects the "comparative institutional capabilities and qualifications of the court and the administrative agency." *State ex rel. Parker v. Sullivan*, 184 Wis. 2d 668, 699, 517 N.W.2d 449 (1994).

The test for applying the great weight standard focuses on whether the agency "was charged by the legislature with the duty of administering the statute," whether the agency "employed its expertise or specialized knowledge" in reaching its conclusion, and whether the agency's interpretation is "one of long-standing" that will promote "uniformity and consistency." *See Harnischfeger Corp. v. LIRC,* 196 Wis. 2d 650, 660, 539 N.W.2d 98 (1995).

Each factor is met with respect to the Commission's interpretation of the CPCN statute. "DNR and PSC are charged with, and have substantial experience in, processing certificate applications," and their "interpretation of the provisions governing the substantive review of certificate applications in Wis. Stat. § 196.491(3) is long-standing." *RURAL v. PSC*, 2000 WI 129, ¶ 23-24, 239 Wis. 2d 660, 677, 619 N.W.2d 888. "[A]ccording great weight deference to PSC determinations . . . promote[s] greater uniformity and consistency in the future than if we were to accord a lesser level of deference that would invite ad hoc court determinations of adequacy." *Citizens' Utility Bd.* v. *PSC*, 211 Wis. 2d 537, 552, 565 N.W.2d 554 (Ct. App. 1997).

D. The Commission's Interpretation And Application Of Its Own Rule Is Accorded Great Weight.

"This court has frequently held that great weight should be given to the administrative agency's interpretation and application of its own rules, unless plainly erroneous or inconsistent with the regulation so interpreted. . . . This is especially so in an area calling for special expertise." *Vonasek v. Hirsch & Stevens, Inc.*, 65 Wis. 2d 1, 7, 221 N.W.2d 815 (1974) (citation omitted).

ARGUMENT

Before a utility can construct a generating facility, it must request and obtain a CPCN from the Commission. The Legislature expressly delegated to the Commission discretionary authority to specify the content of a CPCN application. § 196.491(3)(a)1.-2. Following acceptance of the application, the Commission must conduct a public review process and determine whether the proposed facility "satisfies the reasonable needs of the public" for electricity, and whether the design and location of the facility is "in the public interest" after considering an array of factors, including "alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability and environmental factors." § 196.491(3)(b) and (d). The Commission must take final action on the application within 360 days. § 196.491(3)(g).

WE's CPCN application comprised over 2,400 pages, including detailed engineering plans, environmental studies, transmission studies, site descriptions, energy consumption forecasts, energy priorities analyses, fuel price forecasting and construction cost estimates. (R.18-1, 18-12, 18-27, 18-41, 18-47).

Following acceptance of the application, statutory review was comprehensive and involved highly technical matters. The Commission and DNR jointly prepared a detailed EIS that addressed the statutory factors guiding the Commission's decision under § 196.491(3)(d), as well as various environmental issues relevant to DNR's permitting authority with respect to wetlands, lakebed, navigable waterways, stormwater, wastewater, water withdrawal, and air. (R.18-119).

The Commission held extensive hearings over 11 days, generating a record that includes nearly 6,000 pages of testimony from 68 witnesses, and 302 exhibits. (R.18-157, 18-158, 18-159, 18-160). Based on its technical competence, specialized knowledge and discretionary authority, the

Commission concluded that the proposal satisfied the statutory criteria of § 196.491(3)(d) in that:

- the facilities will satisfy the reasonable needs of the public for electric energy;
- the design and location of the facilities are in the public interest;
- the facilities will not have an undue adverse impact on the environment; and
- bituminous coal is the appropriate fuel source for the identified baseload needs, in accordance with the Energy Priorities Law.

Final Dec. at 4-6 ("Findings of Fact"). The Commission thus approved the application, in part, but specified in its Order that the CPCN "only takes effect" after DNR issues all permits identified as "required prior to construction of the facility." *Id.* at 62.

The Circuit Court did not accord proper deference to the Commission's delegated authority and expertise, or to the Commission's findings of fact and conclusions of law. As set forth below, the Commission's determinations under § 196.491(3)(d) and the Energy Priorities Law are consistent with the statutes and fully supported by the extensive administrative record developed by the Commission. Likewise, the Commission's procedural decisions accepting the application and rendering a conditional Order were well reasoned and consistent with the applicable statutes and rules. When appropriate deference is given to the Commission's thorough decision making, and the full underlying record is considered, it is clear the Commission's Final Decision should be reinstated.

I. There Is No Valid Basis To Vacate The Final Decision Based Upon The Commission's Threshold Decision To Accept The Application And Commence The Statutory Review Process.

The Circuit Court held the Commission erred in accepting the CPCN application as "complete," citing three alleged deficiencies in the content of the application. *Order* at 11-22. This was plain error. The content and form of a CPCN application is a preliminary matter expressly delegated by the Legislature to the Commission. Pursuant to this delegation, the Commission has enacted an administrative rule listing the information required in an application. Applying its own rule, the Commission determined the application was satisfactory and thus the statutory review process could commence. That interpretation of the rule was correct and consistent with long-standing practice. Regardless, even were there any deficiency in the application itself, this preliminary matter did not undermine the correctness of the Final Decision that followed the EIS and contested hearings and, thus, is no basis for vacating the Final Decision.

A. The Form and Content Of An Application Is A Preliminary Matter Delegated To The Commission.

Contested case proceedings for a CPCN commence only after an application is accepted as complete. *See* §§ 196.491(3)(b), 196.491(3)(g), Wis. Stats. The Legislature delegated to the Commission responsibility to define the appropriate form and content of an application. *See* § 196.491(3)(a)1 ("An application for a certificate issued under this subsection shall be in the form and containing the information required by commission rules. . . ."). So too, the Legislature delegated to the Commission the determination of whether an application is "complete." *See* § 196.491(3)(a)2 ("The commission shall determine whether an application filed under subd. 1 is complete . . . ."). The only requirement imposed by statute is that the completeness determination be rendered within 30 days or the application is deemed complete by operation of law. *Id.*

Section 196.491(3)(d) ultimately requires that the Commission determine, *inter alia*:

> 2. The proposed facility satisfies the reasonable needs of the public for an adequate supply of electric energy . . . .
>
> 3. The design and location . . . is in the public interest considering alternative sources of supply, alternative locations . . . ., individual hardships, engineering, economic, safety, reliability and environmental factors . . . .

In light of these statutory factors, the Commission promulgated Wis. Admin. Code § PSC 111.53 to define the content of a CPCN application. This administrative rule provides in relevant part:

> **PSC 111.53 CPCN applications for large electric generating facilities.**
> (1) CONTENTS OF A CPCN APPLICATION. [A] CPCN application . . . is not complete until the applicant has filed all of the following ***information*** with the commission:
>
> . . . .
>
> (e) At least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives.
>
> (f) ***Site-related information*** for each proposed power plant site, including all of the following:
>
> 1. The regulatory approvals required for construction and operation of the facility.
> 2. The construction schedule and timeline, showing construction activities and permitting expectations

> from the beginning of construction to the in-service date.
>
> . . .
>
> 4. Any required transmission line construction, agreements for use of the transmission system to deliver plant power, transmission losses, and effects on system reliability. . . .

(Emphasis added).

This agency rule constitutes the ***only*** criteria defining the information required in a CPCN application.

After demanding multiple supplemental filings, the Commission — applying its own rule in a manner consistent with long-standing practice — held that the WE application included sufficient information for the agency to commence the statutory CPCN review process. (State's App. 230-31).

Acceptance of the application marks the ***beginning*** of contested case proceedings, not final agency action. Thus, judicial review of this preliminary, procedural step is limited. *See generally Waste Management of Wisconsin, Inc. v. DNR*, 128 Wis. 2d 59, 88, 381 N.W.2d 318 (1986) ("[T]he legislative intent was to limit judicial review of administrative agency actions to 'final orders' of the agency."); *Pasch v. DOR*, 58 Wis. 2d 346, 353, 206 N.W.2d 157 (1973). Such procedural matters provide a basis for judicial reversal only to the extent that the ***final*** action of the agency is undermined. *See* § 227.57(4), Wis. Stats.; *RURAL*, 239 Wis. 2d at 693, ¶¶ 47-48; *accord Seebach v. PSC*, 97 Wis. 2d 712, 724, 295 N.W.2d 753 (Ct. App. 1980).

The Circuit Court erred in vacating the Final Decision based on the Commission's threshold acceptance of the application. Foremost, there was no error in the Commission's determination — the application comported with Commission rule and practice and provided sufficient information to commence statutory review. But even were the application somehow deficient, the Final Decision of the

Commission, following the full contested proceedings, was not undermined in any respect.

B. The Commission Correctly Accepted The Application.

The Circuit Court interpreted § PSC 111.53 to require: (1) issued regulatory permits, (2) finalized transmission agreements, and (3) an undefined amount of distance between alternative sites. As to each, the Circuit Court "substitute[d] its judgment" for that of the Commission regarding the agency's own rule, *see, e.g., Vonasek*, 65 Wis. 2d at 7-8, and rendered a construction of § PSC 111.53 inconsistent with both the plain language and purpose of the rule. If uncorrected, the Court's erroneous ruling imposes crippling burdens on state agencies and the CPCN process.

1. Permits Need Not Be Obtained And Submitted At The Time Of The Application.

The Circuit Court concluded that the "plain and unambiguous" terms of § PSC 111.53(1)(f)1 require an applicant to ***obtain*** and submit all construction and operating permits with the application. *See Order* at 19. This novel construction of regulatory requirements, developed *sua sponte* by the Court, is unfounded.

First, this argument was never presented to the Commission. "It is settled law that to preserve an issue for judicial review, a party must raise it before the administrative agency." *State v. Outagamie County Bd. of Adjustment*, 2001 WI 78, ¶ 55, 244 Wis. 2d 613, 647, 628 N.W.2d 376.

Second, nothing in § PSC 111.53(1)(f)1 requires an applicant to obtain the myriad permits relating to a large generation facility before submitting an application. Rather, the express terms of the rule require only that the applicant provide "information" regarding the "regulatory approvals required for construction and operation." Indeed, the very next line of the rule — not discussed by the Court — states that the application should provide "information" regarding

"[t]he construction schedule and timeline, showing construction activities and ***permitting expectations*** from the beginning of construction to the in-service date." § PSC 111.53(1)(f)2 (emphasis added). Any "timeline" setting forth "permitting expectations" would be nonsensical if all permits must be issued before the application is submitted.

The Court's construction is also irreconcilable with § 196.491(3). *See, e.g., State ex rel. WEPCO v. Bardwell*, 71 Wis. 2d 718, 729, 239 N.W.2d 78 (1976) ("Statutory constructions which work unreasonable or absurd results are to be avoided."). Section 196.491(3)(a)3 delineates the time frame for DNR action on permits required "prior to construction" and expressly contemplates that DNR will "complete action" on the permits ***after*** the CPCN application has been accepted by the Commission. *Id.* (providing a 120-day period for DNR action).

Finally, the Circuit Court's construction would place an unworkable and wasteful burden on regulatory bodies. Taken literally and in conjunction with the requirement that an applicant identify an alternative site, it would require applicants to obtain all regulatory permits for at least two separate sites before filing a CPCN application. This would require DNR and other agencies to engage in extensive permitting procedures that by definition would be superfluous, and create intractable burdens for the CPCN process. Such consequences are at direct odds with the intent of § 196.491(3), which was to create an efficient process for the approval of necessary generating facilities. *RURAL*, 239 Wis. 2d at 668-69, ¶ 4.

2. Transmission Agreements Need Not Be Signed At The Time Of The Application.

Under a similarly flawed interpretation of § PSC 111.53(1)(f)4, the Circuit Court (again *sua sponte*) held the application incomplete because it "fails to include the

transmission line agreements required by Wis. Admin. Code sec. 111.53(1)(f)4." *Order* at 19.[5]

The rule contains no requirement that signed agreements be submitted with the CPCN application; rather, it requires only "information" regarding "transmission line construction, agreements for use . . . [etc.]." *See* § PSC 111.53(1)(f)4. WE's application presented such information, including a "Generation Interconnection Study Report," prepared by American Transmission Company ("ATC")[6], addressing required transmission system improvements and estimated costs. (R. 18-1:Vol. 3, Appx. Y).

3. The Commission Properly Determined That The Application Contained "Two Proposed Sites For The Proposed Facility."

The Circuit Court held the application did not set forth "[a]t least two proposed sites for the proposed facility." § PSC 111.53(1)(f); *see Order* at 16-19. The Court erroneously rejected the Commission's construction of its own rule and failed to defer appropriately to the findings of fact underlying the Commission's determination.

a. The Commission's interpretation of its own rule is reasonable.

Section 196.491 was enacted in 1975. From its inception, the Commission has been responsible for determining whether the "design and location [of the proposed facility] . . . is in the public interest considering alternative sources of supply, alternative locations . . . , individual hardships, engineering, economic, safety, reliability and environmental factors." § 196.491(3)(d)3, Wis. Stats. (1975). The Commission has nearly three decades of

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[5] This issue was also not presented to the agency and is waived. *Outagamie County*, 244 Wis. 2d at 647, ¶ 55.

[6] Since January 1, 2001, effectively all transmission assets serving Eastern Wisconsin have been owned by ATC. *See* § 196.485, Wis. Stats.

experience evaluating proposed facilities based on this statutory responsibility.

Consistent with its experience evaluating "alternative locations" under these statutory factors, the Commission has required since 2000 that a CPCN application identify "[a]t least two proposed sites for the proposed facility." § PSC 111.53(1)(e). To determine whether an applicant has complied with this requirement, the Commission applies the following test: "The Commission determines whether proposed site alternatives are reasonable by applying two standards: the site alternatives must each be feasible locations and they must be sufficiently distinct to offer different packages of costs and benefits." *Final Dec.* at 45.

The Commission does not impose any rigid distance criteria to determine if two different physical locations are "sufficiently distinct" to satisfy this "two proposed sites" requirement. Rather, under the agency's practice, "[t]he fact that alternate sites may be geographically close together does not automatically render them unreasonable alternatives. The Commission has accepted CPCN applications ***for numerous projects*** where the alternate sites have been close together, or even adjacent to each other." *Id.* (emphasis added).

The Circuit Court held the Commission's interpretation of its own rule invalid as a matter of law, reasoning:

> [T]here is no ambiguity as to what is meant by "alternative locations" in sec. 196.491(3)(d)3, Wis. Stats. Similarly, there is no ambiguity as to what is meant by "at least two proposed sites" in Wis. Admin. Code sec. PSC 111.53(1)(e). The statute and the rule require that not less than two ***distinct locations*** be submitted as proposed alternate sites.

Order at 14 (emphasis added).

The Court did not define what it meant by "distinct locations" or how its definition of "distinct locations" differed

from the Commission's test. Nonetheless, it went on to hold that these proposed sites were not "distinct," as a matter of law, despite the fact that the proposed sites are geographically different (the sites are approximately ½ mile apart, in different municipalities and counties) and the Commission found that the sites offer different packages of costs and benefits. *Final Dec.* at 47.[7]

The Circuit Court's ruling is incorrect, based both on the deference due an agency's application of its own rule and the findings of fact underlying the application of that rule to this case.

First, nothing in the agency's test or its application here suggests, as the Court apparently believed, that the sites proposed in the application are not "distinct locations" in the literal meaning of the term. To the contrary, the Commission test requires that "the ***site alternatives*** must ***each*** be ***feasible locations*** and they ***must be sufficiently distinct*** to offer different packages of costs and benefits." *Final Dec.* at 45 (emphasis supplied). A "site" is simply the "space of ground occupied or to be occupied by a building." *Webster's Third New Int'l Dictionary* 2128 (1993). A "location" is "a position or site occupied or available for occupancy (as by a building) or marked by some distinguishing feature." *Id.* at 1327. There can be no dispute that the alternative sites set forth in the application constitute different literal "sites" or "locations." *Compare* R.18-1:Vol 3, § 1.1, *with* R.18-1:Vol. 3, § 5.1.1.[8] Thus, the Circuit Court's rejection of the Commission's test is necessarily based on a different judgment as to what renders two sites sufficiently "distinct," rather than the meaning of the terms "site" or "location."

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[7] Without further explanation, the Circuit Court stated that "the CPCN as to the Fond du Lac Energy Center includes a consideration of two separate, distinct proposed locations." *Order* at 14 n.4. The two sites at issue there were approximately 2 miles apart. (R.18-119:418).

[8] A map showing the alternative sites is included at WE App. 108.

However, the degree of "distinct[ness]" necessary to constitute an "alternative" is not a principle that is "unambiguous" as a matter of law. *See generally Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 551 (1978) ("[A]s should be obvious even upon a moment's reflection, the term 'alternatives' is not self-defining."). Rather, differentiating "alternatives" requires context-specific assessments of reasonableness and feasibility. *See, e.g., Wisconsin's Environmental Decade, Inc. v. PSC*, 79 Wis. 2d 161, 177, 255 N.W.2d 917 (1977); *Shoreline Park Preservation, Inc. v. DOA*, 195 Wis. 2d 750, 772, 537 N.W.2d 388 (Ct. App. 1995).[9]

In this light, there is no basis for a Court to find, as a matter of law, that the Commission test is "irrational." *Sauk County,* 165 Wis. 2d at 413. It is not the province of the judiciary to define factual standards for the requisite "distinctness" of "alternatives" — *e.g.*, crafting rules that would mandate the necessary distance between two "sites" for them to constitute "alternatives" (100 yards? 1 mile? 100 miles?). Such determinations are quintessentially vested in the legislature and the agencies to which the legislature delegates authority. *See generally Wisconsin's Environmental Decade, Inc. v. DNR*, 115 Wis. 2d 381, 413, 340 N.W.2d 722 (1983) ("[I]t is not the courts that decide whether and to what extent an agency must consider the social and economic impact, as well as environmental implications, of its permit decisions.").

Given that the Circuit Court's interpretation and the Commission's legal test both require "distinct" alternatives, it is evident that the underlying basis of the Circuit Court's decision is not an "unambiguous" principle of law but simply a disagreement with the ***factual*** determination of the Commission that the sites were sufficiently distinct.

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[9] Federal law is in accord. *See, e.g., Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991); *Lee v. United States Air Force*, 354 F.3d 1229, 1239-40 (10th Cir. 2004).

b. Substantial evidence supports the Commission's determination that the application presented "two proposed sites."

The Commission fully understood that "two proposed sites" must be identified in an application and that the final location of a facility must be assessed under the array of considerations set forth in § 196.491(3)(d)3 in order to approve the location as being "in the public interest." The Final Decision expressly addresses the issue, as does an interim order of the Commission. *See Final Dec.* at 44-45; *see also Interim Order* (State's App. 271-76). The Commission concluded, as a factual matter, that the sites proposed in the WE application were sufficient under the Commission's rule. *Final Dec.* at 44-45.

With respect to the factual basis for the Commission's determination that the application presented "two proposed sites," the Circuit Court stated only: "A fair review of the record reflects the clear picture that there is no significant distinction between the costs and benefits offered by each of the three alternatives. These are not alternative sites or locations; they simply are three different configurations or utilizations of a single site." *Order* at 15-16.

As to such factual inquiries, a reviewing court may not "substitute its judgment for that of the agency" or disregard the "substantial evidence" standard of review. § 227.57(6); *see also RURAL*, 239 Wis. 2d at 675-76, ¶ 20. It appears the Circuit Court may have reasoned that two sites cannot constitute "alternatives" if they are on the same "parcel" (the proposed sites are, in part, within a 1,000-acre property owned by WE).[10] Certainly, however, the ownership of the land (or whether it constitutes a single "parcel") cannot be a determinative factual issue: no one would dispute that there are alternative "sites" within Devil's Lake State Park. Thus, the Circuit Court is left simply with a different judgment than the Commission as to whether the proposed sites are "sufficiently distinct to offer different packages of costs and

[10] The "South Site-Exp" alternative actually included property not owned by WEPCO. *See Final Dec.* at 11; WE App. 108, 227.

benefits." *Final Dec.* at 45. That, however, is an invalid basis to reverse the Commission's considered judgment under the "substantial evidence" test.

Here, more than adequate evidence in the record supports the Commission's determination that the sites are "alternatives." The record establishes various differences in construction requirements for the sites, including differing excavation requirements and effects on wetlands, woodlands, grasslands, and habitat. (R.18-119:412-15; R.18-62:8). An environmental engineer testified on the air pollution advantages of the North Site-CUP over other sites, including: (1) reduced impacts of total suspended particulate matter; and (2) the lowest ambient air concentrations of most pollutants. (WE App. 252-253). The North Site-CUP also has other environmental and aesthetic advantages with respect to noise, availability of sewer services, construction access and traffic control, and surface water management. (WE App. 253-256).

The fact that the sites are also physically located in different municipalities and counties had significant impacts on various of the § 196.491(3)(d)3 factors. For instance, Oak Creek clearly "expressed its willingness to accept the project," whereas Caledonia did not. *Final Dec.* at 47. Moreover, the North Site-CUP alternative reflects a "compromise and agreement between the city [of Oak Creek] and the applicants regarding the proper means of mitigating municipal concerns, such as noise, traffic and air emissions," thereby placing Oak Creek in a "stronger position to enforce mitigation measures that protect its citizens from undue impact." *Id.*

In sum, the Commission properly found, as an issue of fact, that "the site alternatives for ERGS" were "each feasible sites and each provide[d] different packages of costs and benefits, so that the Commission [was] presented with a real choice." *Final Dec.* at 47.

C. Even Were The Application Somehow Deficient, Threshold Acceptance Of The Application For Review Did Not Undermine The Commission's Final Decision.

Even assuming *arguendo* that the application was somehow deficient, no showing can be made that the preliminary acceptance of the application invalidated the Final Decision of the Commission. The Commission fully addressed all statutory factors after considering the full body of evidence and argument presented in the contested proceedings. *See* § 227.57(4), Wis. Stats.; *RURAL*, 239 Wis. 2d at 693, ¶¶ 47-48.

Notably, had the Commission done nothing during the 30-day application period in § 196.491(3)(a)2, the application would have been deemed "complete" by statute and ***no*** argument could be advanced that its "completeness" was subject to challenge.

As to the "permit" and "transmission agreement" issues, no prejudice exists. The Commission's Order mandates that all permits required "prior to construction" issue before the CPCN becomes effective, and such permits have since issued. *See* WE App. 261-289 (air permit), and WE App. 290-318 (Ch. 30 permits).[11] The necessary interconnection and transmission agreements are also in place. *See* ATC FERC Electric Tariff No. 1, Service Agreement No. 222 (FERC Docket No. ER 02-548-000); MISO Transmission Request Nos. 76037796, 76037797.[12]

Similarly, no prejudice exists as to the proposed sites. Even were the application deficient, the Commission fully

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[11] WE requests that the Court take judicial notice of these final agency orders pursuant to § 902.03(1)(b), Wis. Stats.

[12] WE is a party to the Network Integration Transmission Service Agreement ("NITSA") with ATC. ATC has assigned the NITSA with Midwest Independent System Operator ("MISO"), such assignment having been accepted through FERC by letter order in Docket No. ER02-1187-000 issued on March 29, 2002. If requested, WE can submit a copy of the NITSA and letter order to the Court.

considered during the statutory review process "alternatives" beyond those identified in the application. For instance, the Commission considered, "as an alternative to the ERGS project," the Calpine proposal to develop a "natural-gas-fired power plant in the town of Fond du Lac . . . with similar . . . units elsewhere in the state." *Final Dec.* at 30. *Id.* As the Commission noted, "WEC's proposed alternatives were only the starting point for the Commission's review, not its endpoint. The Commission also included locations far away from the city of Oak Creek." (R.63:7-8).

In this light, the statutory requirement that the agency determine, by its ***final*** action, that the "design and location" of the proposed facility is "in the public interest" considering "alternative locations," § 196.491(3)(d)3, was independently satisfied regardless of any deficiencies in the application itself. Importantly, the Circuit Court made ***no*** finding that the ***Final Decision*** failed to satisfy the "alternative location" factor of § 196.491(3)(d)3. Nor would there have been any basis in this administrative record to make such a ruling, given the matters addressed by the Commission during the contested proceedings.

Finally, no party has demonstrated that the Commission ultimately erred in determining that the location selected "is in the public interest," let alone demonstrated that some other location would be superior. *See Seebach*, 97 Wis. 2d at 724; *see generally McCrossen v. Nekoosa-Edwards Paper Co.*, 59 Wis. 2d 245, 263, 208 N.W.2d 148 (1973) ("Trial error is prejudicial only when it reasonably could be expected to affect the outcome of the case.").[13]

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[13] The Court's suggestion that application completeness issues were essential to "full participation" by the public is without basis. *Order* at 23-24. The statutory scheme does not contemplate contested proceedings with respect to the ***application***, as opposed to the public review process following acceptance of the application. The content of the application is a matter delegated entirely to the discretion of the Commission. Public participation is accorded through the contested proceedings – matters for which full and vigorous participation unquestionably occurred here.

II. The Commission's Final Decision Approving The CPCN Comported With The Energy Priorities Law And The CPCN Statute.

With respect to the Commission's Final Decision approving the ERGS facilities under § 196.491(3), the grounds upon which the Circuit Court vacated are also flawed. As demonstrated below, the Circuit Court's conclusions were premised on erroneous interpretations of the applicable statutes and a disregard of the evidence supporting the Commission's decision.

A. The Commission's Final Decision Complies With The Energy Priorities Law.

The Wisconsin Energy Priorities Law ("EPL") requires that the Commission, in approving a CPCN, consider and implement specified priority fuels "to the extent cost-effective and technically feasible." *See* §§ 1.12(4) and 196.025(1), Wis. Stats.

The Circuit Court held that the Commission violated the EPL in two respects: (1) failing to identify facts with "sufficient clarity" to support its conclusion that gas was not a cost-effective alternative for these baseload facilities; and (2) failing to make specific findings regarding oil and low sulfur coal. In so ruling, the Circuit Court failed to respect the Commission's decade-long experience implementing the EPL and its sound explanations as to why alternative fuels, including natural gas, were not appropriate for the identified baseload needs. *See Final Dec.* at 14-23, 29-31. Moreover, the Court's ruling that § 196.025(1) requires that each priority receive an individual point-by-point discussion in the Commission's final decision is without basis.

1. The Commission Has Broad Discretion To Determine Whether Priorities Are "Cost-Effective" or "Technically Feasible."

The primary components of the EPL are set forth in §§ 1.12(4) and 196.025(1).

> **§ 1.12(4), Wis. Stats.**
>
> In meeting energy demands, the policy of the state is that, ***to the extent cost-effective and technically feasible***, options be considered based on the following priorities, in the order listed:
> (a) Energy conservation and efficiency.
> (b) Noncombustible renewable energy resources.
> (c) Combustible renewable energy resources.
> (d) Nonrenewable combustible energy resources, in the order listed:
> 1. Natural gas.
> 2. Oil or coal with a sulfur content of less than 1%.
> 3. All other carbon-based fuels.
>
> **§ 196.025(1), Wis. Stats.**
>
> ***To the extent cost-effective, technically feasible and environmentally sound***, the commission shall implement the priorities under s. 1.12(4) in making all energy related decisions and orders, including advance plan, rate setting and rule-making orders.

(Emphasis added).

Nothing in either statute specifies how the Commission must evaluate "cost-effective[ness]" or technical feasib[ility]." However, the Prefatory Note to the Act that created the EPL explains that the inclusion of this language is intended to give the Commission "substantial discretion" in implementing the law:

> [T]he bill attempts to ensure implementation of the priority list through a combination of directives and encouragement, while ***reserving substantial discretionary authority to the decision maker***.
>
> * * *

> By using the phrase, "to the extent cost-effective and technically feasible," the Bill provides ***a large element of discretion to state agencies*** and local governmental units in following the priority list to meet their own energy needs.

1993 Wis. Act 414, Prefatory Note (emphasis added).

It is important to recognize that in exercising its "substantial discretionary authority" in this case, the Commission appropriately addressed not only the immediate question of the ERGS facilities, but also the role of these facilities within the overall pattern of energy generation for the State.

First, the Commission evaluated the proposed baseload facilities within the context of the entire PTF application, which included two new gas-fired plants, the retirement of an existing coal facility, and a commitment to renewable generation and efficiency measures ultimately mandated in the Final Decision. *Final Dec.* at 21-22. As the Commission recognized, approval of these facilities to fulfill baseload needs was an integral part of a comprehensive plan implementing energy priorities.

Second, the Commission considered the ERGS proposal within the broader history of its prior decisions and the overall energy needs of Wisconsin. The Commission had authorized multiple facilities involving over 6,900 MW of natural gas-fired generation since enactment of the EPL, while the last new coal-fired generation was approved in 1980 and completed in 1985. *Final Dec.* at 21-23. The Commission explained that, to implement energy priorities in a manner consistent with the need for a cost-effective and reliable energy system, it must maintain a reasonable "mix of energy sources," including coal-fired generation. *Id.* at 23. This is squarely consistent with the purpose of the law:

> [C]ompliance with the directive that the agencies follow the priority list [and] the success of implementing the priority list will

> be reflected in the overall pattern of energy generation and use, across the state and through time.

1993 Wis. Act 414, Prefatory Note.

Each energy-related decision is part of a broader ***pattern*** of agency responsibility to oversee the energy needs of the State and system-wide reliability. Given the importance of this "overall pattern" of decision making, a reviewing court should not substitute its judgment for the specialized expertise of the Commission when, as here, the agency was attentive to its responsibilities under the EPL. *See, e.g., Wisconsin Bell, Inc. v. PSC*, 2004 WI App 8, ¶ 22, 269 Wis. 2d 409, 423, 675 N.W.2d 242 ("Without being facetious, we can be humble enough, in a case like this one, to respect that an agency, far better than a court, has the experience, expertise, and fact-finding opportunity that allow for fair and consistent decision making in areas of complex regulation.").

2. The Commission Properly Determined That Coal Was The Appropriate Fuel To Meet The Identified Baseload Power Needs.

The first Finding of Fact in the Final Decision addresses the EPL:

> Energy conservation, renewable resources, or other energy priorities listed in Wis. Stats. §§ 1.12 and 196.025, or their combination, are not cost-effective or technically feasible alternatives to the projects proposed in this docket.

Final Dec. at 4. The record fully supports this finding.

The Commission's analysis addresses the propriety of priority fuels in light of the "baseload" needs at issue. The Circuit Court criticized this attention to "baseload" needs, suggesting the concept was not established. *See Order* at 34-35. To the contrary, the distinction between "baseload

facilities" and "peak load units" was discussed by this Court over 25 years ago. *Falkner v. Northern States Power Co.*, 75 Wis. 2d 116, 136, 248 N.W.2d 885 (1977). Moreover, the need for new "baseload facilities" was a fundamental concern expressed by the Legislature in 2001 and led to the enactment of the Leased Generation Law that authorized the financing mechanism approved in this case. Noting "considerable concern about the adequacy of the electric power supply," the Legislative Council stated:

> [N]o new baseload power plants (large power plants that are designed to run full-time) have been built in Wisconsin since 1985, in spite of significant growth in demand for power since then. There is a general consensus that a substantial amount of new electric generation capacity, including baseload facilities, must be built in the next 10 years to meet the projected demand for power.

(State's App. 249.). Chapter 3 of the EIS in this case also examined the "Need for Baseload Capacity in Southeastern Wisconsin." (WE App. 180-198). The Commission concluded there is a "need for new baseload and intermediate generating capacity for WEPCO and Wisconsin," and that "new baseload power plants" are needed "in the period after 2006." (WE App. 198). In sum, the Commission's emphasis on the need for "baseload" generation capacity was well founded.

Addressing the priorities listed in § 1.12(4), the Commission first discussed whether energy conservation and efficiency (the top priority) could meet these baseload needs. *Final Dec.* at 16-17. While concluding they could not, the Commission ordered WE to implement various conservation measures. *Final Dec.* at 17-18.

The Commission next analyzed renewable energy resources. Focusing on wind and biomass combustion, the Commission noted that while WE has taken steps to obtain 5% of its energy from renewable resources by 2011 (twice the

statutory requirement under § 196.378), such resources are not "cost-effective or technically feasible to meet . . . baseload needs." *Id.* at 18-19.

The Commission then considered whether gas-fired generation was appropriate. Based upon both qualitative and quantitative analyses, the Commission concluded that natural gas was not "cost-effective or technically feasible" to meet these baseload needs. *Final Dec.* at 19.

The Commission employed extensive computer modeling ("EGEAS runs")[14] to assess the appropriateness of natural gas on a cost basis. *Id.* The computer modeling demonstrated that a "gas only" option would cost billions more to operate. (WE App. 203, 245). The EIS explained that "natural gas prices were 237 percent higher than coal prices" in recent years, and EGEAS runs demonstrated that "an expansion plan over the next 30 years relying exclusively on natural gas would cost ratepayers $1.9 billion more than a balanced plan using optimally timed gas- and coal-fired electric generation, as well as some wind generation development." (WE App. 199, 203). EGEAS modeling also demonstrated that Calpine's proposal "would not replace the need for additional coal-fired, baseload generation." *Final Dec.* at 30-31. A reviewing court, lacking the same institutional expertise, is particularly ill-suited to second-guess the Commission's analysis of this evidence. *See, e.g., City of New Richmond v. DNR*, 145 Wis. 2d 535, 552, 428 N.W.2d 279 (Ct. App. 1988) ("The complexities of such assertions and the validity of their scientific underpinning are eloquent testimony of the need to defer to the [agency's] expertise in reviewing its conclusions in terms of their reasonableness.").

The Commission also noted that "qualitative" factors support the use of coal over natural gas for these baseload

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[14] "EGEAS" stands for "Electric Generation Expansion Analysis System." (R.18-119:Vol. 1, at 66). EGEAS has been used for years by the Commission and utilities to help determine the "least-cost generation system expansion plans by comparing all combinations of multiple generation options to meet forecasted system load." *Id.*

needs. *Final Dec.* at 21. The EIS discussed two such concerns in detail – reliability and price volatility. The EIS identifies four "reliability concerns" associated with natural gas transmission: (1) "interruptions of the natural gas system . . . [d]uring extremely cold weather" that "could last for three days or more;" (2) "[p]ressure problems on the pipelines;" (3) the need for "substantial expansion of the interstate pipeline system serving the state" if large-scale generators are to be built; and (4) "the inability of generator owners to store natural gas on-site." (WE App. 211-213). Additionally, the Commission observed that the "extreme volatility of natural gas prices" is "not desirable for consumers." (WE App. 199, 214). Over-reliance on natural gas would thus "exacerbate budget problems currently faced by retail natural gas consumers." (WE App. 214).

Finally, the Commission noted that the decision to approve new coal facilities was consistent with its historical approach to fuel prioritization and that the "total mix of energy sources that the Commission has approved over this time period shows a pattern of decisions for baseload, intermediate and peaking generating facilities that complies with the State's energy policy." *Final Dec.* at 23. In this vein, the Commission noted that "relying upon natural gas to meet WEPCO's baseload needs as well as its intermediate and peaking requirements would raise the risk of not properly diversifying the utility's fuel mix." *Id.* at 31.

Based upon this evidence, the Commission properly concluded that other alternatives were neither cost-effective nor technically feasible to meet Wisconsin's baseload energy needs. *Final Dec.* at 4, 21. Given the evidence supporting the "advantages of using cleaner burning coal technologies like SCPC as a baseload resource," the Commission found that "the key question in this docket is not whether additional coal-fired baseload generation should be approved, but when it should be installed." *Id.* at 21, 24.

3. The Record Reflects That The Commission Properly Rejected Oil and Low Sulfur Coal.

The Circuit Court ruled that there was "no basis" to "infer that the Commission considered in any degree two of the higher priority fuels, oil and low sulfur coal." *Order* at 40. The record demonstrates otherwise.

No party to the administrative proceedings contended that oil or low sulfur coal were feasible or appropriate alternatives for the baseload generation at issue. Thus, this undisputed issue did not warrant specific discussion in the Final Decision. *See Wisconsin's Environmental Decade, Inc. v. PSC*, 98 Wis. 2d 682, 701, 298 N.W.2d 205 (1980) ("There is no requirement . . . that the agency provide an elaborate opinion. It is sufficient if the findings of fact and conclusions of law are specific enough to inform the parties and the courts on appeal of the basis of the decision."). The Commission's Finding of Fact that the "other energy priorities . . . are not cost-effective or technically feasible alternatives," *Final Dec.* at 4, is adequate notice that the Commission considered all of the statutory priorities.

The Circuit Court's suggestion that failing to specifically discuss every priority fuel in the Final Decision was "directly contrary to the plain meaning" of § 196.025(1), *Order* at 40, finds no support in the statute. Section 196.025(1) provides:

> To the extent cost-effective, technically feasible and environmentally sound, the commission shall implement the priorities under s. 1.12(4) in making all energy-related decisions and orders, including advance plan, rate setting and rule-making orders.

Nothing directs the Commission to engage in a rote discussion of each of the various alternatives, particularly where it is undisputed that a fuel source is not a feasible alternative.

Nonetheless, the record fully supports the Commission's determination that low sulfur coal and oil were not appropriate for the proposed facilities.

WE's witness Allan Mihm explained several reasons why WE's proposed bituminous coal is preferable to low sulfur ("subbituminous") coal, including:

(1) improved generating unit efficiency (meaning less coal is burned);

(2) 50% greater heating value;

(3) lower emission rates; and

(4) higher levels of mercury capture.

(WE App. 248-250). The EIS observed that bituminous coal offers distinct "advantages" over subbituminous coal, including "improved mercury collection," "less CO_2 production" and "higher heating values." (WE App. 178-179).

Uncontradicted hearing testimony also established that "oil as a combustion turbine fuel is not cost effective and probably not permittable from an air permit perspective, except as a backup fuel to natural gas." (WE App. 247).

B. The Commission Properly Considered The Potential Impacts Of Related Transmission Facilities.

The Circuit Court held that the Final Decision violated § 196.491(3)(d)3 because the Commission did not "determine" the "design, cost, and location" of related transmission facilities. *See Order* at 30-32. The Court concluded the Commission "essentially elect[ed] not to address the issue." *Id.* at 31. This ruling is plainly erroneous.

1. Section 196.491(3)(d)3 Does Not Require The Commission To Determine The Specific Design, Cost And Location Of Related Transmission Facilities.

Section 196.491(3)(d)3 provides:

> [T]he commission shall approve an application . . . for a [CPCN] only if the commission determines . . .
>
> 3. [that] [t]he design and location or route is in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability and environmental factors . . . .

According to the Circuit Court, this provision, as a matter of law, requires the Commission to "determine" the ***actual*** design, cost, and location of transmission facilities prior to approving a CPCN. *Order* at 32. Although the Court acknowledged that the statute "does not expressly compel the inclusion of transmission facilities," the Court nonetheless held that failure to render such detailed findings was "without rational basis." *Id.*

Nothing in the text of § 196.491(3)(d)3 supports this imposition of substantive requirements. Indeed, this subsection requires only that the Commission determine that the design and location of the generating facility is in the public interest "considering" such factors as "engineering, economic . . . and environmental factors." The Commission has broad authority to determine the salient facts that should be assessed to determine whether the proposal is in the public interest under the statutory criteria. The Circuit Court's attempt to impose its own judgment regarding which facts must be considered by the agency, without any foundation in the express language of the statute, constitutes an impermissible substitution of the Court's judgment for the rational interpretation of the agency. *See, e.g.*, *Sauk County*, 165 Wis. 2d at 413; § 227.57(10), Wis. Stats.

2. The Record Includes Sufficient Information Concerning Transmission Matters.

The Circuit Court's contention that the Commission failed to properly "address" the issue of transmission facilities, and "does not know what the cost or design of the required transmission facilities will be," is likewise unsupportable. *Order* at 31. The Commission considered substantial evidence regarding the design, cost, location and potential environmental impacts of ERGS-related transmission. This evidence was more than adequate to support the agency's approval of the CPCN under § 196.491(3)(d)3.

Chapter 6 of the EIS explains that units at ERGS will produce power at approximately 20 KV and adjacent transformers will step up voltage to 345 KV. (WE App. 228-230). The EIS further explains that interconnection will consist of three circuits, each approximately 4,000 feet long, and contains diagrams of possible routes. (R.18-119:Vol. 2, Figures 2-1, 2-2, 2-4). The EIS examines possible system-wide transmission impacts and the work expected to accommodate the generating units. (WE App. 229-234). The EIS further addresses the design, location and potential environmental impacts of a new four-mile 345 KV line, as well as a 345 KV transmission line potentially resulting from ATC's "10-year Transmission System Assessment." (WE App. 235-243).

The Commission also considered extensive information on the expected cost of transmission improvements. ATC conducted "several studies to determine the cost of interconnecting ERGS to the transmission system and the cost of upgrading the transmission system." *Final Dec.* at 10. The most recent estimate was a total cost of $166 million. *Id.* In addition, the Commission heard testimony from John Ratajczyk of ATC and PSC staff economist Randel Pilo. (R.18-157:3101-73; R.18-157:3906).

The Commission addressed transmission-related matters in its Final Decision, *see, e.g., Final Dec.* at 10-11, acknowledging that ATC's final resolution of the specific interconnection system requirements is "quite complex, depends upon the site chosen, and requires several months of sequential computer model runs." *Id.*

In sum, the administrative record contains substantial evidence supporting the Commission's consideration of the "engineering," "environmental" and "economic" ramifications of the transmission facilities required to transmit energy generated at ERGS. That is all that the "public interest" provision of § 196.491(3)(d) requires.

C. The Commission's Final Decision And Order Satisfies § 196.491(3)(e) And Makes Clear That The CPCN "Takes Effect" Only After The DNR Permits Required "Prior To Construction" Have Issued.

The Circuit Court held that the Commission violated § 196.491(3)(e) by "issu[ing] the CPCN before the regulatory permits have been obtained." *Order* at 45. The Circuit Court thus "vacated" the "PSC Order" and "remanded to the Commission to permit the applicant to demonstrate that the required regulatory permits have been obtained." *Id.* The ruling is inconsistent with the structure and purpose of § 196.491(3) and fails to acknowledge the legal effect of the Commission's Order. Ultimately, however, the issue has little practical impact, as DNR has since issued the permits. (WE App. 261-318).

1. The Final Decision And Order Is Consistent With § 196.491(3)(e).

Section 196.491(3)(e) provides that the Commission "may not issue a [CPCN] until the [DNR] has issued all permits and approvals identified in the listing specified in par. (a)3.a. that are required prior to construction." Consistent with the overall structure of § 196.491(3), provision (3)(e) addresses the specific subset of permits deemed by DNR to be "required prior to the construction of the facility," (as opposed

to operational permits or permits relating to more specific activities that are otherwise listed by DNR pursuant to par. (a)3.a.). This subset of permits, in turn, are subject to the time strictures of § 196.491(3)(a)3.b. (requiring that the DNR "complete action" on such permits "within 120 days" after the DNR application is complete).[15]

"The primary DNR approval needed before power plant construction may begin is the construction permit for a new source emitting significant quantities of air pollutants" ("air permit"). WE App. 172; *see also Final Dec.* at 51. In this case, DNR also designated certain Chapter 30 permits as "pre-construction approvals," *see* WE App. 172, *Final Dec.* at 53;[16] however, for these permits the DNR subsequently determined that contested case hearings should not take place until after a Final Decision approving the ERGS application was rendered by the Commission. (WE App. 257-260, 298-299, ¶¶ 28-31).[17]

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[15] Section 196.491(3c) expressly contemplates that there may be various "federal and state permits . . . required prior to commencement of construction" that will be obtained ***after*** an electric utility "has received a [CPCN]."

[16] These included "the permit for grading work," the "NR 103/NR 299 analysis and certification for wetland fill," the "stormwater runoff" approval, and the "threatened/endangered species review." (R.18-119:5). The first three are part of the Chapter 30 permits issued on November 22, 2004 (WE App. 290-318); the endangered species permit was later determined to be unnecessary. *Final Dec.* at 54.

[17] This decision by DNR is consistent with the manner by which the Legislature has stated the process should operate. In enacting 2003 Act 89, which addressed the interrelationship between Chapter 30 permits and the CPCN process, the Legislative Council stated as follows:

> Note that there are a number of other DNR permits that may be required for construction of a new utility facility. These include air and water pollution permits, solid waste disposal approvals for ash, and permits for withdrawal of cooling water from either surface water or groundwater. An air pollution construction permit must be issued before the PSC may issue a CPCN for the project. The remaining approvals usually are issued at

Although both permits have now issued, *see* WE App. 261-289 (air permit), 290-318 (Ch. 30 permits), neither the air permit nor the Chapter 30 permits had issued as of the time the Commission was required to render its final decision pursuant to § 196.491(3)(g) (mandating "final action on an application" within 360 days or the CPCN is deemed to "have issued").

The deadline for the Commission to take "final action" approving or denying this application was November 10, 2003. Over the course of the preceding 360-day review period, the Commission conducted exhaustive inquiry regarding the statutorily mandated factors for consideration, received and evaluated thousands of pages of analysis and argument, worked in conjunction with DNR to issue a 900-page final EIS addressing environmental matters, and completed comprehensive public hearings and contested proceedings. During this period, DNR also determined that: (1) "both the North Site and North Site-CUP location should meet applicable criteria for [air] permit approval," *Final Dec.* at 51; and (2) it "did not consider any of the sites to be unpermittable" from a Chapter 30 perspective. *See* WE App.299, ¶ 29.

Thus, the Commission was left with three options as of November 10, 2003: (1) not render a decision — in which case the CPCN would "issue" by operation of law without restriction; (2) deny the application — in which case the Commission's determination that these facilities were needed by 2009 and 2010 to meet Wisconsin's energy needs would be negated; or (3) render a final decision and order imposing conditions necessary to satisfy the requirements of

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> some point during the construction process before the permitted activity commences.

Wisconsin Legislative Council Information Memorandum 2004-5, at 3. Although the amended § 30.025, Wis. Stats., does not apply here given its effective date of December 18, 2003, that amendment clarifies that the Chapter 30 permitting should, in fact, come *after* issuance of a CPCN.

§ 196.491(3) and ensure that construction would not commence until required DNR permits issued.

In light of these alternatives, the Commission reached the only reasonable conclusion and rendered a carefully defined Final Decision and Order in full accord with the fundamental purposes of § 196.491(3). To this end, the Commission set forth a Final Decision that "approves the PTF application in part, denies it in part, and modifies it," *Final Dec.* at 4, and rendered an Order that specified, in plain and unambiguous language, the effective date of both that Final Decision and the CPCN itself:

> This Final Decision takes effect on the day after it is mailed. The CPCN for the ERGS facility only takes effect when the DNR issues all permits and approvals that it identified, pursuant to Wis. Stat. § 196.491(3)(a)3.a., as being required prior to construction of the facility.

Final Dec. at 62.

Given the factual circumstances of this administrative proceeding — in which the Commission had completed its analysis of the CPCN application, but DNR had not yet concluded its own permit procedures — this Final Decision and conditional Order constitutes "'a reasonable agency decision that comports with the purpose of the statute.'" *RURAL,* 239 Wis. 2d at 693, ¶ 46. (quoting *UFE, Inc. v. LIRC*, 201 Wis. 2d 274, 286-87, 548 N.W.2d 57 (1996)). The Commission's Order made certain WE is not authorized to "proceed with construction until both agencies had taken favorable action on the application." *See* Wisconsin Legislative Council Information Memorandum 75-8, at 1 (October 20, 1975).

In *RURAL* this Court stated that "[w]here the PSC has before it an application to process according to the longer timeline in Wis. Stat. § 196.491(3), the PSC should, and could, comply with subdivision (e)." 239 Wis. 2d at 699, ¶ 59. Such a position, however, presumed (as does the

statute) that DNR would complete its review within the time frame accorded under § 196.491(3)(a)3.b. Here, given that DNR was not in a position to issue the permits prior to the Commission's statutory deadline to render its final decision, the Commission faced the same set of choices presented in *RURAL*:

> The PSC was faced with three choices: one, issue the permit with the condition that RockGen must obtain all necessary permits; two, allow the pocket provision to operate and have a certificate issue on the application without any conditions; or, three, reject RockGen's certificate application because one permit had not yet been issued.

239 Wis. 2d at 700, ¶ 60.

In these circumstances the Commission appropriately gave "full effect" to the purpose of § 196.491(3) by entering the type of conditional order found to be within its authority in *RURAL*. *Id.* at 700, ¶ 61.

2. The Final Decision Approving The Application Was Proper Even If The Form Of The Order Was Incorrect.

Section 196.491(3)(e) does not preclude the Commission from rendering a final decision on an application before DNR has "issued" permits required prior to construction. Rather, the express terms of § 196.491(3)(e) and (3)(g) distinguish between "final action," "approv[al]" of the application, and "issu[ance]" of the CPCN. Although a CPCN may not "issue" until the requisite construction permits are in place, no such statutory restriction exists with respect to the Commission's authority to render a final decision and order that conditionally "approve[s] the application" within the time frame required by law.

Because nothing in § 196.491(3)(e) renders the Commission's Final Decision to "approve the application with such modifications as are necessary for an affirmative

finding under par. (d)" erroneous, the limited error, if any, arising from the form of Order rendered by the Commission would be that the CPCN itself was prematurely "issued" prior to the required DNR permits.

In legal effect, the form of Order entered here does not constitute "issuance" of the CPCN within the meaning of § 196.491(3)(e), given that the CPCN does not, by the express terms of the Order, authorize construction until DNR permits have issued. *See, e.g., Georgia-Pacific Corp. v. EPA*, 671 F.2d 1235, 1240 (9th Cir. 1982) (noting that, during the same time period § 196.491 was enacted, EPA regulations defined the "date of issuance" of a permit to be "synonymous" with the permit's "effective date"). However, even were the CPCN deemed to have improperly "issued" as of the Final Decision and Order, judicial correction of this procedural error would require only that the matter be remanded to the Commission to ensure that the CPCN not "issue" until the requisite DNR permits have been issued. DNR has issued those permits. (WE App. 261-318).

Finally, the Legislature has instructed that "[s]ubstantial compliance with the requirements of the statutes shall be sufficient to make effective any rule, regulation, order or action of the commission." § 196.02(9), Wis. Stats. This comports with the "reasonableness" standard long applied to Commission actions. *RURAL*, 239 Wis. 2d at 691, ¶ 44. The form of order used here effected substantial compliance with § 196.491(3)(e), and at most represented a "harmless procedural error" that in no manner impairs the "fairness of the proceedings or the correctness of the action." *Id.* at 701-02, ¶ 63.

D. The Commission Did Not Err In Allowing WE To Build "Common Facilities" Large Enough To Accommodate Possible Future Expansion At The ERGS Site.

In its Final Decision the Commission authorized WE to construct certain "common facilities" to support 3,000 MW of generation, 600 more than currently authorized, in order to

"afford[] future planning flexibility." *Final Dec.* at 32. The Commission noted that the $20 million cost of this work "is a modest amount to pay" to provide such flexibility. *Id.*

The Circuit Court ruled that this finding was error because no CPCN was authorized for an extra 600 MW and "[t]here is no suggestion that the Commission has ever before interpreted its authority to include the power to permit partial construction of a facility for which CPCN has not been determined, let alone a facility as to which CPCN has been expressly denied." *Order* at 42-43. This ruling is based on a misunderstanding of the Final Decision.

The Commission did not permit "partial construction" of a facility. Rather, the Commission – exercising its experience, technical competence, and specialized knowledge – assessed the appropriate parameters of construction activity for the facilities that ***were*** approved. The existing generating units at Oak Creek and the two new units will make use of certain "site common systems." (R.18-157:1202). WE presented the Commission with two options: WE could size the common systems to accommodate the existing and new units, or it could "oversize" them to accommodate possible future generation at the site. While the cost of such oversizing was estimated at $20 million if done now, it would be substantially greater in the future. (R.18-157:1225). The limited question facing the Commission, therefore, was whether it was prudent to do the work now in order to avoid potentially significantly higher costs in the future if additional generating capacity is needed. Future generating capacity would be subject to full Commission review and approval.

The question was not one of agency authority. Rather, it was a factual question as to the scope and manner of construction that should be authorized with respect to the CPCN at issue.

CONCLUSION

For the foregoing reasons, WE respectfully requests that the Court reverse the Circuit Court and reinstate the Commission's November 10, 2003 Final Decision and Order.

WE further requests that, for the reasons set forth in WE's petition for a direct, expedited appeal, the Court issue a final decision as expeditiously as possible.

Dated this 3rd day of February, 2005.

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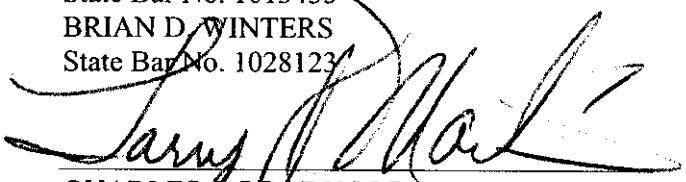

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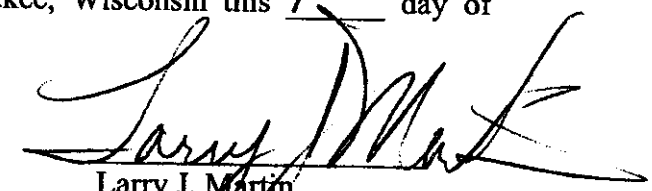
CERTIFICATION PURSUANT TO
§ 809.19(8)(b), WIS. STATS.

I hereby certify that this brief conforms to the rules contained in § 809.19(8)(b) and (c) for a brief produced with a proportional serif font. The length of this brief is 10,998 words.

Dated at Milwaukee, Wisconsin this 4th day of February, 2005.



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CPCN Statute - § 196.491(3), Wis. Stats. (2002)

(3) CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY. (a) 1. No person may commence the construction of a facility unless the person has applied for and received a certificate of public convenience and necessity from the commission as provided in this section. An application in the form and containing the information required by commission rules for such certificate shall be filed with the commission not less than 6 months prior to the commencement of construction of a facility. Within 10 days after filing the application, the commission shall send a copy of the application to the clerk of each municipality and town in which the proposed facility is to be located and to the main public library in each such county.

2. The commission shall determine whether an application filed under subd. 1. is complete and, no later than 30 days after the application is filed, notify the applicant about the determination. If the commission determines that the application is incomplete, the notice shall state the reason for the determination. An applicant may supplement and refile an application that the commission has determined to be incomplete. There is no limit on the number of times that an applicant may refile an application under this subdivision. If the commission fails to determine whether an application is complete within 30 days after the application is filed, the application shall be considered to be complete.

3. a. At least 60 days before a person files an application under subd. 1., the person shall provide the department with an engineering plan showing the location of the facility, a description of the facility, including the major components of the facility that have a significant air, water or solid waste pollution potential, and a description of the anticipated effects of the facility on air and water quality. Within 30 days after a person provides an engineering plan, the department shall provide the person with a listing of each department permit or approval which, on the basis of the information contained in the engineering plan, appears to be required for the construction or operation of the facility.

b. Within 20 days after the department provides a listing specified in subd. 3. a. to a person, the person shall apply for the permits and approvals identified in the listing. The department shall determine whether an application under this subd. 3. b. is complete and, no later than 30 days after the application is filed, notify the applicant about the determination. If the department determines that the application is incomplete, the notice shall state the reason for the determination. An applicant may supplement and refile an application that the department has determined to be incomplete. There is no limit on the number of times that an applicant may refile an application under this subd. 3. b. If the department fails to determine whether an application is complete within 30 days after the application is filed, the application shall be considered to be complete. The department shall complete action on an application under this subd. 3. b. for any permit or approval that is required prior to construction of a facility within 120 days after the date on which the application is determined or considered to be complete.

(b) The commission shall hold a public hearing on an application that is determined or considered to be complete in the area affected pursuant to s. 227.44. A class 1 notice, under ch. 985, shall be given at least 30 days prior to the hearing.

(d) Except as provided under par. (c) and s. 196.493, the commission shall approve an application for a certificate of public convenience and necessity only if the commission determines all of the following:

2. The proposed facility satisfies the reasonable needs of the public for an adequate supply of electric energy. This subdivision does not apply to a wholesale merchant plant.

3. The design and location or route is in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability and environmental factors, except that the commission may not consider alternative sources of supply or engineering or economic factors if the application is for a wholesale merchant plant. In its consideration of environmental factors, the commission may not determine that the design and location or route is not in the public interest because of the impact of air pollution if the proposed facility will meet the requirements of ch. 285.

3m. For a high-voltage transmission line, as defined in s. 30.40 (3r), that is to be located in the lower Wisconsin state riverway, as defined in s. 30.40 (15), the high-voltage transmission line will not impair, to the extent practicable, the scenic beauty or the natural value of the riverway. The commission may not require that a high-voltage transmission line, as defined in s. 30.40 (3r), be placed underground in order for it to approve an application.

3r. For a high-voltage transmission line that is proposed to increase the transmission import capability into this state, existing rights-of-way are used to the extent practicable and the routing and design of the high-voltage transmission line minimizes environmental impacts in a manner that is consistent with achieving reasonable electric rates.

3t. For a high-voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more, the high-voltage transmission line provides usage, service or increased regional reliability benefits to the wholesale and retail customers or members in this state and the benefits of the high-voltage transmission line are reasonable in relation to the cost of the high-voltage transmission line.

4. The proposed facility will not have undue adverse impact on other environmental values such as, but not limited to, ecological balance, public health and welfare, historic sites, geological formations, the aesthetics of land and water and recreational use. In its consideration of the impact on other environmental values, the commission may not determine that the proposed facility will have an undue adverse impact on these values because of the impact of air pollution if the proposed facility will meet the requirements of ch. 285.

5. The proposed facility complies with the criteria under s. 196.49 (3) (b) if the application is by a public utility as defined in s. 196.01.

6. The proposed facility will not unreasonably interfere with the orderly land use and development plans for the area involved.

7. The proposed facility will not have a material adverse impact on competition in the relevant wholesale electric service market.

(dm) In making a determination required under par. (d), the commission may not consider a factual conclusion in a strategic energy assessment unless the conclusion is independently corroborated in the hearing under par. (b).

(e) If the application does not meet the criteria under par. (d), the commission shall reject the application or approve the application with such modifications as are necessary for an affirmative finding under par. (d). The commission may not issue a certificate of public convenience and necessity until the department has issued all permits and approvals identified in the listing specified in par. (a) 3. a. that are required prior to construction.

(g)1. The commission shall take final action on an application within 180 days after the application is determined or considered to be complete under par. (a) 2. If the commission fails to take final action within the 180-day period, the commission is considered to have issued a certificate of public convenience and necessity with respect to the application, unless the commission, within the 180-day period, petitions the circuit court for Dane County for an extension of time for taking final action on the application and the court grants an extension. Upon a showing of good cause, the court may extend the 180-day period for no more than an additional 180 days. If the commission fails to take final action within the extended period, the commission is considered to have issued a certificate of public convenience and necessity with respect to the application.

1m. Subdivision 1. does not apply to an application for a certificate of public convenience and necessity if another state is also taking action on the same or a related application.

(gm) The commission may not approve an application filed after October 29, 1999, under this section for a certificate of public convenience and necessity for a high-voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more unless the approval includes the condition that the applicant shall pay the fees specified in sub. (3g)(a). If the commission has approved an application under this section for a certificate of public convenience and necessity for a high-voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more that was filed after April 1, 1999, and before October 29, 1999, the commission shall require the applicant to pay the fees specified in sub. (3g)(a). For any application subject to this paragraph, the commission shall determine the cost of the high-voltage transmission line, identify the counties, towns, villages and cities through which the high-voltage transmission line is routed and allocate the amount of investment associated with the high-voltage transmission line to each such county, town, village and city.

(h) The commission may waive compliance with any requirement of this section to the extent necessary to restore service which has been substantially interrupted by a natural catastrophe, accident, sabotage or act of God.

(i) If installation or utilization of a facility for which a certificate of convenience and necessity has been granted is precluded or inhibited by a local ordinance, the installation and utilization of the facility may nevertheless proceed.

(j) Any person whose substantial rights may be adversely affected or any county, municipality or town having jurisdiction over land affected by a certificate of public convenience and necessity may petition for judicial review, under ch. 227, of any decision of the commission regarding the certificate.

(k) No person may purchase, or acquire an option to purchase, any interest in real property knowing that such property is being purchased to be used for the construction of a high-voltage transmission line unless the person gives written notice to the prospective seller of the size, maximum voltage and structure type of any transmission line planned to be constructed thereon and the person by whom it will be operated. Contracts made in violation of this paragraph are subject to rescission by the seller at any time prior to the issuance of a certificate of public convenience and necessity for the high-- voltage transmission line by the commission.

(3c) COMMENCEMENT OF CONSTRUCTION OF LARGE ELECTRIC GENERATING FACILITIES. (a) Except as provided in par. (b), an electric utility that has received a certificate of public convenience and necessity under sub. (3) for constructing a large electric generating facility shall commence construction no later than one year after the latest of the following:

1. The date on which the commission issues the certificate of public convenience and necessity.

2. The date on which the electric utility has been issued every federal and state permit, approval, and license that is required prior to commencement of construction.

3. The date on which every deadline has expired for requesting administrative review or reconsideration of every federal and state permit, approval, and license that is required prior to commencement of construction.

4. The date on which the electric utility has received the final decision, after exhaustion of judicial review, in every proceeding for judicial review described in sub. (3)(j).

(b) Upon showing of good cause, the commission may grant an extension to the deadline specified in par. (a).

(c) If an electric utility does not commence construction of a large electric generating facility within the deadline specified in par. (a) or extended under par. (b), the certificate of public convenience and necessity is void, and the electric utility may not commence construction of the large electric generating facility.

Wisconsin Admin. Code § PSC 111.53 (2002)

PSC 111.53 CPCN applications for large electric generating facilities. (1) CONTENTS OF A CPCN APPLICATION. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:

(a) The operating characteristics of the proposed facility, including all of the following:

1. The number of generating units to be included in the facility.
2. A description of each generating unit, including type, size, and fuel.
3. The expected hours of operation and lifetime of the facility.
4. The names and addresses of owners and investors and the percent of ownership.
5. The fuel source and availability. If the facility uses fossil fuel, the fuel's heating value and chemical analysis, the type of transportation to be used, and the approximate capacity of on-site storage shall be provided.
6. The facility's estimated capacity factors, for each generating unit, and the basis for the estimates.
7. The estimated rate of discharge of pollutants for appropriate time intervals, as related to applicable regulatory standards.
8. The heat rates over the range of operating capacity for each generating unit.

(b) The need for the proposed facility in terms of demand and energy.

(c) The economic aspects of the proposed facility, including all of the following:

1. The estimated capital cost of the generating facility and all related facilities, broken down by major plant accounts. All cost escalation factors used in the estimate shall be identified.
2. The projected unit fuel cost, in cents per million Btu, both for the first year of operation and levelized in nominal terms over the life of the unit or facility. All cost escalation factors used in the estimate shall be identified.
3. The estimated annual production cost, calculated as operating, maintenance and fuel costs for the first year of operation and levelized in nominal terms over the life of the facility. All cost escalation factors used and other significant supporting data shall be included.
4. The estimated annual total cost, calculated as capital and production costs for the first year of operation, in mills per net kWh generated, and levelized in nominal terms over the life of the facility. All cost escalation factors used and other significant supporting data shall be included.
5. The estimated useful life of facility, based on depreciation rates established by the commission.

(d) The alternative sources of supply considered, including information about all of the following alternatives:

1. Energy conservation and efficiency.
2. Any alternative whose energy source has a higher priority ranking under s. 1.12 (4) (b) to (d), Stats., than the fuel proposed to used for the facility.
3. For any facility that will use a combustible energy resource but not provide cogeneration, an explanation regarding why cogeneration is not feasible.
4. Purchased power.

(e) At least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives.

(f) Site-related information for each proposed power plant site, including all of the following:

1. The regulatory approvals required for construction and operation of the facility.
2. The construction schedule and timeline, showing construction activities and permitting expectations from the beginning of construction to the in-service date.
3. The availability of transportation for fuel delivery and requirements for gas pipeline construction. If a certificate of authority under s. 196.49, Stats., is required to construct the gas pipeline, the location, termini, length in miles, size of pipe, and pressure.
4. Any required transmission line construction, agreements for use of the transmission system to deliver plant power, transmission losses, and effects on system reliability. If a certificate of authority under s. 196.49, Stats., is required to construct the transmission line, the location of termini, length in miles, and voltage for each transmission line.
5. Other auxiliary facilities, including fuel storage and water storage.
6. Natural resources at each site, including all of the following:

a. Air quality.
b. General soil associations.
c. Geology, noting active mines and quarries.
d. Water, including wetlands, rivers, streams and groundwater.
e. Vegetative cover, including wildlife habitat.
f. Endangered, threatened, and special-concern species and communities.

7. Community-related information, including all of the following:

a. Site history.
b. Existing and proposed land uses at the sites.
c. Local infrastructure, including sewer, water, police, and fire protection.
d. Historical and archeological sites.
e. Potential health impacts.
f. Secondary impacts, including effects on revenue, jobs, and development.
g. Visual and noise impact.

8. Aesthetics.
9. If a CPCN is needed for construction of transmission lines as part of this application, the required information under s. PSC 111.55.

(g) Any additional information the commission may request, including information necessary for it to make the determinations listed in s. 196.491 (3) (d), Stats., or to prepare an environmental assessment or an environmental impact statement under s. 1.11, Stats.

(2) EXCEPTIONS TO FILING REQUIREMENTS. (a) An application for a wholesale merchant plant need not include the information identified in sub. (1) (b) to (d). In addition, an application for a wholesale merchant plant that will be owned, controlled, or operated by an affiliated interest of a public utility, shall include any additional information required by the commission in order to make a determination under s. 196.491 (3m) (a), Stats.

(b) 1. An application for a cogeneration facility may meet the requirement under sub. (1) (e) by filing information on 2 sites that are both located at the steam host's existing industrial plant, if the cogeneration facility will be a qualifying facility under 18 CFR 292.205 and none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.

2. An application for repowering an existing generating facility may meet the requirement under sub. (1) (e) by filing information on 2 sites that are both located at the existing generating facility site, if none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.

History: Cr. Register, June, 2000, No. 534, eff. 7-1-00.

Energy Priorities Law -- §§ 1.12 & 196.025, Wis. Stats. (2002)

§ 1.12 State energy policy. **(1)** DEFINITIONS. In this section:

(a) "Local governmental unit" has the meaning given in s. 19.42(7u).

(b) "State agency" means an office, department, agency, institution of higher education, the legislature, a legislative service agency, the courts, a judicial branch agency, an association, society or other body in state government which is created or authorized to be created by the constitution or by law, for which appropriations are made by law.

(2) CONSERVATION POLICY. A state agency or local governmental unit shall investigate and consider the maximum conservation of energy resources as an important factor when making any major decision that would significantly affect energy usage.

(3) GOALS. (a) *Energy efficiency.* It is the goal of the state to reduce the ratio of energy consumption to economic activity in the state.

(b) *Renewable energy resources.* It is the goal of the state that, to the extent that it is cost-effective and technically feasible, all new installed capacity for electric generation in the state be based on renewable energy resources, including hydroelectric, wood, wind, solar, refuse, agricultural and biomass energy resources.

(c) *Afforestation.* It is the goal of the state to ensure a future supply of wood fuel and reduce atmospheric carbon dioxide by increasing the forested areas of the state.

(4) PRIORITIES. In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:

(a) Energy conservation and efficiency.

(b) Noncombustible renewable energy resources.

(c) Combustible renewable energy resources.

(d) Nonrenewable combustible energy resources, in the order listed:

1. Natural gas.
2. Oil or coal with a sulphur content of less than 1%.
3. All other carbon-based fuels.

(5) MEETING ENERGY DEMANDS. (a) In designing all new and replacement energy projects, a state agency or local governmental unit shall rely to the greatest extent feasible on energy efficiency improvements and renewable energy resources, if the energy efficiency improvements and renewable energy resources are cost-effective and technically feasible and do not have unacceptable environmental impacts.

(b) To the greatest extent cost-effective and technically feasible, a state agency or local governmental unit shall design all new and replacement energy projects following the priorities listed in sub. (4).

§ 196.025 Duties of the commission. **(1)** To the extent cost-effective, technically feasible and environmentally sound, the commission shall implement the priorities under s. 1.12(4) in making all energy-related decisions and orders, including advance plan, rate setting and rule-making orders.

Commission's Powers -- § 192.09, Wis. Stats. (2002)

§ 196.02. Commission's powers. (1) JURISDICTION. The commission has jurisdiction to supervise and regulate every public utility in this state and to do all things necessary and convenient to its jurisdiction.

(2) DEFINITION; CLASSIFICATION. In this subsection, "public utility" does not include a telecommunications cooperative or a small telecommunications utility except as provided under s. 196.205 or 196.215(2) and does not include an alternative telecommunications utility. The commission shall provide for a comprehensive classification of service for each public utility. The classification may take into account the quantity used, the time when used, the purpose for which used, and any other reasonable consideration. Each public utility shall conform its schedules of rates, tolls and charges to such classification.

(3) RULES. The commission may adopt reasonable rules to govern its proceedings and to regulate the mode and manner of all inspections, tests, audits, investigations and hearings.

(4) INFORMATION REQUIRED; STOCK HOLDERS. (a) The commission may inquire into the management of the business of all public utilities. The commission shall keep itself informed as to the manner and method in which the same is conducted. The commission may obtain from any public utility any information necessary to enable the commission to perform its duties.

(b) Each public utility shall furnish to the commission, in such form and at such times as the commission requires, the following information respecting the identity of the holders of its voting capital stock in order to enable the commission to determine whether the holders constitute an affiliated interest within the meaning of this chapter:

1. The names of each holder of one percent or more of the voting capital stock of the public utility.

2. The nature of the property right or other legal or equitable interest which the holder has in the stock.

3. Any other similarly relevant information which the commission prescribes and directs.

(c) If any public utility fails to furnish the commission with information required of it by the commission, the commission may issue an order directing the delinquent public utility to furnish the information immediately or to show good cause why the information cannot be obtained. Failure of any public utility to comply with the order of the commission is a violation of this chapter within the meaning of s. 196.66.

(5) INSPECT BOOKS. The commission or any commissioner or any person employed by the commission for that purpose may, upon demand, inspect the books, accounts, papers, records and memoranda of any public utility, and examine under oath any officer, agent or employee of the public utility in relation to its business and affairs. Any person, other than one of the commissioners, who makes a demand shall produce his or her authority to make the inspection.

(6) PRODUCTION OF RECORDS. The commission may require, by order or subpoena served on any public utility as a summons is served in circuit court, the production within this state at the time and place the commission designates of any books, accounts, papers or records kept by the public utility outside the state, or verified copies in lieu thereof, if the commission orders. If a public utility fails or refuses to comply with the order or subpoena, for each day of the failure or refusal the public utility shall forfeit not less than $50 nor more than $500.

(7) COMMISSION INITIATIVE. In any matter within its jurisdiction, including, but not limited to, chs. 197 and 201 and this chapter, the commission may initiate, investigate and order a hearing at its discretion upon such notice as it deems proper.

(8) EMPLOY COUNSEL. The commission may employ counsel in any proceeding, investigation, hearing or trial had by it or in which it is a party, and the expenses thereby incurred shall be charged to the commission's appropriation.

(9) TECHNICALITIES DISREGARDED. Substantial compliance with the requirements of the statutes shall be sufficient to make effective any rule, regulation, order or action of the commission. No rule, regulation, order or action of the commission is invalid for any omission of a technical nature.

(10) COMMISSION NOTICES; CERTIFICATIONS. Any notice of investigation or hearing or certification to a copy of a record of the commission may be issued or certified by any member of the commission or by its secretary or assistant secretary.

(12) SUE; BE SUED. The commission may sue and be sued in its own name, and may confer with or participate in any proceedings before any regulatory agency of any other state or of the federal government.

§ 227.57, Wis. Stats. (2002)

§ 227.57. Scope of review. **(1)** The review shall be conducted by the court without a jury and shall be confined to the record, except that in cases of alleged irregularities in procedure before the agency, testimony thereon may be taken in the court and, if leave is granted to take such testimony, depositions and written interrogatories may be taken prior to the date set for hearing as provided in ch. 804 if proper cause is shown therefor.

(2) Unless the court finds a ground for setting aside, modifying, remanding or ordering agency action or ancillary relief under a specified provision of this section, it shall affirm the agency's action.

(3) The court shall separately treat disputed issues of agency procedure, interpretations of law, determinations of fact or policy within the agency's exercise of delegated discretion.

(4) The court shall remand the case to the agency for further action if it finds that either the fairness of the proceedings or the correctness of the action has been impaired by a material error in procedure or a failure to follow prescribed procedure.

(5) The court shall set aside or modify the agency action if it finds that the agency has erroneously interpreted a provision of law and a correct interpretation compels a particular action, or it shall remand the case to the agency for further action under a correct interpretation of the provision of law.

(6) If the agency's action depends on any fact found by the agency in a contested case proceeding, the court shall not substitute its judgment for that of the agency as to the weight of the evidence on any disputed finding of fact. The court shall, however, set aside agency action or remand the case to the agency if it finds that the agency's action depends on any finding of fact that is not supported by substantial evidence in the record.

(7) If the agency's action depends on facts determined without a hearing, the court shall set aside, modify or order agency action if the facts compel a particular action as a matter of law, or it may remand the case to the agency for further examination and action within the agency's responsibility.

(8) The court shall reverse or remand the case to the agency if it finds that the agency's exercise of discretion is outside the range of discretion delegated to the agency by law; is inconsistent with an agency rule, an officially stated agency policy or a prior agency practice, if deviation therefrom is not explained to the satisfaction of the court by the agency; or is otherwise in violation of a constitutional or statutory provision; but the court shall not substitute its judgment for that of the agency on an issue of discretion.

(9) The court's decision shall provide whatever relief is appropriate irrespective of the original form of the petition. If the court sets aside agency action or remands the case to the agency for further proceedings, it may make such interlocutory order as it finds necessary to preserve the interests of any party and the public pending further proceedings or agency action.

(10) Upon such review due weight shall be accorded the experience, technical competence, and specialized knowledge of the agency involved, as well as discretionary authority conferred upon it. The right of the appellant to challenge the constitutionality of any act or of its application to the appellant shall not be foreclosed or impaired by the fact that the appellant has applied for or holds a license, permit or privilege under such act.

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CLERK OF SUPREME COURT
OF WISCONSIN

STATE OF WISCONSIN
SUPREME COURT

CLEAN WISCONSIN, INC.
p/k/a Wisconsin's Environmental
Decade Institute, Inc.,
SC JOHNSON & SON, INC. and
CALPINE CORPORATION
Petitioners-Respondents-Cross-
Appellants-Cross-Respondents,

Appeal No. 04-3179

TOWN OF CALEDONIA,
Petitioner-Cross-Respondent,

v.

Circuit Court Case Nos.
03CV003478, 03CV003731,
04CV000133, 04CV000149,
04CV000530, 04CV000533

PUBLIC SERVICE COMMISSION OF
WISCONSIN and WISCONSIN
DEPARTMENT OF NATURAL RESOURCES,
Respondents-Co-Appellants-
Cross-Respondents,

WISCONSIN ELECTRIC POWER
COMPANY, W.E. POWER, LLC and
WISCONSIN ENERGY CORPORATION,
Interested Parties-Appellants-
Cross Respondents,

(Caption continued on following pages)

APPEAL FROM A DECISION OF THE CIRCUIT COURT OF DANE
COUNTY, THE HONORABLE DAVID FLANAGAN, PRESIDING

APPENDIX OF INTERESTED PARTIES-APPELLANTS-CROSS RESPONDENTS WISCONSIN ELECTRIC POWER COMPANY, W.E. POWER, LLC AND WISCONSIN ENERGY CORPORATION

DAIRYLAND POWER COOPERATIVE,
Interested Party-Cross-Respondent,

MADISON GAS & ELECTRIC COMPANY
AND WISCONSIN PUBLIC POWER, INC.,
Interested Parties-Co-Appellants-
Cross-Respondents,

CITY OF OAK CREEK,
Interested Party-Respondent-
Cross-Appellant,

ROBERT H. OWEN,
Interested Party-Respondent-
Cross-Respondent.

CALPINE CORPORATION,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF
WISCONSIN and WISCONSIN
DEPARTMENT OF NATURAL RESOURCES,
Respondents,

WISCONSIN ELECTRIC POWER
COMPANY, W.E. POWER, LLC and
WISCONSIN ENERGY CORPORATION,
DAIRYLAND POWER COOPERATIVE,
MADISON GAS & ELECTRIC COMPANY,
ROBERT H. OWEN, JR., and
CITY OF OAK CREEK,
Interested Parties.

CLEAN WISCONSIN, INC.
p/k/a Wisconsin's Environmental
Decade Institute, Inc.,
SC JOHNSON & SON, INC. and
CALPINE CORPORATION,
Petitioners,

v.

WISCONSIN DEPARTMENT OF
NATURAL RESOURCES,
Respondent,

WISCONSIN PUBLIC POWER, INC.,
CITY OF OAK CREEK, DAIRYLAND
POWER COOPERATIVE, MADISON
GAS & ELECTRIC COMPANY,
WISCONSIN ELECTRIC POWER
COMPANY, WISCONSIN ENERGY
CORPORATION and W.E. POWER, LLC,
Interested Parties.

CALPINE CORPORATION,
Petitioner,

v.

WISCONSIN DEPARTMENT OF
NATURAL RESOURCES,
Respondent,

CITY OF OAK CREEK, DAIRYLAND
POWER COOPERATIVE, MADISON GAS
& ELECTRIC COMPANY, WISCONSIN
PUBLIC POWER, WISCONSIN ELECTRIC
POWER COMPANY, WISCONSIN ENERGY
CORPORATION and W.E. POWER, LLC,
Interested Parties.

CITY OF OAK CREEK,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF
WISCONSIN,
Respondent.

TOWN OF CALEDONIA,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent,

WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION, W.E. POWER, LLC, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, ROBERT H. OWEN, JR., and WISCONSIN PUBLIC POWER, INC.,
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INDEX TO WE APPENDIX

Power the Future ("PTF") Application – Executive Summary (R.18-1, Vol. 1) 101-133

PTF Application (R.18-1, Vol. 1) 134-161

Portions of Final Environmental Impact Statement (R.18-119) 162-243

- Table of Contents (iii-vii) 162-167
- Background and Regulatory Requirements (1-10) 168-177
- Technology Cost Assumptions – SCPC Units (12-13) 178-179
- Need for Baseload Capacity in SE Wis. (27-45) 180-198
- Natural Gas as an Alternative (62-64) 199-201
- EGEAS Summary (72-73) 202-203
- Fuel Diversity Perspectives (79-94) 204-219
- Site Selection Process (95-102) 220-227
- Electric Transmission (126-32) 228-234
- Electric Transmission Proposals and Impacts (381-89) 235-243

Testimony of Jeffrey Knitter (R.18-157:741-44) 244-247

Testimony of Allan Mihm (R.18-157:1199-1200) 248-250

Testimony of David Seitz (R.18-157:2789, 2821-24) 251-256

Testimony of Heidi Hopkins (R.18-157:4447-49) 257-260

January 14, 20904 DNR Air Permit (without conditions) 261-265

February 3, 2005 ALJ Decision Affirming Air Permit 266-289

November 22, 2004 DNR Chapter 30 Permit 290-318

Power the Future

Application to the Public Service Commission of Wisconsin

Executive Summary

February 1, 2002

Table of Contents

Executive Summary

Proposal 1

Location of Proposed New Facilities 2

- Port Washington 2
- Elm Road 5

Project Description 8

- Port Washington Generating Station 8
- Elm Road Generating Station 12

Need for Additional Generating Capacity 17

Advantages of WEC's *Power the Future* Proposal 18

Environmental and Community Issues 21

- Port Washington Generating Station 21
- Elm Road Generating Station 24
- Public Outreach Efforts 26

Project Organization and Structure 27

- Port Washington 27
- Elm Road 29

Conclusion 31

Executive Summary

Proposal

Wisconsin Energy Corporation and its subsidiaries have a long history of pioneering innovation and serving customers in Wisconsin. In January 1852—150 years ago—Wisconsin Gas, the company's gas utility, became the state of Wisconsin's first public utility. Gas was "turned on" later that year. Wisconsin Electric, the company's electric utility and the largest electric utility in Wisconsin, was formed in 1896 to operate electric streetcars, run an interurban railway and provide utility services. In 1917, the company developed the use of pulverized coal as a boiler fuel, which made low-cost central station electric service possible. In 1935, the company's Port Washington Power Plant began its 13-year reign as the world's most efficient steam plant.

The *constant* that runs throughout the company's history has two strands—one is innovation and leadership; the other is Wisconsin and customers.

Wisconsin Energy Corp. and its wholly-owned subsidiaries Wisconsin Electric, W.E. Power and Wisconsin Gas Company file this application to the Public Service Commission of Wisconsin for a Certificate of Public Convenience and Necessity to permit it to build five new generating units over the next decade. The new generating facilities will be constructed by W.E. Power, and owned by W.E. Power and affiliates of other interested Wisconsin utilities. The new generating units will be leased by Wisconsin Electric and other interested Wisconsin utilities. Employees of Wisconsin Electric will operate the facilities.

This application represents an exciting, new idea: a new approach to providing customers with the electric services they need at a price they can afford.

- The proposed new generating units are designed to assure electric utility customers in the State of Wisconsin access to reliable and reasonably priced power for the remainder of the decade and well into the next.

- This filing demonstrates that the goal of having a quality, reliable and affordable energy supply for the state is achievable while simultaneously improving overall environmental performance. The filing is innovative because it is built on the foundation of a broad public consensus on how to best meet the needs of Wisconsin's electricity customers, capturing the principles of fuel diversity, advantages of using domestic resources, and the need to balance economic, environmental and Wisconsin energy-supply goals.

- Never before has there been an electric generation construction proposal that covers the retirement of old coal-based generation, an investment in new natural gas- and coal-based generation, a commitment to increasing renewable resources and energy efficiency programs, and a commitment to carbon dioxide mitigation.

- This proposal is innovative because it strikes a balance between the reliable energy supply Wisconsin needs to continue economic growth and an appreciation that the industry is moving forward on both the technology and regulatory fronts.

What was true in 1852 is still true today. With this filing Wisconsin Energy Corp. remains true to its heritage of innovation and leadership, true to Wisconsin and true to its customers.

Location of Proposed New Facilities

It is proposed that the new generating units be constructed on the sites of two existing power plants—one located in the City of Port Washington, Wisconsin and one in the City of Oak Creek, Wisconsin. Both sites can be classified as 'brownfield' sites, given that they have previously been extensively developed for power generation and other activities. This application represents the first filing under recent legislation adopted by the Wisconsin Legislature regarding the desirability of repowering brownfield sites.

Port Washington

The Port Washington site is located at the downtown harbor area of the City of Port Washington. It has been the location of one of Wisconsin Electric's principal power generating facilities since 1935. As noted previously, during its initial years of operation, the five coal-based generating units established a world record for annual efficiency and the plant was declared a landmark for this achievement by the American Society of Mechanical Engineers. While the plant ran as a base-loaded facility for much of its 67 years of service, in recent years the facility has been used less extensively.

Port Washington Unit 5 was removed from service in 1985 due to boiler drum problems. While Wisconsin Electric has performed required maintenance on the remaining units over the years, they have also experienced some deterioration—which impairs long-term reliable operations. Wisconsin Electric desires to retire the remaining four coal-based units as soon as the capacity can be replaced.

There is also a 6th unit on site – a 20 megawatt oil-based combustion turbine unit that is used to provide added system capacity during hours of peak system demand. This unit was installed in 1968, but in recent years has seen very limited service because of its relatively low efficiency and resulting high operating costs. Wisconsin Electric plans to retire this unit as the new capacity is brought into service.

The site is attractive for re-use for new generating facilities. The features that contributed to the success of the old plant and its record efficiencies will benefit the new generating units, including the availability of Lake Michigan water for once-through cooling, and access to the existing electric transmission system.

W.E. Power proposes to develop the site in such a way that it preserves the major architectural features of this historic facility. However, the new development will permit the portion of the site used for generation to be consolidated somewhat. In particular, the entire coal dock area will no longer be required, following the completion of the construction period. It is hoped that a portion of this property can eventually be dedicated for community use.

Figure 1: General Location Map: The Port Washington Site

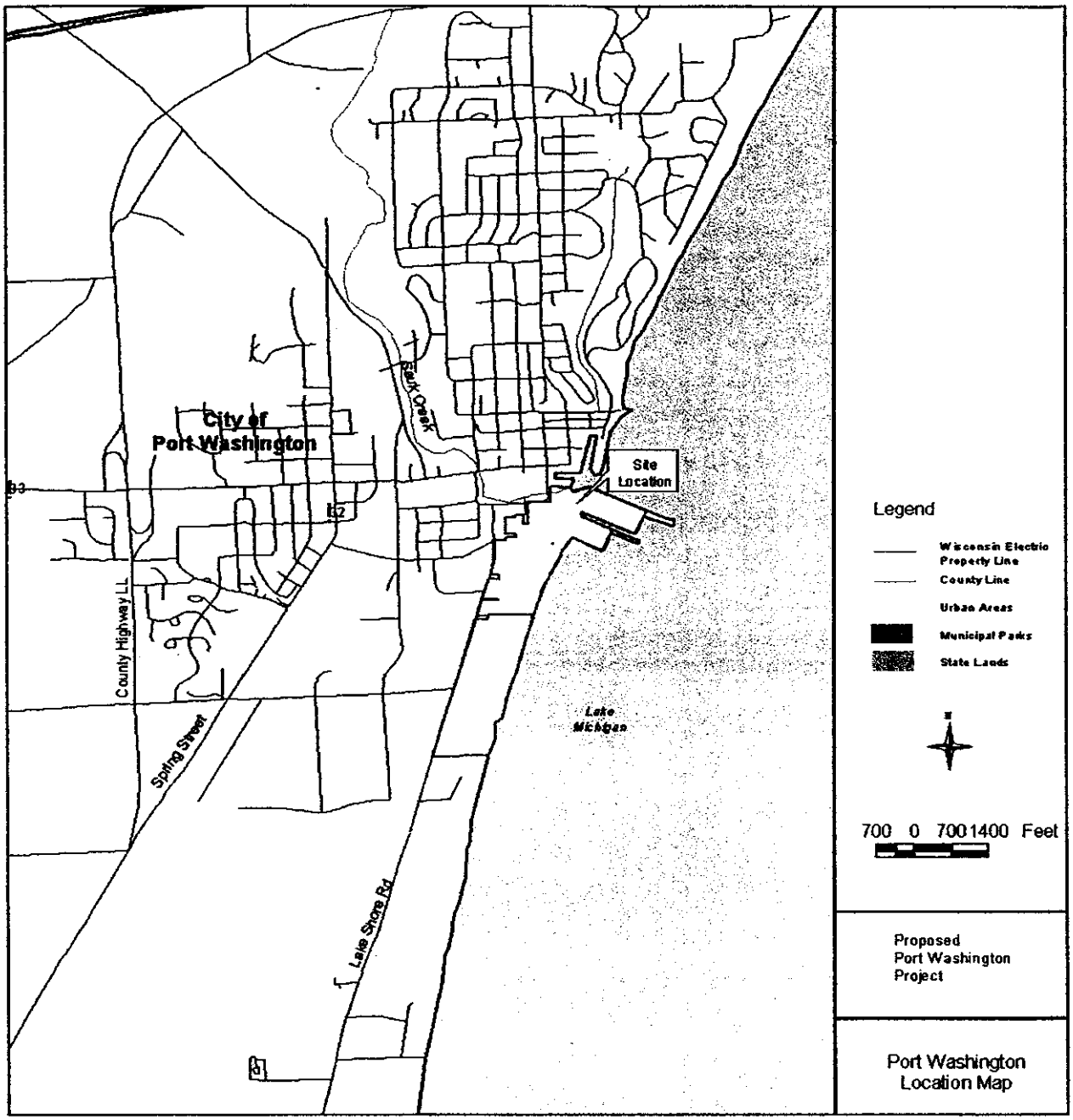
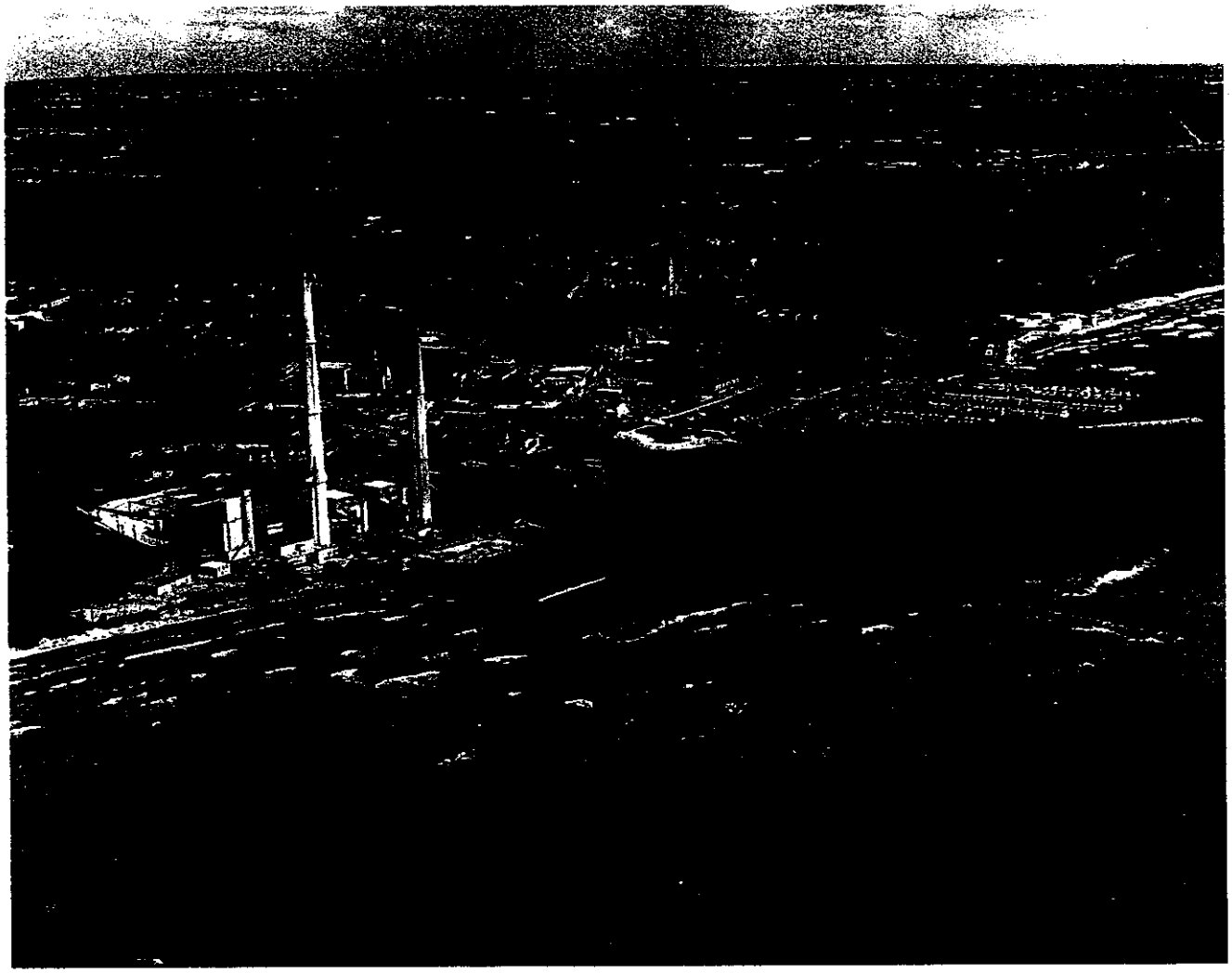


Figure 2: Photograph of the existing Port Washington Power Plant, showing its relation to Downtown Port Washington and the harbor area.



Elm Road

The Elm Road site is located along the shore of Lake Michigan in the City of Oak Creek in Milwaukee County, with an alternative site located in the Town of Caledonia in Racine County. The existing Oak Creek Power Plant occupies a portion of this site, located in the City of Oak Creek.

Elm Road is a large site, consisting of approximately 1,000 acres. The site has been extensively developed, largely for electrical generation purposes. However, the site also includes other development, including a liquefied natural gas storage facility.

Nine generating units were once located on this site. Oak Creek Units 1 through 4 were retired over ten years ago. Units 5 through 9, which were placed in service between 1959 and 1969, continue in service and produce about 1,150 megawatts of power. The primary fuel used is coal, delivered to the site via special trains, although natural gas is used for start-up purposes. A small combustion turbine on the site, the ninth unit, also uses natural gas.

Oak Creek Power Plant is one of Wisconsin Electric's primary generating facilities and is the most efficient coal based power plant in Wisconsin. It is operated as a base loaded plant, operating 24 hours each day, seven days a week. The current facility produces enough power to serve about 400,000 homes.

The Elm Road site is believed to be an excellent location for the new generating units for many reasons, including:

- access to the relatively cold water of Lake Michigan, which serves to increase the efficiency of steam-based cycles for the generation of electricity,
- the ability to use the existing electrical transmission capability available at the site,
- economical coal delivery is available from both rail and boats,
- its 'brownfield' status, which will permit the construction of these new facilities on a site previously used for electric generation, and
- access to a quality team of experienced employees living in the area who know how to operate and maintain electric generation facilities.

Figure 3: General Location Map: Elm Road Site

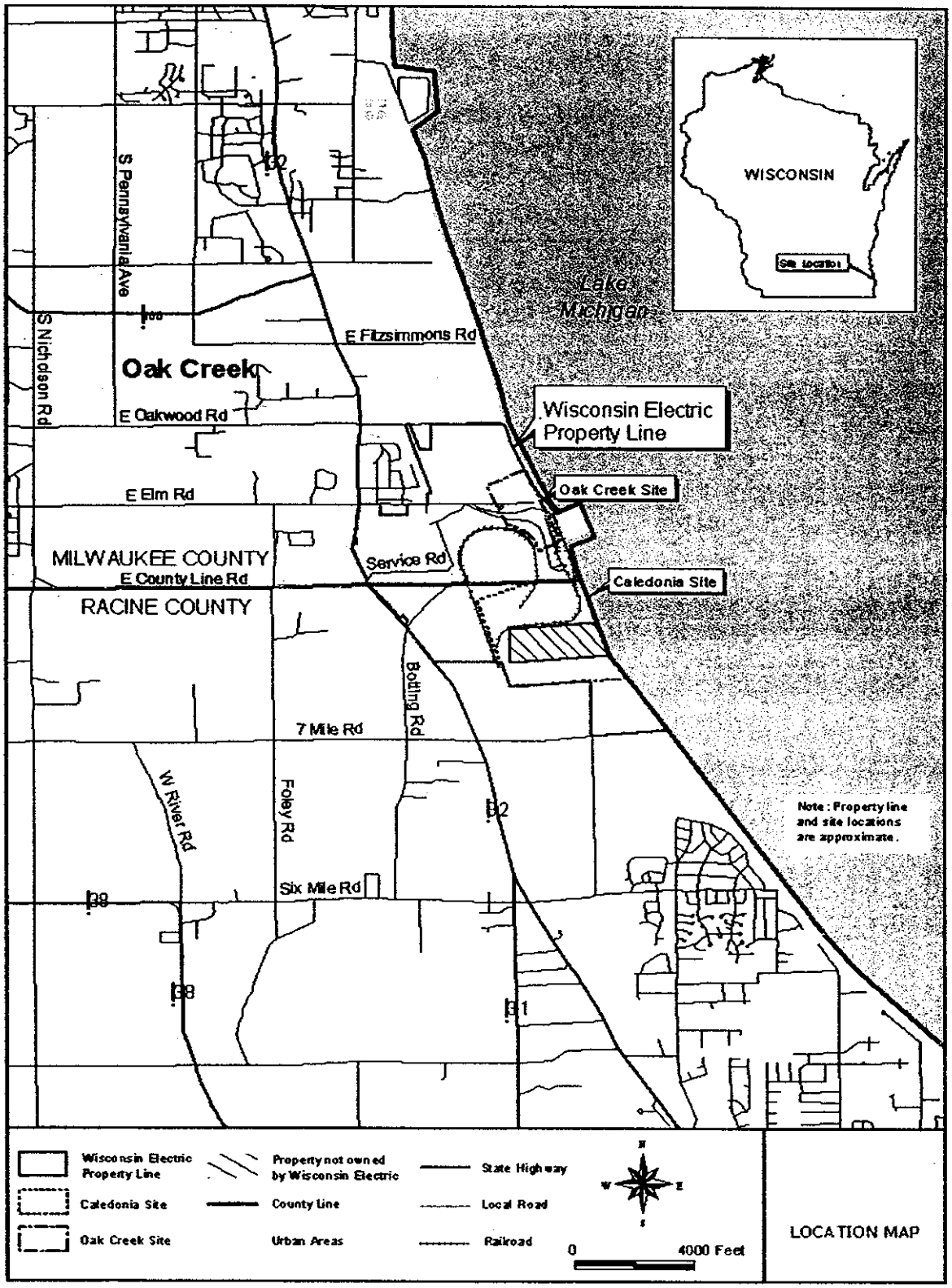


Figure 4: Photograph of the existing Elm Road Generating Station site, showing the existing Oak Creek Power Plant and its relation to Lake Michigan and the surrounding area.

Project Description

Wisconsin Energy proposes to build five new generating units, in order to ensure reliable electric power for the customers of its utility subsidiaries. In particular, WEC proposes to construct, through its W.E. Power subsidiary:

- Two natural gas-based, combined-cycle, generating units in the City of Port Washington, each rated at approximately 545 megawatts. The first unit is proposed for service in 2005; the second unit in 2008.

- Two supercritical, pulverized-coal, generating units in the City of Oak Creek, each rated at approximately 615 megawatts. The first unit is proposed for service in 2007; the second unit in 2009.

- One integrated-gasification, combined-cycle, generating unit in the City of Oak Creek, rated at approximately 600 megawatts, to enter into initial service in 2011.

The projects are further described below, and are more thoroughly described in Enclosures 6 and 7 to the Application.

Port Washington Generating Station

It is proposed that two new combined-cycle generating units be installed at the Port Washington Generating Station. The units will use modern, natural gas-based, turbines. The turbines operate in much the same manner as a jet engine. However, because they are designed specifically for power plants, these engines are larger, more efficient, cleaner, and quiet.

Natural gas will be delivered to the plant through a new 16.5 mile underground pipeline, which will connect to the ANR Pipeline Company's pipeline in the Town of Jackson, Washington County. The proposed pipeline route will follow existing transmission corridors where possible. In addition to providing the fuel source for the new generating units, the pipeline will enhance the reliability of Wisconsin Gas Company's distribution system in the Port Washington area.

Natural gas will be burned directly in the combustion turbines where the air will be heated, causing it to expand and flow through a series of blades (similar to fan blades). As the gas expands through the turbine, the blades will rotate the turbine shaft, which will turn a generator to produce electricity.

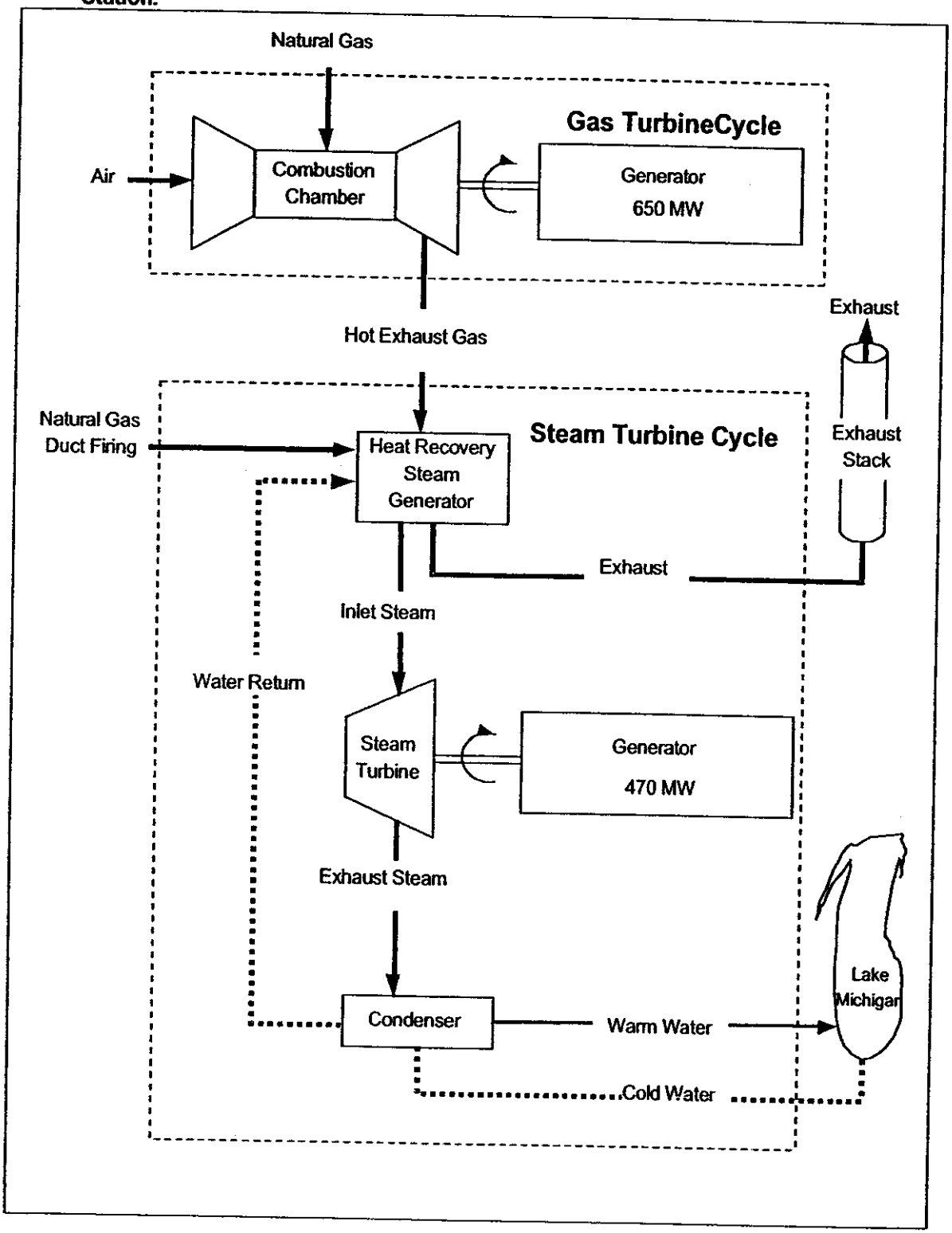
To make the plant even more efficient, the hot exhaust from the turbines will pass through a boiler to produce steam. The steam will flow to a dedicated steam turbine where additional electricity will be generated. As with the existing coal plant, once the steam has finished its work it will then be condensed, by cooling it with Lake Michigan water, and returned to the boilers to repeat the cycle.

Each combustion turbine will incorporate an air inlet system with specially designed equipment to filter the inlet air, as well as to cool the inlet air during warm weather, and to attenuate noise.

The exhaust from the boilers will pass through equipment designed to reduce nitrogen oxides, carbon monoxide and volatile organic compounds. The facility will be designed and operated such that it meets all applicable emission regulations. The exhaust stacks are expected to be between 200 to 250-feet high, replacing the existing 500-foot chimneys.

Extensive noise abatement equipment will be installed; it is expected that the new facility will be quieter than the existing plant operations.

Figure 5: Diagram of basic cycle for the proposed new units at the Port Washington Generating Station.



In order to help preserve the historic nature of the existing Port Washington plant, the new units will be partially constructed within the existing plant structure. W.E. Power has retained a Wisconsin architectural firm to assist in the redesign of the structure.

Once built, the new facility will produce about 1,090 megawatts, or enough to supply about 400,000 homes with reliable and economical electricity. It is expected that the facility will generally operate as an intermediate-load plant, meaning that it will run 5 to 7 days a week, and shut down each evening. However, the facility is expected to run additional hours during its first few years of operation (until the first new Elm Road coal unit is brought on line). Occasional outages at other units on the system, or extreme weather conditions, could cause the facility to operate around the clock from time to time.

Figure 6: Layout of the proposed new units at the Port Washington Generating Station.

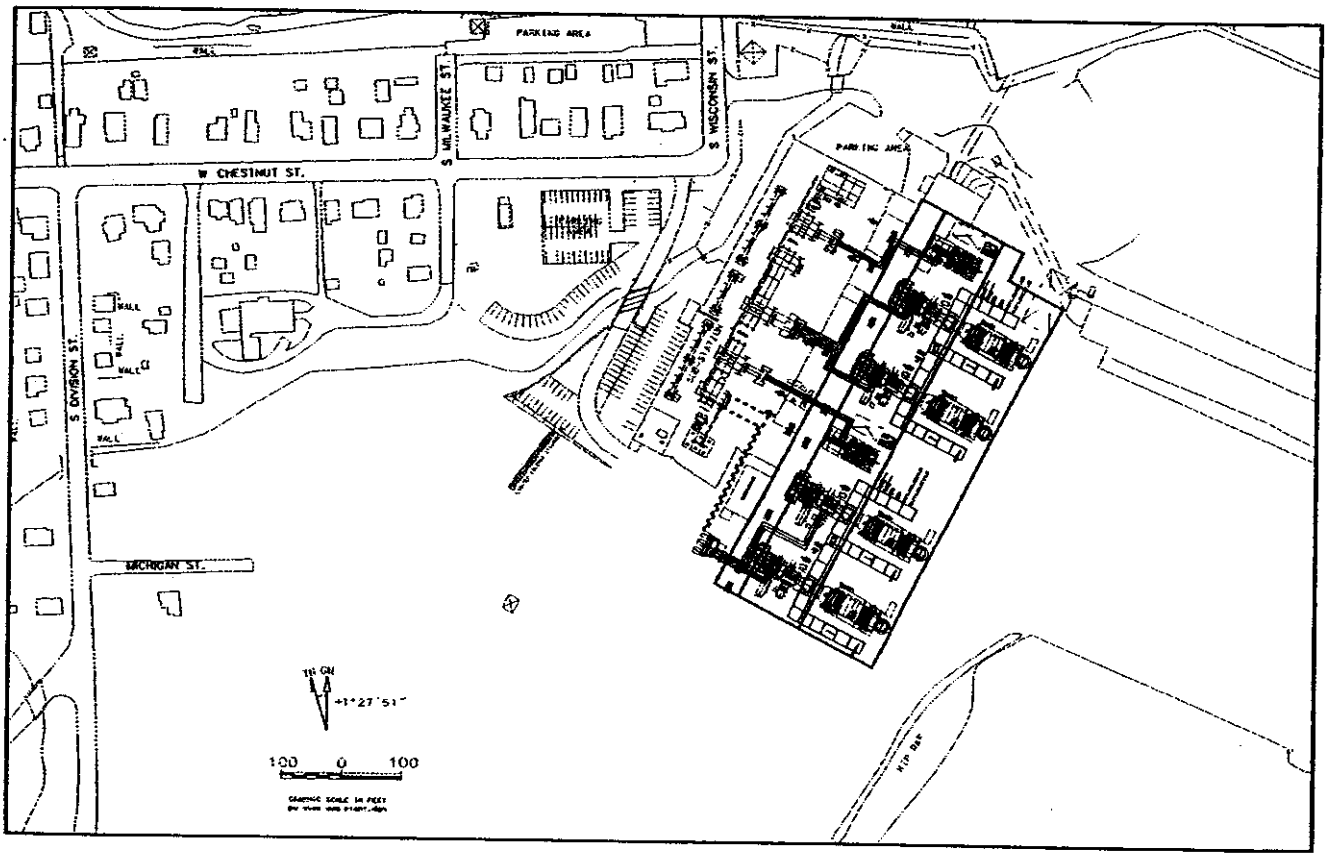
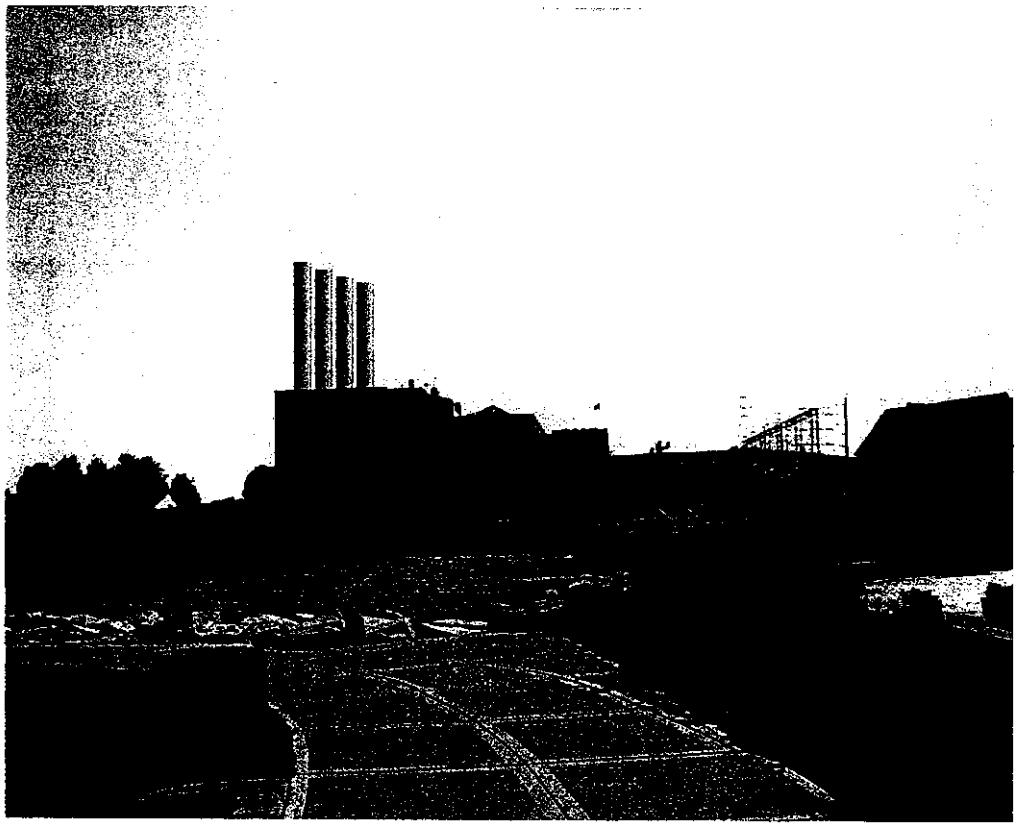


Figure 7: Current photograph of the Port Washington Power Plant, and artist rendering of the proposed Port Washington Generating Station. Both views are looking south, as observed from the Downtown Port Washington.



Elm Road Generating Station

Three new coal-based units are proposed for the Elm Road Generating Station. W.E. Power plans to use two different designs—both based on coal-fuel technology.

Supercritical Pulverized Coal Generating Units

The first two units will incorporate a technology that is very similar, although more efficient, than that in current use at the Oak Creek plant. Basically, these units will pulverize coal and "blow" it into the boiler where it will be burned to produce steam. However, in order to increase efficiency, these two units will use once-through supercritical boilers, as opposed to the "drum" type boilers that are used for the existing coal-based units. These terms refer to how water is circulated to cool the tubing that forms the furnace enclosure, where fuel is burned to release heat. The heat is transferred through the tubes and into the water passing through to generate steam.

At higher pressures and temperatures, greater steam-turbine efficiency can be achieved. This improvement means that less fuel needs to be fired for a given plant output, allowing for better economics while also producing less carbon dioxide and other emissions.

The steam from the supercritical boilers will pass through a series of turbines. As the steam expands through these turbines, blades within the turbines will turn a shaft, which will transfer power to an electric generator. The steam will then be condensed, by cooling it with Lake Michigan water, and returned to the boilers to repeat the cycle.

Plant equipment will include fans for providing the air used in combustion and circulation through the boiler, pumps for circulating the water through the boiler, pumps to circulate Lake Michigan water through the unit condensers and back to the lake, and coal and ash handling equipment.

Extensive systems will be installed to control emissions from the units. These will include:

- Controls to minimize nitrogen oxide emissions, including specialized coal burners and a selective catalytic reduction system that will remove nitrogen oxides from the exhaust.

- Installation of a fabric filter, or a precipitator, to remove particulate matter (flyash). Wisconsin Electric currently reuses over 90% of the flyash produced at the site, and anticipates similar reuse of the flyash produced by the new units, and the eventual beneficial utilization of 100% of the flyash.

- A system to remove sulfur dioxide emissions. It is anticipated that limestone slurry will be sprayed into the exhaust gases in an absorber, to remove sulfur dioxide, in a so-called 'wet limestone scrubber.' Following use, the resulting limestone slurry may be processed to produce a synthetic gypsum material suitable for use at a wall board production facility.

- Hazardous air pollutants, including mercury, will also be removed by a combination of a fabric filter and the wet limestone scrubber.

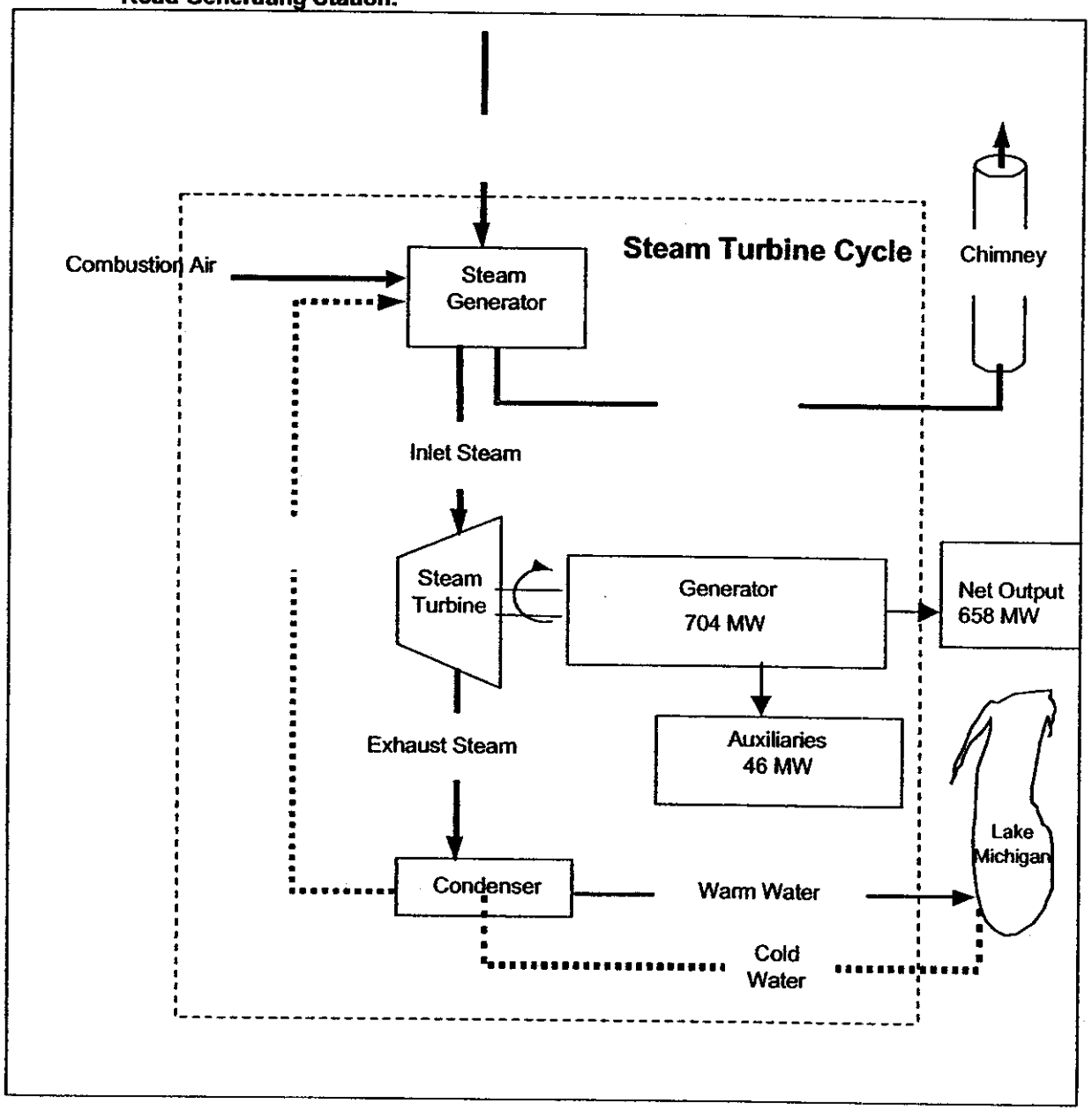
- An exhaust stack anticipated to be 600 to 700 feet high.

- Non-contact cooling water will be drawn from Lake Michigan. "Once through cooling," which allows an increase in efficiency (and resulting decrease in air emissions) of approximately 4%, is a preferred environmental alternative to cooling towers. Additionally, there will be

little or no evaporative losses with once through cooling, especially compared with cooling towers. Intake structures will be designed and upgraded to minimize impact on aquatic life.

Carbon dioxide emissions were considered in the selection of the technology. The best known method for CO_2 reduction is to design the unit for the maximum efficiency practical. The selection of the supercritical cycle will ensure the least CO_2 emissions possible.

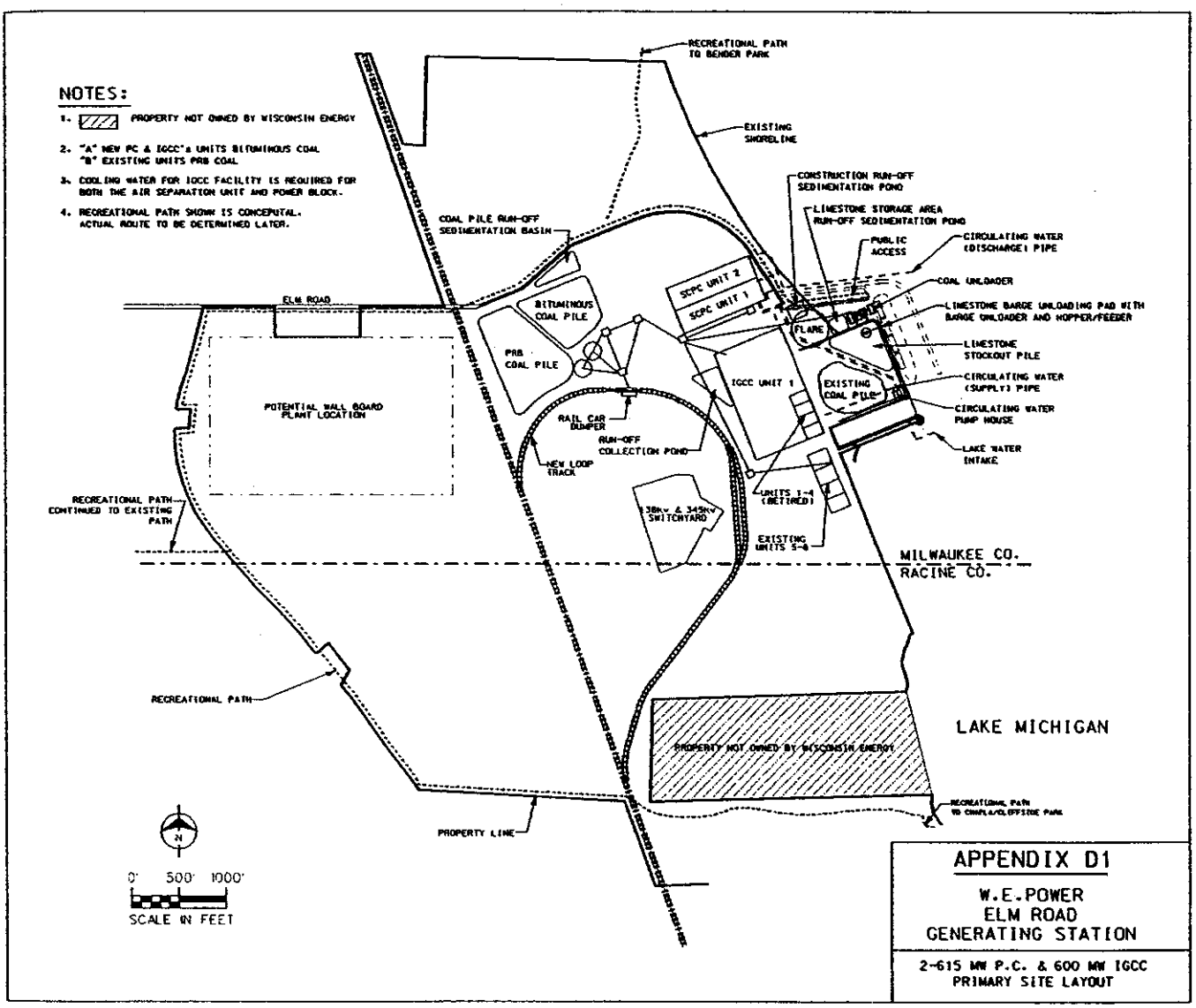
Figure 8: Diagram of basic cycle for the proposed Supercritical Pulverized Coal units for the Elm Road Generating Station.



The units will be designed and operated to meet all applicable emission requirements. Monitoring equipment will be used to continuously measure emissions levels. Emissions data collected from the continuous emissions monitors will be reported to the permitting authority.

It is proposed that these two units be constructed north of the existing Oak Creek Power Plant, as shown in the general location map (Figure 9). An alternate site is proposed that is south of the existing power plant, in the Town of Caledonia.

Figure 9: Layout of the proposed new units at the Elm Road Generating Station.



It is expected that coal will be delivered to the site by specialty trains, as used by the existing Oak Creek Power Plant, or boats, as formerly used by the plant. The company expects to have installed a railway overpass at Seven Mile Road, and potentially at Six Mile Road, in order to prevent the disruption of automobile traffic. Equipment will be installed to control fugitive dust from the coal storage and handling systems. Berms and equipment designed to minimize noise during the unloading of coal trains will be incorporated with the new units.

Limestone delivery will be by rail or lake barge.

Integrated Gasification Combined-Cycle Generating Unit
The third unit will utilize an emerging technology in which the coal fuel will be gasified and cleaned prior to being used by a combined-cycle power plant. The power production portion of this facility will use technology similar to that proposed for the Port Washington site. However, rather than burn natural gas, the unit will produce its own gas in a gasification plant, where coal will be heated to high temperatures in a vessel where the atmosphere inside is precisely controlled so the coal does not burn, but is partially oxidized. The product of this process is a synthesis gas, and a molten slag.

An air separation plant will be installed to supply oxygen to the gasifier. Nitrogen from the separation plant will be injected into the combustion turbines, to increase unit efficiency.

An extensive system will be used to cool and clean the synthesis gas, prior to burning it in the combustion turbines. This system will include an acid gas removal plant, where over 98 percent of the sulfur containing compounds will be removed. The sulfur-containing gases from this removal plant will then be converted to elemental sulfur, or sulfuric acid, and beneficially reused.

The molten slag from the gasifiers will be cooled in a quenching tank, where it will break up into a small aggregate-like material. There are existing commercial uses for this aggregate product

Once the synthesis gas is processed, it becomes a clean burning fuel that can be utilized in modern and efficient combustion turbines to produce electricity. The exhaust gases from the combustion turbines will be passed through boilers, where steam will be generated and used in a turbine to produce additional electricity.

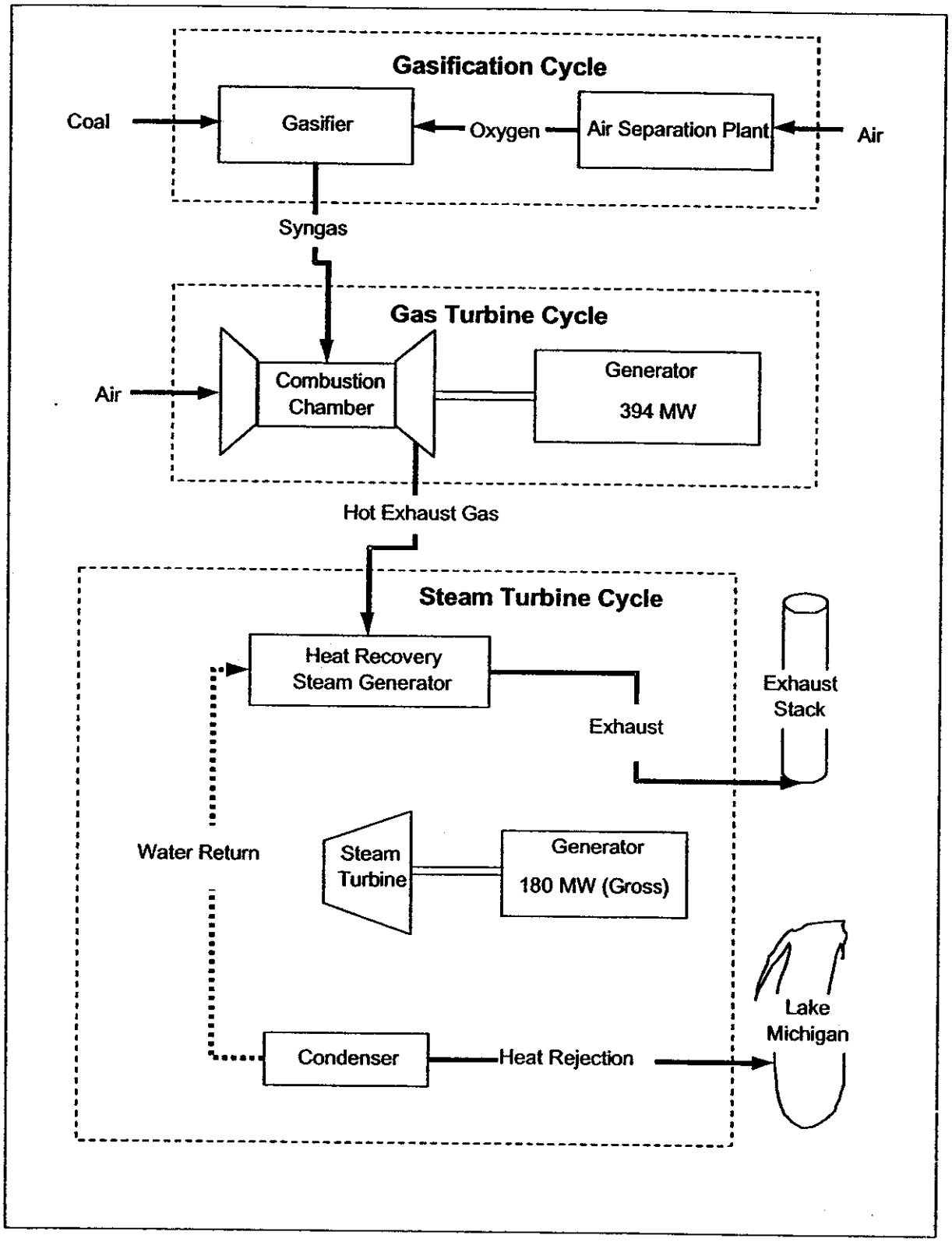
The units will be designed and operated to meet all applicable emission requirements. This emerging technology has the potential to achieve very low emissions, and high efficiencies.

The integrated gasification combined-cycle technology will benefit from the use of Lake Michigan for cooling water similarly to the supercritical pulverized coal units. Cooling water is needed for both the steam turbine condenser as well as the air separation unit.

Wisconsin Electric plans to achieve the beneficial utilization of all solid waste products from the gasification facility.

Monitoring equipment will be used to continuously measure emissions levels. Emissions data collected from the continuous emissions monitors will be reported to the permitting authority.

Figure 10: Diagram of basic cycle for the proposed Integrated Gasified Combined-Cycle Generating Unit at the Elm Road Generating Station



Need for Additional Generating Capacity

Demand for electricity supplied by Wisconsin Electric continues to increase, driven by population growth, business expansion and increasing usage per customer. The peak demand experienced on Wisconsin Energy's utility systems occurred during the summer of 2001 and was 6,298 megawatts. If this actual demand is adjusted to be consistent with planning assumptions (i.e., normal peak producing weather, the availability of load management opportunities, etc.) the 2001 peak would have been 5,764 MWs. Wisconsin Electric forecasts that the peak demand by its customers will grow at approximately 2.9 percent annually from 2002 through 2011 to 7,612 MWs.

In order to satisfy this need, Wisconsin Electric must arrange for this capacity plus an 18 percent reserve margin, to ensure that it can reliably meet its customers' requirements, per guidelines established by the Public Service Commission of Wisconsin.

In looking at alternatives for meeting this increased demand, Wisconsin Electric included a forecast of the portions of this demand that might be satisfied by continued energy efficiency measures, demand-side management activities (which shift peak demand to off-peak hours) and by use of renewable energy sources for the generation of electricity. Even after taking into account these measures, however, it is evident that a substantial increase in electric generation resources will be required over the next decade to reliably meet the demand of Wisconsin Electric's customers.

As part of the *Power the Future* initiatives, Wisconsin Electric plans to retire its existing Port Washington Power Plant and to repower the site with new, efficient generation. The existing facility initially went into service in 1935 and is now over 65 years old. The exiting units produce 337 MWs. The retirement of these units, along with the 18% reserve margin and various other factors, increases Wisconsin Electric's capacity needs to 2,479 MWs in 2011. However, this projection depends on several critical assumptions that no generating units other than the existing Port Washington units will be retired over this period, and that the Point Beach Nuclear Plant will be re-licensed. Given that a number of existing units will be more than 50 years old by 2011, and issues involving the re-licensing of the Point Beach Nuclear Plant, the new capacity additions will provide some hedge against loss of existing generation.

The portion of the new generating facilities contemplated by this application that is expected to be available for use by Wisconsin Energy's utilities is approximately 2,620 MWs—it is anticipated that the remaining capacity will be leased by other Wisconsin-based utilities.

Advantages of WEC's *Power the Future* Proposal

With electricity demand in Wisconsin growing at a rate of nearly three percent per year and Wisconsin moving toward a high degree of reliance on a single fuel source for electric generation, Wisconsin Energy sees a critical need to move Wisconsin toward a sound, strategic approach to secure the state's power supply. A reasonably priced, reliable electric supply is a key factor in sustaining Wisconsin's economic growth.

The *Power the Future* proposal is grounded in the belief that an energy policy must be disciplined and follow three basic principles:

1. **Achieve balance** among economy, environment and energy supply. All three are important and should be balanced when developing an energy policy.

2. **Emphasize fuel diversity** to ensure flexibility when meeting power needs. This helps protect customers from the effects of fuel shortages and supply-and-demand-driven price increases. With the addition of new technology coal-based generation, the *Power the Future* proposal takes advantage of a domestic fuel resource with large proven reserves. Similarly, the increased commitment to renewable energy resources also enhances fuel diversity.

3. **Commit to long-term solutions** that rely on both utility and non-utility related generators to build capacity.

With these basic principles as a foundation, the *Power the Future* proposal was developed to address the energy needs of the full range of Wisconsin Energy's customers and advance the state's desires for a strong economy and a clean environment. Key advantages include:

- **Stable, affordable energy prices.** By keeping fuel sources diverse and balanced, the plan shields customers from the effects of fuel shortages and resulting price spikes. Customers also benefit from coal's lower and more stable prices versus natural gas. The coal-based units that are part of the *Power the Future* proposal could save customers about $8 billion ($1 billion on a present value basis), when compared to a "natural gas only" electric generation solution.

- **Reliable power.** Society's reliance on computers and electronics makes power reliability more critical than ever. A diverse fuel mix, including renewable energy and conservation, helps prevent large-scale supply interruptions. (And the distribution upgrades, as proposed by Wisconsin Electric as part of the *Power the Future* initiatives, will improve local service reliability.)

- **Environmental factors and new electric generation.** Modern, high-efficiency power plants mean Wisconsin can balance its growing need for more electricity with emission reductions. For example, the new coal plants will be 50 percent more efficient than Wisconsin Energy's coal-based Port Washington Power Plant, which is scheduled for retirement. This means that the new plants will use one-third less coal for each megawatt-hour of energy, and less coal consumption means not only lower emissions, but less energy required for shipping and less land disrupted by coal mining. Reductions in emissions will be dramatic. The new coal technologies will remove more than 95 percent of sulfur dioxide, more than 90 percent of nitrogen oxides, more than 99 percent of particulate matter, and 70 percent or more of mercury. The improved efficiency also means lower carbon dioxide emissions. Wisconsin Energy will continue its commitment to environmental improvements

in its existing generation, and new power units help the company replace older, less efficient power units.

- **Environmental benefit.** Older, less efficient, coal-based power plants will be replaced with newer, more efficient natural gas and coal-based generating units. These new units will use state-of-the-art emissions control technology that will allow Wisconsin Energy to generate more electricity while reducing overall emissions. In addition, as another element of the overall *Power the Future* plan, Wisconsin Energy will invest $1.3 billion over ten years to upgrade the company's existing power plants, further reducing emissions.

- **Enhanced Energy Conservation.** Under the *Power the Future* plan, Wisconsin Energy has made a commitment to work on projects beyond the scope of state-mandated Public Benefits activities to further encourage the efficient use of energy.

- **Increased Funding for Renewable Resources.** The company will increase the amount of renewable energy Wisconsin Energy uses beyond what is required by Wisconsin law.

- **Increased Funding to Address Global Climate Change.** Under the *Power the Future* plan, Wisconsin Energy will provide funds to develop resources and technologies that will help us take responsible actions to mitigate the production of carbon dioxide.

- **Use of existing sites to build new electric power units.** New power plant construction often involves the development of greenfield sites, with a significant disruption to the community and the environment that such change can bring. The *Power the Future* plan uses existing power plant locations in Oak Creek and Port Washington. These locations are among the state's most environmentally suitable power plant sites. Both have transmission in place, and Lake Michigan cooling water is easily available. Oak Creek already has rail facilities for coal shipment. The Port Washington site will need a 16-mile lateral to connect with the nearest gas-supply pipeline.

- **Employment.** The new power plants comprise the largest construction project in state history, creating an estimated 1,200 construction jobs requiring some 15 million work hours, at a total labor payroll of over $1 billion. Wisconsin Energy has signed a labor agreement with the Milwaukee Building and Construction Trades Council for power plant construction. Under the agreement, the company commits to hiring union labor for *Power the Future* projects, and the unions agree to build the plants without delays, strikes, or work stoppages. Once the units are in operation, there also will be over 200 permanent union operations positions available.

- **Minority and Small Business Opportunities.** Wisconsin Energy is committed to providing business opportunities for minority business enterprises and small business enterprises. The construction programs under the *Power the Future* program will include establishment of attainable goals for the inclusion of these business enterprises, and for their participation in the construction of the new generating facilities. A citizen advisory council will also be established to monitor supplier diversity activities and progress toward goals. The company also believes it is appropriate that the work force associated with the construction of its generating units reflect the diversity of the customer base within the communities that are served by the company.

- **Advanced Coal Technology.** Coal became the nation's primary power plant fuel because it is inexpensive, abundant, and available domestically. Those virtues will not change. New

technologies are necessary as utilities strive to meet stricter air-quality rules and deal with public demands to reduce greenhouse gas emissions. In assembling *Power the Future*, Wisconsin Energy explored several advanced coal technologies before settling on a combination of supercritical pulverized coal and integrated gasification combined cycle combustion for the new power plants. Supercritical pulverized coal can carry the initiative forward in the immediate future, allowing time for the integrated gasification combined cycle technology to be further developed through technological improvements and industry-specific experience.

- **Energy Security.** A mix of fuel sources, or fuel diversity, for new power unit development enhances long-term fuel price stability and provides customers with a stable, less costly electricity supply. Using a diverse fuel mix of coal, nuclear, gas, hydro and renewable energy sources, along with purchased power, helps ensure adequate, reliable and affordable power.

- **Innovative Structure.** *Power the Future* proposes an innovative approach, blessed by the Wisconsin legislature, to providing power and building new generation. It is particularly important to consider new structures for this large-scale project, given the state of the economy and the large cost of building new power plants. The new plants will be owned by a Wisconsin Energy generation subsidiary, W.E. Power, LLC, that will lease the plants to Wisconsin Electric for a 20- to 25-year period. Wisconsin Electric-Wisconsin Gas employees will operate and maintain the new plants as part of the lease agreement. Wisconsin Energy's existing power plants will remain with the regulated utility and their regulatory status would be unchanged. Wisconsin Energy will work closely with the Public Service Commission of Wisconsin to ensure the state's long-term energy needs are met at a reasonable cost to all customers, small and large.

- **Coalition Approach to Solving Wisconsin's energy needs.** Wisconsin Energy believes it is important to work with key customer and environmental groups, public officials, business leaders, other utilities and labor organizations to discuss the energy challenge and develop a framework to address the energy needs of Wisconsin for the rest of the decade. The company worked with these key groups to design a conceptual framework for additional power development in the state, which became the *Power the Future* plan. The discussions were a first for some of the parties involved, emphasizing the growing urgency of those concerned with meeting Wisconsin's future energy needs. The results of these discussions are now presented to the Public Service Commission of Wisconsin for their consideration.

Environmental and Community Issues

The Port Washington Generating Station and the Elm Road Generating Station will both use a combination of state-of-the-art methods for controlling emissions. These control technologies will achieve Clean Air Act goals through the installation of equipment that meets Best Available Control Technology, Maximum Available Control Technology, and Lowest Available Emission Rate requirements. As such, both facilities will meet or exceed the latest Federal and State environmental standards.

An extensive discussion of the environmental impacts of the project is included in enclosures 6 and 7 of the Application.

Port Washington Generating Station

Wisconsin Energy plans to repower the existing Port Washington Power Plant with new natural gas-based combined-cycle generating units. As a result, many of the environmental and site impacts will be significantly reduced.

Air Emissions

Multiple air emission constituents will be evaluated in the process of permitting the new generating units. Emissions from the new facility will be significantly reduced in most cases compared with emissions from the existing plant. The maximum predicted releases of particulate matter will be less than the allowable limits under Prevention of Significant Deterioration rules.

Water Resources

Lake Michigan water will be used for once-through non-contact condenser cooling and combustion air chilling. The new units will draw cooling water from Lake Michigan via the existing intake channel that extends adjacent to the south side of the coal dock. The quantity of cooling water is expected to be similar to that used by the existing coal units.

Waste water and storm water runoff will be controlled by a wastewater treatment system. Overall, the final wastewater and storm water discharge quality will improve compared to the current coal-based facility. Some wastewater will be handled off-site by a licensed contractor.

Sanitary waste will continue to be routed to the existing municipal sanitary sewer system.

Vegetation and wildlife

Buildings and parking areas cover most of the area that will be impacted by the project. Wildlife species that are present in the vicinity of the proposed project co-exist with the present industrial and residential uses of the area. There is no indication of any threatened or endangered species in the vicinity of the proposed generation station.

Land use

The new generating units will be constructed mostly within the existing plant operating area. All land is currently owned by Wisconsin Electric.

Local community services

The proposed facilities will be self-sufficient except for potable water, which will continue to be provided by the City's water utility, sanitary wastewater, which will continue to be discharged to Port Washington municipal sewage treatment facilities, and emergency services. The facilities will have extensive fire suppression systems, to serve as the first-line of defense against fires.

Roads
Although not directly related to the project, Wisconsin Electric is developing an access road from the bluff to the plant site, to provide truck and equipment access to the existing plant. After the existing units are retired and the new gas units are in service, vehicle traffic to the site is expected to decrease from present levels. As a result, Wisconsin Electric plans to turn the new road over to the City of Port Washington, for use by the community. This road will provide community access to the lakeshore south of the generating facility, for recreational and other purposes.

Noise
Operational noise sources include the combustion turbine generators, heat recovery steam generators, steam turbine generators, generator step-up transformers and roof top ventilation fans. Noise attenuating equipment and materials will be incorporated into the design to minimize the facility's sound impacts on the surrounding community. Noise attenuating building materials will provide additional noise suppression.

An acoustical consultant familiar will controlling noise levels from similar facilities has been retained to assist the project in minimizing sound levels from the new units.

Visual impact
The most notable change in visual impact from the facility will come from the removal of the two existing 500-foot high stacks and construction of four new stacks, which will be between 200 and 250 feet high. Removal of the coal pile and associated runoff basins will dramatically change the view of the site from downtown and the harbor area.

The dock area currently used by the plant's coal pile will no longer be required for generation purposes. The company hopes that this area can be dedicated for some future community use.

Historic properties
The existing Port Washington Power Plant was constructed in 1935 and is listed in the Architecture and History Inventory. The plant was also designated a National Historic Mechanical Engineering Landmark in 1980 by the American Society of Mechanical Engineers. The existing plaque will be maintained in a prominent position to continue to recognize the historic accomplishments that occurred at the site.

Much of the existing building will be retained and integrated with the new facilities, to preserve the historic character of the structure.

Connecting facilities
The generation station will be connected to the existing electric transmission system. In support of the proposed project, the American Transmission Company is filing a request for construction authorization. They have identified certain system improvements that they wish to undertake to serve the new capacity, which includes rebuilding certain overhead transmission lines on the current structures.

A new natural gas pipeline will be extended to the power plant. A 16.5 mile underground pipeline will be built to connect to the ANR Pipeline Company's pipeline in the Town of Jackson in Washington County. The proposed pipeline route will follow existing electric transmission corridors where possible.

Economic Impacts
The community will benefit in general, as well as all customers in Wisconsin Electric's service area, through continued reliable service resulting from the generating capacity provided by the facility. In addition, the City of Port Washington and Ozaukee County will realize a significant increase in shared tax revenue.

Average employment during the construction period is estimated to be 300 workers. During peak employment the project is expected to generate approximately 500 jobs, with a total payroll of approximately $150 million. A substantial portion of the construction workforce is expected to come from eastern Wisconsin. Once in operation, the total employment for the facility will be approximately 30 employees.

Elm Road Generating Station

The Elm Road Generating Station is another example of a brownfield property where power generation has been and continues to take place. The preferred site for the new plants includes re-using the location of four previously retired coal units. The site offers existing infrastructure for electrical transmission, access to railroads and the means, with some improvements, to have lake delivery of coal, limestone and other raw materials. Barge delivery of certain power plant equipment may also be possible. Access to Lake Michigan provides a source of open cycle cooling water for the plant. This type of cooling process improves efficiency and reduces evaporative loss of water.

Air Emissions

Modeling indicates that, with the installation of the state-of-the-art control technologies proposed, the National Ambient Air Quality Standards will continue to be maintained. Emissions of nitrogen oxides are expected to be reduced by about 85%, sulfur dioxides by about 95%, particulate removal will be about 99.7% and mercury reductions of about 70% are predicted.

More than 180 separate air emissions will be evaluated in the permitting process. Although there is currently no requirement for controlling greenhouse gases, consideration of the emission rate of carbon dioxide was factored into the selection of technologies for the new coal units.

Water Resources

Lake Michigan water will be used for once-through, non-contact, condenser cooling. Cooling water will be withdrawn using the existing intake structure for the first new supercritical pulverized coal unit. Because the former four units had a combined capacity of approximately 500 megawatts, the existing intake structure should be adequately sized to accommodate this first unit. Additional cooling water will be needed when the second unit is installed, and when the integrated gasification combined cycle unit goes in service. Intake structure modifications are anticipated and the details of any improvements will be determined after additional federal EPA regulations have been finalized. Thermal discharges from the proposed generating units will meet state water quality standards.

Waste water and storm water runoff will be controlled by a new wastewater treatment system. Collection and treatment of coal pile runoff will be provided.

Land Resources

Wisconsin Energy's goal is to use 100% of the coal combustion/conversion products from the proposed coal-based units. Based on our current experience and the anticipated demand for these materials, new landfill construction is not planned for this project. During the time it takes to reach 100% utilization of these materials, space at existing permitted landfills can be used.

Vegetation and wildlife

Most of the property for both the Oak Creek and Caledonia sites has been previously cleared for activities and operations related to the power plant. Some areas also were used for agricultural use. Small amounts of wet meadow, woodland, old field and marsh/pond habitats are present. Wildlife present in the vicinity of the proposed facilities already co-exist with current power plant, residential and industrial activities. Efforts will be made to minimize impacts to certain wooded areas and other locations on the property that are environmentally significant.

Property Ownership for Generating Units

The new generating units will be constructed on land currently owned by Wisconsin Electric.

Local community services
The proposed facilities will be self-sufficient except for potable water, sanitary wastewater, garbage collection and other basic municipal services. Local municipalities will also provide police, fire and other emergency services. The facilities will have extensive fire suppression systems, to serve as the first line of defense against fires.

Roads and railroads
Improvements to the existing railroad tracks on the plant property will allow an entire unit train to pull into the site without the need to break it up into smaller segments. An additional rail car positioner ("indexer") and car dumper will be added to increase the speed of the coal unloading operation.

Access from I-94 is about five miles west of the plant. State highway 32 is the main north-south thoroughfare that provides road access to the site.

Noise
Noise attenuating equipment and materials will be incorporated into the design to minimize the facility's sound impacts on the surrounding community. Noise attenuating building materials will provide additional noise suppression. Improvements to the rail spur, car dumpers and the installation of a rail car positioner will help reduce noise.

An acoustical consultant familiar with controlling noise levels from similar facilities has been retained to assist the project in minimizing sound levels from the new units.

Visual impact
The plant location at the base of the bluff reduces the visible profile of the facilities, screens the visibility of plant facilities and operations from off-site view, and lessens the visual impacts for the inland areas surrounding the site. The existing units and the sites of both proposed generating units will be visible from Lake Michigan. However, the proposed supercritical pulverized coal units are situated near the former site of north Oak Creek units 1-4, so the visual impact of the these new facilities will far less than building at a greenfield location. The greatest change in visual impact will come from the addition of the new stacks. The two new supercritical pulverized coal unit stacks will be approximately 600 to 700 feet high, and the two integrated gasification combined-cycle unit stacks will be approximately 200 to 300 feet in height. A flare of about 200 feet is also required for the gasification facility. The coal pile relocation to the northwest of the existing units and the expansion of the existing dock also will change the view from Lake Michigan.

Known and Listed Historic Properties
There are no existing historic properties listed on the Architecture and History Inventory with the State Historical Society of Wisconsin (SHSW) at the current plant site.

Connecting facilities
The generation station will be connected to the existing electric transmission system. In support of the proposed project, the American Transmission Company has completed an Interconnection Study that includes information about plant substation and other transmission system improvements they anticipate will be needed to accommodate the additional generating capacity.

Economic Impacts
The community will benefit in general, as well as all customers in Wisconsin Electric's service area, through continued reliable service resulting from the generating capacity provided by the facility. In addition, depending on the site alternative approved, the Cities of Oak Creek or Caledonia and either Milwaukee or Racine Counties will realize a significant increase in shared tax revenues.

Average employment during the construction period is estimated to be 500 workers. During peak employment the project is expected to generate approximately 1,200 jobs, with a payroll of approximately $900 million. A substantial portion of the construction workforce is expected to come from eastern Wisconsin. Once in operation, the total employment for the new facilities is expected to be approximately 300 employees.

Public Access
Community access to Lake Michigan will be improved as part of this project:

- A recreational trail will be constructed adjacent to and through a portion of the site, such that it will be possible to bike or walk between the north and south site boundaries.
- The recreational path will also lead to the lake where a fishing pier and picnic area are planned.

Public Outreach Efforts

Wisconsin Energy has prepared materials that outline the plans for these generating facilities for the affected communities. Open house meetings and personal visits were conducted in November and December 2001 and will continue during 2002. WEC representatives have also met with municipal government members of the communities in the area. In addition, WEC has sent letters to nearby property owners informing them of the proposed generating plants and open house meetings.

A formal hearing process, including public hearings, will be conducted by the Public Service Commission to develop a record upon which the Commission will render its decision.

Wisconsin Energy has committed that it will continue to provide various forums to answer questions concerning the project, as well as to address concerns from area residents.

Communications
Printed material to provide information about ***Power the Future*** and our specific plans for the proposed generating stations will be distributed to area residents and may be placed in local newspapers. Our speakers bureau will continue to honor requests of local civic groups and political bodies that ask for information about WEC's plans for future electrical generation. Other future communication will entail continued responsiveness to queries about the project from local, state and national media, including trade publications, and providing update information to various media outlets. For examples of past and current public communications, go to the powerthefuture.net web site for the following:

News Releases:	http://www.powerthefuture.net/newsreleases.htm
Printed Material:	http://www.powerthefuture.net/printads.htm
Speeches:	http://www.powerthefuture.net/speeches.htm
Speakers Bureau:	http://www.we-wg.com/wewgcompany/community/speakers.htm

Project Organization and Structure

The Power-the-Future initiative is designed to provide Wisconsin Electric's customers with a reliable, reasonably priced energy supply through an innovative arrangement. Under this arrangement, Wisconsin Energy Corporation, through one or more wholly or partially owned subsidiaries, will develop, construct, own, finance and lease to Wisconsin Electric several new electric generating facilities. The same arrangement is proposed for major capital improvements to some of Wisconsin Electric's existing electric generating facilities.

More specifically, it is proposed that W.E. Power LLC, a wholly owned subsidiary of WEC, will construct, own and lease to Wisconsin Electric and other interested Wisconsin utilities approximately 2,900 MW of new electric generating facilities, pursuant to long-term facility lease agreements. This section summarizes the proposed lease arrangements, which are contained more fully in Enclosure 5 to this filing.

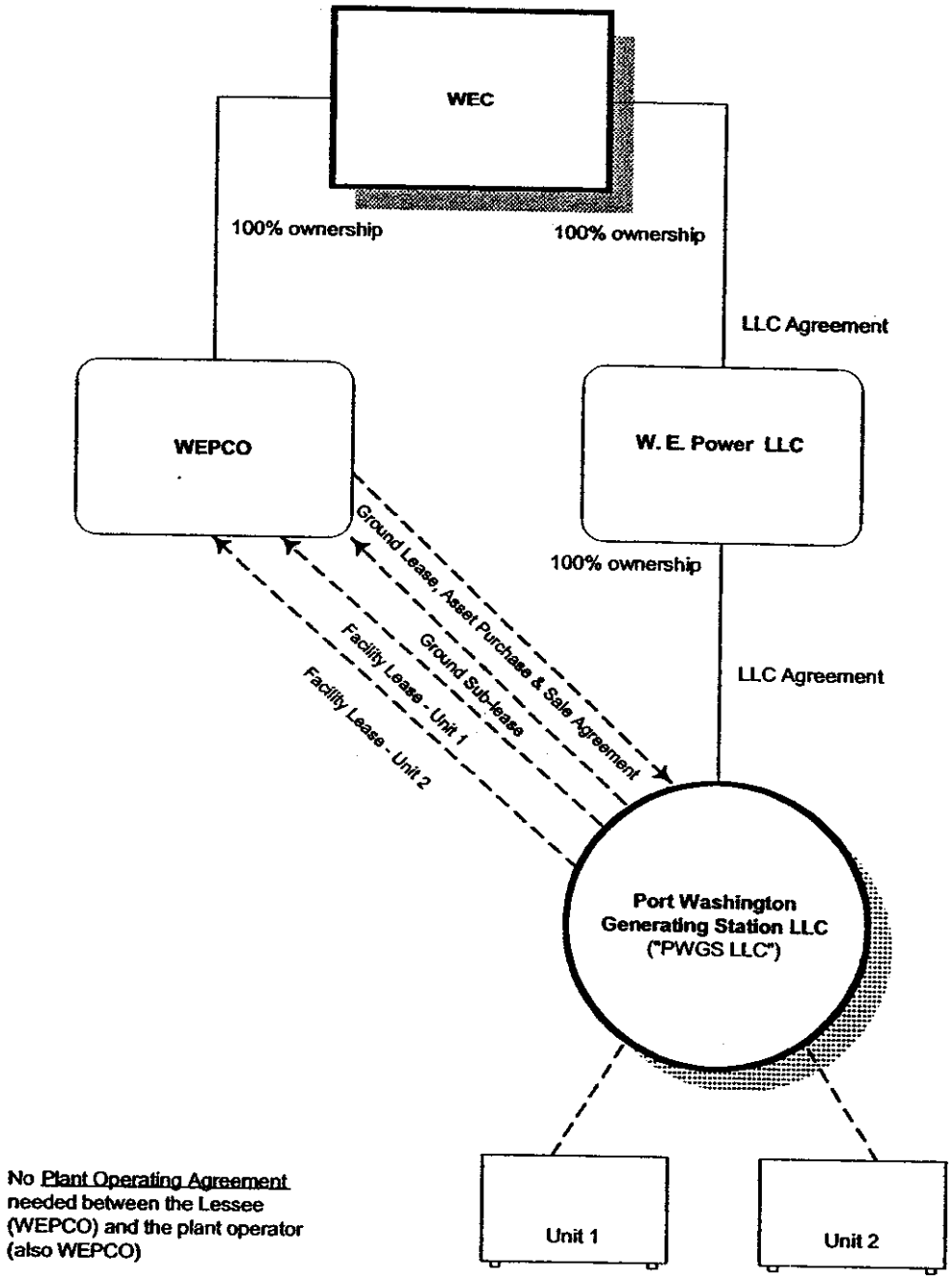
Port Washington

In coordination with the staged decommissioning of Wisconsin Electric's Port Washington Power Plant, Port Washington Generating Station LLC, a wholly owned subsidiary of W.E. Power, will construct two new combined cycle generating units. Wisconsin Electric will lease the real property on which the new units will be constructed to Port Washington LLC pursuant to a ground lease. Wisconsin Electric will also sell to Port Washington LLC certain assets no longer needed for Wisconsin Electric's operation of the existing Port Washington plant for use in the construction and operation of the new combined-cycle generating units.

Port Washington LLC will enter into two Facility Leases with Wisconsin Electric pursuant to which Port Washington LLC will construct the generating units and, following satisfaction of commercial operation and certain other conditions, will lease them to Wisconsin Electric. Coincident with the commencement of the lease of the Facility Leases, Port Washington LLC will sub-lease back to Wisconsin Electric the real property on which the units have been constructed pursuant to a ground sublease.

These relationships are shown in the following diagram.

Figure 11: Port Washington Generating Station Ownership and Lease Arrangements



No Plant Operating Agreement needed between the Lessee (WEPCO) and the plant operator (also WEPCO)

Elm Road

Each of the new Elm Road generating units will be constructed and owned by a special purpose entity ("Elm Road LLC 1", "Elm Road LLC 2" and "Elm Road LLC 3"), each of which will be owned by a wholly owned subsidiary of W.E. Power, and, potentially one or more other minority investors.

Wisconsin Electric will lease to each Elm Road LLC the real property on which its respective unit will be constructed pursuant to a ground lease.

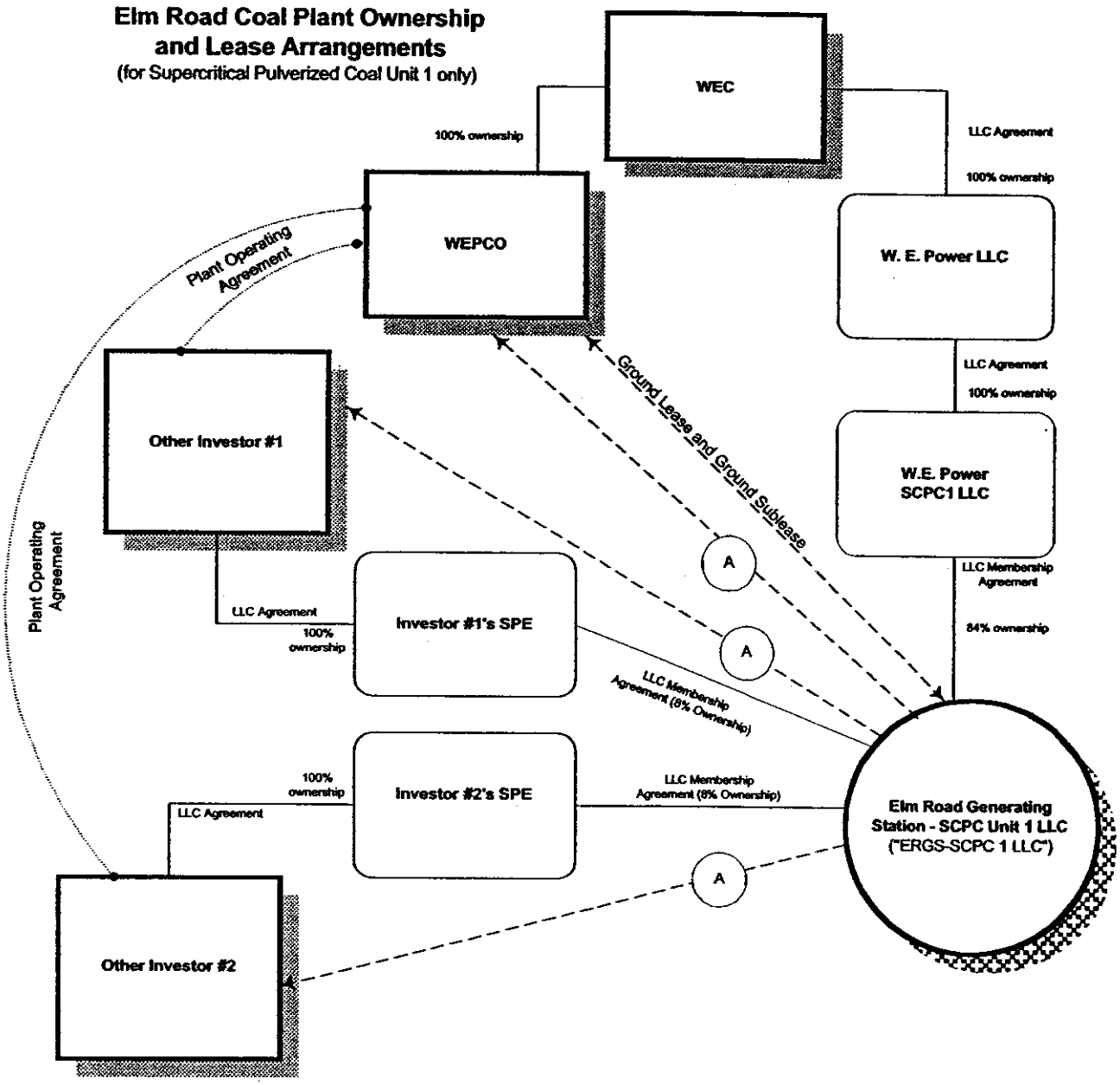
Each Elm Road LLC will enter into a facility lease with Wisconsin Electric and, potentially, one or more other utilities. Under this facility lease, the Elm Road LLC will construct its respective coal unit and, in the case of Elm Road LLC 1, certain coal handling and other common facilities which will be required to operate the new and existing generating units. Following satisfaction of commercial operation and certain other conditions, each Elm Road LLC will lease its respective coal unit to Wisconsin Electric, subject to the rights of the other interested utilities to certain output from the generating unit. Simultaneously with the commencement of the lease of each generating unit, the Elm Road LLC will sub-lease back to Wisconsin Electric the real property on which the generating unit was constructed pursuant to a ground sublease.

Wisconsin Electric and the other interested utilities will enter into a plant operating agreement with respect to each generating unit pursuant to which Wisconsin Electric will assume responsibility for, and have decision-making authority with respect to, the operation and maintenance of, and capital improvements to the generating unit. Wisconsin Electric and the other interested utilities will share all fuel costs and fixed and variable O&M costs and capital expenditures for improvements.

Once Elm Road LLC 2 and 3 have completed construction of their respective units, Elm Road LLC 1 will sell a portion of its interest in the New Common Facilities to each of the other Elm Road LLCs pursuant to separate asset purchase and sale agreements. The Elm Road LLCs will agree how the New Common Facilities are to be owned, managed, operated and maintained pursuant to a common facilities agreement between the Elm Road LLCs.

These relationships are shown in the following diagram.

Figure 12: Elm Road Generating Station Ownership and Lease Arrangements



(A) The Facility Lease is from the ERGS-SCPC 1 LLC (the Lessor) to a primary Lessee (WEPCO) and to two secondary Lessees

Conclusion

Wisconsin Energy and its subsidiaries have a strong track record of innovation and service. The company has served the energy needs of Wisconsin customers for the past 150 years, and intends to continue this proud tradition of innovation and service with its ***Power the Future*** plan.

This application covers the details of the electric generation building element of the ***Power the Future*** plan. It also implements the landmark legislative enactment in 2001 Act 9, which was signed in to law by Governor McCallum following unanimous approval by the Joint Finance Committee of the Wisconsin Legislature. This filing is further facilitated by the Public Service Commission's favorable Declaratory Ruling of October 2001. The ruling allowed Wisconsin Energy to proceed with this filing.

Wisconsin Energy envisioned the ***Power the Future*** plan as a well-balanced, strategic initiative to benefit the entire state—its citizens, the environment and the economy. The building of new electric generation, as outlined in the attached application and supporting materials, demonstrates that Wisconsin Energy remains committed to its tradition of innovation and service to customers. This application represents a commitment on behalf of Wisconsin Energy to provide Wisconsin with a quality, reliable and economically priced power supply.

BEFORE THE PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Wisconsin Electric Power Company, Wisconsin Energy Corporation, W.E. Power, LLC, and Wisconsin Gas Company for a CPCN for construction of two large electric generation facilities and associated high voltage transmission and natural gas interconnection facilities to be located in Ozaukee County.	)	Docket No. 05-CE-117
Application of Wisconsin Electric Power Company, Wisconsin Energy Corporation, W.E. Power, LLC, and Wisconsin Gas Company for a CPCN for construction of three large electric generation facilities and associated high voltage transmission interconnection facilities to be located in Milwaukee and Racine Counties.	)	Docket No. 05-CE-130
Approval of affiliated interest transactions between W.E. Power, LLC, Wisconsin Electric Power Company and Wisconsin Energy Corporation	)	Docket No. 05-AE-109

Application

This application requests all authorizations and approvals necessary to implement the generation supply component of Power the Future (PTF) -- a proposal by Wisconsin Energy Corporation (WEC) to assure Wisconsin customers access to reliable and reasonably-priced power for the next several decades, to create over a thousand jobs in the skilled construction trades, and to improve the environmental performance of the power plant fleet operated by Wisconsin Electric Power Company (WE).

In the following sections of this application and in the enclosures, PTF will be described and justified in detail. Before proceeding to that detail, it is useful to summarize why PTF is in the public interest.

Substantial additional generation needs to be constructed in the next 10 years if the citizens of this state are to have reliable electric service. In order to have reliable energy at a reasonable, predictable cost, it is important that this additional generation be powered by a variety of fuels, including coal and renewables. Because the vast majority of generation built in the last 15 years has been gas-fired and because the vast majority of planned generation is gas-fired, enormous pressure will be put on gas supplies and delivery mechanisms. This creates a very real risk that reliability will be compromised due to supply constraints and that gas prices will be volatile, with their overall trend upward. PTF mitigates this risk by calling for a diversified portfolio of gas-based, coal-based and renewables-based generation.

If PTF is rejected, thereby effectively limiting the generation market to independent power producers or IPPs, it is unlikely that the public interest in diverse generation will be met. Historically, IPPs have shown little inclination to build coal-based generation. No IPP has ever built coal-based generation in Wisconsin. In fact, since PTF was announced almost a year and a half ago, no IPP has proposed a coal based power plant in Wisconsin. Indeed, as documented in the financial and popular press, IPPs have recently been canceling projects, not proposing additional generation.

Building coal-based generation takes more time and is much more costly than building gas-based generation. WEC can only build coal-based plants if it is allowed also to build gas-based plants. Gas-based generation has much lower capital costs and a much shorter construction period. The cash flow from gas-based plants will help WEC secure the funds needed to build the more costly coal-based units. In short, building coal-based plants alone is not an economically viable option. This is why PTF links the construction of new coal-based units to new gas-based units.

Finally, the innovative PTF structure is in the public interest. This structure provides a new regulatory paradigm that allows a utility affiliate to build dedicated generation facilities. This new structure – leased generation – is necessary to provide a viable financial vehicle to Wisconsin Energy which allows WE's customers to realize the benefits of improved reliability, lower rates, rate stability and insulation from the risk of stranded investment. For the reasons mentioned briefly here and elaborated below, these benefits cannot be achieved through the traditional regulatory model or by simply ceding the generation market to IPPs. It is reasonable to conclude that the reason that the Wisconsin Legislature has cleared the way for the new regulatory mechanism reflected in PTF is to secure PTF's benefits for the citizens of Wisconsin.

PTF - Overview

On Nov. 29, 2000, Wisconsin Energy Corporation filed an application with the Public Service Commission of Wisconsin (PSCW) regarding its "Power the Future" proposal to assure reliable, economical and environmentally responsible electric power for Wisconsin. Based on extensive input from customer groups and others, WEC withdrew its original PTF proposal on Feb. 23, 2001, and replaced it with a modified proposal that employs innovative "leased generation contracts" instead of traditional power purchase agreements (PPAs). This modified proposal was filed because the crisis in the California power market and other problems involving electric power market deregulation had raised grave concerns about excessive reliance on PPAs, which are subject to federal rather than PSCW regulation. Using the leasing model, instead of PPAs, allows WEC to proceed with the construction of approximately 2,900 megawatts (MW) of new power generation projects, while ensuring oversight by the PSCW to protect ratepayer interests. At the same time, the lease model allows WE to effectively utilize its established assets. [1]

The recent spectacular collapse of Enron and the loss of investment grade credit ratings by several prominent independent power producers provide additional validation for the concerns motivating PTF. Recent reports in the financial press indicate that last year 91,139 MW of proposed generating capacity – 18 percent of all proposed new additions – were canceled or tabled.[2] In December, for the first time in recent memory, plant cancellations significantly

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[1] Those assets include over a century of experience in the power generation business in Wisconsin.

[2] Rebecca Smith, "Power Industry Cuts Plans for New Plants, Posing Risks for Post-Recessionary Period," Wall Street Journal, Jan. 4, 2002 at A3, A9.

exceeded newly announced projects.[3] According to one commentator, these statistics, which are based on company announcements, "if anything, understate what's actually happening in the market place, because companies often slow projects rather than kill them outright."[4] For example, PG&E National Energy Group announced on Jan. 8 that the gas-based power plant it proposed in 1998 to build at Pleasant Prairie, Wis., will not move forward "at least until 2005 because of the energy market malaise."[5] And as part of the Enron debacle, a federal bankruptcy-court judge recently approved Enron's request to terminate 600 to 700 power-supply contracts, leaving those customers to find alternative sources of supply.[6]

Support for WEC's innovative proposal has come from many quarters – labor, business, groups representing both retail and wholesale customers, and other Wisconsin power suppliers, including Madison Gas & Electric (MGE), Dairyland Power Cooperative and WPPI. The PSCW found sufficient merit in the plan to issue a declaratory ruling that addressed the costs incurred to develop the PTF plan before certificates of public convenience and necessity (CPCNs) are issued.[7] The Wisconsin Legislature expressed its support by passing important enabling legislation that gives statutory recognition and protection to the leased generation contracts that are at the heart of PTF.[8]

In the months since PTF was first proposed, many details have evolved, but the key features remain the same:

- Under PTF, W.E. Power, LLC (W.E. Power), a non-utility generation company owned by WEC, will, together with other Wisconsin-based energy suppliers, build and own -- but not operate -- five new generating units. W.E. Power will also make major new investments in existing (non-nuclear) power plants owned by WE.[9]
- The new plants (and major additions to existing plants) will be leased to WE under long-term leases. The terms of those leases will be consistent with the newly enacted law governing leased generation contracts and will also be subject to approval by the PSCW under § 196.52, Wis. Stat. Obtaining approval of those leases and related affiliated interest agreements is one of the objectives of this application.
- The new power plants will be operated and maintained by WE using utility employees. As is the case with the existing power plants operated by WE, all

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[3] Id.

[4] Id.

[5] Pete Millard, "Questions May Plow Under Power Plant Plants," Milwaukee Business Journal, Jan. 11, 2002 at 1, 39.

[6] "Request to End Contracts Receives Judge's Approval," Wall Street Journal, Jan. 4, 2002, at C9.

[7] PSCW Docket 6630-DR-104. The declaratory ruling is being challenged in court by a coalition of mostly out-of-state independent power producers, including Dynegy, the company that made an eleventh-hour bid for Enron (which was subsequently withdrawn).

[8] Among other things, the Legislature created § 196.52(9) of the Wisconsin Statutes which defines "leased generation contract," spells out the conditions under which the PSCW may approve a leased generation contract, and allows a public utility to recover lease payments in its retail rates.

[9] As explained below, W.E. Power will not directly build and own the new facilities, but will do so through intermediate entities that W.E. Power will own. Other Wisconsin based energy suppliers may be part owners/investors in these intermediate entities.

costs of operation (including fuel) will be incurred by the utility and be subject to PSCW regulation.

- To preserve fuel diversity, the PTF plan proposes to build approximately 1,100 MW of natural gas-based combined cycle capacity and approximately 1,800 MW of advanced-technology coal-based capacity. The extreme volatility in fuel prices – especially gas prices – since PTF was initially proposed confirms the desirability of diversifying fuel risk.
- The older coal-based units at the Port Washington Generating Station (PWGS) will be decommissioned and replaced with combined cycle gas-based units. Advanced technology coal-based units will be built next to the existing coal-based units at the Elm Road Generating Station (ERGS), addressing Wisconsin's need for reliable, economical power in a way that significantly improves the environmental profile of the WE fleet.[10] PTF also provides flexibility for the accelerated retirement of other, older WE coal units, which would also benefit the environment.
- In addition to the positive environmental attributes of the generation technology to be employed by PTF, the plan involves an increased commitment to conservation and renewable fuels, as well as a commitment to address greenhouse gas issues.
- PTF permits other smaller Wisconsin energy providers to invest in the proposed new capacity and obtain ownership rights in a portion of the output or, in the alternative, to purchase power from the new facilities.
- At the end of the initial lease terms, WE will have the opportunity to renew the leases, to buy the generation assets outright, or to secure the generation it needs elsewhere.

PTF has two main components that address the need for reliable energy.

The first component addresses energy supply. W.E. Power will build five new generation units, three of them coal-based and two of them gas-based. The coal-based units consist of two 600-MW units using supercritical pulverized coal (SCPC) technology and one 600-MW unit using integrated gasification combined cycle (IGCC) technology.[11] All five new units would be located at "brownfield" sites – the coal-based units at Elm Road and the gas-based units at Port Washington. The 1930s vintage coal-based units currently operating at Port Washington will be retired. This new construction constitutes a $3 billion addition to Wisconsin's energy infrastructure.

PTF also contributes to increased energy supply by committing to increase the amount of energy derived from renewable fuel sources. While state law requires utilities to obtain a certain percentage of their energy from renewables by 2011[12], WE commits as part of PTF to working

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[10] "Elm Road Generating Station" refers to the combined Oak Creek/Caledonia site.

[11] Supercritical pulverized coal technology is characterized by higher steam temperatures and pressures, resulting in increased efficiency. These plants use selective catalytic reduction (SCR) equipment and scrubbers to reduce NO_x and SO_2 emissions. In contrast, IGCC technology employs two plants that are "integrated" with one another -- a gasification plant that converts coal into a gaseous fuel (like natural gas, but with one quarter of the heat content), and a combined-cycle generating plant which combines a gas turbine with a heat recovery boiler and a steam turbine. The gasification step produces the fuel and the combined cycle step burns it very efficiently to produce electricity. (All capacity ratings are nominal and subject to some variance depending on actual equipment selection and operating results).

[12] §196.378(2), Wis. Stat.

in a collaborative group to reach a target of 5 percent of energy derived from renewables in 10 years. This is a very aggressive target, but WE believes it is achievable.[13] A separate commitment to end-use efficiency ensures that demand-side actions are incorporated into the overall PTF plan.[14] And finally, pending separate regulatory approval, WE has committed to spend $10 million over five years on CO_2 mitigation projects. These projects will be energy focused and Wisconsin focused and will strive to create verifiable CO_2 offsets. The combination of retiring old coal plants and replacing them with new plants and taking the three steps described above will reduce greenhouse gas emissions from the WE generation fleet.

The second component of the PTF reliability plan is the upgrading of WE's existing power plants. While certificates of authority for these upgrade projects will be requested from time to time as needed, this application seeks approval to apply the PTF financial structure to such investments in existing plants.

This application asks that the PSCW grant on a timely basis all authorizations and approvals necessary to implement the generation construction component of PTF. The specific relief sought, and the relevant legal standards, are set forth below in the section entitled "Request for Relief."

I. Energy supply must grow to meet the increasing demands of Wisconsin's economy and its citizens.

Demand for electricity will exceed available supply unless new power plants are built and put in service in a timely manner. Demand for electricity supplied by WE is projected to grow at a 2.9 percent average annual rate from 2002 through 2011. This growth is driven by population growth, growth in the number of households, business expansion, and increasing usage per customer. In addition, firm sales to wholesale customers are expected to increase by 286 MW during this period. The growth in WE's total demand obligation (including reserves) is projected to be 2,033 MW through 2011. The difference between WE's projected demand (including an 18 percent reserve margin as called for under PSCW guidelines) and its net generation (after accounting for retirements) plus purchases is expected to result in a deficit of 2,479 MW in 2011. This is equivalent to approximately 40 percent of WE's current capacity. If the Arrowhead-Weston transmission line is not built, or the 1,000 MW Point Beach nuclear plant is not relicensed by 2010, the deficit will be much greater.[15] WE's detailed demand forecast is contained in Enclosure 1, Need and Supply Analysis Report.[16]

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[13] This commitment is subject to regulatory approval outside of this proceeding and to regulatory authorization to include the cost of renewable fuels in rates.

[14] That commitment, as well, is subject to PSCW review in a separate proceeding and inclusion in utility rates and is not a subject of this application.

[15] Without the Arrowhead-Weston transmission line, the ability to import power into eastern Wisconsin from other regions will continue to be constrained. Utilities in eastern Wisconsin, such as WE, would need to maintain higher reserve margins (since extraordinary demand could not be met by imports). That in turn necessitates more capacity and a larger supply deficit unless new resources are put in place.

[16] The need for capacity expansion is underlined by a recent report issued by the North American Reliability Council (NERC). As reported in the January 2002, issue of Power Engineering, NERC has stated that "[p]lanned resources in the MAPP-U.S. area are judged to be inadequate to supply the forecast annual summer peak demand growth through the next 10 years."

II. Computerized modeling results show that PTF is less expensive than an "all natural gas" alternative.

The portfolio of new capacity proposed under PTF consists of the following:

- A 545-MW combined cycle gas-based unit at the Port Washington site entering service in 2005.
- A second 545-MW combined cycle gas-based unit at Port Washington entering service in 2008.
- A 615-MW super critical pulverized coal (SCPC) unit at the Elm Road site entering service in 2007.
- A second 615-MW SCPC unit at Elm Road entering service in 2009.
- A 600-MW integrated gasification combined cycle (IGCC) coal-based unit at Elm Road entering service in 2011.[17]

The applicants used the EGEAS supply expansion model to compare the economics of the proposed PTF portfolio against the economics of alternative sources of supply.[18] As explained elsewhere in this application, the most likely alternative to the PTF portfolio is capacity supplied by independent power producers (IPPs), which is almost certain to be all natural gas-based. The EGEAS modeling shows that building the diversified PTF portfolio results in aggregate cost savings to utility customers of $8.0 billion in nominal dollars or $1.0 billion in present value terms compared to an expansion plan employing only gas-based resources. Details are provided in Enclosure 1.[19]

While EGEAS is a powerful planning tool, its focus is exclusively financial. Under Wisconsin's CPCN statute, § 196.491, Wis. Stat., a number of noneconomic factors must also be considered in determining whether a generation supply proposal is in the public interest. These noneconomic factors (which include environmental concerns) also strongly support PTF and are discussed in more detail elsewhere in this application.

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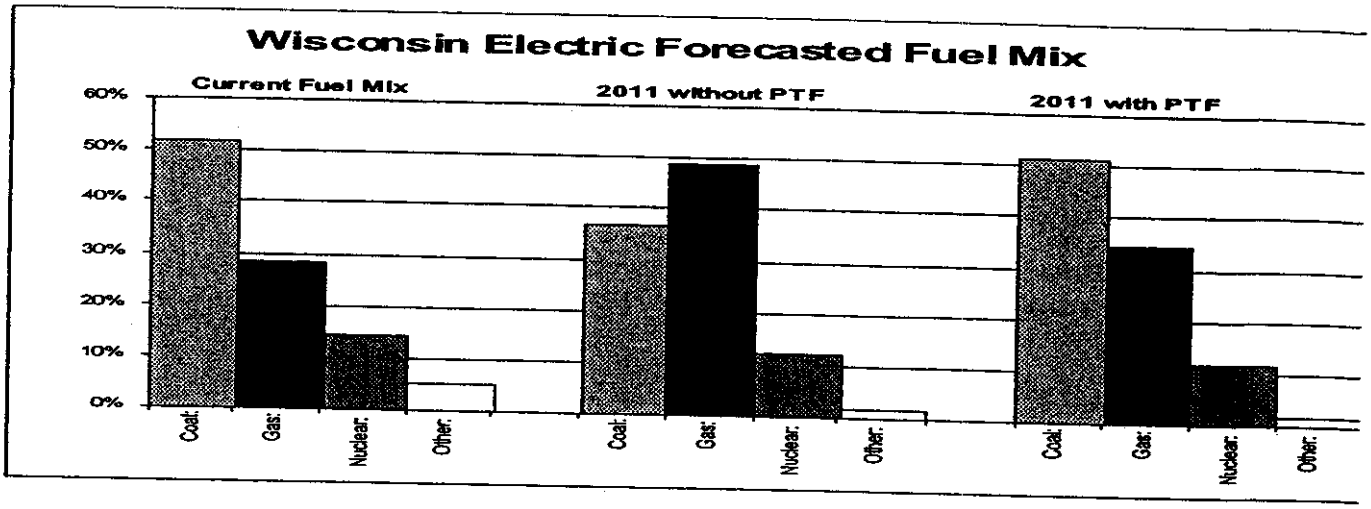
[17] It is expected that 100 MW of capacity from each of the three proposed coal-based units will be used by other Wisconsin energy providers, some of which may be investors in those units.

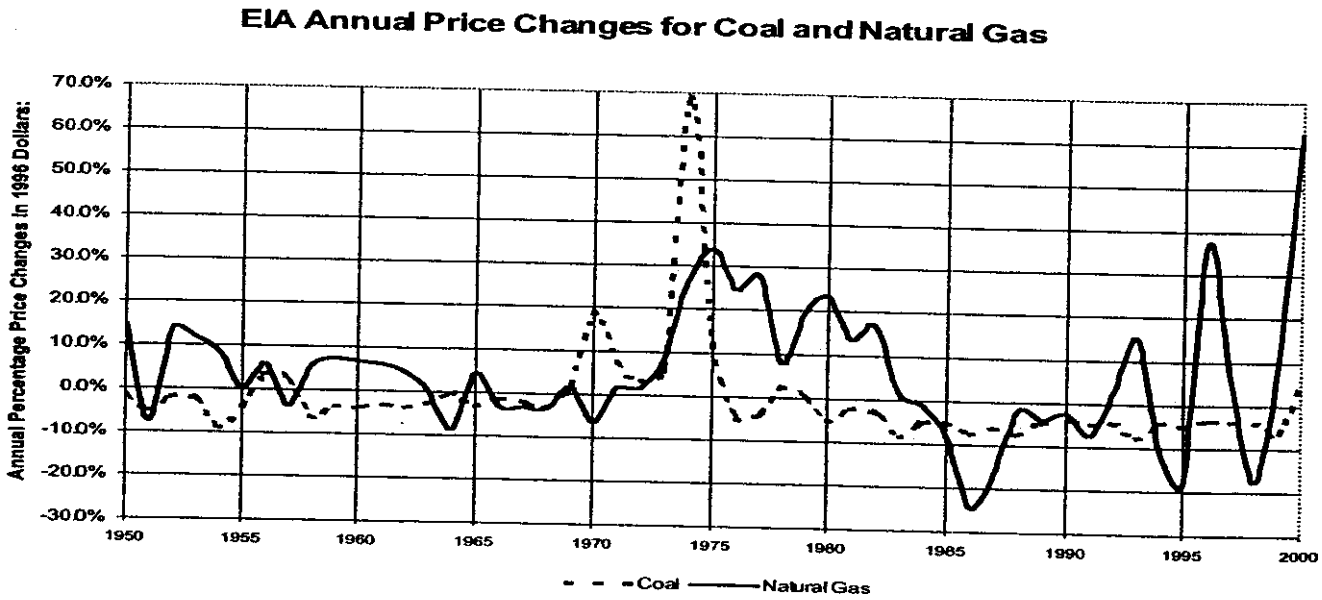
[18] "EGEAS" stands for "Electric Generation Expansion Analysis System." EGEAS is a computer program that is used to find the most economical means of meeting projected system loads by comparing the various options available. The inputs into the EGEAS model include forecasts of required energy and capacity, the characteristics of existing and possible new generating units, fuel price forecasts, known or expected energy purchases or sales, desired reserve margin and the projected cost of emission allowances. EGEAS uses mathematical techniques to test all possible combinations of new generation units needed to meet load growth or to replace existing resources that may be retired. Each new unit is described by operating costs, construction costs and carrying costs. EGEAS simulates the operation of the generating system year by year and finds the most economical means of expanding the system to meet expected load over a specified planning horizon.

[19] The EGEAS model also shows that using the supercritical pulverized coal technology for all three coal-based units would be less expensive than using the IGCC technology for the third unit. However, the applicants believe that despite its slightly higher costs, based on today's estimates, the IGCC technology offers other advantages as it matures, including possible increased efficiency. These advantages justify including IGCC in the PTF plan rather than relying exclusively on SCPC for all three coal-based units.

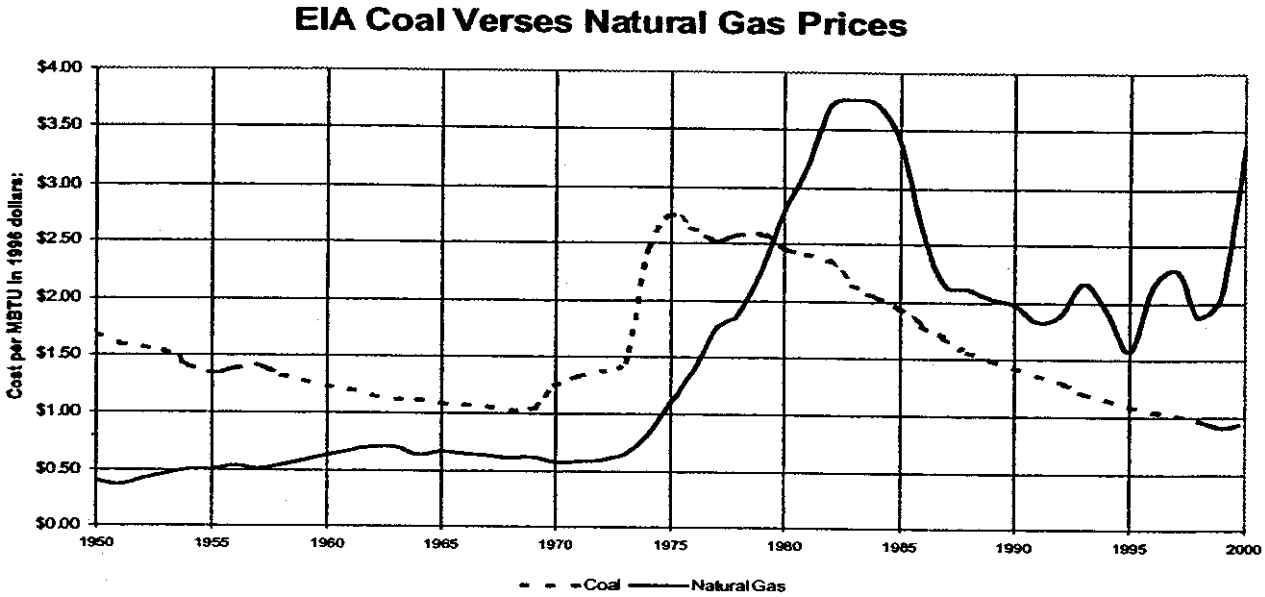
In addition, as the following diagram indicates,[20] without PTF the share of WE generation fueled by natural gas will rise significantly.



Such increased dependence on natural gas exposes Wisconsin customers to the risk of higher energy prices and more price volatility.



[20] As explained elsewhere in this application, PTF includes an enhanced commitment to renewables. That commitment is not reflected in the behavior of the "other" category in the diagram because, in addition to renewables, the category includes oil. Oil-based generation will decline sharply as part of the WE fuel mix, and in the diagram that decline marks the increased use of renewables.



III. PTF will improve environmental performance and will mitigate impacts on local communities.

PTF will supply the reliable, economical power that Wisconsin needs while at the same time improving the environmental performance of the WE generation fleet. The CPCN statute, § 196.491, Wis. Stat., and the relevant PSCW rules require a detailed analysis of the environmental effects of power plant projects such as those contemplated under PTF. Detailed information on the environmental characteristics of the proposed power plants is provided in Enclosure 6, Port Washington Generating Station Environmental Report and Enclosure 7, Elm Road Generating Station Environmental Report.

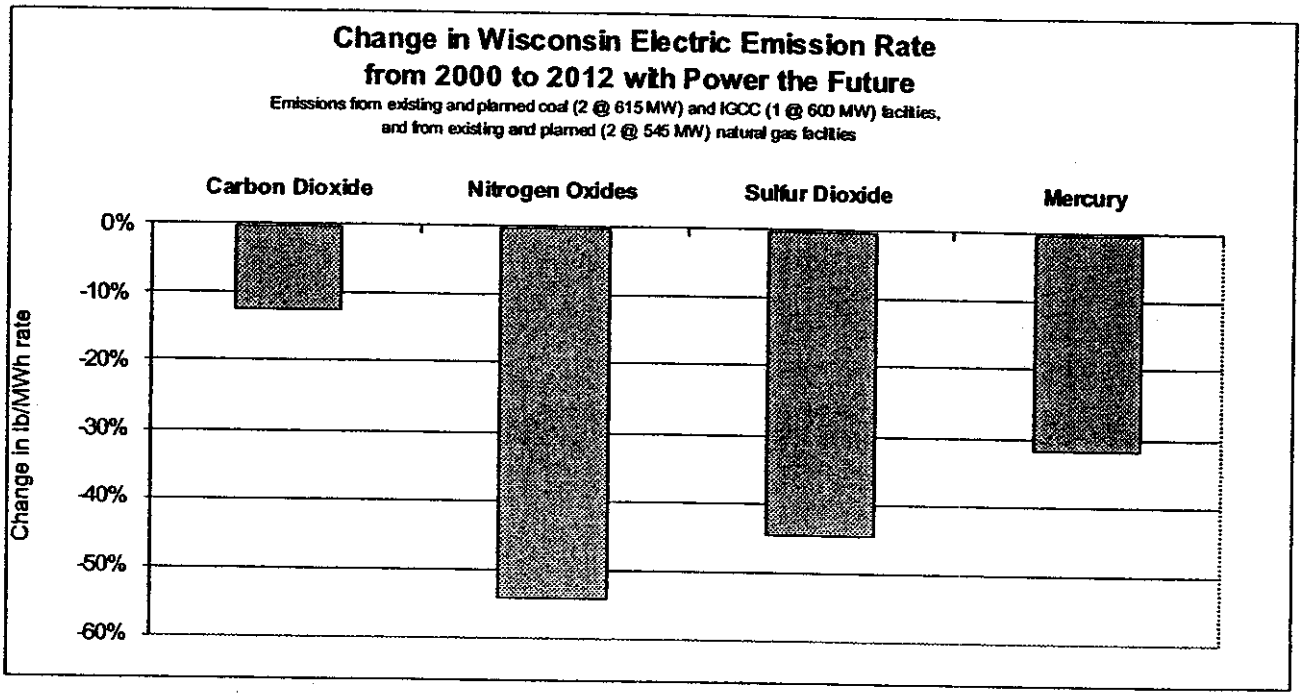
The most salient environmental characteristics of PTF are these:

- PTF introduces new and updated technologies at brownfield locations.
- PTF will employ advanced coal-based technologies at Elm Road.
- PTF involves significant investments in conservation, in CO_2 mitigation and in renewable sources of energy.

A. PTF introduces new and updated technologies at brownfield sites.

Replacing existing older coal-based plants with gas-based plants and advanced technology coal-based plants will provide a significant reduction in air emissions, while maintaining the fuel

diversity currently present in the WE system.[21] The advanced technology to be employed in PTF will remove 90-95 percent of the sulfur dioxide, 80-90 percent of the nitrogen oxide and over 99.99 percent of the particulate matter emissions. Mercury and other air pollutants will also be sharply reduced. The chart below illustrates some of the anticipated improvements.[22]



Because they will be more efficient, the new plants will emit less carbon dioxide, a greenhouse gas. PTF also contains a financial commitment of $10 million for specific programs to further reduce greenhouse gas emissions. These programs will be designed in cooperation with interested parties and presented to the PSCW.

Reusing existing ("brownfield") power plant sites has its own environmental advantages. Among them is avoiding the disruption that results from building facilities of this size on greenfield sites. In addition, the sites of both the Port Washington Generating Station and the Elm Road Generating Station have existing cooling water intake structures and associated discharge facilities. Use of Lake Michigan as a source of cold water permits open-cycle, once-through condenser cooling systems. This allows the generating units to operate more efficiently, using less fuel and with less emissions per unit of energy produced, compared to greenfield plant sites located inland. This system also eliminates the consumption of Lake Michigan water through cooling tower evaporation.

B. PTF uses the appropriate technologies in the appropriate sequence.

In designing PTF, WEC examined the reliability and environmental performance of several advanced coal-based technologies before settling on supercritical pulverized coal (SCPC) technology for the initial two coal-based plants and integrated gasification combined cycle

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[21] Adequate fuel diversity is essential to protect customers against volatility in any one fuel price or, worse, shortages of a particular fuel.

[22] Mercury emissions reflect control technologies on new facilities only.

technology (IGCC) for the third coal-based unit. If the appropriate emissions reduction equipment is incorporated into each system, each of these technologies provides different environmental benefits. However, IGCC technology has yet to be used in large-scale power generation projects and its reliability in such applications has not yet been proved. Because the main goal of PTF is to reliably supply customers with electric power, the applicants believe that the prudent course is to use supercritical pulverized coal for the first two units at Elm Road, allowing time for the IGCC technology to mature so that it can be used in the third proposed unit at Elm Road.[23]

C. PTF includes increased reliance on renewable energy sources and on conservation.[24]

In addition to the environmental benefits derived from the new plants themselves, the PTF proposal involves significant additional investment in both renewable fuel sources and conservation in the form of increased energy efficiency.

By the end of 2011, state law requires that 2.2 percent of WE's delivered power consist of "renewable energy" compared to a baseline amount. The initial PTF plan would increase the amount to 3.3 percent, an increase of 50 percent over the legal requirement. Since PTF was announced, Wisconsin Energy has been working with RENEW Wisconsin and Customers First! Coalition to expand PTF's commitment to the use of renewable fuels. These parties have now agreed to a ten-year collaborative process to achieve a target of 5 percent of the energy delivered to WE's utility customers being renewable-energy based. The collaborative will examine pricing plans, finance-oriented methodologies for portfolio management, the use of tradeable renewable energy certificates, and other mechanisms to stimulate the use of renewables and lower their cost to customers. Subject to regulatory approval and provision for cost recovery, WE will spend $6 million annually, including administrative costs, to accomplish these important goals.

PTF will also earmark substantial additional resources over the next ten years to encourage and support customer-based efforts to increase energy efficiency in WE's service territory. These investments are <u>in addition to</u> WE's substantial ongoing investment in conservation programs. Since 1987, WE has invested more than $500 million in conservation and currently provides about $52 million each year to help fund the state's public benefits program, Wisconsin Focus on Energy. Rather than emphasize on individual projects, or duplicate efforts for which the Department of Administration is responsible under § 16.957, Wis. Stat., WE is working with groups interested in increasing energy efficiency in Wisconsin in a "structural" way.

Making homes and buildings more energy efficient is an area of great potential in this regard. Additional measures that may be implemented to promote increased energy efficiency include encouraging the use of building materials and construction practices that will decrease energy usage and providing incentives for customers to select equipment and appliances that satisfy the efficiency specifications of the EPA's ENERGY STAR® program. Other specific programs to

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[23] It is reasonable to expect the IGCC technology to mature for a number of reasons. The Department of Energy's Gasification Technologies program provides significant funding to develop IGCC plants. The two IGCC plants currently operating as electrical generators in the U.S. continue to resolve operating and maintenance issues and expect to improve their reliability. Global Energy has announced plans to build two 540 MW IGCC plants in Kentucky and Ohio, with commercial operation targeted for the second quarter of 2005; these plants will contribute to the knowledge base.

[24] The items discussed in this subsection are subject to PSCW approval in a separate proceeding and establishment of rate recovery. They are outlined here to provide a full picture of PTF.

be explored include the Optimum Housing Technology Program, including the Milwaukee Idea Home,[25] and the LEED Green Building Rating System.[26] WE stands ready to assist in exploring ways in which Wisconsin can rebuild its housing stock and commercial building infrastructure in a dramatically more energy-efficient way, without imposing unacceptable lifestyle changes or extraordinary costs on its citizens.

WE intends to enter into a collaborative process with groups interested in eliminating barriers to energy efficient designs and promoting reforms that would encourage energy efficient buildings. This process could be similar to the one proposed for increasing use of renewables. The collaborative would work with groups already established, as well as project developers and builders' groups. Designing, enacting and implementing such reforms on a wide scale is a long-term process that will not result in immediate benefits, but which has great promise for increased efficiency over the long term. This initiative is intended to be separate, but complementary, to the Public Benefits program mentioned earlier.

IV. PTF provides customers with a package of benefits at less cost than alternatives that do not provide those benefits.

PTF benefits – including fuel diversity, enhanced reliability and a cleaner environment -- are described elsewhere in this application. This section discusses PTF's cost competitiveness.

A. Compared to the most likely alternative, the diversified PTF portfolio saves customers $8 billion in nominal dollars and $1 billion in present value terms.

If PTF is not implemented, WE will probably meet its needs by contracting with IPPs. If the commercial behavior of IPPs to date is any indication, the resources they supply are likely to be exclusively gas-based.[27] Consequently, in evaluating the cost effectiveness of the proposed PTF portfolio, the applicants have compared its characteristics against the characteristics, including cost, of equivalent capacity and energy obtained from IPP-owned gas-based units.

The total cost of producing energy under PTF has three main components: (1) the monthly payments for the new facilities under their respective leases; (2) estimated O&M costs over the period evaluated; and (3) fuel cost.

The calculation of the monthly payments under the lease is discussed elsewhere in this application. These payments are based on: (1) the total cost of building each PTF facility, which becomes the so-called principal amount in the lease; (2) the term of the lease, which is the amortization period for the new facilities; and (3) the discount rate, which is the owner's rate

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[25] This is a project organized by the School of Architecture and Urban Planning at the University of Wisconsin-Milwaukee. Information about the project is available at http://www.sarup.uwm.edu/oh!/MIH/MIHhome.htm.

[26] LEED™ stands for "Leadership in Energy & Environmental Design" and is a project of the U.S. Green Building Council. Information is available at http://www.usgbc.org/.

[27] The IPP business model has emphasized gas-based capacity rather than coal for at least two reasons. First, gas-based plants involve less risk because they require far less capital up front, have much shorter lead times, and employ standardized designs. Second, gas-based plants are either peakers or intermediate load resources. As such, they are better suited to taking advantage of shortages in the wholesale market that drive spot prices sharply higher.

of return, assuming a 58/42 equity to debt ratio, a 13.9 percent after tax return on equity and a cost of debt that reflects the actual cost of debt at the time a plant is financed. Once the expected stream of lease payments for each facility has been calculated, the all-in cost of the facility can be calculated by adding in estimated O&M costs and estimated fuel costs based on fuel price forecasts, heat rates and expected capacity utilization rates. [28]
Based on these calculations, which are detailed in Enclosure 1 and will be supported by testimony when hearings are held on this application, the all-in cost of supplying power to Wisconsin customers through PTF is $8.0 billion less in nominal dollars and $1.0 billion less in present value terms than the expected cost of using alternative resources.[29]

B. The applicants are exercising great care so that their cost estimates will be reliable.

The analysis that shows that the PTF portfolio saves customers money compared to the most likely alternative is only credible if the cost estimates for the PTF projects are reliable. The applicants' estimated construction costs are reliable because of: (1) the care and skill devoted to preparing those estimates; (2) the use of project management methods that will minimize the likelihood that the construction costs actually incurred deviate from the estimates; and (3) the manner in which the PTF plan minimizes and allocates residual risk.

The capital cost estimates for the PTF projects were prepared by WE staff in conjunction with a respected engineering firm, Sargent & Lundy (S&L). S&L has been providing engineering services to the electric power industry for over 100 years and has designed more than 800 power plants worldwide for both utilities and IPPs, with a total capacity of over 115,000 MW. In preparing the cost estimates, information was used from vendor proposals[30] and cost models S&L has developed for plants of similar configuration.

Once estimates have been arrived at, steps must be taken so that actual costs incurred do not deviate from the estimates. There are three general areas that present cost risks in projects like these: (1) material and equipment costs; (2) construction labor costs; and (3) financing costs.

The risk of cost overruns associated with material and equipment is relatively low. Generally speaking, the kind of equipment used for gas-based units is common in the industry and its pricing and delivery lead times are generally well known. Equipment cost estimates for the SCPC units are somewhat less certain. In the past ten years SCPC units have been built overseas and components retrofitted to the existing U.S. fleet. These projects provide a database of equipment cost information that should provide reasonable estimates for SCPC plant equipment. Since large-scale IGCC plants have not yet been built, equipment cost estimates for the proposed IGCC unit are based on vendor proposals and extrapolating data for smaller plants. As a result, equipment cost estimates for IGCC are the least certain among the three PTF technologies.

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[28] As indicated, the costs examined include all the costs of producing power from a facility. A facility that has a higher up-front construction cost may have a lower over-all cost if, for example, its fuel cost over the period of time examined is low enough to compensate for the higher construction cost.

[29] As discussed elsewhere in this application and in various enclosures, PTF achieves these cost savings even with a proposed return on equity that is somewhat higher than WE's current utility rate of return. The estimated savings are realized over the resource planning period used in the EGEAS model. While that planning period is convenient to use to measure savings, it does not correspond to either the initial coal plant lease period or to useful life of a typical coal unit.

[30] For example, the estimate of major equipment cost at Port Washington, which comprises one-third of the total project cost at that site, reflects proposals WE has received from two leading equipment manufacturers.

Construction labor costs can be more difficult to forecast. These are affected by hourly labor rates, premiums required to attract skilled labor, and the availability and productivity of the work force. As explained elsewhere, WEC has intimate knowledge of the Wisconsin labor market, a long history of working cooperatively with labor unions, and has entered into a project labor agreement for PTF. As a result, W.E. Power is well equipped to manage labor costs.

The risk of overruns in project finance costs depends primarily on the risk that the project will take longer than expected to complete, which in turn depends on timely delivery of equipment and the availability and productivity of labor.

W.E. Power will implement detailed project control procedures and will require strict adherence to those procedures by the engineering and construction firms employed on PTF projects. W.E. Power also expects to incorporate cost-control incentives wherever practical in its agreements with such firms.[31] These actions increase the likelihood that the PTF projects will come in on budget.

Of course, projects of this magnitude entail a residual risk that the final cost will exceed even the best estimates. An important issue, therefore, is how residual risk is allocated. In the case of the Port Washington projects, W.E. Power will bear most of the risk of cost overruns and requests in this application approval of only an amount based on its upfront estimates of the projects' costs, plus specifically defined adjustments to that approved amount. Those adjustments fall into two categories: (1) escalators for price increases that affect the whole industry as measured by standard price indexes; and (2) adjustments for unpredictable occurrences beyond W.E. Power's control. The latter would include such things as changes in laws or government regulations (including environmental laws or regulations), the cost of mitigating local impacts and resolving local concerns, and force majeure events. The adjustments proposed are similar to those that one would expect in a PPA with an unaffiliated IPP. The total cost of the project will therefore be limited to the approved amount plus the indicated kinds of adjustments and would be certified by W.E. Power and filed with the PSCW prior to incorporation into the lease.

Because few comparable coal-based facilities have been built recently, the risk that actual cost may deviate from estimated cost is greater for the Elm Road projects than for the Port Washington projects. In addition, labor costs make up a greater share of costs for the Elm Road projects and equipment costs are inherently more difficult to estimate for coal-based units than for gas-based units. The Washington Group International has been retained to provide an independent detailed cost estimate for the SCPC units.

Additionally, for the Elm Road projects WE will ask the PSCW to approve retention of an independent firm to act as an external project evaluator. That firm will be involved in reviewing all significant decisions that could affect project cost, schedule, or performance, and will provide a "real-time" assessment to W.E. Power, WE and the PSCW of any conditions that it sees developing that may adversely affect costs.

Great care is also being exercised in arriving at estimates of O&M costs. The Port Washington O&M cost estimates are based on data from a variety of sources, including quotations from major equipment manufacturers for service agreements and costs WE has incurred to staff and insure comparable facilities. These costs make up approximately 75 percent of the total annual

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[31] W.E. Power is currently negotiating a contract with Washington Group International for the construction of the first gas-based unit at Port Washington. The principles of project cost control referred to are being incorporated into that contract, which should be completed in the first quarter of 2002.

operating costs, excluding fuel costs. The estimates of the remaining plant operating and maintenance costs were developed by WE using the S&L cost model and other industry data. The PSCW will continue to have jurisdiction over the operation of the facilities and will have the ability to determine whether the O&M and fuel costs are just and reasonable.

O&M cost estimates for the Elm Road SCPC units are based on WE's experience operating coal plants[32], estimates of incremental costs due to the additional emissions controls systems included in the advanced technology coal-based facilities, information provided by S&L, and information available from other industry sources.

C. The costs of PTF are comparable to similar proposals by other potential suppliers.

As discussed above, the EGEAS modeling demonstrates that the PTF portfolio is more economical than its all-gas alternative. It is also unlikely, for several reasons, that any other potential supplier could provide a comparable diversified supply portfolio at lower cost than W.E. Power.

The first reason is that no other party has come forward with a credible, comparable 2800 MW proposal in the 17 months since PTF was first announced.

Second, even if a "slice" of the PTF proposal is used for comparison -- and this piecemeal approach is not the appropriate way to analyze PTF -- that PTF subset is still cost-competitive compared to alternatives. For example, with respect to the Port Washington gas-based plants, W.E. Power has compared its cost estimates against data available in the market place, including recent proposals from IPPs to supply gas-based capacity. That comparison, which is detailed in Enclosure 2, Evaluation of Supply Alternatives Available to WE, demonstrates that the estimated all-in cost for W.E. Power to supply power from the proposed Port Washington plants is less than the cost of similar capacity and energy from IPPs.

Third, with respect to the coal-based plants, there is no reason to believe that an IPP would have some special cost advantage over W.E. Power. For example, major capital equipment, such as turbines and boilers, represents 40-50 percent of total construction cost. The same vendors -- and the same prices -- are available to W.E. Power as would be available to an IPP. The rest of the cost -- the cost of construction itself -- is such that it is more plausible to believe that W.E. Power would have a marked advantage over an IPP, and not vice versa.

In particular, labor cost is a crucial driver of construction costs, and WEC has intimate, first-hand knowledge of the local labor market and a history of working cooperatively with local labor unions. Indeed, as explained elsewhere in this application, WEC entered into a Project Labor Agreement with the Building Trades Council a year ago and labor's ongoing input has been important to the design and the evolution of the PTF plan. Organized labor participated in the declaratory ruling proceeding in support of PTF at the same time out-of-state IPPs were opposing it.

In addition, the Elm Road site provides substantial inherent cost advantages, including:

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[32] WE currently operates a fleet of 21 coal-based generating units with a total capacity of 3,600 MW. That fleet includes the twin 600-MW facility in Pleasant Prairie, WI, which is similar in size to the SCPC units proposed for Elm Road. Pleasant Prairie consistently ranks among the 10 lowest cost coal-based generating stations in the U.S., according to Electric Light & Power.

- **Faster, lower-cost resolution of certain environmental issues.** As an existing and well-studied power plant site, the Elm Road site will not require new air-quality monitoring as part of air permitting, nor will it be subject to delays caused by "surprises," such as the discovery of historical artifacts or other environmentally sensitive features.
- **Efficient plant cooling.** Access to cold water from Lake Michigan allows an open-cycle (once-through) cooling system that will increase plant efficiency compared to sites that do not use open-cycle lake water cooling. (This increased efficiency also yields environmental benefits by reducing air emissions from the facilities and conserving Lake Michigan water.)
- **Existing transportation.** The Elm Road site has established rail access for coal delivery. The site also has barge access for cost-effective delivery of plant equipment, fuel and limestone.
- **Shared infrastructure.** The site already has cooling water intakes and coal handling equipment. It also has an operating ash storage landfill, another potentially controversial component of a new coal-based power plant built on any greenfield site.

The inherent superiority of using brownfield sites instead of building on previously undisturbed land has been acknowledged by the PSCW in its guidance document *Common Power Plant Siting Criteria*. According to that PSCW document, "it's usually more economical and environmentally acceptable to add generating capacity at an existing site than to build at a new site."

D. PTF includes mechanisms to help make sure the plants are completed on time and meet WE's operational requirements.

PTF is unique because the new generating units will be operated by the utility, and all output will be sold by the utility as part of its regulated service. Therefore, while it is important that PTF projects come in on budget, it is also crucial that they come in on time and that they meet WE's operational requirements.[33] Many of the same construction management techniques that help ensure cost-efficient completion of the projects also contribute to their timely completion. To help secure a qualified and stable workforce and foster a safe and quality-conscious work environment for the PTF projects, WEC has been in continuous discussions with Wisconsin labor unions and trade councils. In February 2001, WEC signed a Project Labor Agreement with the Building Trades Council. This agreement ensures the full support of Wisconsin labor in the safe, successful completion of the PTF projects, without work stoppages and with a cooperative training and recruitment effort.

The new generating units must also be built to run efficiently as part of the WE fleet. To ensure that the new generating units meet WE's operational requirements, the leases will contain performance standards that the new plants must meet. Because WE personnel will be responsible for operating and maintaining the new facilities, it is important that they provide input early on in the process of designing and building them. One criterion of good design is that it accommodates the needs of those who will operate, maintain and repair a plant. Operator input in the design phase can identify practices that might adversely affect a plant's future operating costs and reliability. There is also an evolutionary aspect to plant design, and the

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[33] W.E. Power will obligate itself in the facility leases to deliver operational generating units to WE on time.

details ultimately incorporated into a facility should reflect issues raised by WE plant operating and maintenance professionals along the way.

For these reasons W.E. Power will work closely with WE throughout the design phase, in the fabrication phase and on the construction site. By being involved in the design phase, WE plant operating and maintenance personnel can review system design and assist in equipment selection. By being involved in fabrication and construction, the WE O&M personnel will acquire valuable knowledge regarding the equipment they eventually will be responsible for. They can provide additional oversight of fabrication and construction activities, helping to identify potential cost savings and improvements. The plant construction period also provides an opportunity to train the future plant staff to operate and maintain specific plant equipment and systems. This helps develop detailed and specific O&M procedures, preventive maintenance plans and inventory requirements, all of which contribute to lower O&M costs and increased reliability when the plants are in operation.

WE personnel will also be intimately involved in system testing, turnover and start-up. During this crucial period, plant personnel, working with start-up engineers, vendor field representatives, and construction craft personnel will address the literally thousands of items that need to be checked, verified, tuned and adjusted when commissioning a new generating facility.

E. Local community issues and supplier issues must be addressed to ensure that the economic benefits from these projects are broadly shared while any costs imposed on the affected localities are mitigated.

Taken as a whole, PTF is perhaps the largest construction project in Wisconsin's history. Its potential effects on the state's economy are unprecedented. The economic benefit to Wisconsin from having a reliable source of economical power for its businesses and citizens, produced in a more environmentally friendly way, is obvious. But the PTF construction projects will stimulate Wisconsin's economy even more directly. During peak construction, approximately 1,200 people will be employed on the Elm Road project and 500 people will be employed on the Port Washington project. Most of the construction jobs are skilled, high-paying positions, such as boilermakers, pipefitters, electricians, millwrights, iron workers and carpenters.

It is important that the direct economic benefits of PTF be shared broadly. In addition, WEC believes that supplier diversity makes good business sense and is committed to building meaningful opportunities for minority, women and small business enterprises to join its supplier team. The WEC affiliate constructing the new plants, W.E. Power, will establish internal mechanisms and standards for achieving specific goals so that this diversity policy is implemented and its objectives are met. A citizen advisory council will also be established to monitor supplier diversity activities and progress toward goals A statement of W.E. Power's plans in this regard is included in section 3.9.2 of both the Port Washington and Elm Road environmental reports.

Special efforts have been made to keep the affected communities knowledgeable and involved in the process. Beyond the typical "town meetings" and local community hearings, WEC has visited individually with citizens, going door-to-door in Oak Creek and Port Washington to explain PTF and to draw out local concerns. W.E. Power will continue similar efforts throughout the construction period. The design of the plants will be responsive to local concerns about noise, traffic, aesthetics and other factors.

WEC has also supported and worked to enact legislation so that communities that host power plants receive a larger share of the gross tax receipts those plants generate. Specifically, WEC has supported improvements in the allotment formula in Assembly Bill 584, as amended, that would significantly increase the shared tax revenue for the host communities. The applicants estimate that, under existing law, over the period 2002-2026 the Port Washington project will yield an additional $14.9 million to the City of Port Washington and $6.5 million to Ozaukee County. Under the proposed legislation those amounts would rise to $37.4 million and $17.8 million, respectively. Under existing law, over the period 2002-2026 the Elm Road project will yield $14.7 million in shared revenue for the City of Oak Creek and $6.7 million for Milwaukee County. Those amounts would increase to $41.1 million and $19.9 million, respectively, if the proposed legislation is enacted. As required by law, the Applicant's have identified an alternative site for the Elm Road project. That site is in the Town of Caledonia in Racine County. If the alternative site is used, from 2002-2026 the Town of Caledonia would receive $9.1 million in shared revenue under existing law and $27.3 million under the proposed legislation. Racine County would receive $18.2 million under existing law and $39.6 million under the proposed legislation.

W.E. Power's lease agreements will also contain provisions for additional compensation to local communities to help mitigate any special environmental or other local impacts that may result from building the PTF facilities.

V. The PTF leased generation plant structure is the appropriate one for the new generation.

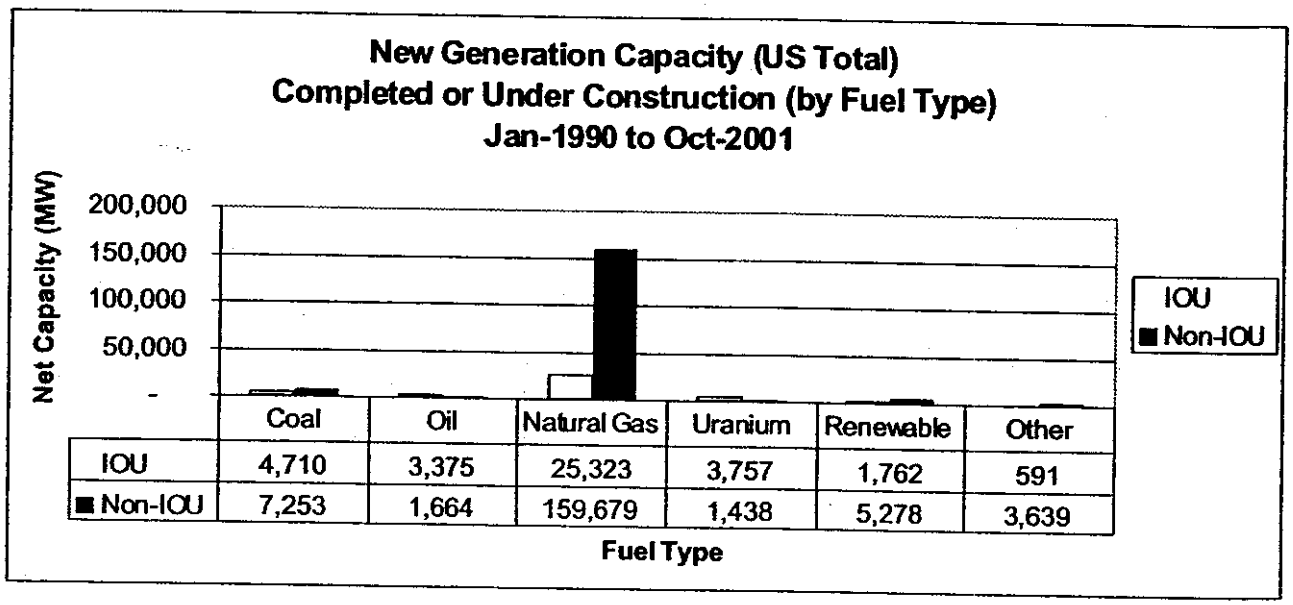
The Legislature and Governor have paved the way for PTF to use a "leased generation" structure to finance and build new power plants. 2001 Act 9 legislatively validates the leased generation approach while not replacing other approaches such as building within the utility itself, building utility-affiliated "merchant plants," or contracting with IPPs. Of the three options, leased generation best accomplishes the goal of assuring a supply of reasonably priced energy over a long period of time.

PTF is a massive undertaking requiring the investment of billions of dollars. This application focuses on the $3 billion required to build new generation. At the same time, however, WE needs to spend an additional $4 billion to upgrade distribution and existing generation and to invest in conservation and renewables. Undertaking this massive amount of investment within WE itself would place serious financial stress on the company. WE has prepared pro forma financial models of the impact on the utility of building the PTF projects inside the utility at WE's currently authorized 12.2 percent return on equity. That analysis, which is detailed in Enclosure 3, shows that, even with optimistic assumptions, building in the utility would result in a highly leveraged company with a debt/equity ratio of 68/32. WE's bond rating would likely drop from its current investment grade level of "A" to junk bond levels. Customers would feel the impact of that decline in creditworthiness in two ways: (1) the resulting higher capital costs would be reflected in higher prices for electricity; and (2) the utility would be less able to withstand economic adversity. The PSCW has long recognized that a utility with a strong capital structure is in the public interest because in the long run such a structure results in lower utility rates and more reliable service. Making investments of this magnitude inside the utility would be directly contrary to this long held view.

Besides resulting in unacceptable leverage, building the new generation within the utility involves greater risk for investors than if the construction is undertaken in a non-utility generating company. Greater risk makes capital more expensive. The utility industry is experiencing great change, and this has radically altered investors' perception of risk. Regardless of what return on utility equity is set today, there is no assurance that future Commissions will continue to authorize a return deemed adequate by the capital markets. The PTF structure, together with the new leased generation law,

directly addresses this risk by ensuring that the return, once set, cannot be changed for the term of the lease. The other major risk perceived by investors is industry restructuring or deregulation. In other jurisdictions deregulation has led to forced divestiture of generation. Whether or when that would ultimately happen in Wisconsin is unknown, but it is that very uncertainty that creates risk. Utilities and the people who provide them with capital have understandably been reluctant to build major new assets the future fate of which is unknown. The PTF structure mitigates this risk because the proposed new assets will be owned by a non-utility affiliate and less likely to be subject to divestiture. The fate of the assets is thus more predictable for the duration of the leases.

The risks of building generation within a utility are very real and amply demonstrated by what has happened in the electric power industry in recent years. Very little new generation of any kind has been built "inside" regulated utilities. As the diagram "New Generation Capacity" indicates, the vast majority of the new capacity completed or under construction since 1990 has been undertaken by non-utility entities.



	Coal	Oil	Natural Gas	Uranium	Renewable	Other
IOU	4,710	3,375	25,323	3,757	1,762	591
Non-IOU	7,253	1,664	159,679	1,438	5,278	3,639

Some of these entities have been affiliated with utilities; most have been IPPs. Particularly noteworthy is the fact that only a handful of domestic utilities have taken on the risk of building a significant coal-based unit in the last 15 years.

The Wisconsin Legislature is not the only government body that has recognized that the risk profile of building generating capacity inside the utility has changed, but that it may not be in the public interest to rely exclusively on IPPs for new capacity. In response to that recognition, the Iowa Legislature recently passed a law that addresses uncertainty and provides an incentive to utilities to add capacity themselves by allowing the regulatory treatment for cost recovery to be established before a utility undertakes a project.[34] Under the Iowa legislation, the regulatory

[34] House File 577, which Iowa Governor Tom Vilsack signed on July 3, 2001, provides, in part, that if a rate-regulated public utility applies to construct or lease a generating facility "The [Iowa Utilities Board] shall specify in advance by order issued after a contested case proceeding the ratemaking principles that will apply when the costs of the facility are included in regulated electric rates"; "[i]n determining the applicable ratemaking principles, the board shall not be limited to traditional ratemaking principles or traditional cost recovery mechanisms"; "[t]he order setting forth the applicable ratemaking principles shall be issued prior to the commencement of construction or lease of the facility"; and "the ratemaking principles established by the order issued ... shall be binding with regard to the specific electric power generating facility in any subsequent rate proceeding."

treatment of cost recovery need not reflect traditional ratemaking principles. Equally important, once the approach to cost recovery for a new facility has been established, it remains in effect for the life of the facility.

The need to "think outside the box" reflected in the Iowa legislation is at the heart of PTF's new regulatory framework. That framework recognizes the need to find a "middle ground" between the traditional "in the utility" approach and the IPP alternative. With PTF clearly in mind, the Wisconsin Legislature found the middle ground by enacting the recent statute regarding "leased generation contracts."[35] Wisconsin law now allows an affiliate of a public utility to build electric generation facilities and lease them to the utility. This provides an incentive for new power plant development, in large part by providing regulatory certainty. Once the PSCW has reviewed and approved the key financial terms of a leased generation proposal, including return on equity, capital structure and lease term, those terms are incorporated into a commercial contract, the lease. Once included in an approved lease, the payments for the new capacity cannot be altered by future PSCW action.

In fact, the new regulatory structure approved by the Wisconsin Legislature provides better protection for retail customers against changing circumstances in the industry than would be available otherwise. Under the facility leases, the new power plants will be committed to serving WE's retail ratepayers at predictable cost, even if a future change in law requires WE to divest existing, "in-the-utility" generation. Presumably, divestiture of utility-owned generation would occur in the context of implementing retail competition in the electric power market. While divestiture would, in theory, prevent the exercise of market power to set prices above "competitive" levels, there is no way to predict how high those competitive price levels themselves would be. (Recent price volatility in deregulated energy markets makes this clear.) With the leases under PTF, the cost of capacity can be predicted with certainty for the duration of the leases regardless of what is going on in the power market, the credit market, and the equity market.

This is not to claim that all generation should be leased generation. PTF will result in a mix of regulatory structures, maximizing flexibility to respond to future events as they unfold. When PTF has been fully implemented, WE's generation portfolio will be a mix of traditionally regulated utility plants (Point Beach, Pleasant Prairie, etc.), plants controlled under leased generation contracts (the new PTF facilities), and capacity supplied under contract by IPPs. This diversity provides a hedge for customers against future restructuring and unpredictable market conditions. Customers will not be overly exposed to market changes, regulatory changes, or structural changes, whenever they occur and whatever form they take. The PTF strategy is thus a conservative one, designed to foster stability and minimize risk to customers.

VI. PTF is an integrated plan and should be approved as a whole.

The PTF generation projects constitute an integrated plan and should be approved as such.

PTF takes a long-term approach, retiring old WE coal-based facilities while reusing their brownfield sites; adding new natural gas-based units early on and advanced technology coal-based units later; using cash flow from early projects to finance later ones; and mixing higher

[35] § 196.52(9), Wis. Stat.

risk coal-based units with lower risk gas-based units.[36] The PSCW should not approve the plan piecemeal, or permit IPPs or others to cherry-pick the earlier, less capital intensive parts of the project, since it is these projects which help finance the coal-based projects and make their benefits available for WE's customers.[37]

Building the gas units and the coal units as a package makes it significantly easier for WEC to finance the coal units. WEC has modeled PTF's ability to generate internal cash and equity both with and without the Port Washington gas projects. Leaving out the gas projects results in $1.1 billion less internal cash and $640 million less equity being generated over a 20-year planning horizon. These funds are necessary to help finance the extremely capital intensive coal-based projects.[38]

Not only is it critical that the gas-based units and the coal-based units be viewed as a single package, it is critical that at least the two super critical pulverized coal ("SCPC") units be considered as a package. There are significant economies of scale that result from building two SCPC sister units. Unless the sister units are approved at the same time, WEC and WE's customers risk the loss of a substantial portion of those economies of scale, perhaps $100 million, through the potential need to re-engineer the second unit. Moreover, failure to authorize both sister units at the same time will force WE Power to gamble on what type of coal system to install. If two units are built, a coal system ranging in cost from $130 to $140 million will be necessary. If only one unit is to be built, the coal system would cost in the range of $30 to $40 million. Unless both sister units are approved at the same time, W.E. Power will be forced to make a choice. If it chooses the $130 to $140 million coal system and the second unit is not approved, it will have spent $100 million it need not have. If, on the other hand, it builds the $30 to $40 million coal system and the second unit is approved, it would still have to spend nearly the full $130 to $140 range since only a part of the $30 to $40 million system would be reusable.[39] For these reasons, it is important for the PSCW to authorize construction of the first two coal units at the same time.

VII. The financial terms in PTF are reasonable and necessary for the project to proceed.

The 13.9 percent rate of return that the applicants seek on the PTF projects is reasonable for a number of reasons.

First and foremost, those returns do not result in excessive costs to customers. As demonstrated in Enclosure 2, when the proposed rates of return are used to calculate the all-in costs of the PTF facilities, those costs come in below the costs estimated for alternative sources of supply. In addition, as explained elsewhere, the value provided by PTF -- including fuel

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[36] When the Applicants characterize coal-based units as "higher risk," the risk referred to is not risk to customers that the units will be unreliable. Rather, the risk referred to is the financial risk of undertaking such capital-intensive, long lead-time projects.

[37] Indeed, because they view the coal-based and the gas-based projects as inextricably linked, the Applicants would support an order point in this proceeding that would assess some penalty if, having begun construction on the gas-based projects, a change in business plans causes them not to proceed with the coal-based projects.

[38] Even as to the third coal-based unit, approval in this proceeding is appropriate. Such approval can, if necessary, be conditioned on any subsequent modifications required to incorporate then-appropriate technology and changes in environmental standards.

[39] W.E. Power could avoid "shooting in the dark" this way by delaying work on the first coal-based unit until the PSCW reaches a decision regarding the second unit. This approach has significant risks and costs of its own; in particular, it delays the operation date of the first unit, in all likelihood necessitating the purchase of replacement power.

diversity, reliability, a cleaner environment and jobs and economic development – far exceeds that of the alternatives. Objectively benchmarked in that way, the rate of return requested does not result in unreasonable rates, given the benefits of the plan and the cost of alternatives.[40]

In addition, when all the evidence is presented, W.E. Power will have demonstrated that its proposed rate of return passes muster even under traditional rate of return analyses properly applied to these circumstances. For example, the proposed 13.9 percent return on equity for this incremental investment of $3 billion in generation assets is only 100 basis points higher than the return the PSCW approved for MGE's existing portfolio of utility assets. In addition, evidence will be offered in the hearings on this application that the mean return observed for IPPs in the public market is roughly 14 percent. Peter Cartwright, the founder, Chairman and CEO of Calpine, recently stated that his company's hurdle rate for new project spending is 18 percent.[41] If, as the data seem to show, the cost of equity for IPP gas-based investments is 14-18 percent (or higher), then a 13.9 percent return on investments in both gas and higher risk coal-based assets is certainly within the range of reasonableness.

VIII. The expansion of generating capacity proposed by PTF will not have a material adverse effect on power markets.

The PSCW's review of CPCN applications includes whether the proposed facilities will have "a material adverse impact on competition in the relevant wholesale electric market." As explained in more detail in Enclosure 4, the proposed PTF facilities will have no such impact. Furthermore, while this additional analysis is not required under the CPCN statute, the PTF facilities will not have a material adverse impact on retail markets or on the development of a competitive wholesale market in the future.

The CPCN statute does not define what is meant by a "material adverse effect on competition." The economic and legal literature from which the concept derives makes it clear, however, that an action by a firm adversely affects competition if it makes it possible for the firm to charge higher prices.[42] In that sense, the additional capacity proposed by PTF will not have a material adverse effect on competition in the relevant wholesale market because the wholesale prices WE may charge are currently regulated, and will continue to be regulated, by FERC.

Furthermore, the new capacity proposed under PTF will be dedicated to serving WE's own load. Whatever view one takes of WE's position in the wholesale market today, that position will not change -- wholesale market competition will not be adversely affected -- by adding capacity that is already spoken for.

In addition, there is no long-term supply alternative that would have any different impact on competition while still providing the same benefits to WE's customers. Because WE needs long-term capacity, the alternatives to leasing generation as proposed in the PTF plan consist of WE

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[40] The issue here is not return on equity in the aggregate. Rather, the issue is only the enhancement in return proposed under PTF as compared to existing, authorized utility rates of return, and that enhancement applies only to new investments in generation, not to WE's existing fleet or to the entire utility investment.

[41] "Calpine to Slow Power Plant Building Due to Unfavorable Market Conditions", Wall Street Journal, Jan. 16, 2002, at A2.

[42] For example, a merger adversely affects competition if the resulting firm, because it has absorbed a competitor, can charge higher prices.

owning generation or contracting for capacity under long-term contracts. These alternatives all require WE to control the capacity, which would have the same effect as the PTF proposal.

Finally, the proposed additional capacity will not prevent Wisconsin policymakers from taking any action in the future that might be necessary to introduce retail competition. Notably, there are no plans to change the regulatory structure in Wisconsin now or in the immediate future. In particular, there is no plan pending (or contemplated) for retail access. In addition, prior market power studies indicate that substantial restructuring may be required to achieve a workably competitive market (at least if a certain market model is presumed). The ability of Wisconsin policymakers to restructure the market as necessary to facilitate more extensive wholesale and retail competition in the future will not be materially affected by the proposed PTF facilities.

IX. PTF's organizational structure permits efficient implementation of the plan and complies with Wisconsin's leased generation statute.

A graphical representation of the ownership structure of PTF can be found in Enclosure 5.

Under PTF, two gas-based combined cycle power plants would be built at WE's Port Washington Generating Station. Both plants would be built and owned by a single limited liability company, the Port Washington Generating Station LLC ("PWGS LLC").[43]

The PWGS LLC would enter into a series of agreements with WE. Most important, a "facility lease," which is described in more detail below, will set out the terms under which WE will lease the generating units from PWGS LLC.[44] First, however, PWGS LLC will lease from WE (the current owner) the land on which the new plants are built.[45] Then, when each unit is complete and the LLC leases it to WE, it will also sublease back to WE the land on which the unit stands. Some existing assets will be sold directly to PWGS LLC by WE via an asset purchase and sale agreement at such time as those assets are no longer used by and useful to WE. The facility leases, the ground leases, the ground subleases, and the asset purchase and sale agreements related to the new Port Washington units are all affiliated interest agreements as defined in § 196.52, Wis. Stat.

Because additional parties may participate as investors in the Elm Road projects, the organizational structure for those projects is a bit more complicated than the Port Washington organizational structure. Each Elm Road generating unit will be owned by its own Project LLC. Each Elm Road Project LLC will be owned in part (roughly 84 percent) by a single purpose entity, each of which is wholly owned by W.E. Power LLC. The portion of the project LLCs not owned by a W.E. Power special purpose entity will be owned by other investors, either directly or through their own single purpose entities. The LLC membership agreements for the Elm Road project LLCs will specify the rights and obligations of the investors.

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[43] The governing document of each limited liability company or LLC consists of a "membership agreement" setting forth the rights and obligations of the LLC's owners, who are also referred to as "members" of the LLC. The Port Washington project LLC has only one member, PWGS LLC.

[44] The facilities leases have been the subject of extensive discussions with interested parties representing customer groups, and the applicants encourage further suggestions for this improvement.

[45] This is specifically authorized in the new legislation. See § 196.52(9), Wis. Stat.

Each investor in the Elm Road project LLCs will have the right under the facility leases to draw on capacity from the plants in proportion to the investor's interest in the project LLC. The plants will actually be operated by WE under the facility lease and a plant operating agreement between WE and the investors.

As with the Port Washington facilities, WE will lease the necessary land at the Elm Road site to the Project LLCs, which will then sublease it back to WE. There may also be asset purchase and sale agreements between WE and the project LLCs at some point in time involving decommissioned WE assets, but none are contemplated in the current plan.

X. The affiliated interest agreements needed to implement PTF benefit WE's customers and are reasonable and in the public interest.

Central to PTF are the facility leases. These are the agreements under which the project LLCs that build and own the new plants (and major improvements to existing plants) will lease those assets to WE for its use in producing energy for its customers (and for the co-owners in the case of the Elm Road facilities). Because these leases are between WE, which is a public utility, and the project LLCs, which are affiliates of WE, PSCW approval of the leases is required under § 196.52, Wis. Stat, including new § 196.52(9), which governs PSCW approval of leased generation contracts. The nature of the projects necessarily means that the lease documents are lengthy and complex, but the fundamental principles of the leases are not complicated.

At the heart of each facility lease is an amount of money, the "principal amount," which will consist of the cost incurred to build the generating unit which is the subject of the lease, including an appropriate share of pre-CPCN expenses.[46] After a plant goes into service, the monthly payments or "basic rent" under each lease will be an amount sufficient to amortize the principal amount, using a specified discount rate, over a 20-year lease term in the case of the gas-based plants and a 25-year term in the case of the coal-based plants.[47]

The discount rate used to calculate the lease payment is in fact the rate of return earned by the lessor (the project LLC), who has advanced the principal amount in the first place. The project LLCs may have one or more investors (or members) who provide the equity capital. A key issue, which is discussed in more detail elsewhere in this application, is the appropriate rate of return to be reflected in the lease payments. Each lease under PTF assumes that the principal amount consists of 58 percent equity and 42 percent debt. The rate of return on equity will be 13.9 percent and the rate of return on the debt component will reflect the cost of the debt financing at the time it is put in place.

In return for making the monthly lease payments, WE as lessee has the right to occupy and operate the leased facility to produce power for its customers. As operator of the leased facilities, WE is responsible for operating and maintenance costs, including fuel. At the end of the lease term WE has the option of returning the facility to its owner (the project LLC) in good

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[46] The principal amount does not include carrying costs for funds expended during construction. Instead, those carrying costs are billed to the lessee (WE) monthly during the construction period (along with monthly management costs). Handling carrying costs during construction on such a "pay as you go" basis reduces the principal amount that needs to be recovered under the lease and reduces the ultimate cost to utility customers.

[47] These monthly payments are simply an annuity, where the present value is the principal amount, the time period is the term of the lease, and the discount rate is the rate of return expected by the owner.

condition, renewing the lease for an additional term, or buying the facility outright from the owner.

Each of the Elm Road facility leases provides that the lessor (a project LLC owned by single purpose subsidiaries of W.E. Power and one or more other investors) will lease to WE the respective Elm Road generating units, subject to the contractual rights of any minority investors to a pro rata share of the capacity and energy from the Elm Road unit in question.[48] Any minority investor or its affiliate becomes a minority lessee under the facility lease. In exchange for its contractual right to output, each of these minority lessees will be obligated to pay its pro rata share of the basic rent, any supplemental rent resulting from additions or improvements to the unit once it is built, and other payment obligations of the lessees under each facility lease. Each minority lessee will also bear a pro rata risk of any casualty loss suffered by a leased facility due to fire, weather or similar causes. A plant operating agreement among the lessees will describe their respective rights and duties, including the apportionment of O&M and fuel cost.

The facility leases also address the issue of capital additions that may be required by the new generating units while they are under lease. These investments may be needed to keep the units in good condition, to respond to any new government mandates, or for other reasons. Such capital additions will be paid for in the first instance by the owner of the plant (the project LLC). The owner will recover the cost of such additions by means of supplemental monthly rent payments by the lessee. The calculation of such supplemental payments will be similar to the calculation of the basic lease payment except that the amortization period for a capital addition will be the remaining term of the underlying facility lease. To avoid situations in which a large capital addition late in the term of the facility lease results in a large supplemental rent payment because of the short time remaining in which to amortize the cost of the addition, the facility lease will provide for early renewal options or other mechanisms which enable the utility lessee to amortize the costs over a longer period in order to keep customer rates relatively stable.

When first proposed in September 2000, PTF involved not only the construction of new generating units by a non-utility affiliate, but also the transfer of existing (non-nuclear) generating units to such an affiliate. As now proposed, PTF no longer contemplates the transfer of existing units. It does contemplate, however, that major capital additions[49] to existing units will be paid for and owned by a single purpose LLC and leased back to WE. The lease payments for such major capital additions will be calculated the same way other PTF lease payments are calculated. The lease term for major additions to existing plants will depend on whether or not the addition is severable from the property, the expected economic life of the addition, the total expected life of the existing generating unit with the addition, and relevant tax considerations.

In addition to the facility leases, PTF employs several other affiliated interest agreements, all of which require PSCW approval under § 196.52, Wis. Stats.:

- **Ground Leases.** WE is the current owner of the land on which the new generating units will be built. For the project LLCs to build the units, they must first obtain control of the land, which they accomplish by leasing the land from WE. The ground leases spell out the terms of these arrangements including

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[48] "Pro rata" share in this discussion means in proportion to the ownership interest the lessee (or its affiliate) has in the project LLC.

[49] The Wisconsin statutes provide that the cost of such additions to existing utility plants must exceed $10 million to qualify for lease treatment. § 196.52(9)(b)4, Wis. Stat.

descriptions of the site leased, easements and rent, which is based on the property's book value as required by the leased generation statute.

- **Ground Subleases.** After a project LLC builds a generating unit on the land it leased from WE, it leases the generating unit to WE by means of a facility lease and it leases the land back to WE by means of a ground sublease. The rent specified in the ground subleases, like the rent specified in the ground leases, is based on the land's book value.
- **Asset Purchase and Sale Agreements.** The sites on which the proposed PTF generating units will be built currently support electric generation facilities owned and operated by WE. Parts of those existing facilities will no longer be needed by WE once the existing plants are decommissioned. It is proposed to sell such assets to the project LLCs for their use. Asset purchase and sale agreements are required to execute such transactions.

XI. Request for Relief.

Pursuant to §§ 196.49, 196.491(3), and 196.52, and 196.795(5)(k)3, Wis. Stat., and §§ PSC 111.53 and 133.04, Wis. Admin. Code, Wisconsin Energy Corporation ("WEC"), Wisconsin Electric Power Company ("WE"), W.E. Power, LLC ("W.E. Power"), and Wisconsin Gas Company ("Wisconsin Gas"), collectively "The Applicants," make application to the Public Service Commission of Wisconsin ("PSCW") for all authorizations and approvals necessary to implement the generation component of PTF, as described in this application and in the enclosures which are incorporated herein by reference.[50]

The applicants seek timely PSCW action as follows:

- Issuance of certificates of public convenience and necessity ("CPCN") to W.E. Power and WE permitting the construction and placement in operation of approximately 1,100 MW of combined-cycle gas-based generating capacity at the Port Washington Power Plant site.
- Issuance of a Certificate of Authority ("CA") to Wisconsin Gas permitting the construction and placement in operation of a natural gas pipeline lateral to transport natural gas from the ANR gate station in the Town of Jackson, Washington County, to the Port Washington Power Plant site, where that gas will be used to fuel the proposed generating capacity and to reinforce the gas distribution system in the Port Washington area.
- Issuance of a CPCN to W.E. Power and WE permitting the construction and placement in operation of approximately 1,800 MW of advanced technology coal-based generating capacity at the Elm Road Power Plant site.
- Approval of a series of affiliated interest agreements between WE and the project companies in which W.E. Power has a majority ownership interest.

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[50]The American Transmission Company LLC is filing separately for a certificate of authority to undertake transmission work in support of the Port Washington generation project.

Section 196.491, Wis. Stat., provides that the PSCW shall approve an application for a certificate of public convenience and necessity only if the Commission determines all of the following:

- The proposed facility satisfies the reasonable needs of the public for an adequate supply of electric energy.
- The design and location of the proposed facility is in the public interest considering:
  - Alternative sources of supply
  - Alternative locations or routes
  - Individual hardships
  - Engineering factors
  - Economic factors
  - Safety factors
  - Reliability factors
  - Environmental factors
- The proposed facility will not have undue adverse impact on other environmental values, such as, but not limited to, ecological balance, public health and welfare, historic sites, geological formations, and aesthetics of land and water and recreational use.
- The facilities will not substantially impair the efficiency of service, nor provide facilities unreasonably in excess of probable future requirements, nor, when placed in operation, add to the cost of service without proportionately increasing the value of availability of service.
- The proposed facility will not unreasonably interfere with the orderly land use and development plans for the area involved.
- The proposed facility will not have a material adverse impact on competition in the relevant wholesale electric market.

Regulations promulgated by the PSCW spell out in detail the information that must be provided with an application for a CPCN so that the extent to which a proposed facility satisfies the statutory requirements can be evaluated. That information is being filed with this application in the form of Enclosures organized according to the factors listed in the statute and the rules.

Section 196.52, Wis. Stat., provides that no contract or arrangement between a public utility and an "affiliated interest" is valid or effective unless and until the PSCW gives its written approval. Under the statute, the PSCW shall approve such a contract or arrangement "only if it shall clearly appear and be established upon investigation that it is reasonable and consistent with the public interest." Section 196.52(9) sets specific requirements for an affiliated interest agreement to qualify as a "leased generation contract."

The affiliated interest agreements the PSCW is being asked to approve consist of the following:

- A facility lease between WE and the project LLCs that own the new power plants.
- A ground lease between WE and each project LLC under which WE leases to the project LLC the land on which the new generation facilities will be built.

- A ground sublease between each project LLC and WE, under which the project LLC leases back to WE the land on which the leased generation facilities are built.
- Asset purchase and sales agreements and bills of sale by which the project LLCs will buy certain decommissioned assets from WE to be used in the construction and/or operation of the power plants.

The Applicants believe that these affiliated interest agreements, which are described in more detail elsewhere in this application and forms of which are contained in Enclosure 5, are necessary to successfully and efficiently implement PTF. As such, the Applicants believe it will be shown upon investigation that the agreements are reasonable and in the public interest, thus satisfying the standard for approval set forth in § 196.52.

CONCLUSION

PTF seeks to assure WE customers that their future needs for electric power will be met reliably, at reasonable prices and in a way that protects the environment. Since it was announced seventeen months ago, PTF has evolved and its innovative leased generation structure has been authorized by legislation. After seven months of review, including a contested case hearing, the PSCW entered an order authorizing WE to proceed with the development of PTF. The applicants do not expect the plan's evolution to cease with the filing of this application. They look forward to working with the PSCW and other interested parties, through the public hearing process and otherwise, to make additional improvements in the PTF plan and they look forward to PSCW approval of PTF so that they can implement this important project.

Dated this 1st day of February 2002.

Respectfully submitted,

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Power the Future Application Index

Introduction and Application

Transmittal Letter
Executive Summary
Application

Volume 1

Enclosure 1: Need and Supply Analysis Report
Enclosure 2: Evaluation of Supply Alternatives Available to WE
Enclosure 3: Financial Analysis
Enclosure 4: Competitive Issues Analysis
Enclosure 5: Affiliated Interest Agreements
Enclosure 8: Port Washington and Elm Road Cost Report

Volume 2

Enclosure 6: Port Washington Generating Station Environmental Report

Volume 3

Enclosure 7: Elm Road Generating Station Environmental Report

July
2003

PUBLIC SERVICE COMMISSION OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

Final Environmental Impact Statement

Elm Road Generating Station – Volume 1

Docket 05-CE-130
Date Issued, July 2003

Table of Contents

To the Reader: i

Table of Contents iii

List of Tables ix

List of Figures xiii

Contributors and Reviewers xv

Contributors xv
Reviewers xvi

Executive Summary xvii

Chapter 1 – Background and Regulatory Requirements 1

Proposed Facilities 2
Proposed sites 2
Ownership and operation 3
Leased generation agreements 3
Cost in brief 4
Application for PSC certification 4
DNR permitting authority 5
Wisconsin Environmental Policy Act 5
Public participation opportunities 6
Process and public participation for this case 6
Federal interests 8
State interests 9
Local Interests 10

Chapter 2 – PTF Costs and Financing Mechanism..... 11

Financing mechanism 12
Technology cost assumptions – SCPC units 12
Technology cost assumptions - IGCC Unit 13
Fuel cost assumptions 14
Operation and maintenance 14
Retirement costs 15
Projected transmission costs 15
Costs of previous coal-fired generation plants 16
Facility lease financing 18
Ground leases 26

Chapter 3 – Need for Baseload Capacity in Southeastern Wisconsin..... 27

Adequacy of existing supply for peak demand 28
Adequacy of existing supply for energy use 31
Baseload generation of energy 31
Previous generation supply plans 33
Current generation supply plans 34
Capacity needs in surrounding states 35
Recently approved transmission capacity 35
Proposed transmission additions in southeastern Wisconsin 37
Planned capacity retirements and nuclear relicensing 38
Historic growth in energy use 38
Historic growth in peak demand 40
Projected growth in energy use and peak demand 42
Present state of the WUMS wholesale market 44
Potential effects of Elm Road Generating Station on the WUMS wholesale market 44

Chapter 4 – Alternatives to the Proposed Project..... 47

Types of energy efficiency 48
Results of energy efficiency 48
Regulation of energy efficiency 49
Applicant's analysis of energy efficiency as an alternative 50
Staff's critique of WEPCO's analysis 51
Staff's analysis of energy efficiency potential 51
Wind 54
Staff's analysis of cost and potential 55
Biomass 57
Solar power 59
Fuel cells and hydrogen 59
Applicant's analysis of renewables as an alternative 61
Staff's analysis of renewables potential 61
Fuel cost comparisons 62
Applicant's treatment of IPP alternatives 64
Calpine's proposal 65
Staff's analysis of Calpine's proposal 65
EGEAS results - with 410 MW of wind by 2030 67
EGEAS Results- with No Limit on Wind 70
Other EGEAS Analyses 72
EGEAS summary 72
Effect on EGEAS results due to necessary transmission system improvements 74

Chapter 5 - Fuel Diversity Perspectives 79

Coal sources and availability 79
Natural gas resources, pipeline capacity and storage 80
Coal mining and transport 90
Natural gas extraction and transport 91
Resource needs and impacts 92
Air emissions 93

Chapter 6 - Overview of Proposed Sites and Technologies 95

Site Selection Process 95
North Site 99
South Site 101
South Site - Exp 102
Super critical pulverized coal (SCPC) 103
Integrated gasification combined-cycle (IGCC) 115
Combustion turbine 118
Hazardous Chemicals Management 124
Diesel fuel 125
Other chemicals 125
Interconnection on the plant site 126
Substation changes on the plant site 127
Possible system-wide transmission impacts 127
Stability issues 128

Chapter 7 – Air Emissions 133

Project changes and resulting delays in DNR's analyses 133
Particulates 135
NO_x 136
SO_2 137
Acid rain 138
Greenhouse gases 138
Volatile Organic Compounds and Ozone 139
Hazardous Air Pollutants (HAPs) 141
Mercury 142
Expected schedule for air permitting 145
National Ambient Air Quality Standards 146
Non-attainment new source review requirements 147
Prevention of significant deterioration 147
Federal Acid Rain Program 152
Hazardous air pollutants 152
State requirements (Wisconsin) 154
Ambient Air Quality in the Region 156
Regional climate 156
Ambient Air Quality Standards for Oak Creek 157
NAAQS and PSD 157
Expected annual project emissions for the ERGS 161
Pollution emission sources 161
Expected project emissions and PSD thresholds 162
Proposed BACT 166
Air quality impacts - construction phase 168
Air quality impacts - plant operation 169
Additional impacts 171

Chapter 8 - Water Resources 179

Lake Michigan (near-shore and offshore) 179
Changes related to shoreline modifications since 1952 and the OCPP construction 180
On-shore water resources (WEPCO property) 197
North of Elm Road 198
West of the railroad tracks 198
East of the railroad tracks 198
Railroad corridor 199
Water use 200
Cooling water intake structure 203
Harbor construction activities 208
Lakebed fill 209
Results of sediment quality investigation 210
Impacts of new facilities 216
Treatment and discharge of cooling water 217
Site differences 218
Treatment and discharge of storm water 221
Construction site erosion control plan 222
Treatment and discharge of process wastewater 224
Sanitary wastewater 225
Description of facilities 225
Impacts of new facilities 225

Chapter 9 - Solid and Hazardous Waste Disposal and Remediation 227

Active landfills 227
Closed landfills 231
Early ash disposal areas 231
Present methods of hauling ash 233
Present methods of re-use 233
Reburning of existing landfill material 233
Projected volumes of by-products 233
Characterization of by-products 235
Fly ash 236
Bottom ash 236
Gypsum 236
Gasifier slag 237
Elemental sulfur or sulfuric acid 237
Excavation debris 237
Structure demolition debris 238
Dredged materials from Lake Michigan 238
Changes in hauling methods and timing 238
Impacts on operating landfills 239
Impacts on existing closed landfills 239
Remediations 243
Beneficial Re-use 244
Ash 244
New landfills 246

Chapter 10 - Land Resources 247

Topography 248
Geology 249
Rock 249
Glacial till 249
Soils 250

Shooting range property 250
Designated biological areas 251
Primary environmental corridors 251
Natural areas 252
Isolated natural resource areas 252
Critical species habitat 252
Habitat fragmentation 253
Existing vegetation 254
North of Elm Road 254
South of Elm Road and east of the railroad 255
West of the railroad 255
Wildlife 256
Wildlife use of the property 256
Bird habitat 259
Insects 261
Threatened/endangered species 262
State endangered species 262
State threatened species 262
State special concern species 263
Species not actively tracked but under state observation 264
Archeology/historic properties 264
Potential Impacts on WEPCO's Property 265
Topography 265
Geology 266
Designated biological areas 267
Habitat fragmentation 267
Vegetation and wildlife 267
Pollutants 268
Exhaust stacks 268
Migrating bird stopover habitat 269
Archeology/historic properties 270
North Site 271
Topography and soils 271
Designated biological areas 272
Vegetation 272
Wildlife 274
South Site 277
Designated biological areas 278
Vegetation 278
Wildlife 278
South Site-Exp 280
Topography and soils 280

Chapter 11 - Community Impacts 285

Affected Communities 285
Communities close to the power plant site 285
Communities close to associated facilities 285
The larger community 286
Site History 286
OCPP generating units 286
Landfills on site 286
Pollution control upgrades 287
WEPCO-owned property 287
Community Characteristics 290
Demographics 290
Sensitive or vulnerable communities 291
Residents nearest to WEPCO-owned property 292
Land Use 292
Existing environment 292
Land use plans 293
Existing land use on WEPCO-owned land 293
WEPCO's proposed changes to on-site land use 293
Planned land use on WEPCO-owned land in the city of Oak Creek 294
Planned land use on WEPCO-owned land in the town of Caledonia 294
Existing land use – adjacent to WEPCO property 295
Planned land use – adjacent to WEPCO property 295
Potential conflicts with land use plans 296
Lakeview Village Concept Plan 296
Zoning 298
Zoning on WEPCO-owned property 298
Zoning adjacent to WEPCO-owned property 299
Primary environmental corridor 299
Municipal authority and influences over the proposed project 300
Proposed Construction and Operation Schedule 300
Municipal Services 301
Water and sewer service 301
Storm water 301
Refuse collection 302
Police 302
Fire protection and emergency medical service 302
Schools and other social services 302
Shared Revenue 302
Existing shared revenue program 302
Past adjustments to the shared revenue program 303
Current legislative changes to the shared revenue program 303
Property Values 304
Review of existing studies on property values near generation sites 305
Summary of literature review 306
Jobs and Employment 307
Existing environment 307
Expected changes in on-site employment 307
Fugitive Dust 309
DNR regulation of fugitive dust 309
Existing rules 309
DNR analysis of suspected dust samples from existing power plants 309
New rules specifically addressing coal dust 309
Requirements of local government 310
Potential fugitive dust sources 310
Effect of site selection and number of units 310
Traffic 316
Existing environment 316
Increased traffic 317
*** This number does not include trucks required for ash shipment, which would begin about 5-10 years after plant operation. See Table 3-15 318

Noise **327**
Terminology and measurements 327
Applicable local ordinances 328
Existing noise environment 328
Modeling the proposed project impacts 333
Other noise sources 334
Recreation **339**
Haas Park 339
Bender Park 340
Cliffside Park 342
Milwaukee -- Racine County Recreational trail 343
Recreational uses on WEPCO-owned property 344
Visual Impacts **345**
Existing visual environment 345
Existing light environment 351
Expected visual impacts 351
IGCC flare 353
Site lighting 355
Building exterior and landscaping 356
Mitigation of visual impacts 356
Railroad Proposals and Impacts **358**
Existing environment 358
Railroad lines 358
Canadian Pacific rail corridor, Amtrack, and MRRI. 358
Existing coal delivery 359
Proposed coal delivery for ERGS 362
Delivery of coal by ship 362
Proposed changes to the railroad corridor 364
Potential air pollution from coal trains 368
Fugitive dust 368
Diesel emissions from rail engines 369
Noise effects of proposed changes in coal unloading facilities 369
Potential safety issues associated with increased rail traffic 370
Coordination with potential commuter rail service 370
Trains blocking crossroads due to proposed changes in the rail corridor and train length 371
Potential impacts of WEPCO's proposal to eliminate road blockage problems on Seven-Mile Road 376
Loss of an access road for emergency vehicles 376
Potential impacts of a new rail underpass on Six Mile Road 377
DNR concerns with proposed railroad changes 380
Electric Transmission Proposals and Impacts **381**
Introduction 381

Chapter 12 - The Conditional Use Permit (CUP) Option 391

Shooting range 393
Topography and Soils 393
Air emissions 395
Pollution source descriptions 395
Ash haul routes and ash reburn building 395
Expected project emissions 396
Proposed BACT 396
Air quality impacts - construction phase 397
Air quality impacts - plant operation 397
Hazardous air pollutants 398
PECs 401
INRA/CSH areas 401
Vegetation 402
Woodland 402
Old field 402
Grassland 402
Coal piles 403
Wisconsin law -- protection of listed sites 404
Federal law - surveys to locate and evaluate historic properties 404
Fugitive Dust Impacts 404
Noise Impacts 405
Traffic Impacts 405
Visual Impacts 406
New and avoided impacts due to reduced stack height and number 406
New and avoided impacts due to coal pile relocations 406
New and avoided impacts due to access road changes 407
New and avoided impacts due to berm changes 407

Chapter 13 - Overview of the Required Decisions and Summary of Impacts 409

Alternative power plant sites 410
Alternative technologies or actions 410
Market power 411
Project site selection 411

Appendix A-1 – Executive Summary for the Calpine Fond du Lac Energy Center 417

Air 419
Water 419
Vegetation and wildlife 420
Land use 420
Local community services 421
Fogging and icing 421
Noise 421
Visual 421
Historic properties 422

Appendix A-2 - Executive Summary for the Fox Energy Center 423

Proposals 423
Project Location 423
Project Description 424
Water supply and discharge 424
Electric transmission interconnection 425

Environmental Issues 426
Air 426
Water 426
Other plant site issues 427
Potential environmental impacts of new transmission lines 427
Required Decisions 428
General Comparison of Natural Gas vs Coal-fired Generation 429
Amount of land required 429
Air emissions 429
Jobs and employment 430
Traffic 430

Appendix B - EGEAS Modeled Expansion Plans for WEPCO 2005 to 2030 431

Appendix C – DNR 316(b) Determination for the OCER Station 439

Appendix D -- Air Emissions Data 447

Best Available Control Technology (BACT) for Pollutant Emission Sources and Proposed Emission Limits 447

Appendix E – Agreement Between WEPCO and the City of Oak Creek, and the Conditional Use Permit 463

Acronyms 465

1

Chapter 1 – Background and Regulatory Requirements

Description of the Proposed Project

Wisconsin Electric (WEC); Wisconsin Electric Power Company (WEPCO); and WE Power, LLC (WE Power), a non-utility affiliate, are proposing to build approximately 1,830 MW of advanced technology coal-based generating capacity.

The applicants have applied to the Public Service Commission of Wisconsin (Commission or PSC) for a Certificate of Public Convenience and Necessity (CPCN) under Wis. Stat. § 196.491(3), and Wis. Admin. Code PSC ch. 111.53, and for any additional approvals required from the Commission to construct and operate a large electric power generating facility under Wisconsin's leased generation law, Wis. Stat. § 196.52(9).

The new facility, the Elm Road Generating Station (ERGS), would consist of two super-critical pulverized coal (SCPC) units and a single integrated-coal gasification (IGCC) unit, all constructed on or adjacent to a site containing WEPCO's existing Oak Creek Power Plant (OCPP). The new generating units would be constructed and owned by WE Power. The units would be leased by WEPCO and other interested utilities. Employees of WEPCO would operate the new facilities.

The purpose of the project is to satisfy WEPCO's need for additional capacity over the coming years. WEPCO forecasts that its peak demand driven by population growth, new wholesale obligations, business expansion and increasing usage per customer, will grow at approximately 2.9 percent annually from 2002 through 2011, reaching 7,612 MW. In order to meet this need, plus an 18 percent reserve margin, it has proposed a package of generation capacity that includes 1,090 MW of natural gas-fired capacity at its existing Port Washington Power Plant site and 1,830 MW of coal-based generation that is the subject of this application. The portion of the new facilities at Port Washington and Elm Road expected to be available for use by WEC's utilities is 2,620 MW. It is anticipated that the remaining capacity, approximately 300 MW, would be leased by other Wisconsin-based utilities.

Proposed Facilities

SCPC units

Two SCPC units would be built on the selected site. One would commence construction in 2004 and begin operation in 2008[9] and the second would have an in-service date of 2009, with a similar construction period.

The SCPC technology is more advanced than conventional coal-combustion technologies currently in operation in Wisconsin. In the SCPC technology, water is heated to higher temperatures and pressure so that the energy content of the steam delivered to the turbines is much greater. Higher plant efficiencies result and less fuel is burned per unit of electrical output.

The combustion process and the equipment and components that comprise the power block are described in Chapter 6. All of the auxiliary facilities, such as the coal handling equipment and coal train unloading facilities are also discussed in Chapter 6.

IGCC unit

The proposed IGCC process is designed to break down coal into its basic constituents and produce a synthetic gas (syngas), separate out pollutants from the syngas, and use the syngas as fuel for the combustion turbines. Waste heat is also used to produce steam for steam turbine use.

The IGCC technology, which is described in detail in Chapter 6, is based on several existing facilities in the U.S. However, this technology is still in the early stages of development relative to conventional coal and SCPC combustion technologies. The IGCC plant is proposed to be in service in 2011 and it is expected that changes in the technology and estimated final cost could differ from what is presented in this application.

Proposed sites

The proposed sites for the ERGS are on a large parcel of land located along the shore of Lake Michigan near the OCPP. The parcel is approximately 1,000 acres in size, and is primarily owned by WEPCO. This land currently functions as buffer area around the existing OCPP. An 80-acre property within the WEPCO property is currently used as a shooting range, but is also being considered as a site for some of the facilities. This property consists of two parcels - a northerly parcel owned by the State of Wisconsin and a southerly parcel owned by the U.S. government.

Three sites for the proposed ERGS were identified in the CPCN application. One of the proposed sites is in the city of Oak Creek in Milwaukee County at the east end of Elm Road, north of the existing OCPP. This site is referred to as the North Site throughout this EIS. A second site, the South Site, is located south of the existing OCPP along the lakeshore. A variation of the South Site was proposed as the applicants' third site alternative. For purposes of description and analysis in this document, this alternative will be referred to as South-Exp Option.

[9] In WEPCO's direct testimony, May 2008 is listed as the start-up date for the first SCPC unit. This differs from the 2007 date provided in the CPCN application and used in the analyses for the draft EIS.

Selection of the South Site would place all three coal units (two SCPC units and one IGCC unit) on property currently owned by WEPCO. In the South-Exp Option, the two SCPC units would be placed on WEPCO property in the same location, but the IGCC unit would be built on the section of land that is currently federally-owned. Use of the South-Exp Option would require negotiations for a land purchase or swap between WEPCO and the federal government. Both the South Site and its variant, the South-Exp Option, are located in the town of Caledonia in Racine County.

Since the draft EIS was issued, WEPCO and the city of Oak Creek agreed upon another site layout plan for the North Site. This site layout was negotiated as part of the Conditional Use Permit (CUP) process that the applicants agreed to follow in their agreement with the city of Oak Creek. The applicants have stated that they would be willing to build the ERGS facilities as proposed in their CPCN application (with some exceptions), but that they would like to have the new site layout, hereafter reffered to as the CUP Option, considered by the Commission in its final decision on the project.

In the CUP Option, the two SCPC units and the IGCC unit would be placed at approximately the same location as in the original North Site layout. However, the new option involves relocating the active and reserve coal piles, splitting the existing substation into two sections and relocating the substations, adding a new access road and ash haul roads (and possibly a new ash reburn building), and altering the configuration of soil deposition areas. A description of the new layout and its potential environmental effects are described in Chapter 12 of this final EIS.

Both the North and South Sites are within WEPCO's service territory adjacent to a major and growing source of electric load. A description of the criteria used in identifying potential sites and the methodology and justification used by WEPCO to select the proposed sites is found in Chapter 6.

Ownership and operation

WEPCO is a public utility, as defined in Wis. Stat. § 196.01(5), engaged in the generation and distribution of electricity to customers in eastern Wisconsin and the upper peninsula of Michigan.

WEPCO owns, or would own (if it obtains the federal land), the site on which the proposed ERGS facilities would be located. WE Power would build and own the facility, and WEPCO would operate the facility.

Leased generation agreements

The leased generation statute was created recently to allow the formation of electric generating facilities by non-regulated entities and the use of leased generation contracts between the non-utility entity and the public utility. The addition of this subsection to Wis. Stat. §196.52 does not change the basic requirement that affiliated interest agreements (in this case, leased generation contracts) must be reasonable and in the public interest.

According to the application, an entity titled Elm Road Generating Station - SCPC Unit 1 LLC would be formed as another wholly owned subsidiary of WEC. WEPCO, WE Power, and ERGS - SCPC Unit 1 LLC are or will be affiliated interests as defined in Wis. Stat. § 196.52.

WEPCO would lease the land (the Ground Lease) to build the proposed facilities to ERGS - SCPC Unit 1 LLC. WE Power would lease its owned interest in the facility (the Facility Lease), and sublease its interest in the facility site (Ground Sublease) to WEPCO, who would operate the electric generation facility. Similar arrangements would occur for the second SCPC unit as well as the IGCC unit.[10]

Because WEPCO and WE Power are affiliated interests, the Facility Lease and Ground Sublease between WEPCO and WE Power must receive PSC approval under Wis. Stat. § 196.52(9). The completed facility would be owned by WE Power. WE Power would own assets that comprise a complete facility for the generation of electricity under the leased generation law. These relationships and facility leases related to the ERGS are shown in Figure 2-4 in Chapter 2.

Cost in brief

The cost to construct both SCPC units and the IGCC plant would be approximately $4.3 billion. A detailed discussion regarding the assumptions and uncertainties contained in the estimated costs, the structure of the financing and lease arrangements, and the potential long-term impact of the facility cost on WEPCO customers is discussed in Chapter 2.

Proposed Schedule

Draft EIS issued	April	2003
Public meetings	May	2003
Final EIS issued	August	2003
Technical hearings	August	2003
Public hearings	September	2003
PSC decision and order	November	2003
If the project is approved:		
Begin construction of initial SCPC unit	April	2004
Begin construction of the second SCPC unit	December	2005
Commence operation of the first SCPC	May	2008

PSC Construction Case Process

Application for PSC certification

Anyone proposing to build a power plant of 100 MW or more in Wisconsin must obtain approval from the PSC in the form of a CPCN before construction can begin. The Commission makes the final decision about whether a power plant is built and where it is sited. The Commission consists of three members, appointed by the governor for staggered six-year terms.

[10] Each subsequent unit of the ERGS, the second SCPC unit and the IGCC unit, would require the development of a separate Ground Lease, Ground Sublease, and Facility Lease.

Project developers must file a detailed CPCN construction application with the PSC. Once the PSC deems an application complete under Wis. Stat. § 196.491(3), it must complete its review process within 180 days. Court approval is needed to extend the review time to a maximum of 360 days. If the PSC does not obtain a court extension or issue a CPCN within this time period, the project is automatically approved as proposed by the applicant.

Because of the complexity of the ERGS proposal and the amount of public interest it has generated, the Commission applied to the Dane County Clerk of Court for a 180-day extension needed to complete the review of this project. A 180-day extension was granted. Thus, the Commission's final decision must be rendered by November 10, 2003.

DNR permitting authority

The developer of a proposed power plant must obtain several approvals and permits from the DNR. Some of these permits are designated as "pre-construction" permits or approvals. Construction may not begin until these permits and approvals are received by the applicants. The primary DNR approval needed before power plant construction may begin is the construction permit for a new source emitting significant[11] quantities of air pollutants. The DNR will also conduct a Prevention of Significant Deterioration (PSD) review and use the results in establishing permit conditions.

Because of the location of the proposed sites and potential for adverse effects to the lakeshore and water quality, several other permits have also been designated as pre-construction approvals. These include the permit for grading work for the generating facilities, the NR 103/NR 299 analysis and certification for wetland fill associated with the generating station site work, the approval of a plan for construction site stormwater runoff, and the threatened/endangered species review for construction associated with the generating station site work.

Some of the other important water-related permits and approvals would include modification of the WPDES permit, and a water withdrawal and loss approval. Other DNR permits would be required for various parts of the power plant project, depending on the final location, the type of shoreline protection measures implemented, the selected method of coal and limestone delivery for the new plant, and other expected impacts.

Wisconsin Environmental Policy Act

Environmental impact statement

The Wisconsin Environmental Policy Act (WEPA), Wis. Stat. § 1.11, requires all state agencies to consider the environmental impacts of major actions that could significantly affect the quality of the human environment. A proposal for a coal-fired power plant requires preparation of an environmental impact statement (EIS) under Wis. Admin. Code § PSC 4.10, regardless of whether it is located at an existing generating site or a green field site. The PSC and the DNR have prepared this EIS jointly with the PSC functioning as the lead agency. Based on the information provided, this EIS describes the proposed project

[11] "Significant" in this context means the level of pollutants that triggers the permitting process.

to the extent known, discusses possible alternatives to the proposed action, and evaluates the project need, cost, and impacts on the natural and human environment.

The EIS process has several stages: a draft EIS is produced and circulated for comment; all comments are considered in preparing a final EIS which is also distributed for review; and a public hearing is held in the project area.

Public participation opportunities

As part of agency scoping responsibilities under Wis. Admin. Code § PSC 4.30(2) and NR 150.21(3), the PSC and DNR, before preparing the draft EIS, solicit comments from any person interested in the proposed action. The PSC also distributes copies of the project application to local clerks and libraries for inspection by the public.

The applicant and the regulatory agencies may hold public information meetings in the project area early in the process. At these meetings, the public can learn more about the project, the applicant can improve its application, and the PSC and DNR staff can learn more about local concerns and interests before beginning to prepare the draft EIS.

The purpose of the EIS is to inform the Commissioners and the public of the potential effects of the proposed project. After the draft EIS is issued, there is a public comment period of 45 days. After the final EIS is issued, there is at least a 30-day review period to allow individuals to read the final EIS and prepare for the public hearing. The Commission provides notice to the public and holds a public hearing in the project area. The hearing is the opportunity for the public to make their views known to the Commissioners.

Process and public participation for this case

Application filed – PSC docket 05-CE-130

On February 1, 2002, WEPCO, WE Power, and WEC filed a CPCN application for authority to construct 1090 MW of natural gas-fired generation at the existing Port Washington Power plant site and 1830 MW of coal-fired generation on or adjacent to the existing OCPP site. The applicants also filed for other approvals related to the new leased generation law. The PSC subsequently bifurcated the process for reviewing the Port Washington Generating Station (PWGS) and the ERGS into two separate construction dockets. The PWGS application (PSC docket 05-CE-117) was reviewed and approved in 2002. The ERGS application was assigned PSC docket number 05-CE-130 and is the subject of this EIS.

After the company filed additional materials, the PSC found the application to be complete on November 15, 2002. The PSC distributed copies of the entire application to local clerks and county libraries in the project area. It also issued a public notification to interested and affected persons on January 13, 2003, to explain the PSC's review process, to solicit comments and questions about the proposed project, and to announce a public scoping meeting, which was jointly sponsored with the DNR and held on January 27, 2003. Applications for several permits were filed with the DNR at about the same time the CPCN application was filed.

PSC process

The PSC and the DNR prepared this draft EIS and held public meetings in the project area during the 45-day comment period to solicit comments on the draft EIS. Following the comment period, a final EIS was prepared taking into consideration the comments received and new information filed by the applicants in their direct testimony and in response to numerous data requests. A Notice of Hearing will be issued at least 30 days before the scheduled hearing date, possibly with the final EIS.

About 30 days after the final EIS is issued, the PSC will hold public hearings in the project area on the final EIS and the CPCN application. After the hearing is complete and transcripts of the hearing record are reviewed, the three Commissioners will meet to make a decision to approve, modify, or reject the proposed project based on information presented at the hearing. That meeting will be open to public observation. If one or more of the proposed coal-fired units are approved, the Commission will select the site for the unit(s) and add any conditions it determines necessary to be included in the construction order. After the Commission's decisions are made, an order to the applicants will be prepared and issued.

Public participation activities for this docket

Applicants

The applicants have prepared materials outlining the plans for the ERGS, issued news releases, sent letters to area residents, held several open house meetings, and conducted personal visits regarding the project. WEPCO representatives have also met with municipal government members of the nearby communities of Oak Creek and the town of Caledonia.

PSC and DNR

After reviewing the CPCN application and DNR permit applications, the PSC and DNR co-hosted a public scoping meeting with afternoon and evening sessions on January 27, 2003 in the Oak Creek Community Center on Howell Avenue in the city of Oak Creek. A press release was issued, and direct mail invitations were made to everyone on the project mailing list, including landowners near the project site and members of the public that had contacted the PSC about the project. About 200 members of the public participated in the afternoon session, and about 300 people attended the session in the evening.

Meetings to solicit comments on the draft EIS were held in Oak Creek and the town of Caledonia in May 2003. These meetings were well attended and staff received nearly 300 written and verbal comments during the 45-day comment period, many of them substantive in nature. The comment period on the draft EIS ended on June 12, 2003. Comments were used to prepare this final EIS.

The hearing and the Commission decisions

As described above, the final EIS will be distributed to all interested and affected persons who request a copy. A 30-day review period for the final EIS will be followed by a public hearing in which members of the public are encouraged to testify. The Commission meeting where final decisions on the project are made will be open to public observation.

Public involvement through other state agencies

An air pollution control permit is part of the project review, and anticipated air pollutant emissions are described in this EIS. The hearing on the air permit will likely be held separately in late September 2003.

The EPA has also delegated to DNR its determination regarding whether the ERGS facilities qualify as new or existing facilities under Section 316 (b) of the Clean Water Act. This determination could affect the applicant's ability to use once-through cooling technology for the ERGS facilities. More information about this determination is found in Chapter 9.

Other state level permits would be needed to build or operate the plant but are not required before plant construction can begin. Some permits are required before specific plant components are installed, constructed, or operated. State agency permits and approvals needed for this project are listed in Table 1-2.

Other Federal, State and Local Interests

Federal interests

Several federal government agencies also have regulatory interests in this project that they will act on directly or will delegate to state agencies. These interests can be varied, depending on the sites and the type of facilities proposed. Table 1-1 indicates the federal agencies involved in this project to date.

Table 1-1 Federal government agencies involved in the project

Agency	Interest or Permit	Contact
U.S. Environmental Protection Agency	Section 316(b) Clean Waters Act determination - delegated to DNR	
	Clean Air Act New Source Performance Standards - delegated to DNR	See DNR below in Table 1-2
	Clean Air Act Acid Rain Permit - delegated to DNR	See DNR below in Table 1-2
U.S. Army Corps of Engineers	s. 404 of the Clean Waters Act - wetland fill for generating station, coal storage, site work, rail improvements. Construction of railroad underpasses and/or overpasses	Tamara Cameron St. Paul District (651) 290-5197
	s. 10 of the Rivers and Harbors Act of 1899 - construction of breakwater and harbor facilities, including dock extension	
Federal Aviation Administration	Reviewing heights of proposed facilities; assessing impacts on aviation and clearance standards; and requiring facility alterations as needed.	Richard Farrell, III Great Lakes Regional Office (847) 294-7566

National Historic Preservation Act compliance

Under Section 106 of the National Historic Preservation Act, the Wisconsin Historical Society (WHS) must be consulted by each federal agency that has an interest in this project. These agencies must also contact any Native American peoples that may have an interest in the area affected by the project and any other individuals that may be affected by the loss or protection of historical, archeological, or traditional cultural properties as part of agency actions. Eventually, treatment of the area of potential affect would be the subject of a memorandum of agreement among all the interested parties.

The requirements of Section 106, when invoked early in a project review at the Commission, supersede the requirements of the corresponding state law on historic preservation. If Section 106 is invoked, it could cover all facets of this project, including the plant site, any new natural gas corridor, and any new water intakes, outflows, or pipeline corridors that are required by the proposed plant. Discussions of historical and archeological considerations are in Chapter 10 of this draft EIS under the heading "Historical and

Archeological Sites." Although the results of any negotiations or agreement under Section 106 can be incorporated into the final EIS, it is possible that they would occur during federal agency review processes after the project received PSC approval. If no historic properties were potentially affected, the Section 106 process could be completed before the CPCN were issued.

State interests

In addition to the substantial approval and permitting interests of PSC and DNR, several other state agencies must approve plans, designs, or specific components of the proposed generating facilities and auxiliary equipment.

Table 1-2 State agency approvals and permits required for construction of the proposed plant, electric transmission, and water supply and discharge structures

Agency	Approvals/Permits or Interest	Contact
Public Service Commission	s. 196.491 Wis. Stat. – Certificate of Public Convenience and Necessity for construction of large electric generating facility	Jeffrey Kitsembel 608-266-9658
	s. 196.49 Wis. Stat. - Certificate of Authority and s. 196.491 Certificate of Pubic Convenience and Necessity for transmission construction	
Department of Commerce	s. 101.12 Wis. Stat. - Plan and specification approval for construction of buildings and structures and installation of HVAC equipment, exhaust systems and elevators	Betty Wiese-Milwaukee. Co (414) 8523694 Larry Weede-Racine Co (262) 949-4300
	ch. DCOMM 41 and s. 101.17 Wis. Stat. - Safety requirements for installation of boilers, turbines, and related equipment	Terrence Walbillig (414) 303-8575
	ch. DCOMM 82.20 - Plan review and approval for construction of plumbing facilities	Robert Samuels (262) 424-3373
	ch. DCOMM 10 and s. 101.09 Wis. Stat. - Design requirements for installation of fuel or lubricating oil storage tanks	Vannessa Mouth (608) 267-5280
Department of Natural Resources	ch. NR 407 - Air quality operation permit and acid rain permit	Jeffrey Hanson (608)266-6876
	ch. NR 405, 406, 408 - Air construction permit	
	ch. NR 103 and 299 - Analysis/certification for wetland fill for the generating station coal storage, site work, and rail improvements	Heidi Hopkins (414) 263-8522
	s. 30.19 Wis. Stat. - permit for grading work in excess of 10,000 sq. ft. for generating facilities	
	s. 30.19 Wis. Stat. - permit for grading work for construction of railroad underpasses and./or overpasses	
	s. 30.21 Wis. Stat. - Approval for use of lakebed, dredging, and shoreline structures for construction of breakwater and harbor facilities.	
	s. 30.21 Wis. Stat. - Approval of use of lakebed for installation of the cooling water intake and discharge structures.	
	ch. NR 216 - WPDES Permit for stormwater discharges associated with construction activities and amendment of existing stormwater pollution prevention plan	Peter Woods (262) 884-2360
	ss. 281.35 and 281.41 Wis. Stat. and NR 142.06 – Approval for water withdrawal and water loss	Dan Joyce (608) 266-8736
	s. 283.31(6) Wis. Stat. and 316(b) CWA - BTA modification of WPDES permits and determination for cooling water intake structure	

Agency	Approval/Permit or Interests	Contact
Department of Natural Resources (continued)	ch. NR 502 - Approval for storage of coal combustion byproducts	Bizhan Zia Sheikholeslami (414) 229-0852
	ch. NR 514 - Solid waste approval for landfill plan of operation modifications	Heidi Hopkins (414) 263-8522
	s. 29.604 Wis. Stat. and NR 27 - Incidental take for threatened and endangered species if necessary	Jennifer Bardeen (608) 266-0289
Department of Transportation	s. 114.135(6) Wis. Stat. - High structure permit for the stacks	Gary Dikkers (608) 267-5018
	Vehicle weight restrictions and oversize/overweight permits	
Department of Health and Family Services	s. 145 Wis. Stat. - Approval of plumbing and fire protection system for construction of plumbing facilities	TBD
Wisconsin Historical Society	s. 44.40 Wis. Stat. - Approval of archeological surveys	Richard Dexter (608) 264-6509

Local Interests

To date, the city of Oak Creek and the town of Caledonia have been very active in seeking information about the project and involving local citizens and residents in the project review. Many locally sponsored meetings and forums have been held in these communities to provide information to citizens and ensure that the applicants are aware of local interests. Milwaukee and Racine County governments are also involved in reviewing certain aspects of the proposed project. Table 1-3 indicates the local interests and approvals necessary for construction of the ERGS facilities.

Table 1-3 Local government approvals and interests

Agency or Office	Interest or Approval	Contact
Milwaukee County	Inventory of hazardous materials and toxic release	Carl Stenbol (414) 278-4709
Racine County	Conditional Use permit to incorporate requirements of local ordinances, including site plan approval, erosion control, drainage and noise.	Julie Anderson (262) 886-8470
	Inventory of hazardous materials and toxic release	David Maack (262) 242-4202
City of Oak Creek	Conditional Use Permit to incorporate requirements of local ordinances, including site plan approval, erosion control, drainage and noise	Doug Seymour (414) 768-6526
Town of Caledonia	Coordination with Racine County on conditional use permit	Fred Haerter (262) 835-8423
	Construction permit, including erosion control and stormwater control plans for construction of railroad underpasses and/or overpasses.	

less certain because coal-based IGCC plants in the 500+ MW range have not been built anywhere in the world. Estimated costs for the ERGS project on a per unit basis are listed in Table 2-1. The total cost for the ERGS proposal is estimated to be about $4,314,995,000.

The cost estimates provided by WEPCO were utilized in the EGEAS modeling discussed in Chapter 4. For the SCPC and IGCC generating units, construction cost estimates of $1,415/kW and $1,739/kW were utilized respectively for the economic evaluation.[16]

Table 2-1 ERGS estimated construction costs on a per unit basis

Item	Unit 1 SCPC (2003)	Unit 2 SCPC (2003)	Unit 3 IGCC (2003)
Generating Unit (2003 $)	922,140,000	623,470,000	843,394,000
Shared Facilities	335,750,000	28,220,000	59,171,000
Escalation	125,412,000	78,594,000	147,118,000
Carrying Cost	261,300,000	275,200,000	298,900,000
Retirement Cost	138,330,000	73,028,000	104,968,000
TOTAL	1,782,932,000	1,078,512,000	1,453,551,000
TOTAL, 3 UNITS	4,314,995,000		

* Each unit has $13 million included for additional train costs.
** Escalation is for general inflation as measured by the GDP price deflator.
*** Carrying costs represent the interest on the capital invested in the project.
**** Retirement costs include amounts necessary to tear down the facility.

Production costs for electric generation consist of the capital dollars to build the plant, fuel procurement, and the Operating and Maintenance (O&M) expenses. Each of these costs is described in more detail below.

Financing mechanism

In its supply resource planning, WEPCO considered utility-owned generation (i.e. traditional rate-based generation), procurement from wholesale merchant plant suppliers (i.e. independent power producers), and leased generation from a public utility affiliate. After reviewing these three approaches, WEPCO decided to pursue the leased generation financing approach for both the combined-cycle units at Port Washington and the coal-fired facilities designated as the ERGS and located near the existing Oak Creek Power Plant.

The leased generation contract for the ERGS consists of three leases, a Facility Lease, a Ground Lease, and Ground Sublease. A set of these three leases would be required for each of the three units proposed for the ERGS. At this time, only the leases for the first SCPC unit have been provided to the PSC for review. These leases and their financial terms and ratepayer impacts are discussed later in this chapter.

Technology cost assumptions – SCPC units

WEPCO is proposing to use bituminous coal as the primary fuel source at an estimated cost premium of 3.5 percent more than if it burned sub-bituminous coal. The additional cost offers advantages of improved mercury collection and higher efficiencies[17] (thus less CO_2 production). Bituminous coals, from the eastern

[16] DR-006 provided original supporting documentation for levelized lease payments. Al Mihm's testimony provided the latest $/kW costs.
[17] Response to 1-SUP-013.

U.S., have higher heating values due to more fixed carbon. Subbituminous coals, from the western U.S., have higher ash and moisture content.

The technology for the SCPC units is considered mature and the estimated costs should be relatively stable. Roughly 1,000 units are operating with coal as a primary fuel source and it is estimated that 40 units within the U.S. have incorporated the SCPC technology since 1960.[18]

Since the PTF application was initially filed, WE Power has received bids for the Engineer, Procure, and Construct (EPC) contract for the SCPC units. Bechtel Power Corporation has been selected as the lowest evaluated bidder. WEPCO has indicated a change from the original cost estimates of $1,263/kW in 2001 dollars to $1,400/kW in 2003 dollars.

Items that impacted the original estimate provided by WEPCO include:

- The need to remove a portion of the bluff for plant siting.
- The additional cost for the water intake being tunneled 9,000 feet into bedrock.[19]
- The estimated cost for a fabric final filter after the electrostatic precipitator (if required).
- The estimated cost of $20 million for a coal shed over the active coal pile.[20]
- Construction of an underpass at Six Mile Road at a cost estimated at $5 million.[21]

Items that have not been considered part of the construction cost include:

- Recently negotiated annual payments to Oak Creek similar to that paid to Port Washington.[22]
- Transmission system impacts.

Technology cost assumptions - IGCC Unit

The estimated cost for the IGCC unit is not as refined as that for the SCPC units. A request for bids for an EPC contract for the IGCC plant has not been issued and likely will not be issued before a CPCN decision occurs. There is little historical information to determine the estimated IGCC cost and the 2011 commercial operation date is too far into the future to develop a more reliable estimate with increased price certainty.

IGCC technology has been demonstrated commercially at only two sites within the U. S., both for a nominal 250-MW size plant. The cost for one of those plants, the Wabash River Plant in Indiana, was $417 million for a 262-MW facility (in 1995 dollars) or $1,591/kW.

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18 http://www.fe.doe.gov/coal_power/special_rpts/market_systems/marketbased_systems_appendices.pdf page 11.

19 Response to 1-SUP-093.

20 WEPCO increased this cost from $5 million to $20 million in its comments on the draft EIS.

21 Grade Separation Feasibility Studies... by Benesch.

22 The Commission approved an annual payment of $500,000 to the city of Port Washington after it approved the construction of two 515 MW natural gas-fired combined-cycle plants to replace the existing 320 MW of coal-fired generation currently on-site. Recently WEC and WEPCO agreed to pay Oak Creek the following amounts: $1.5 million per year after the start-up of unit 1 (SCPC); an additional $750,000 at the start-up of unit 2 (SCPC); and an additional $250,000 at the start-up of unit 3 (IGCC).

3

Chapter 3 – Need for Baseload Capacity in Southeastern Wisconsin

WEPCO proposes to build three additional units or 1,830 MW of coal-fired generation over the next eight years. The need for all or a portion of this capacity, particularly as baseload generation, is explored in this chapter.

In determining the need for a proposed power plant, peak demand, energy use, and implications on reliability are examined. Forecasts of future peak demand and energy use typically include a multi-year projection of the annual maximum demand for power in kilowatts and energy use, in kilowatt hours.

Planning at least five years into the future is required for large generating units because of the construction lead-time necessary. The further into the future demand and energy use are predicted, the more uncertain the data becomes. To avoid paying for plants before they are required, there is a need to accurately balance future supply and demand. Appropriate planning for additional generation to meet future needs requires accurate forecasting of the variables and is best accomplished by making incremental changes in the generation supply instead of large changes all at once.

In addition to balancing supply and demand, an analysis of the generating system reliability is required. Reliability is based on the demand for electricity and the operating and reliability characteristics for each individual plant in the system.

Reliable service typically is defined by a lack of power interruptions. WEPCO must maintain sufficient peaking capacity and purchase power arrangements to cover unscheduled or planned outages from its generation supply during peak demand. The Mid-America Interconnected Network (MAIN) guidelines typically require about 15 percent target reserves. The PSC has traditionally required Eastern Wisconsin utilities to maintain a higher 18 percent planning reserve margin due to concerns with issues such as transmission limitations.

The optimal choice for new generation is determined by examining all of the possible generation addition plans that would meet the projected peak demand and energy use with an adequate level of reliability. The need to have an adequate mix of fuel sources (coal, nuclear, gas, and renewables) is discussed in this chapter. Alternative plans that could potentially substitute for the ERGS proposal are discussed in Chapter 4 and compared on the basis of cost, reliability, and environmental impacts.

Recent History of Reliability in WEPCO's (EWU's) Service Territory

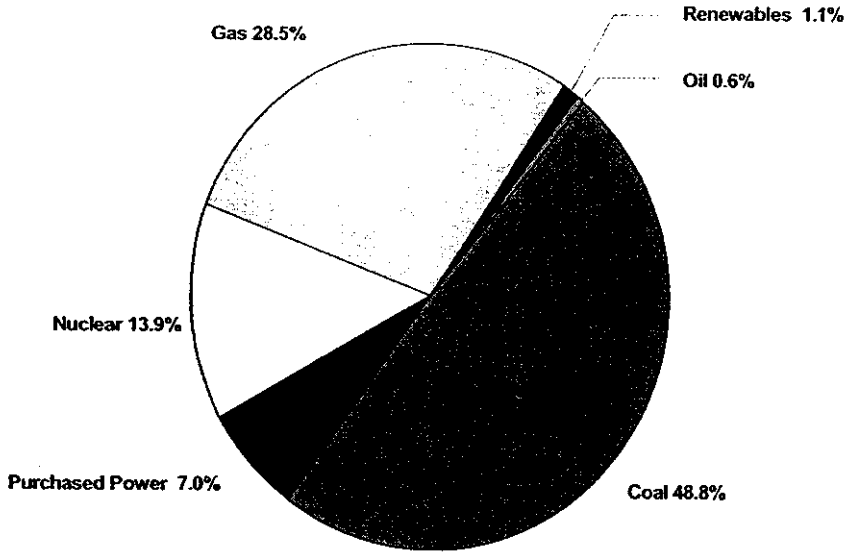
WEPCO's peak load for 2002 was 5,479 MW [31] with an estimated peak of 5,624 MW for 2003, as reported in its 2002 Wisconsin Strategic Energy Assessment (SEA) filing. Available WEPCO-owned capacity at peak, for 2003, is 5,053 MW. In addition, WEPCO has 948 MW contracted from merchant power plants and expects 411 MW of purchases without reserves. Adjusting for its Upper Michigan load of 98 MW results in a total supply of 6,430 MW in 2003, as reported in the SEA. The Mid-American Interconnection Network (MAIN) audit shows a 20.56 percent reserve margin in 2003 for WEPCO.

For planning future needs, it is desirable for WEPCO to maintain the 18 percent planning reserve margin recommended by the PSC. The 18 percent reserve is greater than some North American Electric Reliability Council (NERC) sub-region guidelines because it is meant to take into account transmission constraints within the Wisconsin Upper Michigan System (WUMS).

Adequacy of existing supply for peak demand

Although its reserve margin for 2003 is 20.56 percent, WEPCO is becoming increasingly dependent on power purchases to meet its needs. Figure 3-1 indicates that seven percent of its capacity will be power purchases to meet the anticipated peak demand. This does not include merchant plants under contract to WEPCO which are included as part of the gas section.

Figure 3-1 WEPCO's summer capacity available for 2003 peak demand

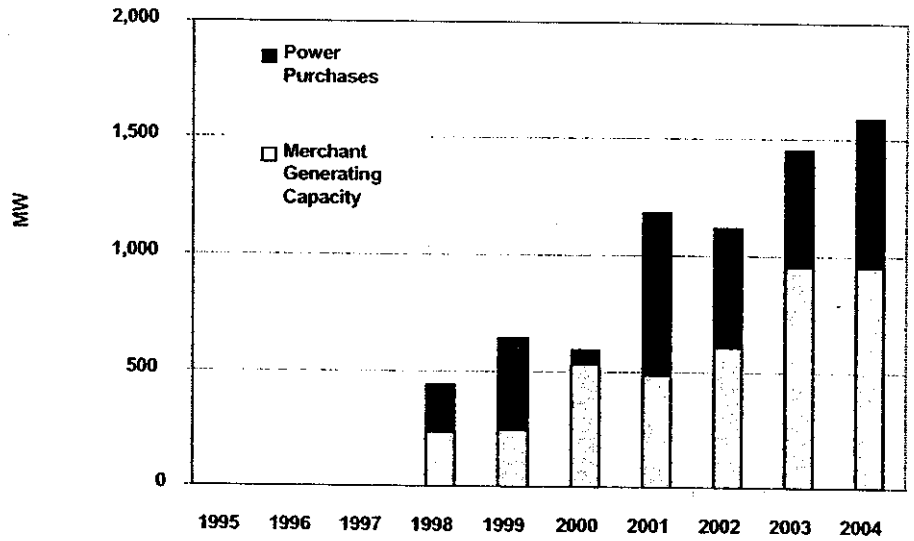


[31] Peak load not weather normalized and for Wisconsin only load of WEPCO.

No guidelines are specified for utilities on how to meet the PSC reserve margin; therefore, utilities have opted to pursue numerous options. To obtain the required 18 percent planning reserve margin, WEPCO has increased its reliance on interruptible load, load control, and increased purchases with reserves to reduce its peak load. On the supply side, WEPCO has increased its reliance on merchant plant capacity purchases and purchases without reserves, some of which are located outside of Wisconsin.[32]

Figure 3-2 shows the amount of WEPCO's capacity comprised of power purchases and merchant plant generating capacity. The additional three percent added to the reserve margin by the PSC was intended to allow for transmission constraints and other reliability issues. Three percent of WEPCO demand is approximately 150 MW, but the amount of purchase power WEPCO relies on is growing to levels well beyond this. Because these purchases have in turn increased the strain on a transmission system that is already viewed as overloaded, it is unlikely that this trend can continue. This implies that there may be a need for more baseload capacity in Wisconsin and more transfer capability.

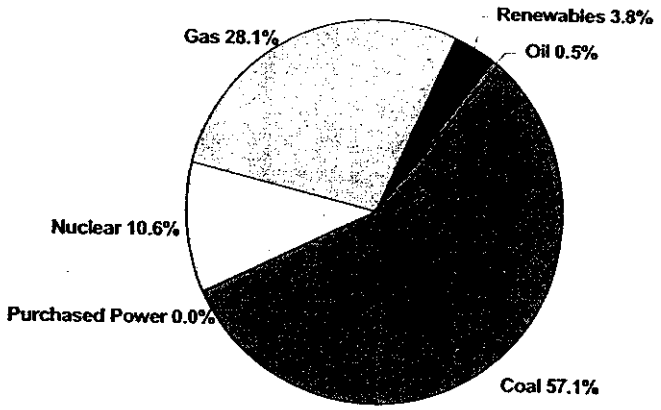
Figure 3-2 WEPCO's power purchases and merchant plant capacity



A mixture of baseload, intermediate load, and peaking load generation is required for an adequate generation mix as well as a mixture of fuel types. The baseload units in WEPCO's fleet consist of: Pleasant Prairie 1 and 2; Oak Creek 5, 6, 7, and 8; Point Beach 1 and 2; and WEPCO's 25 percent share of the Edgewater generating unit. Figure 3-3 presents the summer capacity in 2011 if all Port Washington and ERGS units are built.

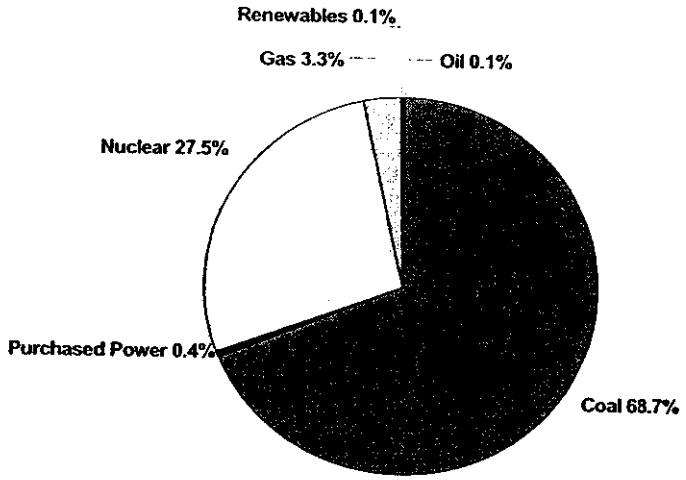
[32] The distinction between purchases with reserves and purchases without reserves pertains to the power seller's responsibility for planning reserves. A purchase with reserves means the seller is required to have sufficient capacity to back up the sale as if the seller were delivering the power for use by its own native load customers.

Figure 3-3 WEPCO's summer capacity available for 2011 peak demand (if ERGS and PWGS are constructed as planned)



Compared to the summer capacity chart for 2003, the percent of gas generation would remain the same, the percent of coal generation would increase, and the percent of nuclear would decrease. Figure 3-3 assumes that WEPCO would sign no purchased power contracts, which in all likelihood is false. However, at this point it is not possible to forecast the number of contracts or the capacity they would provide. If the purchases are gas-based, the coal percentage would be lower.

Figure 3-4 WEPCO's energy production by fuel for 2001 in MWh



Adequacy of existing supply for energy use

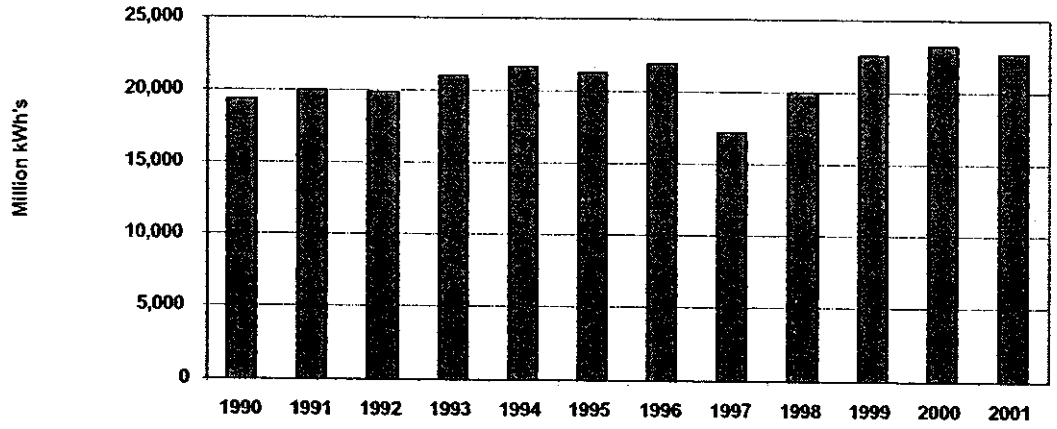
Coal-fired generation accounts for the majority of WEPCO's energy produced, as shown in Figure 3-4.[33] Nuclear power, which has represented greater than 25 percent of WEPCO's energy needs, will probably have a declining role if energy use continues to rise. Natural gas generation has increased to over 3 percent. The amount of future natural gas capacity will be highly dependent on the price of future fuel supplies. To meet the increase in energy use, there is a need for additional capacity with low fuel costs and high capacity factors to meet the changing energy needs. The different generating options and the changes that could result in the energy used to generate power are evaluated in Chapter 4.

Existing Generation Supply

Baseload generation of energy

The existing baseload plants are aging and at the same time have come under greater pressure to increase their output. The last baseload power plant constructed by WEPCO was Pleasant Prairie, Units 1 and 2 in 1985. While the growth in peak demand of the last decade was met by the installation of combustion turbines, the growth in energy use has been met in additional ways. The energy produced from WEPCO baseload generating units during the last decade increased by 15 percent as shown in Figure 3-5.

Figure 3-5 kWh production for WEPCO generating units built after 1960

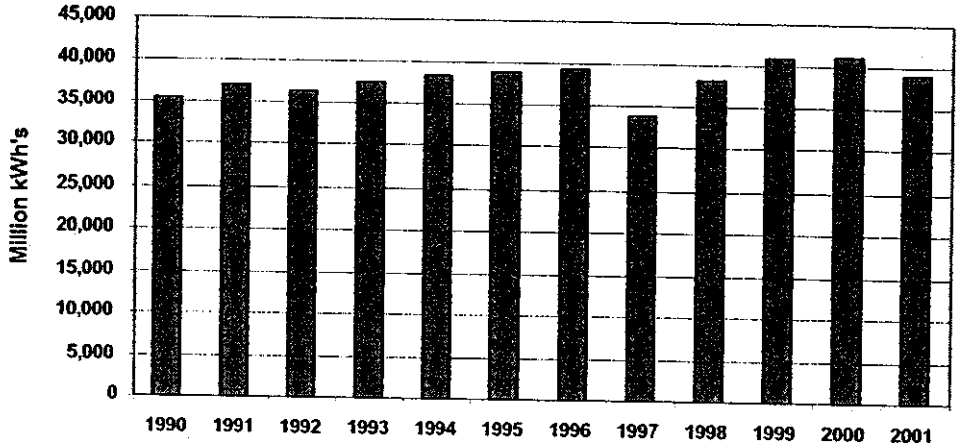


This increase is comparable to the trend seen in the rest of Wisconsin utilities where an increase of 9 percent has occurred (see Figure 3-6). The reduction in 1997 was due to the Point Beach and Kewaunee nuclear units being out of service for an extended period. The existing baseload plants have encountered higher capacity factors as production costs remained less than those for the newly installed combustion turbines.

[33] WEPCO purchases additional renewables amounting to between 2 and 5 percent of its sales that is not accounted for in its production.

Further production increases from the existing baseload generating units are not anticipated, and any shortfall in production would need to come from other sources.

Figure 3-6 kWh production for Wisconsin generating units built after 1960



Increased baseload energy use means the available time to work on multiple generating units during spring and fall maintenance seasons is further constrained. As a result, the outage "season" for Wisconsin is starting earlier and continuing later. As seen this past January, the need for maintenance at baseload facilities and unexpected forced outages during colder weather can force combustion turbine units into service during periods of high gas demand. As a planning issue, the implications of needing a large amount of gas generation to be available during the winter have been overlooked and requires further investigation, especially with the predicted increase in gas generation.

An increase in energy use has also been seen at the end of the outage "season" in May or the beginning of the fall season in September. Warm weather results in increased air conditioning load and a need to run gas turbines while baseload capacity is out of service.

In addition, the effect of peak demand reduction programs, such as direct load control and interruptibles, is contributing to reducing the time available for maintenance of existing baseload units. Summer peak demand reduction through active and passive kW programs, lessens the difference in demand between the spring and fall "shoulder" months and the summer peak month. In essence, this leaves less "room" to take multiple units out of service for routine maintenance.

As a market indicator, utilities have seen the forward-looking prices for purchased power in Wisconsin increase. This indicates that the costs for replacement generation are no longer based on the next available coal-fired baseload plants but on the next available gas generation plant.

Previous generation supply plans

WEPCO's 1976 long range expansion plan, developed to match the projected peak demand and projected energy demands, indicated 2,000 MW of coal-fired generation, 1800 MW of nuclear generation, and 213 MW of gas generation (see Table 3-1) would be required.

Table 3-1 WEPCO's proposed expansion plan in 1976

Year	Generating Units	Estimated MW	Actual MW
1979	Germantown combustion turbines	213	245
1980	Pleasant Prairie I	580	600
1982	Pleasant Prairie II	580	600
1984	A share of Koshkonong I coal-fired plant	440	
1985	A share of Koshkonong II coal-fired plant	400	
1987	A share of the Haven I nuclear plant	900	
1989	A share of the Haven II nuclear plant	900	

The Koshkonong and Haven power plants were never built as the energy demand discussed earlier never materialized until the late 1990s. Growth in energy and peak demand did, however, continue to increase. WEPCO met its generation needs accordingly by installing less costly combustion turbines at Paris and Concord as shown in Table 3-2.

Table 3-2 Generating units installed by or under contract to WEPCO since 1985

Year	Generating Units	Estimated MW	Actual MW
1993-94	Concord combustion turbines	344	382
1995	Paris combustion turbines	344	382
1997	Whitewater combined-cycle (purchase)	235	247
2000	Germantown 5 combustion turbine	95	95
2000	Neenah combustion turbines (purchase)	300	350
2004	Zion combustion turbines (Illinois purchase)	450	
2005	Port Washington combined-cycle	545	
2008	Port Washington combined-cycle	545	

In addition to the generating units it built, WEPCO arranged a 235 MW power purchase from the Whitewater combined-cycle generating unit and it expects to use up to 450 MW of capacity from Calpine's Zion Energy Center in Illinois by 2003. Advance Plan 7, filed in 1994, identified a future need for 500 MW of baseload facilities in 2011 and 2013. While use of 10- to 20-year Advance Plans has now been superceded by a two-year focused Strategic Energy Assessment, planning exercises over the past decade have identified a need for new baseload generation after 2007.

Other plants built or under construction within Wisconsin or that have ties to Wisconsin load are listed in Table 3-3.

Current generation supply plans

After the Advance Plan statute was repealed, the Strategic Energy Assessment (SEA) was created as its replacement. The SEA, issued every two years, has only a two-year outlook. Thus, large generation projects that require a longer lead time may not be disclosed or discussed.

Table 3-3 Other generating units greater than 50 MW installed or under construction in Wisconsin since 1998, or tied to Wisconsin load[34]

State	Year	Generating Units	Estimated MW	Utility Served
Wisconsin	1999	De Pere CT	175	WPSC
Wisconsin		Marinette CT		MGE
Wisconsin	2001	Rock Gen Christiana CT	450	WP&L
Wisconsin	2001	Elk Mound CT	96	DPC
Illinois	2001	Cordova CC	500	
Illinois	2002	Kendall Energy Center CC	1,000	
Wisconsin	2003	Pulliam CT	83	WPSC
Wisconsin	2004	Kaukauna CT	52	WPPI
Wisconsin	2004	Riverside CC	600	WP&L

Due to deregulation of wholesale power markets at both the state and federal levels, non-utility generation has been the supply area in which significant power plant construction has taken place in recent years. As late as 1996, there were no merchant power plants in the state. Beginning in 1997 with the operation of the LS Power (now Cogentrix) 235 MW cogeneration facility at the University of Wisconsin-Whitewater, there has been an expanded use of wholesale merchant power plants. In 1999, the 175 MW Polsky Energy Corporation combustion turbine unit in De Pere began commercial operation (the plant was subsequently purchased by WPSC). During the summer of 2000, SEI Wisconsin, the predecessor of Mirant, placed a 300 MW natural gas facility in Neenah into commercial operation (the plant subsequently was purchased by Alliant Generation). During 2001, the 450 MW RockGen combustion turbine project located in the town of Christiana in Dane County began full operation. All of these facilities are under contract to various state utilities. The sale of some of the merchant power plants to Wisconsin utilities reduces the amount of generation that merchant plants were predicted to supply toward the state's generation needs.

By the end of 2004, nearly 2,050 MW of electric generating supply being used by electricity providers for Wisconsin customers may come from merchant plants under contract to the states' utilities. Some of this power will come from merchant facilities located outside the state; such capacity plays an important part in maintaining electric reliability in the state. For instance, by 2003, WEPCO expects to use up to 450 MW of capacity from Calpine's Zion Energy Center in Illinois.

Power plants approved by the PSC but not expected to start construction in the near future include: a 1,050 MW combined-cycle unit in Kenosha County proposed by Badger Generating, LLC, a unit of Pacific Gas and Electric; a 900 MW facility in the Plover area of Portage County proposed by Mirant Corporation; and a 170 MW combustion turbine facility in Superior planned by Rainy River.

[34] The table does not include the Badger Gen, Rainy River, Fox Energy, or Mirant power plants which have PSC approval but have not been constructed. These projects have been placed on hold because they have been unable to sign contracts with Wisconsin electricity providers and because of the widespread financial difficulties in the IPP markets.

A shift toward a deregulated electricity market in the 1990s was supposed to allow merchant power plants the opportunity to compete with the electric utilities for providing wholesale power at competitive rates. Competitive alternatives for generation, however, have not fully materialized for several reasons:

- The financial standing of many IPPs is questionable. Financing is difficult without long-term power purchase agreements.
- Utilities have been reluctant to sign long-term contracts with IPP's because of their uncertain financial situation.
- A lack of available firm transmission services into Wisconsin hinders agreements with IPP's outside of Wisconsin.
- IPP projects are gas-fired, not coal, for the most part and natural gas prices have been higher than predicted.

Capacity needs in surrounding states

States surrounding Wisconsin have addressed capacity needs in different ways. Illinois, which was in the forefront of the deregulation movement a few years ago, has had over 10,000 MW of combustion turbines installed and 5,000 MW of combined-cycle generating units constructed since 1998. Much of this generation is located south and west of Chicago. Transmission constraints between northern Illinois and Wisconsin however, limit the options available to Wisconsin utilities beyond the merchant power plants listed in Table 3-3.

Iowa has not built a baseload power plant since the late 1970s and energy demands are expected to exceed supplies by 2003. Deregulation plans have been delayed. In May 2003, the Iowa Utility Board approved a 750 MW coal plant proposed by Mid American Energy Company. That plant would be located in Council Bluffs, Iowa.

Minnesota has not built a baseload power plant since the late 1980s and anticipates the need for two or three large coal or nuclear plants.

Recently approved transmission capacity

Existing transmission

The existing high voltage and extra high voltage (EHV 230 and 345 kV) systems in southeast Wisconsin have been just adequate to meet current generation and load serving requirements. Since the start of 2003, contracts for additional firm import power (beyond existing contracts) from northern Illinois have been mostly denied by the Midwest Independent System Operator (MISO). Recently, Alliant was granted a 100 MW contract for the summer of 2003.

The interstate transmission lines to the west and south have been in transfer-limiting condition for the past two years. When transmission lines can be overloaded with a single outage, the system operator issues a Transmission Loading Relief (TLR) order to mitigate the problem and reduce the chances of cascading power failures. Power flow issues are quite complex and can originate from several causes, including local

generation dispatch, line maintenance, generation maintenance, interstate power transfers, or inadvertent loop flow. Selected TLR incidents from the year 2001 are listed in Table 3-4 below.

MISO tracks the number of hours that its flowgates are in a TLR. MISO's footprint covers Wisconsin, Michigan, Minnesota, Dakota's, Nebraska, Iowa, Missouri, Kansas, Indiana, Ohio, and Kentucky. During 2001, only five months had "flowgate hours in TLR" (FG-HR) that exceeded 500 hours when considering the sum for each month. The largest monthly total was 800 FG-HR. This indicator of system transfer capability has steadily declined since 2001. From June 2002 to December 2002, no month has had less than 700 FG-HR. September 2002 had almost 1,400 FG-HR.

The levels of mitigation that involve curtailment of power transactions start at level 3. The definitions for each level are:

> **Level 3a**: Curtail transactions using Non-firm Point-to-Point transmission service to allow transaction using higher priority Point-to-Point transmission service.
>
> **Level 3b**: Curtail transactions using Non-firm Point-to-Point transmission service to mitigate operating security limit violations.
>
> **Level 4**: Reconfigure transmission system to allow transactions using Firm Point-to-Point transmission service to continue.
>
> **Level 5a**: Curtail transaction (pro rata) using Firm Point-to-Point transmission service to allow new transactions using Firm Point-to-Point transmission service to begin (pro rata).
>
> **Level 5b**: Curtail transactions using Firm Point-to-Point transmission service to mitigate operating security limit violations.

ATC has plans to improve the 138 kV problems noted in the above table. Work is now in progress in the Janesville area and in the Mukwonago area. ATC's 10-Year Assessment – Full Report – August 2002 notes other system performance limitations in the southeast portion of Wisconsin, which it designates as Zone 5. The other limitations include low voltages, overloads, and the accommodation of new generation.

Table 3-4 Selected 2001 transmission loading relief (TLR) incidents

Limiting element*	Contingent element	Days at level 3, 4 or 5
Albers - Paris 138 kV	Wempleton - Paddock 345 kV	21
Blackhawk Colley Road 138 kV	Paddock -Rock River 138 kV	12
Eau Claire – Arpin 345 kV		10
Mukwonago – Whitewater 138 kV	South Fond du Lac - Columbia 345 kV	2
Paddock - Blackhawk 138 kV	Paddock - Rock River 138 kV	4
Paddock - 345/138 kV Transformer	Paddock - Rockdale 345 kV	22
Pleasant Prairie - Racine 345 kV	Wempleton - Paddock 345 kV	1
Russell –Rockdale 138 kV	Paddock - Rockdale 345 kV	8
Wempleton - Paddock 345 kV		7

*Limiting element identifies the transmission segment that will become overloaded if the contingent element trips out of service unexpectedly.

Figure 3-7 shows the MISO curtailment flowgate-hours by TLR level for the months from January 2001 to December 2002.

Proposed transmission additions in southeastern Wisconsin

There are several transmission projects planned for Zone 5 (southeastern Wisconsin) that would address existing and near term reliability issues. Some of the larger projects planned by ATC are listed in Table 3-5 below. These items were selected from ATC's recent 10-Year Assessment Update, February 2003. This table does not include the additions that would be associated with the ERGS.

Figure 3-7 MISO curtailment flowgate-hours

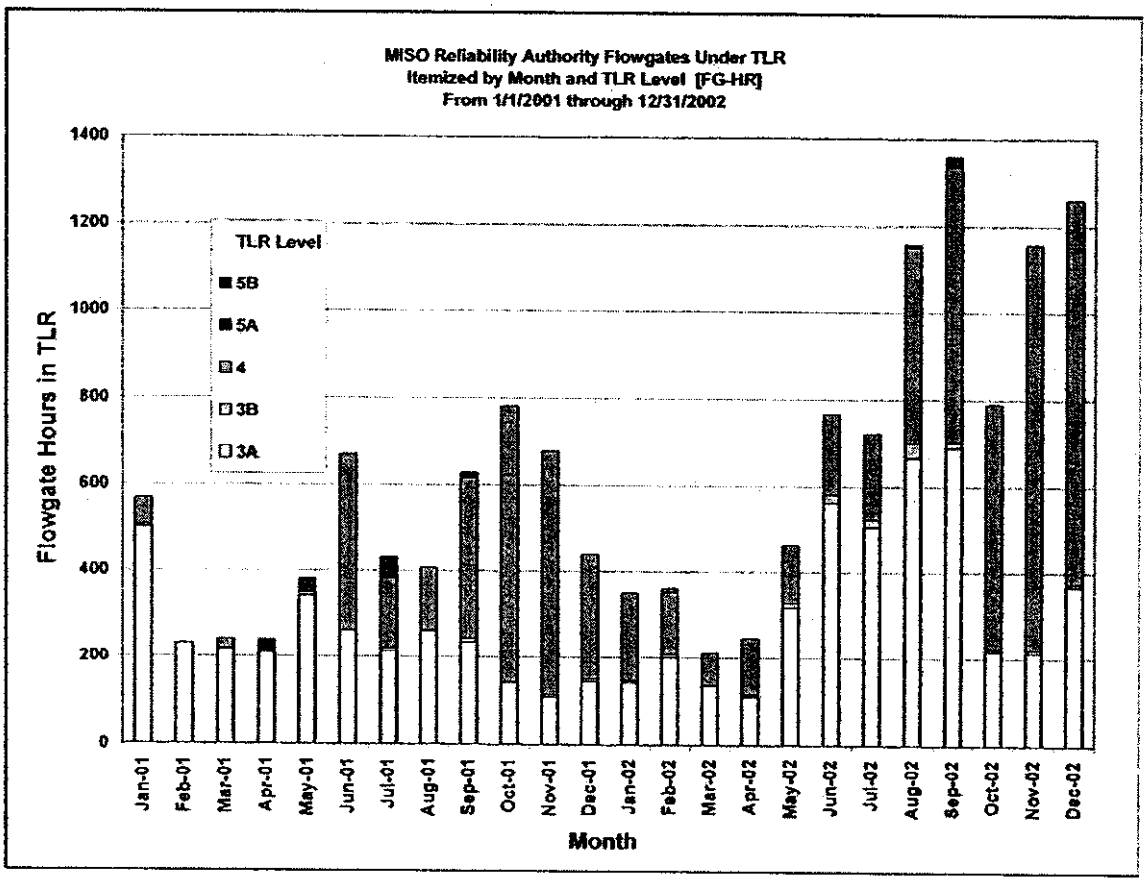


Table 3-5 Selected ATC Zone 5 improvements

Planned Additions	Projected In-Service Date	Need Category
Install 2 - 26 MVAR capacitor banks at Sussex 138 kV	2002	Reliability
Reconductor Mukwonago - Whitewater 138 kV line	2003	Condition, reliability, service limitation, new generation
Uprate Pleasant Prairie - Arcadian 345 kV line	2004	Service limitation, reliability
Rebuild Port Washington - Range Line double circuit 138 kV line	2004	New generation
Construct a new Lannon Junction sub at intersection of Granville-Arcadian 345 kV, Forest Junction - Arcadian 345 kV, Sussex -	2005	Reliability and Germantown generation stability

Planned Additions	Projected In-Service Date	Need Category
Tamarack 138 kV and Sussex -Germantown 138 kV lines; install 345/138 kV, 500 MVA transformer		
Construct a Waukesha - Duplainville - Sussex 138 kV line	2005	T-D interconnection
Rebuild Port Washington - Saukville double circuit 138 kV line	2005	New generation at Port Wash.
Rebuild Port Washington- Saukville single circuit 138 kV line	2005	New generation at Port Washington
Install 138 kV capacitor banks at Summit, Tichigan, Bluemound, and Moorland	2007	Reliability

Planned capacity retirements and nuclear relicensing

In its CPCN application, WEPCO indicated that no existing baseload capacity would be retired in the near future. However, retirement of OCPP units 5 and 6 has been made a condition of the WEPCO-US EPA Consent Decree released in May 2003. Commission staff recommended considering retirement of a generating unit at 60 years and this assumption was incorporated into the EGEAS modeling. Any forced retirements would most likely increase the need for additional generating capacity. Chapter 4 EGEAS base runs assume that OCPP units 5 and 6 are retired in 2012.

No retirement of any nuclear units was factored into staff's analyses. All expansion plans assumed successful relicensing for Units 1 and 2 at the Point Beach Nuclear Power Plant. Any forced retirements would most likely increase the need for additional generating capacity.

Projected Growth, Electric Demand, and Energy

This section discusses past and future projections of growth in energy use and peak demand. A review of previous forecasts for energy requirements indicates the levels of growth predicted have been reached for both energy use and peak demand but usually later than originally predicted. The projections for future growth appear reasonable and are based on a growing economy. If the recent economic slowdown were to continue, the need for additional generation may not be forthcoming or simply delayed. Past history indicates predicting growth accurately beyond a period of five years is very difficult.

Historic growth in energy use

Energy use has continued to grow over the last 30 years, although at a rate less than originally anticipated in the mid-1970's. The growth has been steady and linear. The Environmental Impact Report developed for Pleasant Prairie Units 1 and 2 in 1976 provided projected annual energy requirements up to 1989. These values are shown in Figure 3-9.

The total sales by WEPCO were predicted to reach 30,000 MWh in 1987. Growth in energy use has been steady, yet total sales did not reach the 30,000 MWh level until 1999.[35] Growth in 2001 and 2002 occurred in the residential and commercial sectors while the industrial sales decreased, resulting in no load growth in

[35] FERC Form 1 Page 301 Line 14

2001 and 2002. Energy use or total sales by WEPCO have continued to increase approximately 2.7 percent per year since 1992 as shown in Figure 3-10.

Figure 3-9 **WEPCO projected energy demand since 1976**

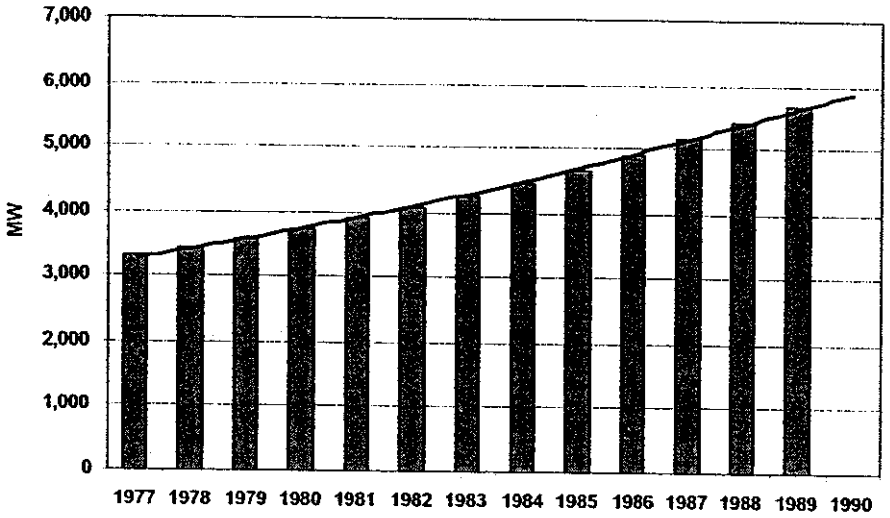
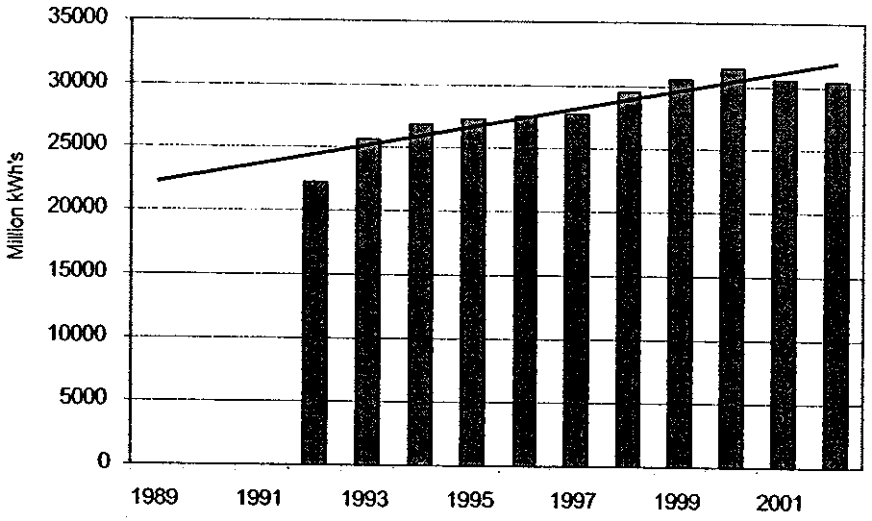


Figure 3-10 **WEPCO total sales**



WEPCO's annual growth in energy use has been slightly greater than the state's energy use measured in total sales. Figure 3-11 provides an indication that over the past 30 years, growth in total sales for Wisconsin electric utilities has averaged about two percent per year.

Figure 3-11 Sales from Wisconsin electric utility power generation: 1970-2001

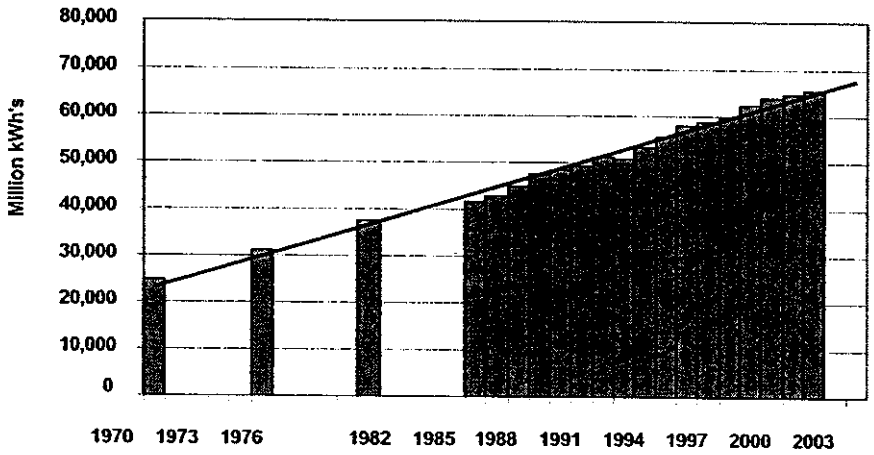
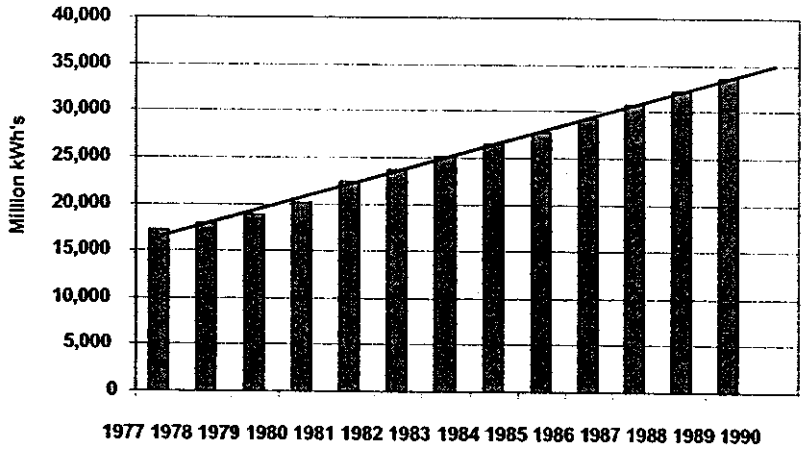


Figure 3-12 WEPCO projected demand in 1976



Historic growth in peak demand

The 1976 projected peak demand is shown in Figure 3-12.

The peak demand predicted was estimated to reach 5,500 MW by 1989. This peak was not reached until 2000[36] but the peak demand has steadily increased. Since 1997, the normalized native system, excluding peak load of mines, has continued to increase approximately 2.5 percent per year as shown in Figure 3-13.

Figure 3-13 **Normalized native system excluding mines peak**

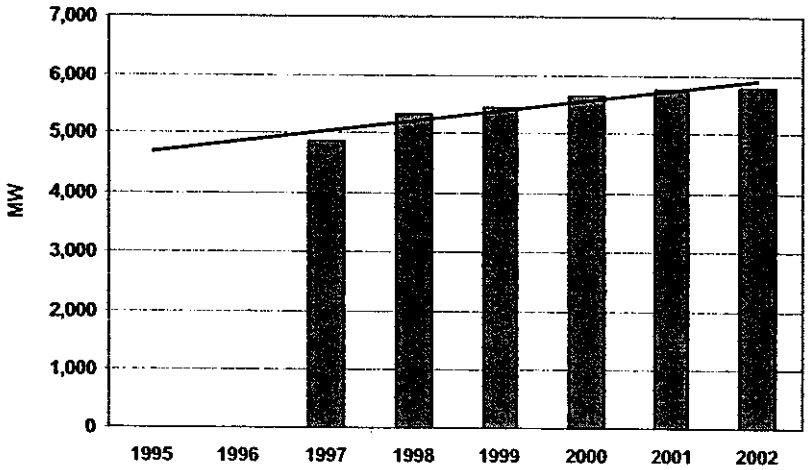


Table 3-6 **Summary of peak and energy forecasts: WEPCO and MAIN Region**

Year	Peak Demand (MW)		Energy Use (GWh)	
	WEPCO	EIA MAIN Growth Rate	WEPCO	EIA MAIN Growth Rate
2002	5,778	5,778	30,877	30,877
2005	6,276	6,223	33,379	33,254
2010	7,258	6,971	37,920	37,250
2015	8,166	7,665	42,024	40,958
2020	9,175	8,321	46,345	44,464
2025	10,295	8,925	48,974	47,689
2030	11,280	9,515	52,735	50,845
Growth Rate				
2002-2005	2.8%	2.5%	2.6%	2.5%
2005-2010	3.0%	2.3%	2.6%	2.3%
2010-2015	2.4%	1.9%	2.1%	1.9%
2015-2020	2.4%	1.7%	2.0%	1.7%
2020-2025	2.3%	1.4%	1.1%	1.4%
2025-2030	1.8%	1.3%	1.5%	1.3%

[36] Response to DR-067

Projected growth in energy use and peak demand

Table 3-6 shows both the growth in electric demand and energy use forecasted by WEPCO through 2030 and the lower growth rates used by the Energy Information Administration (EIA) in its estimates of energy growth rates for the Mid-America Interconnected Network (MAIN) through 2020 as applied to WEPCO.

In this docket Commission staff required WEPCO to provide an updated electric demand and energy forecast from the forecast it used for the Port Washington CPCN case (docket 05-CE-117). The company generally lowered its growth estimates for peak and energy relative to the forecast provided for the Port Washington case. However, WEPCO's forecasted growth rates from 2002 through 2011 in this case are very close to those it used for the Port Washington case. Commission staff made a more detailed analysis of WEPCO's updated forecast, analyzing the residential, commercial and industrial sectors. Staff's analysis indicates that WEPCO's updated electric demand and energy forecast is reasonable although it may have a slight upward bias.

Just as in the Port Washington case, Commission staff applied the forecasted growth rates to WEPCO estimated by the EIA for the MAIN region for 2002 to 2020. Commission staff used also the EIA MAIN forecasted increase for 2019 to 2020 for the period 2020 through 2030. The EIA forecast is for energy use only. Commission staff assumed that the growth rate in peak demand would be the same as the growth rate in energy during this period. The difference between the two forecasts is an increase in peak demand of 500 MW in the WEPCO forecast by the year 2015. Under the EIA MAIN forecast, WEPCO would not need the capacity represented by the third coal plant until much later.

Figure 3-14 **WEPCO peak load compared to generation supply with and without the Port Washington and ERGS units, and assuming no Oak Creek unit reqirements**

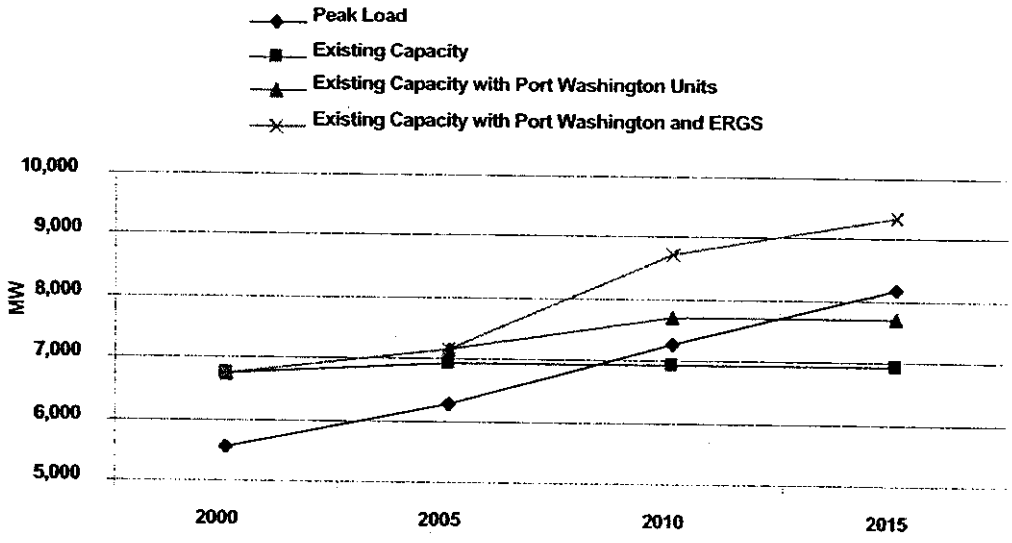
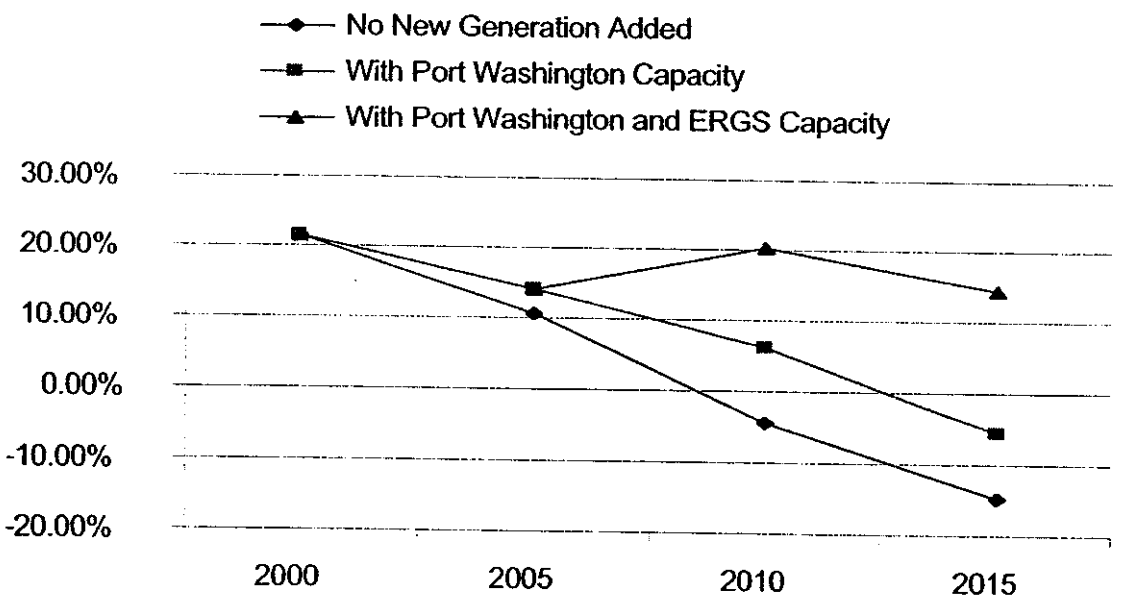


Figure 3-14 displays the WEPCO peak load demand forecast compared to the electric supply resources available to the utility if there is no expansion in existing generating capacity, if the 1,090 MW of Port Washington capacity is added to WEPCO's existing system, and if both the Port Washington and 1,800 MW of ERGS capacity is added to the existing system using the implementation schedule as set forth by the utility. Figure 3-14 demonstrates that without some type of significant capacity addition or IPP capacity after 2007, WEPCO would not be able to meet its expected peak load obligation. Data in Figure 3-14 assume that WEPCO continues to purchase as part of its existing capacity about 1,200 MWs from merchant power plants and other suppliers during the 2005 to 2015 time frame.

An alternative way to depict the information in Figure 3-14 is to examine the expected planning reserve margin for WEPCO if the capacity represented by the Port Washington and ERGS units is added to the existing system. Figure 3-15 portrays expected planning reserve margins with or without the Port Washington and ERGS units. Presently, the PSC requires the state's utilities to maintain an 18 percent planning reserve margin. (See Order Point 9, page 22, Advance Plan 8 Final Order, November 20, 1997). Figure 3-15 highlights the fact that without substantial capacity additions, WEPCO would not be able to maintain an adequate level of reliability, as the planning reserve margin quickly drops below 10 percent. Data in Figure 3-15 assume that WEPCO continues to purchase as part of its existing capacity about 1,200 MWs from merchant power plants and other suppliers during the 2005 to 2015 time frame.

Figure 3-15 Expected WEPCO planning reserve margins 2005 to 2015



Effects on the Wholesale Market

Present state of the WUMS wholesale market

Under Wis. Stat. § 196.491(3)(d)7, the Commission may issue a CPCN for a proposed facility only if it "will not have a material adverse impact on competition in the relevant wholesale electric service market." Such a determination requires an analysis of market power, which is the ability of a firm to charge prices for its product above what a competitive market would allow.

Presently, the relevant wholesale electric service market, from an anti-trust perspective, is the geographic region of WUMS (the Wisconsin and Upper Michigan system). This region is considered to be an electric "island" in which a large electric generating firm could obtain leverage over the prices paid for electricity because of transmission constraints and congestion.

This fact was documented for the Commission in an independent market power study conducted in 2000 for the Commission by Tabors, Caramanis and Associates of Cambridge, Massachusetts.[37] The WUMS wholesale electricity market is highly concentrated.[38] When a market becomes so limited, utilities or other players with a large market share or concentration can obtain leverage over the prices being paid in that market. In essence, a large electric generating firm in a narrow competitive energy market can influence prices to its advantage and everyone else's detriment. In economics, such leverage is referred to as horizontal market power and is policed by federal and state anti-trust law.

Potential effects of Elm Road Generating Station on the WUMS wholesale market

Since WEPCO turned over operational control of its transmission system to ATC in the year 2000, this analysis focuses only on horizontal market power issues associated with the construction and operation of the Elm Road coal facilities. Vertical market power issues associated with the combined operation of proposed coal plant facilities and the transmission system do not need review, given the existence of the Midwest Independent System Operator and its control over the ATC transmission system.

This same issue was reviewed by the Commission in the 2002 Port Washington CPCN docket. In that proceeding, the Commission determined that it was unlikely that there would be any adverse impacts on competition. This is because 1,090 MW of capacity and energy from the Port Washington generating units would be provided to WEPCO via a Facility Lease, at rates that the PSC regulates through its review of the lease's economic terms and conditions. Essentially, PSC economic regulation prevents any material adverse impact on competition in WUMS. The market power study conducted by Tabors, Caramanis and Associates of Boston confirmed that fixed price contracts such as the proposed Facility Lease can mitigate market power. In addition, the Federal Energy Regulatory Commission (FERC) only allows WEPCO to sell in WUMS at cost-based rates.

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[37] See, Horizontal Market Power in Wisconsin Electricity Markets, A Report to the Public Service Commission of Wisconsin, November 14, 2000.
[38] Ibid.

In the Port Washington CPCN case, despite these observations, several parties suggested that approval of the Port Washington generating facilities could have a material adverse impact on competition by preventing the development of a competitive wholesale generation sector and hindering further electric industry restructuring in Wisconsin. The Commission did not agree with that position because WEPCO planned to continue contracting for power with IPPs, obtaining up to 1,000 MW of capacity from these providers. Relative to that amount the Port Washington facilities in total were also about the same size, constituting 1,090 MW of capacity. Furthermore, a stand-alone generation company such as WE Power LLC could more easily be divested by WEC than generating assets that are held within WEPCO as rate base assets, should a future legislature or Commission require splitting the generating plant assets away from utilities.

For these reasons, the Commission found that approval of the PWGS project would not prevent the development of a competitive wholesale generation sector nor hinder further electric industry restructuring in Wisconsin. In the present proceeding the Commission will have to examine this market power issue again. Since the regulated price feature of the facility leases has not changed, a similar result could occur. However, given the magnitude of the ERGS at around 1,800 MW, the continued fruition of a long-term competitive power market in Wisconsin, especially WUMS, could be dependent on the Commission requiring WEPCO to continue purchasing 1,000 MW or more of capacity from IPPs, as long as such purchases were cost effective and not an entitlement Additionally, the Commission could postpone the decision on the 600 MW IGCC unit and require WEPCO to solicit competitive bids from IPPs for that capacity at the appropriate time.

Chapter Summary

1) WEPCO has increased its reliance on power purchases and merchant power plant capacity. This trend has limits, translating into the potential need for new baseload and intermediate generating capacity in Wisconsin. Merchant plants have been a promising development, but many independent power producers have been experiencing financial difficulties.

2) Current WEPCO baseload units are being used extensively; the same is true for similar plants in Wisconsin. Baseload unit maintenance scheduling is increasingly more complex, requiring high cost natural gas-fired peaking plants to be used more often even during the winter months and maintenance outage seasons. Such increased usage of peaking plants raises their capacity factors, a sign of increased need for new baseload and intermediate generating capacity for WEPCO and Wisconsin.

3) Present transmission constraints do not allow WEPCO to obtain necessary capacity from Illinois where excess low cost capacity may exist, translating into a potential need for new capacity located in Wisconsin.

4) Prior Advance Plans which established optimal generation expansion plans suggested the need for new baseload power plants in the period after 2006.

5) WEPCO's demand and energy forecast for the next ten years is not unreasonable. Based on prior experience, it may be on the high side however. For this reason, using a lower growth rate demand and energy forecast as provided by the U.S. Department of Energy's Energy Information Administration (EIA) provides a useful sensitivity. Such a sensitivity reduces peak demand by about 500 MW or by about one baseload power plant during the important 2005-2015 time period.

Natural Gas-Fired Combined-Cycle and/or Simple-Cycle as an Alternative

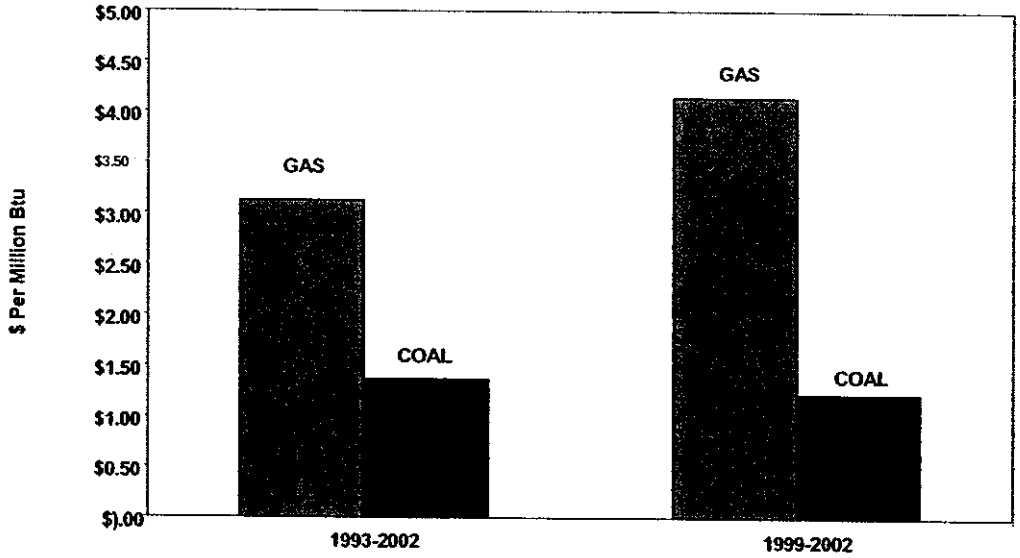
Fuel cost comparisons

An analysis of whether natural gas-fired generation should be built instead of coal generation should include, among other analyses, a comparison of natural gas prices and coal prices. Natural gas is a high-energy-content, premium fuel. These desirable features are offset, however, by the high cost of natural gas on a Btu-adjusted basis, and also by the extreme volatility of natural gas prices.

The average real cost of natural gas sold to electric generators over the past 10 years (1993-2002) has been $3.13 per million Btu (2002 dollars).[45] In contrast, the average real cost of coal over the same period has been $1.37 per million Btu. Natural gas costs have, on average, been 128 percent higher than coal costs over this period. If more recent data are examined, the difference in cost is even more dramatic. Over the past three years (2000-2002) the average real cost of gas was $4.14 per million Btu, whereas the real price of coal averaged $1.23 per million Btu over this period. Thus, in recent times, natural gas prices were 237 percent higher than coal prices. These cost comparisons are shown in Figure 4-1.

Making accurate predictions of future natural gas prices is difficult due to the extreme volatility of the data series. The standard deviation[46] of the annual natural gas price changes over the past 10 years is 24 percent. This contrasts with the standard deviation of annual changes in coal prices of only 2 percent.

Figure 4-1 **Average cost of fuels used for electric generation over various time periods**



[45] Price data is from the US Energy Information Administration. Prices were converted to constant dollars via use of the GDP price deflator.
[46] The standard deviation is a statistical measure of the dispersion of a data series.

The wide dispersion of natural gas prices in turn leads to very wide statistical prediction intervals for the price of natural gas over time. This can be demonstrated via the following random-walk model[47] of real natural gas prices:

$$\log \text{Gas Price}_{t+1} = \log \text{Gas Price}_t + \varepsilon_{t+1}$$

where

log = natural logarithm
Gas Price_t = real gas price in time period t
Gas Price_t+1 = real gas price in time period t+1
ε_t+1 = log-normally distributed random disturbance in time period t+1

Statistical forecasts can be generated from this model. For example, if this model reasonably represents the behavior of real natural gas prices, then one could be 90 percent sure that the 2003 average annual real gas price forecast would range between $2.48 to $4.91 per million Btu. This range is quite large.

The width of the prediction interval increases as the forecast period moves further into the future. For example, the 90 percent prediction interval for the year 2007 is $1.93 to $6.32 per million Btu. The 90 percent prediction interval for the year 2012 is $1.18 to $10.32 per million Btu.

This analysis indicates that real natural gas prices are essentially unpredictable for planning purposes. The real cost of natural gas for generation over the next five years might be below $3.20 per million Btu, but it also could just as easily be above $5.50 per million Btu. There is a smaller chance that it might decline to below $2.00 per million Btu, but there is also a small chance that it could increase to above $8.00 per million Btu. These types of prediction intervals do not provide much useful guidance as to the likely cost of natural gas over the long term.

Statistical forecasts of real coal prices have much tighter prediction intervals. For example, the 90 percent confidence forecast interval for real coal prices for the year 2012 is $0.58 to $2.55 per million Btu. This contrasts with the real natural gas price forecast interval of $1.18 to $10.32 per million Btu for the same time period. The contrast in predictability for natural gas prices versus coal prices is shown in Figure 4-2.

The volatility of the natural gas data makes it very difficult to draw firm quantitative conclusions about future natural gas prices. One can, however, draw important qualitative conclusions from this analysis. Those conclusions are:

- It is reasonable to assume as a base case that natural gas will continue to be significantly more expensive than coal over the generation planning horizon.
- The risk of incurring very high fuel prices is much greater for natural gas than it is for coal.

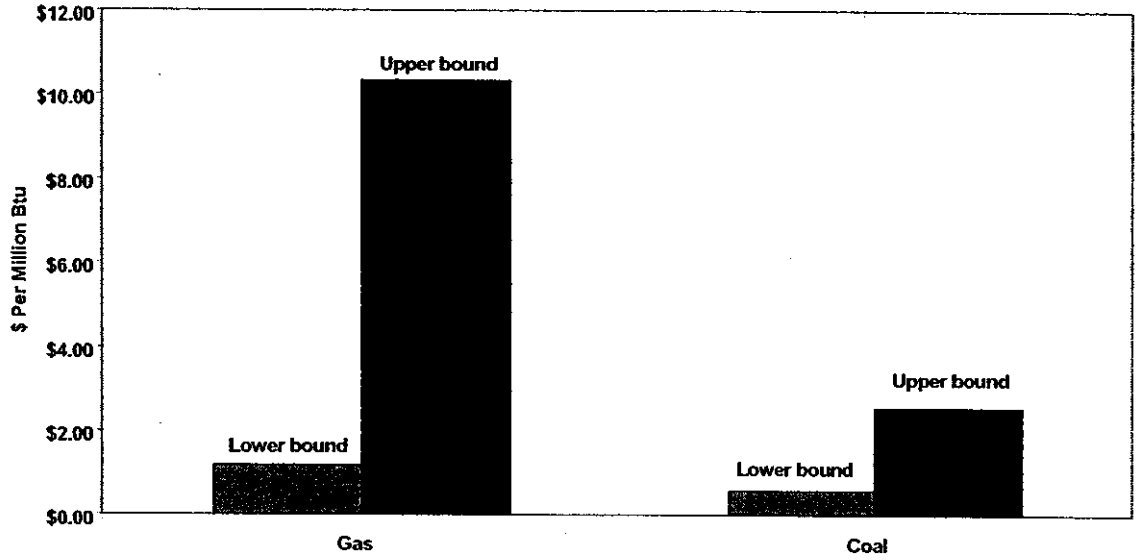
Staff's analysis of natural gas potential

Commission staff included the potential for some generic natural gas-fired combustion turbines in its EGEAS modeling runs and it also modeled and analyzed a proposal for a natural gas-fired combined-cycle plant that was filed at the PSC by Calpine Corporation as an alternative proposal to the ERGS. This

[47] The random-walk model assumes that the best estimate of today's price is yesterday's price.

proposal is described in more detail and compared with the proposed ERGS facilities in the following sections.

Figure 4-2 **Statistical prediction intervals (90 percent confidence) for fuels used for electric generation for the year 2012**



Alternative Proposals from Independent Power Producers

Applicant's treatment of IPP alternatives

As an alternative to all or part of the ERGS, WEPCO could rely on electric generation from an independent power producer (IPP) not affiliated with the utility or any of its affiliates. Such an alternative would require an IPP to construct a wholesale merchant power plant or sell electricity from a plant that is already operating but which has not contracted for all of its electrical output.

In its cost analysis filed in the CPCN application, WEPCO modeled purchases from generic or hypothetical power plants. WEPCO did not solicit power plant proposals or bids from IPPs that would directly compete with the ERGS coal facilities. This means that the costs under the proposed facility lease have not faced market discipline per se and are proxy costs that WEPCO believes are reasonable based on the company's insight of the marketplace.

In some instances, such an approach can be reasonable, especially if a formal bidding-type process to gather such market information would be expensive, untimely, or resource intensive. On the other hand, the use of competitive forces does foster cost discipline that ultimately benefits ratepayers. The fact that WEPCO did not issue an RFP for the capacity of ERGS may be an important issue at the hearing. In addition, the evaluation process itself may be an issue at hearing.

For the no wind tax credit scenario, the Calpine run is the most economic. For the Calpine run, the first coal unit is pushed out to 2011, whereas the Optimal without Calpine run picks its first coal unit in 2009. The Calpine proposal is significantly less expensive than the ERGS w/o IGCC proposal. With no wind tax credit, no new wind is picked by EGEAS until 2017.

Other EGEAS Analyses

Commission staff also analyzed a June 2003 proposal from Calpine for 260 MW of combined-cycle capacity from its Fox Energy Center using Commission staff's Base Case assumptions. The Fox Energy proposal using only 260 MW in 2007 was more expensive than the Calpine Fond du Lac proposal using 523 MW by $12.4 million. (See Appendix A, Summary of EGEAS Expansion Plans) Commission staff did not run the EGEAS model with capacity available from both Calpine projects simultaneously due to limited time, but may explore that possibility in time for the technical hearing.

Commission staff made an EGEAS run with the IGCC unit included in the model for the Base Case scenario. The ERGS proposal with the IGCC was more expensive than the ERGS proposal without the IGCC by $247.1 million.

Commission staff made an EGEAS run assuming no coal nor biomass, and wind limited to that hardwired by WEPCO. The cost of that plan was less economic than the Optimal plan by $1,937.8 million. When Commission staff allowed EGEAS to pick up to 1,500 MW of biomass, the resulting expansion plan was more expensive than the Optimal plan by $1,405 million. These latter sensitivities indicate that a mixture of properly timed gas- and coal-fired units would result in the lowest overall cost expansion plan for WEPCO.

EGEAS summary

10. The IGCC unit, which is the third unit in the ERGS proposal, is not cost-effective.
11. The proposed timing of the SCPC units in 2007 and 2009, as WEPCO has proposed, is not least cost. This scenario is generally more than $100 million more expensive on a present value basis. Timing appears to be about two to three years premature.
12. The Calpine 523 MW CC proposal in Fond du Lac using natural gas is lower cost than the ERGS - w/o IGCC proposal. However, the Calpine proposal would not need to be put in-service until 2007. Selecting the Calpine proposal does not mean that coal plants would not be needed. Several scenarios suggest that a coal plant would not be needed until 2011, if not later, if the Calpine proposal is selected.
13. CO_2 monetization, as well as other emissions monetization scenarios, favors picking the Calpine proposal versus ERGS w/o IGCC.
14. If the coal plants were to have cost overruns of 10 percent, then the Optimal expansion plan does not select a coal plant until 2011.
15. Should lower demand and energy growth occur due to increased energy efficiency efforts and lower overall use of electricity than depicted by WEPCO in its base demand and energy forecast, then the earliest a new coal facility would be needed is 2012.
16. ERGS w/o IGCC could be made competitive with the Calpine Fond du Lac proposal by the Commission choosing an overall finanacing plan that would cost ratepayers between $50 million and $100 million less on a present value basis.

17. Substantial Lake Michigan wind development exceeding 2,500 MW by 2014 and 11,000 MW by 2023 would be effective in meeting demand and energy growth for WEPCO, but it would require a substantial federal transfer via a permanent wind tax creit of $18 MWh. If the federal government were to not renew the wind tax credit presently set to expire in 2004, then no new wind would be selected by EGEAS until 2017.
18. An expansion plan over the next 30 years relying exclusively on natural gas would cost ratepayers $1.9 billion more than a balanced plan using optimally timed gas- and coal-fired electric generation, as well as some wind generation development.

There are important caveats in interpreting and understanding the above comments. First, Commission staff has used a strict materiality threshold of $10 million in interpreting the EGEAS model results. This means that Commission staff believes that expansion plan total costs that differ by more than $10 million are considered significant. Due to modeling complexity, the number and type of input assumptions, as well as the long-term nature of the EGEAS expansion plans, different parties may want to use other materiality thresholds. For instance, the Commission used a materiality threshold of $50 million during the Port Washington CPCN case. Using a $50 million materiality threshold still results in selecting Calpine proposal over the ERGS w/o IGCC proposal.

Another important caveat is that the Commission can choose a financing package other than the one proposed by WEPCO for ERGS and modeled here. The Commission could fashion a financing package for ERGS that would lower present value costs to ratepayers. For instance, in Chapter 3, rate-based financing rather than the lease approach could be used to lower ratepayer costs. Alternatively the Commission could still use a leasing approach but with different financial parameters.

It should also be noted that the above quantitative results only focus on parameters that can be directly modeled in EGEAS. The following sections adjust the EGEAS results for the ratepayer impact associated with mitigation payments under the WEPCO-city of Oak Creek agreement as well as the different transmission system upgrade costs associated with the various generation expansion plans.

Lastly, these results focus on quantitative effects. The Commission will need to consider the qualitative environmental and economic risks associated with the use of different fuels as discussed throughout this final EIS.

Effect on EGEAS results due to the potential for adverse credit quality effects on WEPCO's capital structure arising from the Facility Lease or a Purchase Power Agreement

When a long-term facility lease or purchase power agreement is signed, credit rating agencies can downgrade a utility's credit rating due to the debt-like quality of such agreements. This is especially the case if the lease or signed purchase power agreement constitutes a capital lease under Financial Accounting Standard Board (FASB) standards. Essentially, the signing of leases and PPAs with capital lease attributes and the attendant paying of rent or capacity payments looks much like a stream of continuing finance payments usually associated with long-term debt. This can reduce the utility's ability to obtain new financing and can raise borrowing costs as well. Any such increase in borrowing costs due to signed PPAs or leases needs to be factored into any generation cost analysis, including the quantitative EGEAS analysis reported above.

5

Chapter 5 - Fuel Diversity Perspectives

The topic of fuel diversity has been raised frequently in public discussions and meetings related to this project. Fuel diversity is a complex issue and can be viewed in a number of ways. The applicants have stated, in the CPCN application and at several public forums, that maintaining or enhancing the fuel diversity in WEPCO's generation mix is one of the primary reasons they have proposed the ERGS facilities. An examination of the pie charts in Figures 3-1 and 3-4, shows that about 50 percent of WEPCO's generating capacity is presently coal-fired and that about 70 percent of the energy consumed by WEPCO customers is produced by coal-fired generation. From this perspective, the applicants' statements seem to be inconsistent. However, there are many considerations in determining the appropriate mix of generation technologies and fuel sources.

Some of these considerations include: the age and condition of WEPCO's existing generating units; the source and availability of the fuels; fuel prices and the expected stability or volatility of fuel price over time; the overall energy balance and use in Wisconsin; and the environmental effects and safety issues associated with the use of different fuels.

This chapter will discuss some of these issues and perspectives. The chapter does not contain specific conclusions or recommendations with respect to the proposed ERGS project or any of the alternatives to the project. It is included in the EIS to provide information, raise awareness, and generate discussion. Although this chapter is focused on coal power plants versus natural gas-fired facilities, staff recognizes that a similar analysis of an integrated resource alternative which includes renewables, energy efficiency, electric transmission improvements, and possibly other smaller fossil-fueled facilities would also be valuable. Finally, the chapter is organized under the broad topics of reliability, economics, and environmental issues, but issues discussed under one topic often have implications in other areas.

Reliability Issues

Coal sources and availability

There is an estimated 304.6 billion tons of recoverable coal reserves in the United States.[52] The U.S. has about 25 percent of the world's reserves and uses about 25 percent of the worldwide coal used annually. In 2001, the U.S. mined a record 1.12 billion tons of coal, an increase of 60 percent over a 25-year period.

[52] Based on 60 percent recovery rate and US Energy Information Administration coal reserve data.

The current growth trend in coal production began in 1961. From 1986 to 1997, coal production increased by 22 percent, while the number of operating coal mines in the country declined by 59 percent, from 4,424 in 1986 to 1,828 in 1997. Coal prices decreased by 45 percent in real dollar terms over this same time period. Today, roughly equal amounts of Western coal and Appalachian coal are produced with about half as much interior (such as Illinois) coal produced.[53]

Competition from natural gas has slowed the growth of new coal-fired generation capacity but consumption of coal still increased by 28 percent from 1986 through 1997. By 1997, 90 percent of the coal consumed was used to generate electricity. Coal-fired units account for only 5 percent of planned new generation units between 1998 and 2007. But coal-fired net generation capacity is projected to grow because of an anticipated increase in utilization and capacity additions after 2007.

EIA projections between 1997 and 2010, which take into account scheduled generating capacity additions and baseload mix, anticipate nearly a 14 percent increase in annual coal consumption at electricity generators. These projections, and others like them, provide reasonable assurance of long-term coal markets and motivate large companies, especially those with traditional ties to coal, to hold investment positions in coal for the long term.

Natural gas resources, pipeline capacity and storage

Wisconsin has no indigenous supplies of natural gas. Therefore, owners of any natural gas-fired electric generation would have to procure supplies from outside the state. Natural gas is typically purchased from production areas in Louisiana, Oklahoma, and Canada. It is then transported to Wisconsin via interstate pipelines. Some generators connect directly to the interstate pipeline to receive their natural gas. Other generators purchase natural gas from a Wisconsin utility, which means that the gas must also flow through the utility's distribution system to reach the facility. This results in three possible areas for which reliability of natural gas must be assessed: (1) production, (2) interstate transmission, and (3) distribution. Each sector will be addressed separately in this section. The reliability implications associated with the inability of generator operators to store natural gas on-site will also be discussed.

Natural gas production and use: long-term analysis

With respect to production there are two possible reliability issues. First, natural gas must be available in the production region. Second, wells must be in place to make it possible to remove the natural gas from the field. According to the U.S. Energy Information Administration (EIA), technically recoverable reserves of natural gas in the United States in 2001 amounted to 1,614 trillion cubic feet.[54] This is about 82 times the amount of natural gas produced in the U.S. in that year. This is an overly-optimistic perspective of available supplies, however, because the technically recoverable estimate includes, among other items, gas supplies that are not currently economically recoverable. It also includes estimates of natural gas supply volumes that have not yet been discovered.

[53] The US Coal Industry in the 1990's: Low Prices and Record Production by Richard Bonskowski, September 1999.
[54] Energy Information Administration, "U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves," 2001 Annual Report.

In contrast, there are only 183 trillion cubic feet of natural gas in proved reserves.[55] This amounts to only about nine times the 2001 annual production level. This is an overly conservative estimate of the amount of natural gas likely to be available in the future.

The U.S. has about 2 to 6 percent of the world's natural gas reserves and uses about 33 percent of the world's production annually. Currently the U.S. imports 16 percent of its natural gas but that is expected to increase as demand increases from 22 trillion cubic feet (TCF) to 35 TCF by 2025.[56]

Historically, market forces have helped the industry to discover and produce much more gas than the experts had originally thought was available. To wit, the American Gas Association reports that its Potential Gas Committee's 1998 estimate of the amount of gas available in the U.S. was approximately 4 percent higher than its 1990 estimate, even though a substantial amount of the gas supply had been consumed over the intervening period.[57] This suggests that even though large volumes of natural gas continue to be consumed, the available resource base may be expanding, not declining as gas prices move higher. Over the long-term, however, existing production areas may not be able to supply the increases in demand. In that case, gas would need to be brought to market from other areas. Examples include importing LNG, off-shore eastern Canada, the Mackenzie Delta, Alaska, and the Rocky Mountains.

The support for the concept of an increasing supply of gas is founded in part on the fact that currently uneconomic gas reserves may become economically attractive even if there is no technological improvement in natural gas production. The amount of economically recoverable gas interacts dynamically with the price of natural gas. This interaction makes it very unlikely that the country would ever "run out of gas." The more likely scenario is that if supplies begin to dwindle without an accompanying reduction in demand, the price of natural gas would rise.

Under those circumstances natural gas production would increase as natural gas supplies that were formerly too expensive to extract would then become economically attractive. At the same time, the higher prices would tend to have a moderating impact on demand. Thus, the price mechanism would simultaneously tend to increase supplies and decrease demand, thereby returning the natural gas market to balance. It is not surprising to find therefore, that with the current high natural gas prices there could be more economically recoverable supplies of gas than there were 10 years ago.[58]

The impacts of market adjustments that bring on the additional supplies are felt by consumers. The resulting equilibrium price that expands the resource base could be significantly higher than it was prior to the adjustment. So the real threat, in terms of reliability of supplies, is not that we will run out of natural gas, but rather that we might run out of inexpensive natural gas.

Holding all else equal, the pace of escalation in natural gas prices would likely be accelerated if natural gas remains the fuel of choice for new electric power plants. By the year 2001, the use of natural gas by electric generators had already approached the level of consumption from the commercial (non-industrial) sector. There appears to have been a major revision to the EIA consumption data between the time the draft EIS

[55] EIA defines proved reserves to be volumes of natural gas that geological and engineering data indicate with reasonable certainty appear to be recoverable from known reservoirs under existing economic and operating conditions.
[56] EnerFax Daily 2/26/03
[57] American Gas Association, *Fueling the Future: Natural Gas and New Technologies for a Cleaner 21st Century*, 2001.
[58] At the time that this section was drafted, spot natural gas prices were in excess of $6.00 per million Btu.

was prepared and the final EIS was written. When the draft EIS was written, the latest data available was the 2001 data that showed that natural gas use by the electric utilities amounted to 14 percent of the total useage. The new data reported for 2002 show that the figure has almost doubled to 27 percent.[59] In addition natural gas usage in the Industrial sector decreased in the last two years and it is not clear if the decrease was due to a softening economy or demand destruction due to higher prices. PSC staff has not yet had an opportunity to investigate the basis for these dramatic changes.

Table 5-1 Natural gas consumption by sector--2001 and 2002 (billion cubic feet per year)

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
Industrial	8,656	45%
Residential	4,809	25%
Commercial	3,037	16%
Electric utilities	2,686	14%
[illegible]	[illegible]	[illegible]
Industrial	7,123	34%
Residential	4,915	24%
Commercial	3,147	15%
Electric utilities	5,553	27%

While the EIA data suggests that natural gas use by electric utilities is rapidly increasing, based on the orders placed for new turbines, the pace of adding natural gas-fired electrical generating capacity has slowed considerably in recent times. Figure 5-1 shows the delivered orders for gas turbines reported by General Electric over several years.[60] (The turbines are key components of natural gas-fired generating facilities.) This suggests that any upward pressure on natural gas prices due to new natural gas-fired generators may be less than had been anticipated several years ago.

Another fact that has bearing on the availability of natural gas for power generation projects is the overall demand for natural gas. The demand for natural gas in the U.S. actually peaked in 1973.[61] By 1986 the country was using 25 percent less natural gas than it did 13 years earlier. This is shown in Figure 5-2.

[59] Source: US Energy Information Administration
[60] Source: Jacqueline Doherty, "Turning on the Lights," *Barron's*, February 22, 2003.
[61] Source: US Energy Information Administration.

Figure 5-1 General Electric's gas turbine shipments by year

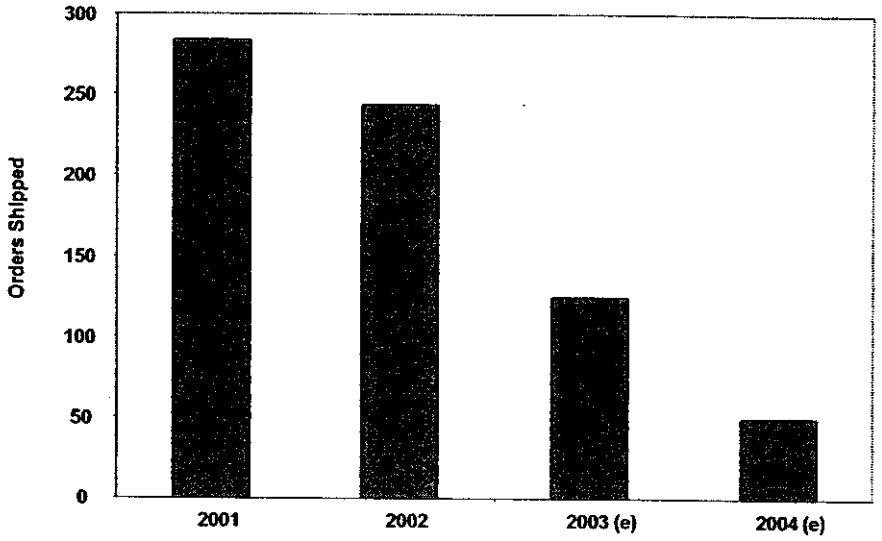
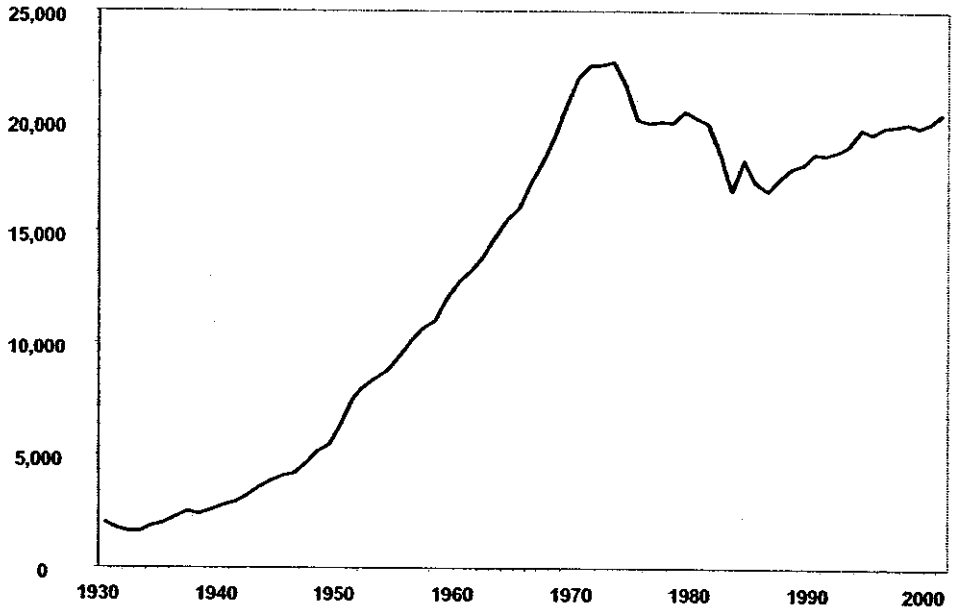


Figure 5-2 Marketed production of natural gas in the U.S. from 1930-2001

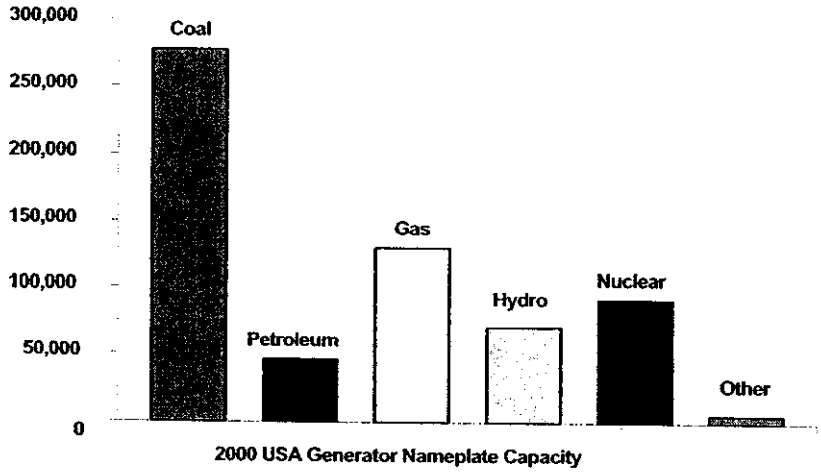


The demand for natural gas reversed its trend in the mid-eighties, although the subsequent growth rate has been slow. Over the past 15 years, natural gas demand has increased by a little more than one percent per year.

With the generally slow growth rate in natural gas demand and the apparent slowing in the pace of natural-gas-fired electrical generation, technological advance and technological innovation could allow for the development of additional supplies to keep pace with the demand for natural gas.[62] In fact, if new ways of drilling for gas are invented, or if news means of finding currently undiscovered gas supplies are developed and implemented, it may be possible to have an expanding resource base at lower prices than those experienced today. Another factor that could increase supplies and decrease prices is the development of natural gas in areas where natural gas production is currently not permitted. This would include Federal lands such as in national parks or in Alaska. Doing so, however, could have substantial environmental impacts that may preclude that option from being allowed.

In 2001 and 2002, over 90,000 MW of generation using natural gas as a primary fuel was installed nationwide. Through 2011, it is estimated that $35 billion in gas infrastructure nationwide will be required.[63] This has resulted in a large shift in the electric generation capabilities as shown in Figures 5-3 and 5-4.

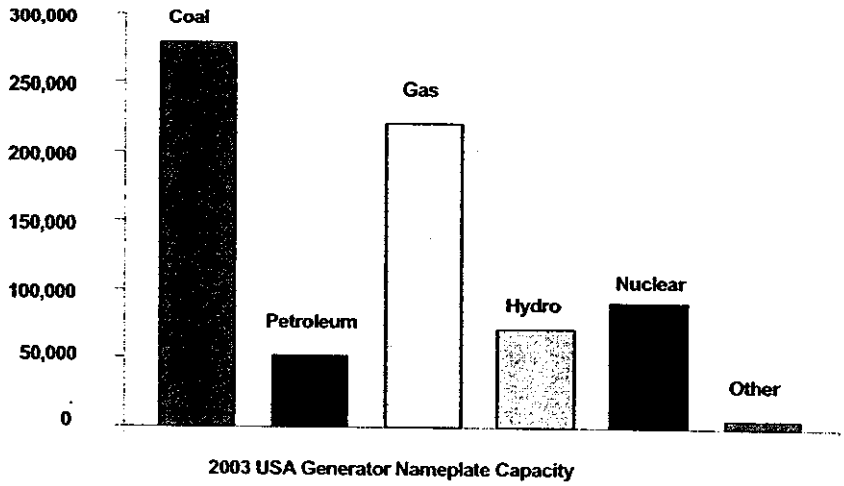
Figure 5-3 U.S. generating capacity in 2000



The addition of 90,000 MW of natural gas capacity in 2001 and 2002 to the existing 130,000 MW will add significantly to the gas consumption used for electric generation. According to EIA, the 1999 demand was 21.4 trillion cubic feet (21,400 billion cubic feet). Gas consumption for electrical generation represented 16 percent or 3,424 billion cubic feet of this total. The EIA estimates for overall demand for natural gas are estimated to increase only 2.3 percent per year.

[62] Technological advance refers to the invention of new technologies. Technological innovation refers to the use of existing technologies that had previously been invented, but that previously had not been used in practice.
[63] PTF Volum 1 Enclosure 1.0, Sec 7.0

Figure 5-4 U.S. generating capacity in 2003



No estimates for the expected capacity factors for this new generation are provided with the EIA data. One could assume that a 70 percent increase in nationwide generation would translate into a 70 percent increase in gas usage for electrical generation. If this is true, total gas consumption nationwide would increase by over 10 percent.

Natural gas production: short-term analysis

The amount of natural gas as a resource base is not, however, the controlling factor as to the availability of natural gas in the short run.[64] There can be a large basin of natural gas that is not developed; i.e., it has no operating drilling rigs to extract the gas. This gas cannot reach consumers. The high prices experienced in recent times appear to be heavily related to a failure of the natural gas producers to expand their operations over time.[65]

The productive capacity of the domestic natural gas industry is often summarized by a term referred to as the rig count, which is simply a count of the number of rigs actively withdrawing natural gas. The rig count has been quite volatile in the past decade and is in part responsible for the volatility of natural prices. For example, Baker Hughes[66] reported that in January 1999 there were 587 drilling rigs in operation in the U.S. This was 41 percent fewer rigs than were in operation a year earlier. Two years later (January 2001), the count had increased by 44 percent over the January 1999 level to 1,118 rigs. As of January 2003, the count has declined to 854 rigs, which amounts to a 24 percent reduction in the count over the past two years.

The short-run capacity to deliver natural gas tends to rise and fall directly with changes in the rig count. It is not so much the absolute level of the rig count that matters most, but rather the rig count relative to the level of demand. When the number of operating rigs is not sufficient to keep up with demand, two things

[64] "Short-run" in this context is a period of no more than 18 months.
[65] Russell Gold and Rebecca Smith, "Effects of Gas Shortage Rip Through Economy," *Wall Street Journal*, February 28, 2003.
[66] The Baker Hughes Rig Count is often used as the standard measure of the rig count in the natural gas industry.

happen: (1) interruptible customers do not receive natural gas; (2) natural gas prices rise; and (3) demand is reduced. So during these situations for the generator using natural gas, supplies might be available at high cost, or under certain conditions might not be available at all.

Natural gas transmission

The preceding discussion suggested that under certain circumstances natural gas might not be available to electric generators. This is almost a certainty if the generator relies on interruptible interstate transmission capacity to ship its natural gas from the production area in the southern U.S. to Wisconsin. Some interruptions may occur even if the generator has a contract for firm transmission, although the frequency of such interruptions would be much lower than that experienced by customers who rely on interruptible transportation.

Interruptible transportation rates for interstate pipelines are set at a fraction of the firm rate. That deep discount in the rate reflects the quality of service obtained. With the exception of very warm winters, interruptible customers can count on the fact that service will be unavailable on one or more days of the year. The pipeline does not expand its capacity when interruptible customers are added to its system. The interruptible customers essentially use any extra space available. On peak winter days there is not likely to be such extra space and the interruptible customers are often forced to stop taking natural gas on those days.

A generator customer that relies on interruptible interstate transmission capacity is by definition not going to be reliable during the coldest winter periods. Such an arrangement is reasonable if the generator is a peaking plant that will be used only during the electric utilities' summer peak periods. If, on the other hand, the plant is expected to be available year-round and the generator relies on interruptible transmission capacity to ship its natural gas to Wisconsin, a potentially difficult situation is very likely to occur. Under these conditions, unless the generator has dual-fuel capability, it will have to cease operation at a time when the electric system is relying on its output.

The Commission faces a potential problem as it relates to merchant power plant providers and knowing how or if these plants will affect overall system reliability. The supply procurement decisions are not always revealed when a merchant plant owner makes a proposal to provide electric capacity. For a merchant plant that is a base load or intermediate load facility, or if the facility is to be available as a peaking unit year-round, the interstate natural gas transmission capacity must be firm if electric reliability is to be maintained. Contracting for interruptible natural gas transmission capacity would be reasonable under these circumstances, only if back-up fuel can be used to power the generator.

That option would be acceptable, however, only if the merchant plant owner maintained adequate supplies of alternative fuel that could be used during periods of natural gas interruptions. During extremely cold weather, interruptions of the natural gas system could last for three days or more. For a dual-fueled 500 MW base load unit, the oil storage capacity would have to be quite large to assure that the plant could continue to operate. Relying on oil service companies to provide back-up fuel when natural gas facilities are interrupted may not be reliable. During periods of cold weather, many industrial customers also must switch to oil as their natural gas service is interrupted. This creates a dramatic increase in the demand for oil in a short time. If the oil service companies do not have the capacity to deliver to all of their customers, a portion of the demand for the generator may go unmet. On-site storage of several days of supplies of alternative fuel reduces the risk of this occurring.

If a merchant plant provider does not reveal the specific arrangements that it has made to meet its natural gas operations, it should be presumed to be of low reliability. Absent a showing that the plant will be available when needed, the Commission could reasonably assume that the plant is interruptible.

Contract provisions between the merchant plant and an electric utility that call for liquidated damages for failure to deliver the needed electricity are not a substitute for physical reliability. While such damage clauses are a necessary complement to such contracts, the only way to obtain the maximum assurance of the plant's reliability is to examine the underlying supply contracts. Payments of millions of dollars of liquidated damages may not compensate the state of Wisconsin for the harm caused by a lack of electrical energy at a critical time.

Even firm interstate pipeline capacity, however, is not a fail-safe alternative. There is always the possibility of *force majeure* type events (examples include war, an Act of God, etc.) that could prevent natural gas from flowing. These situations can affect all fuel types including natural gas, oil, and coal. With natural gas, however, there is an additional concern that may cause reliability concerns. Electric generators that use natural gas as the input fuel generally must receive natural gas at a delivery pressure of about 450 psig or higher. Local distribution utilities can generally maintain reliable service at lower pressures. The first sign of delivery problems on the interstate pipeline system is a drop in delivery pressure. This means that even if capacity arrangements are firm, generators could see problems before the local distribution utilities do when pressure problems occur. Thus an electrical generator with firm interstate pipeline capacity may be less reliable than a local distribution company (LDC) with the same service.

Pressure problems on the pipelines are more than a hypothetical concern. For example, on and around January 23, 2003 ANR Pipeline, the major provider of interstate pipeline capacity to the state, had difficulty maintaining pressure on its system.[67] The specifics of the situation, including the impact on natural-gas-fired power generators, are being investigated at this time.

If a large number of gas-fired generators want to obtain firm capacity on interstate pipelines, the pipelines serving the state may have to expand, or new pipelines may have to be built. The recently-constructed Guardian Pipeline is such an example. It brings an additional 750 million cubic feet per day of capacity to the state, some of which could be used to serve natural-gas-fired electric generators. On the surface, that represents about a 30 percent increase in the net capacity serving Wisconsin.[68]

That figure likely overstates the capacity increase for the state. As customers switch to contracts with Guardian, they temporarily strand capacity on other pipelines. The other pipelines have likely sold this stranded capacity formerly used to serve Wisconsin to customers in other Midwest states. So there is not likely to be a glut of pipeline capacity serving the state. That means that if large-scale natural-gas-fired generators are to be built in Wisconsin, substantial expansion of the interstate pipeline system serving the state may be necessary.

[67] February 6, 2003, letter from David J. Kyto (Wisconsin Public Service Corporation) to Robert Bauer (Public Service Commission).
[68] EIA reported that the net pipeline capacity serving Wisconsin in 2001 was approximately 2,500 million cubic feet/day. See James Tobin, *Natural Gas Transportation—Infrastructure Issues and Operational Trends*, Energy Information Administration, October 2001.

Natural gas distribution

In assessing the reliability of natural-gas-fired electrical generators that take service from a LDC rather than directly from a natural gas transmission pipeline, one must examine operational history of the LDC's distribution system. Like the pipelines, some gas utilities offer firm and interruptible distribution service. The reliability of service during the winter is diminished to some extent when the customer elects interruptible distribution service. The degradation in service quality is not as great, however, on the distribution system as it is on the interstate pipelines. The only LDC in Wisconsin that has interrupted its customers because of distribution constraints in recent years is Wisconsin Gas Company. In fact, distribution-related interruptions on the other utilities have been so rare that some utilities no longer offer interruptible distribution service. (Interruptible customers were essentially receiving firm service at discounted rates.)

There is another reliability issue that needs to be addressed for power generators on an LDC's distribution system. Even firm service is not absolutely guaranteed. For example, if an LDC's major distribution main is accidentally damaged during construction, large customers including electrical generators, would be among the first to be interrupted. The utility would attempt to flow gas to the customers that are at the greatest risk, which on a cold winter day would be residential customers. This type of interruption is rare, but the possibility does exist.

Natural gas reliability as a function of plant operation

Unlike a coal-fired utility that maintains weeks or months of fuel supplies at its site, it is generally not cost-effective for a generator to store natural gas on its site. So while a coal-fired facility is largely unaffected by the derailment of a unit train transporting coal to its facility, an interruption in the flow of natural gas to a gas-fired generator is likely to cause a problem. The situation is less severe if the generator can rely on alternative fuel. Gas-only plants would have no alternative but to cease operations if the flow of natural gas is interrupted.

Natural gas reliability: conclusion

In terms of the supply of the natural gas resource, rather than running out of gas generators are more likely to be faced with pricing problems. Natural gas will generally be available from supply basins if the generator is willing to pay for it. Reliability is more likely to be a concern on the interstate pipeline system if generators purchase interruptible capacity or if pressure problems occur on the pipelines. Reliability can also be impaired on the LDC distribution system, although problems are likely to occur less frequently there than they are on the transmission pipelines.

Solely in terms of reliable fuel supplies, the inability of generator owners to store natural gas on-site means that any interruption in the flow of gas can present major operational problems for the generator. This decreases the overall reliability of natural-gas-fired units relative to plants fired by coal. Whether natural-gas-fired plants are less reliable than coal plants when all relevant factors are considered is beyond the scope of this analysis.

The volatility of natural gas was especially noticeable this winter as winter returned to more normal colder temperatures, gas fired generation increased its share of natural gas needs, Canada was less able to import,

and the US production fell from previous levels. Concern is developing about the adequacy of previous predictions and the availability of gas in the future.[69]

Economic Issues

As discussed earlier in Chapter 3, natural gas prices are extremely volatile. That means that the cost of electricity generated by burning natural gas will also be quite volatile. To the extent that these costs are passed on to consumers via fuel cost adjustments, electricity prices would become more volatile.

Volatility is not desirable for consumers. Volatile energy bills make budgeting more difficult. That affects residential, business, and governmental consumers. The use of natural gas to produce electric power will exacerbate problems currently faced by retail natural gas consumers because electric bills will tend to increase at the same time that natural gas bills increase. Put another way, using natural gas to fire electrical generators provides no diversification from natural gas price spikes. Rather it magnifies the impact of those spikes.

Alternatively, when comparing the capital costs of natural gas generation versus coal-fired generation, the capital construction costs for gas-fired plants are much more consistent, predictable, and significantly lower than those associated with coal-based facilities.

For instance, in the Port Washington CPCN case, the first 545 MW combined-cycle natural gas-fired generating unit is expected to cost $309.6 million in 2001 dollars. This is in contrast to the expected capital cost of $721 million in 2003 dollars for 515 MW from the first SCPC unit. Both units are of nearly equal size in generation output to be used by the utility, but the capital cost of the coal facility is more than double that of the gas-fired project. In addition, in the Port Washington CPCN case, the facility lease has a "hold to" cost feature, meaning that any cost overruns will not be passed on to ratepayers. The fact that a coal facility's capital cost is at least double that of a gas-fired generation facility and that any cost overruns in constructing the coal facilities could be passed on to ratepayers means that choosing a coal facility carries its own significant economic risks that must be weighed against price spikes and supply risks associated with choosing a gas-fired facility. However, in its May 2003 filing, WEPG limited the extent of any cost overruns to 10 percent. This will be a key issue in this case.

The following table displays fuel diversity mix by electric energy generation in the US, Wisconsin and surrounding states.

Table 5-2 Electric power industry generation - percentage of MWH generated by different fuel types in 1999

[illegible]	Coal	Nuclear	Nat. Gas	Hydro	Other
Illinois	45%	50%	4%	0%	1%
Iowa	85%	9%	1%	2%	3%
Minnesota	62%	27%	2%	2%	7%
Wisconsin	70%	20%	3%	3%	4%
US	51%	20%	16%	9%	4%
WEPCO (2001)	68%	27%	3%	0%	2%

* Source: EIA 1999 State Electricity Profiles and Figure 3-4 of the final EIS.

[69] Effects of Gas Shortage Rip Through Economy: Wall Street Journal, February 28, 2003

This table shows that Wisconsin and WEPCO rely on more coal-fired generation as an electric energy source than the US, Minnesota, and Illinois. Only Iowa uses proportionately more coal-fired electric generation. This table also shows the importance of nuclear generation. That is, Illinois uses less baseload coal-fired generation due to its sizeable use of nuclear power.
On a forward-going basis, given that the coal generation at Port Washington will be retired, if Oak Creek Units 5 and 6 are retired and only the SCPC units at ERGS are constructed, WEPCO's percentage share of electric generation in Table 5-2 may only moderately increase for the period after 2012.

Environmental Issues

Although much of the previous discussion focusing on fuel prices and volatility may appear to favor use of coal, a general environmental comparison of natural gas versus coal generation draws attention to other factors that should be considered in making a choice for future baseload generation capacity. The following discussion focuses on some of the basic environmental differences between these fuel choices.

Coal mining and transport

The use of coal as a fuel supports the coal mining industry, which has grown over the last several decades directly because of the nation's increased need for electricity. According to the U.S. Department of Energy, Energy Information Administration (EIA), in 1949, 84 out of a total of 483.2 million short tons of coal (approximately 17 percent) were purchased by electric utility plants. However in 2001, 948 out of a total of 1060.3 million short tons (approximately 89 percent) of coal were purchased by electric plants, showing an increase in the amount of coal mined and a significant increase in the percentage of coal mined for coal-fired electric power plants.

The coal mining industry is responsible for many severe environmental impacts. By necessity, surface land is disturbed in the process of mining coal. The actual coal mine facility can disturb a footprint of a few acres for underground mining operations or tens of square miles for a surface mining operation. However impacts from coal wastes, road building activities, subsidence, acid mine drainage, groundwater contamination, and other natural resource impacts can also have wide ranging effects, well beyond the boundaries of the surface disturbance of the coal mine.

To grasp the impact coal mining has had on the environment, one can examine the statistics for Pennsylvania, the fourth largest coal-producing state in the U.S. and the source of the coal to be used in the ERGS facilities. Pennsylvania currently has about 2.6 billion cubic yards of coal refuse which is generally unsuitable for plant growth and a potential source of acid mine drainage. According to the Federal Office of Surface Mining, Pennsylvania ranks first in the nation in the total estimated cost (over $15 billion) of environmental cleanup needed for the past mining of coal. In recent years, Pennsylvania spending for mine reclamation has averaged $21 million annually. Despite many regulations written to protect environmental resources from adverse effects associated with new mines, impacts as a result of newer technologies and environmental accidents continue to occur.

In addition to environmental concerns, as a heavy industry, underground coal mining, including longwall mining, has many safety concerns for those individuals engaged in the mining work.[70] Accidents related to electrical work, hydraulics, fire, or flood can occur. There is a need to monitor coal dust production and exposures to arsenic, cadmium, lead, mercury, and other components in the coal. While much progress has been made in reducing respirable dust levels in mines, black lung (also known as coal workers' pneumoconiosis and silicosis) continues to occur among coal miners. Black lung can devastate a miner's quality of life, affect a miner's family, and lead to premature death.

ERGS has proposed the use of Pittsburgh #8 bituminous coal with the Blacksville Mine as a typical coal supply. The Blacksville Mine uses the longwall method, a type of underground, continuous, highly mechanized mining method. Whereas the permanent changes on the landscape are clearly visible from surface mining operations, underground mining also has wide-reaching environmental impacts as well. Surface mining affects many acres by eliminating surface vegetation, permanently and drastically altering soil and subsurface geological structure, and disrupting surface and subsurface hydrologic regimes. Underground mining due to subsidence can have the same set of impacts.

By its very nature, underground coal mining entails a risk of surface subsidence as gravity induces the downward movement of the overlying rock strata to fill the void left where coal has been removed. Longwall mining, by contrast with more traditional methods of underground coal removal, induces deliberate, uneven subsidence of the land surface relatively quickly after mining. This subsidence affects surface water hydrology, altering soil and subsurface structure, and species habitat. Subsidence and fracturing can also induce the acidic water associated with overlying coal seams to enter drinking water wells and streams.

Coal is transported primarily by train. As the utility industry need for coal has increased, the amount of coal transported by train has increased. The EIA reported that the quantity of contract coal shipped by rail to electric utilities rose from 269.6 to 366.2 million short tons from 1988 to 1997, an increase of 36 percent. The average distance contract coal has been shipped by rail rose from 640 miles in 1988 to 793 miles in 1997. The increase of coal trains and train traffic in turn has increased the amount of noise and coal dust blowing off trains. Air pollution has also increased from train operation, especially nitrous oxides, carbon monoxide, and sulfur dioxide. CO2 production is discussed in Chapter 7. If a carbon tax is imposed, the additional cost could be dramatic. A carbon tax is one of the sensitivities discussed in the EGEAS modeling in Chapter 4.

Natural gas extraction and transport

Natural gas is extracted either through "free-flowing wells" because of natural pressure underground or by some type of pumping system. After the natural gas is extracted, it is treated at gas plants to remove impurities such as hydrogen sulfide, helium, carbon dioxide, hydrocarbons, and moisture. Pipelines transport the natural gas from the gas plants to power plants. Construction of major gas transmission pipelines and the numerous distribution laterals can cause substantial environmental effects, depending on the terrain, land use, and land cover.

[70] Information on black lung and mine safety can be found in the web site of the Mine Safety and Health Administration of the U. S. Department of Labor -- http://www.msha.gov/

The extraction of natural gas and the construction of natural gas power plants can destroy natural habitat for animals and plants. Possible land resource impacts include erosion, loss of soil productivity, and landslides. However, natural gas extraction is a much less disruptive installation than a typical coal mine. A field of production wells often can share the landscape with fields of corn and soybeans, though the oil and natural gas extraction process does result in outputs of drilling mud, drill cuttings, and well maintenance products. Disposal of these materials, as well as materials resulting from equipment cleaning, have the potential to create water quality impacts if not carefully managed.

Resource needs and impacts

Water

Coal-burning technologies have major resource needs related to water, land, and solid waste disposal compared to natural gas-fired combined-cycle plants or simple combustion turbines. The following discussion describes some of these needs and the associated impacts.

The two SCPC units of the ERGS project (about 1,230 MW) would require about 1,400 million gallons per day (mgd) of water for purposes of cooling, ash removal, demineralization processes and make-up water. Approximately 1.7 mgd would be "consumed" by various processes or evaporated, thus discharging approximately the same amount of water as was initially withdrawn. Release of this large quantity of heated water into a surface water body can result in major environmental impacts and substantial changes due to thermal pollution. These impacts could vary depending on the ambient water temperature, the physical characteristics of the water body (i.e. flow rate, water depth, etc.), and the time of year.

Alternatively, a similarly-sized natural gas-fired combined-cycle plant (1,180 MW) would require about 7.0 mgd for operation. However, the majority of this water (about 5.0 mgd) would be consumed during plant operation or evaporated from the plant's cooling towers returning less than 2.0 mgd to the river or lake from which it was drawn.

Thus, with respect to the ERGS and an alternative gas-fired generation plant, there is a trade-off between the potential thermal pollution effects and a water consumption concern. (Note: Coal plants can also utilitize cooling tower technologies rather than once-through cooling systems as proposed for the ERGS. In coal plants that have cooling towers, the quantity of water evaporated is much greater than for a natural gas-fired plant.)

Solid waste

The need for ash landfills is always a consideration when proposing to build new coal-generation. The two SCPC units of the ERGS facilities are expected to produce 206, 300 tons of fly ash and 51,600 tons of bottom ash per year. New landfills are very difficult to site and must be maintained to avoid impacts due to surface runoff or leaching. The potential to reburn some amount of landfilled ash and the developing beneficial re-use market for ash and other coal-based generation by-products will help to reduce the need for new landfills and slow the rate at which existing landfills reach capacity.

Solid wastes produced by natural gas-fired facilities are primarily limited to sludge cakes resulting from the pre-treatment of raw surface water for use in the plant.

Land

The amount of land required for a natural gas-combined cycle plant is much less than that needed to accommodate a similarly sized (MW capacity basis) coal-burning generator. The auxiliary facilities, such as rail tracks, coal silos and coal handling equipment, coal piles, and ash landfills result in a much larger "footprint" of disturbed land. In addition, the noise, fugitive dust, and safety issues create a need for a substantial buffer area around the plant facilities. As in the case of the existing OCPP property however, if managed properly, this buffer land can preserve special resources and habitat functions.

Air emissions

The air emissions profile for a coal-fired generator is quite different from that of a natural gas-fired combined-cycle plant. Coal and limestone are the mercury sources for the ERGS facility, which is expected to emit about 300 lbs. of mercury per year. Mercury is not a pollutant emitted by natural gas combustion.

In addition, SO_2 (3-hr and 24-hr) and particulate matter, specifically PM_{10} (24-hr) are emitted in much higher concentrations from coal-fired plants than from natural gas facilities. These higher concentrations occur even though the best available control technologies have been implemented to reduce emissions. The proposed ERGS SCPC units include a flue gas desulfurization system (FGD) and the IGCC plant would have a sulfur recovery unit (SRU) to minimize the amount of sulfur emitted.

CO_2 emissions

In data response 1-SUP-178 dated March 4, 2002 WEPCO indicated to PSC staff that CO_2 emissions from 600 MW of coal would be about 3,500,000 tons per year. A DNR analsyis completed since the issuance of the draft EIS indicates that CO_2 emissions up to 4,450,000 tons per year could occur. This is in contrast to 450,000 tons per year for a 500 MW natural gas-fired combined-cycle plant. Presently, CO2 is not a regulated emission. Due to concerns over climate change, CO2 emissions could come under closer regulation in the future. To the extent such emissions did come under supervision, ratepayers in Wisconsin could be faced with higher compliance costs under an expansion plan utilizing more coal-fired generation than natural gas.

Chapter Summary

In summary, the primary points raised in this chapter are:

- The supply of coal is plentiful.
- Gas use is increasing nationwide with the potential to increase dramatically at the state level, depending on the level of merchant plant development.
- It is unlikely natural gas growth can be sustained without increasing price volatility and more infrastructure improvements such as gas wells, interstate pipelines, intrastate pipelines, and liquid natural gas facilities.
- .Reliability issues with electric generation may increase as the percentage of natural gas generation increases.
- Natural gas prices have been volatile. Increased reliance on generation from natural gas-fired power plants could lead to more volatile electricity prices for consumers.

- In selecting the appropriate electricity supply resources, the Commission must balance the higher marginal energy cost, price spike potential, and supply risks associated with natural gas-fired facilities versus the economic risks of choosing a coal facility in which a coal facility's capital cost is at least double that of a gas-fired generation facility for a similar amount of energy output and that cost overruns in constructing the coal facilities can be passed on in part to ratepayers.
- If a carbon tax is imposed, coal plants could be dramatically affected to the ratepayers' detriment.
- Coal can be stored on-site in large quantities providing a fuel inventory that can last longer than natural gas.
- Coal-burning power plants typically emit higher concentrations of SO_2, Hg, and certain particulates than natural gas-fired facilities with a similar capacity.
- Disposal of solid waste, including ash and other by-products, is an environmental issue for coal facilities, but not natural gas plants.
- The amount of land needed for placement of auxiliary facilities and buffer area is much greater for coal plants than for natural gas-fired generators.
- Coal-based facilities have major cooling water requirements. Although this may not be a consumptive water use, it can result in thermal pollution concerns.
- Natural gas-fired combined-cycle facilities often evaporate a large percentage of the intake water, causing consumptive water use concerns.
- Coal mining is generally more disruptive to the environment than natural gas drilling. Also, health problems associated with underground coal mining, including black lung disease, continue to occur despite federal efforts to improve conditions for miners.

6

Chapter 6 - Overview of Proposed Sites and Technologies

This chapter provides a descriptive overview of the proposed sites for the ERGS facilities and the coal-based technologies proposed by the applicants. It also explains the site selection process and siting criteria used by the applicants to choose the proposed sites that were submitted in their CPCN application.

Site Selection Process

The applicants state that the site selection process started with over 140 potential sites. The number of potential sites was further reduced through a process that evaluated the sites on various social, environmental, and technical/economic parameters that were embodied in 55 screening criteria, which were weighted according to their importance. Social issues captured in the criteria included public attitudes, current and future land use, need for land acquisition, and effects on property owners, and the general public. Examples of environmental issues included in the criteria are air and water quality, presence of wetlands and natural areas, and landfill capacity among others. Technical/economic aspects included in the criteria were availability of cooling water, proximity to railways, highways and transmission lines, physical site conditions, ease of construction, and adequacy of pre-existing conditions.

The primary site selection criteria used by the applicants to select the proposed coal generation locations focused on the criteria related to cooling water, fuel delivery, and electrical transmission. The ability to locate all three proposed units at one site as well as the potential re-use of existing infrastructure were also important considerations in the applicants' final selection of sites. Five possible sites, shown in Table 6-1, were closely compared in making the final selection.

Table 6-1 Site alternatives compared in the applicants' final selection

Site	County	Type	WEPCO Controlled
North Oak Creek	Milwaukee	Brownfield	Yes
Pleasant Prairie	Kenosha	Brownfield	Yes
Haven	Sheboygan	Greenfield	Yes
Ozaukee	Ozaukee	Greenfield	No
Little Suamico	Oconto	Greenfield	No

The sites in Ozaukee and Oconto Counties were eliminated because of the increased cost and environmental impact to develop greenfield sites and acquire a substantial amount of land. Because of its irregular shape, the applicants state that acquisition of additional land may have been required to build the ERGS facilities on the Haven site and once-through cooling would not have been a viable option because the site is about 0.25 miles from Lake Michigan.

WEPCO's existing Pleasant Prairie Power Plant site would have been large enough to accommodate only the two SCPC units, not the third IGCC plant. Also, because of the site's distance from Lake Michigan, cooling towers would have been required, reducing the efficiency and overall output of the proposed facilities.

In reviewing the North OCPP site, the applicants identified other possible sites near the southern end of the WEPCO-owned property in Racine County that could also accommodate all three coal-based units and share the advantages of once-through cooling, and use of the existing transmission infrastructure and rail lines.

Although the sites would share the use of some of the common existing OCPP infrastructure such as the coal-handling equipment, rail lines and ash landfills, there are several ways in which the sites can be differentiated as alternative sites. These differences include: 1) having building footprints in different municipalities and counties resulting in different entities receiving shared-revenue payments if the ERGS proposal is approved, 2) separate service water discharge locations, and 3) significant differences in the amount of excavation required to build and safely operate the facilities.

A detailed description of the proposed sites and these differences are described below.

Proposed Sites

Two site options (one of which has a variation) have been proposed by the applicants for the ERGS facilities. As described above, all of the sites are on WEPCO-owned property adjacent to the existing OCPP on the shore of Lake Michigan (see Figure 6-1). One of the sites is north of the existing OCPP, while the other alternatives are south of the existing OCPP. The existing plant is shown in the aerial photo in Figure 6-2. The North Site and South Site are located completely on WEPCO-owned property. The South Site-Exp is located mostly on WEPCO property, but extends onto what is currently a federally-owned shooting range. WEPCO has reached an agreement to secure the shooting range property in the event that the South Site-Exp is chosen by the Commission as the approved site for the ERGS facilities. The shooting range would be relocated to an area on the north side of Seven Mile Road east of the railroad corridor.

After the draft EIS was issued, WEPCO and the city of Oak Creek negotiated another site layout plan for use on the North Site. Some information regarding this new site layout was filed in WEPCO's direct testimony. Additional information and maps requested by PSC and DNR staff were provided in mid to late-June. This new site layout, the CUP Option, would also require use of a portion of the shooting range property. A more detailed description of the CUP Option layout and the potential environmental effects related to this layout are found in Chapter 12.

Detailed information about the local environment and potential community impacts related to building the facilities on the North and South Sites is found in Chapters 7 through 12.

Figure 6-1 Location map showing OCPP property in relation to the city of Oak Creek and northern Racine County

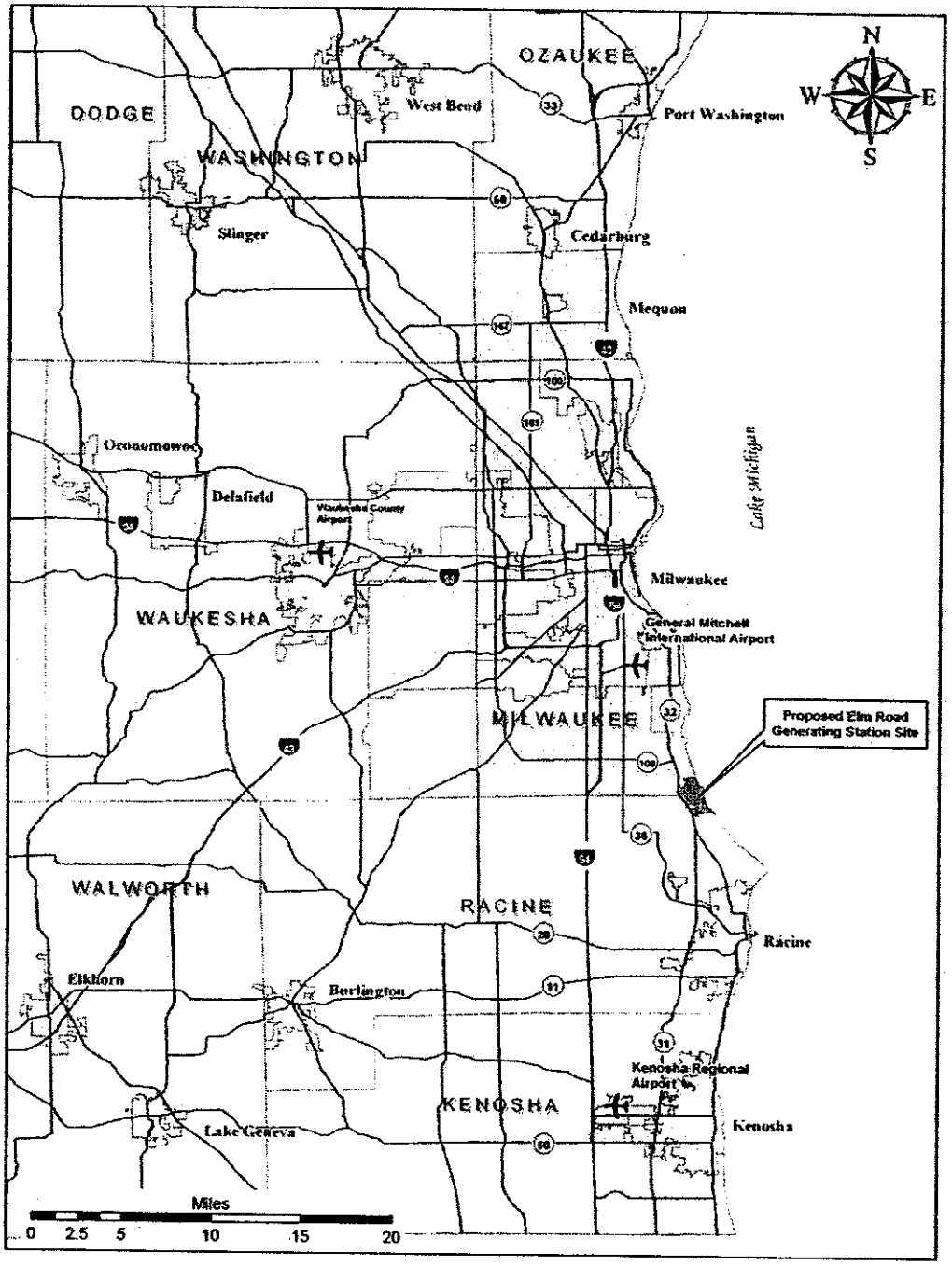


Figure 6-2 Aerial photo of existing OCPP site

North Site

Existing structures and land cover

The North Site is located on WEPCO's property in the city of Oak Creek in Milwaukee County, Wisconsin. This portion of the property is comprised of about 35 acres located along the Lake Michigan shoreline. A 100-foot bluff now parallels the lake shoreline and is present along the entire length of the proposed North Site. The southern half of the North Site currently consists of some previously graded lands and an access road that passes through a large ravine as it runs from the top of the bluff to the existing North OCPP building. The northern portion of the North Site includes a portion of the existing, closed North Oak Creek Ash Landfill. To the east of the bluff, depending on the location along the site, the site is relatively flat for about 100 to 350 feet leading to beach material and the lake. A large coal dock, created by filling in a portion of the lake near the former North OCPP units 1-4, is located southeast of the end of Elm Road. The natural features of the North Site are discussed in more detail in Chapters 8 and 10.

The location of the SCPC units on the North Site would be near the east end of Elm Road and about 0.25 miles north of the building that formerly housed the OCPP units 1-4. The proposed SCPC units would be located in Section 31, Township 5 North, and Range 23 East (T5N-R23E). The location for the IGCC unit is south of the SCPC units in the vicinity of the present North OCPP building. See Figure 6-2.

The existing operating South OCPP units lie south of the proposed IGCC location. This plant contains four coal-fired plants (units 5-8) and one combustion turbine (unit 9) which generate about 1,200 MW total. Unit 9 would be retired before operation of the first SCPC unit. At one time, the OCPP was a nine-unit 1,700 MW power plant, prior to the retirement of the North Oak Creek units. Units 3 and 4 were retired and substantially removed on April 1, 1988, and Units 1 and 2 were retired on December 31, 1989. The building for the former North Oak Creek units still remains because it supports coal handling and other facilities serving the remaining units. It would be demolished, however, to make way for the new plant. The larger features of the South Oak Creek plant are shown in Figure 6-2.

Figure 6-2 also shows an existing substation and switchyard that interconnects the plant to the American Transmission Company (ATC) electric transmission system. An existing rail line and track system for coal delivery connects to interstate railroad tracks running north and south parallel to the lake shore. Inside the upper portion of the train track is a relatively mature beech maple woodland (discussed in detail in Chapter 10) that appears to be the habitat for an endangered plant species as well as a beech forest community.

The coal unloading process currently requires the break-up of trains and creates local traffic congestion south of the site in Racine County. This problem and proposed solutions are discussed in detail in Chapter 11. Coal storage piles are located on the dock area which is a filled area in the lake present just south of the access road and another east of the car dumper near the rail track. Coal handling systems presently run from the dumper along the track to the storage piles and back to the currently operating boilers. A water intake system in Lake Michigan provides water for cooling and other process water for the existing OCPP units. The intake channel currently provides a means to accept delivery of coal, limestone, or other needed raw materials via barges or lake vessels for the existing units. Bottom ash from the boilers is temporarily stored on the coal dock, and fly ash not being utilized for other purposes is currently being landfilled in the only on-site operating landfill. This landfill, the Caledonia Landfill, is located in the southwestern portion of the property. Two closed landfills exist on the northwest end of the property south of Elm Road.

The proposed locations of the ERGS facilities are discussed below and in more detail later in this chapter. A more detailed discussion of the ash handling and landfills can be found in Chapter 9.

Proposed structures and land cover

Generating station equipment would occupy about half of the site, and the balance would be areas that include access roads, storage buildings and open areas for electrical transmission line corridors. Detailed descriptions of the proposed SCPC and IGCC power plants and their auxiliary facilities are found later in this chapter. The proposed layout for the ERGS plant at the North Site is shown in Figure Vol. 2-1.

Conventional SCPC facilities are typically constructed on relatively flat sites. This allows for standardized designs that provide the most cost-effective means to complete engineering and construction work. If the elevation differs across the site, equipment arrangements, duct runs, piping locations and the ability to share common utilities for both SCPC units (such as coal handling, circulating water, and service water) becomes more difficult and the economics of a standardized design are lost. The units need to at the base of the bluff to facilitate open-cycle cooling. Therefore, WEPCO and WE Power have proposed that the bluff be cut back to allow for the installation of these units.

The SCPC units would include air pollution control equipment buildings such as the selective catalytic reduction (SCR) facility, a new baghouse or high efficiency electrostatic precipitators, and wet scrubbers. The footprint for each generating unit would be about 300 feet wide and about 1,200 feet long (perpendicular to the lakeshore), covering about 8.3 acres.

The IGCC unit would be located along the shoreline at the site of the old North OCPP building, and its related buildings would extend westward from there, with most of them placed on the north and east side of the existing rail loop. Both the combined-cycle (CC) facility and air separation unit (ASU) of the IGCC would be at the base of the bluff to facilitate open-cycle cooling with lake water.

Some of the auxiliary facilities for the existing OCPP units would be the same, while others would need to be changed. The substation and switchyard would remain where they are, but a substation expansion is proposed. The existing rail loop would be widened inward to accommodate additional tracks with new dumper equipment, resulting in a loss of some of the mature woodland inside the loop. The coal conveyance facilities would be relocated to accommodate new coal piles in the northwest portion of the property, north of the rail loop. The new coal piles would occupy approximately 55 acres of land with a footprint of approximately 1,425 by 1,650 feet, exclusive of the various conveyors.

The existing coal dock could accommodate barge coal delivery and would be used for barge limestone delivery and storage. The limestone handling and storage system would occupy approximately 13 acres of the existing coal dock and have a footprint of approximately 750 by 750 feet. The current docking facilities may be expanded to handle larger coal barges and ships. A new ship unloading facility, including a breakwall, is proposed for east of the existing dock in the lake. A proposed new expansion of the existing dock would require filling in additional lake area for a distance of about 500 to the north of the existing dock. Some materials handling facilities would be located on the new fill. A new intake structure would be installed approximately 3,500 to 9,000 feet out into the lake with bored tunnels that would contain the pipeline for carrying water to the new ERGS and existing OCPP facilities. No new landfills would be created.

A potential site for a commercially-owned wallboard plant has been set aside south of OCPP units 5-8 and north of and parallel to a federally-owned shooting range which is discussed in more detail in Chapters 9, 11, and 12. The potential for construction of a wallboard plant is discussed in more detail later in this chapter and in Chapters 9 and 10.[71]

South Site

Existing structures and land cover

The proposed South Site is in the northwest quarter of Section 6 in T4N-R23E, in the town of Caledonia in Racine County, Wisconsin. WEPCO owns the land, which is south of the currently operating South OCPP units. The 60-acre portion of the site proposed for the SCPC units is approximately 1,300 feet wide. It lies south of the county line and north of the shooting range property. The site extends, on average, about 2,000 feet west of the Lake Michigan shoreline to a point near the railroad tracks. A 100-foot bluff parallels the lake shoreline along the entire length of the South Site. East of the bluff, the shoreline is relatively flat for about 300 to 350 feet to the lake. There are existing settling ponds south of the operating OCPP power plant units on this part of the property. At the top of the bluff, the land is also fairly level. It supports a few buildings and roads. An area designated as an "isolated natural resource area" (INRA) is at the west end of the proposed IGCC plant location east of the rail loop. The location of and impacts to this and other INRAs are discussed in Chapter 10.

Proposed structures and land cover

Figure Vol. 2-2 shows the South Site layout. Similar to the North Site, the facility would be entirely located on WEPCO-owned property. Again, as at the North Site, construction of the SCPC and IGCC units on the South Site would require extensive earthwork to create a flat site large enough for all the plant equipment that needs to be placed at or close to lake level. The IGCC buildings for the South Site would be aligned east to west and perpendicular to the lakeshore in a relatively tight space, adjacent to the shooting range property line and extending into the INRA. The proposed IGCC facility would be directly south of the SCPC units. The air separation unit, sulfur recovery unit, sulfuric acid storage tanks, and waste water treatment pfacilities would be located within the area of the INRA.

The same road and rail loop construction would be needed for the South Site as for the North Site. The shape and dimensions of the coal storage area would differ slightly from that planned for the North Site, but it would be stored at the same location. The coal conveyor system would be routed differently to deliver coal to each of the new units on the South Site. The wastewater discharge channel would be located near the southeast corner of the SCPC units. The same expansion of the transmission system would be necessary regardless of site. The same ash landfills would be used but the on-site haul roads would be adapted as needed.

The potential site for the commercially-owned wallboard plant would be shifted for the South Site to a northern location along the top of the bluff at a point near the east end of the existing Elm Road and next to the proposed coal piles.

[71] The originally proposed wallboard plant site was at the current site of the South Oak Creek Landfill. This location would have required excavation and reclamation of at least some of the landfill ash. WEPCO has since revised the most likely wallboard plant locations for the three sites so that it would be built closer to the lakeshore rather than near the South Oak Creek Landfill.

South Site - Exp

Existing structures and land cover

The South Site-Exp, also in the northwest quarter of Section 6, T4N-R23E, includes land owned by WEPCO south of the operating South OCPP units plus the land parcel further to the south that is owned by the federal government and is currently used as a shooting range. The WEPCO land available south of units 5-8 is about 60 acres, and most of it would be used for the SCPC units, laid out in the same manner as for the South Site. The shooting range property is about 70 acres in size. If this land could be purchased, it would allow the proposed IGCC facility to be expanded in acreage and sited closer to Lake Michigan.

WEPCO has met with the Department of Military Affairs (DMA) to discuss the shooting range property. According to WEPCO, the DMA has been supportive of a land swap or purchase. WEPCO and the DMA have reached an agreement. Based on discussions at the time of this EIS, WEPCO indicates that it would likely obtain the site in 2004, in time to begin construction of the IGCC facility.

The 100-foot tall bluff along the lake shore continues along the entire length of the South Site and the South Site-Exp. The site is bordered on the east by Lake Michigan and on the west by the bluff. East of the bluff, and on the WEPCO-owned property, the land is relatively flat for about 300 to 350 feet to the lake. Along the shooting range property, and to the south of it, the bluff essentially forms the lakeshore, with some artificial bluff stabilization work in place. A large wooded ravine is located just south of the shooting range on existing WEPCO-owned land. This ravine would not be used as part of the ERGS facilities site.

Proposed structures and land cover

Similar to the South Site, use of the South Site-Exp option would require cutting into and leveling portions of the existing 100-foot tall bluff that parallels the lake shoreline. Figure Vol. 2-3 shows the site layout. While the SCPC units would be located in the same place, the South Site-Exp includes a different location for the IGCC facility, placing it south of the proposed SCPC unit sites, but closer to Lake Michigan and extending onto the shooting range property.

WEPCO prefers this site option to the other South Site arrangement for engineering and construction reasons. Use of this option would allow equipment that requires cooling water to be located closer to Lake Michigan without as much bluff removal. The IGCC equipment could also be expanded to a more accessible size and less tightly arranged. Potential impacts related to utilizing the shooting range propeorty are discussed in Chapters 9, 10, and 11.

The coal piles for both the new bituminous and the currently used subbituminous coals would remain on the north portion of the existing OCPP site. A coal conveyor from the bituminous coal pile on the north portion of the site would be routed to deliver coal to the gasification building. The coal conveyor length would be similar to that needed for the South Site SCPC site layout. The rail loop would also be the same as for the South Site and the North Site. The transmission switchyard and rail loop would be the same as they would be for the South Site or the North Site.

The potential site for a commercially-owned wallboard plant would be at the same place as described and shown for the South Site.

Table 6-5 Typical chemicals stored during IGCC construction and operation

Product	Nominal quantity	Storage method
Methanol	10,000 gals.	Storage tanks
Monoethanol amine	3,000 gals.	Storage tanks
Oxygen	3 bottles	Steel pressure cylinders
Helium	3 bottles	Steel pressure cylinders
Hydrogen	20 bottles	Steel pressure cylinders
Lube oils	30,000 bottles	Lube oil tanks
Ammonium hydroxide (20%)	5,000 bottles	Storage tanks
Caustic soda	5,000 gals.	Storage tanks

Table 6-6 Typical chemicals stored during construction and operation of the IGCC combustion turbine and heat-recovery steam generator

Product	Nominal quantity	Storage method
Diesel fuel (start-up and emergency)	500,000 gals.	Storage tanks
Sulfuric acid (by-product)	200,000 gals.	
Sulfuric Acid (demineralizer)	5,000 gals.	
Sodium hydroxide (demineralizer)	5,000 gals.	
Oxygen	20 bottles	Steel pressure cylinders
Hydrogen (generator cooling)	20 bottles	
CO2 (hydrogen purging)	20 bottles	
Propane	10 bottles	
Acetylene	10 bottles	
Di-and trisodium phosphate (HRSG feedwater pH and scale control)	10 to 50 lbs. of each	Stored on pallets in granular form
Hydrazine or carbohydrazide (feedwater oxygen scavenger)	100 gallons	Drum storage
Step-up transformer insulation oil	15,000 to 20,000 gals.	Transformer vessel
Auxiliary transformer insulation oil	2,500 to 5,000 gals.	
Lube oils	15,000 gals.	Lube oil tanks (steel)
Hydraulic oil (steam turbine)	500 gals.	Oil tanks (steel)

Sodium hydroxide and sulfuric acid (H_2SO_4) would also be stored on-site. These two chemicals are used in the water treatment process to produce demineralized water.

Electric Transmission

Interconnection on the plant site

The new generation for the ERGS project would have generator step-up unit transformers adjacent to the buildings housing the generators. The generators would produce power at approximately 20 kV. This power is raised to 345 kV to connect to the transmission network.

As originally proposed in the project application, the interconnection would consist of three circuits. Each circuit would be approximately 4,000 feet in length. For the North Site, the line route from the generators to the substation would travel southwest over the coal handling area, then south to the new expanded 345 kV substation. For the South Site (see Figure Vol. 2-1), the transmission interconnection lines from the SCPC units would head west northwest across the proposed rail loop track toward the expanded substation which would be located inside of the loop. The interconnection from the IGCC unit would proceed west along the south side of the rail tracks and then turn north, crossing several sets of railroad tracks to reach the substation (See Figure Vol. 2-2). The on-site transmission interconnection would be similar for the South Site-Exp, except that the connection from the IGCC unit would run in a more north-south direction, crossing the railroad tracks several times (see Figure Vol. 2-3).

In its Conditional Use Permit agreement with the city of Oak Creek, WEPCO has proposed to split the existing 345/138 kV substation into two portions and relocated them outside of the new proposed rail loop. A diagram showing this arrangement is shown as Figure Vol. 2-4 and described in Chapter 12.

Substation changes on the plant site

For all site options proposed in the original CPCN application, the existing 345 kV substation would be expanded to the west with dimensions of approximately 500 feet by 500 feet. This equates to approximately a 40 percent increase in overall size. The modified substation and switchyard are shown in Figure Vol. 2-1. For the CUP Option, which was negotiated by WEPCO and the city of Oak Creek after the draft EIS was issued, a different location and layout for the substation changes has been proposed. The electrical duties and performance of the substation equipment would not change. The proposed substation location and layout related to the CUP Option and its potential environmental impacts are described in Chapter 12.

Possible system-wide transmission impacts

The high voltage and extra high voltage transmission system additions for the ERGS are summarized in the Generation Interconnection Study Report, Final Summary Report for IC012 Revision 1, July 17, 2002.

Transmission lines and substations support a power plant's ability to deliver power to customer's load requirements. There are three basic requirements the transmission system provides:

> Thermal Requirements – this defines the system capacity to not overheat and damage equipment or violate safety code clearances
> System Stability – this defines the ability of the generator and other regional generators to stay synchronized with each other and not trip off line due to faults, power surges, etc.
> Short-Circuit – this determines the ability of the equipment to remove faults from the system quickly and not damage equipment while maintaining the system integrity

For the purposes of the Generation Interconnection study, the ERGS project was proposed to be installed in three increments of 650 MW each. (In actuality, the two SCPC units would be 615 MW each and the IGCC capacity would be 600 MW.) The following tables and figures detail the items, purpose, and general location.

Tables 6-7, 6-8 and 6-9 below describe the transmission system improvements and costs that are associated with each of the generating units proposed for the ERGS project. Maps showing the transmission construction required for each generation increment are found in Volume 2. They are Figures Vol. 2-5, 2-6, and 2-7.

Stability issues

One of the key issues for southern Wisconsin and northern Illinois power plants is to remain stable during different system load periods and with different generation levels at the many sites in the region. The ATC "Generation Interconnection Study Report, Stability Study for IC012 Phase 2 - July15, 2002" details some of the alternatives to meeting the stability requirements when the second phase of the project (the second SCPC unit) comes on line. Three plans were studied.

At the initial time of the report's issuance in 2002, the Pleasant Prairie to Zion to Libertyville 345 kV lines were deemed the best plan to meet all the needs. This solution had about 13 miles of line from Pleasant Prairie to Zion and about 17 miles of line to be rerouted west of Zion to tap the Libertyville 345 kV line. One of the alternatives was Plan D, which had a new Big Bend 345 kV substation on the Arcadian to Oak Creek 345 kV line, and a new Big Bend to Paddock 345 kV line which would be about 56 miles in length. The changes would include rebuilding some of the 138 kV lines connecting the Mukwonago, Whitewater, Janesville, Lakehead, Sunrise, Rock River and Paddock substations.

ATC issued a 10-Year Assessment Update February 2003. The update indicates the conceptual plan for a number of 345 kV lines in southern Wisconsin connecting to Illinois and Iowa. The Big Bend to Paddock 345 kV line is illustrated as one of several 345 kV lines that could meet future needs. The line is not being proposed at this time.

A third set of IC012 (Elm Road) interconnection studies are being conducted during the summer of 2003. The following generating units which were ahead of the first two ERGS units in the MISO generation list queue have been removed:

- #GIC001 (Midwest Power – Germantown) - 1194 MW, on the Arcadian – Zion 345 kV line
- #GIC003 (Badger Gen – Kenosha) – 375 MW on the Arcadian – Pleasant Prairie 345 kV line
- Reduction with 3 of 4 proposed units in northern Illinois resulting in the generation dropping from 2146 MW to 825 MW

Removal of these facilities will affect the incremental amount of transmission in the region required to interconnect the new generation and will change the thermal capabilities of the transmission system to move the power to the designated load area.

The new study is assessing the region of southern Wisconsin and northern Illinois through 2011. ATC is conducting the restudy. ATC completed a stability restudy of the second unit on June 13, 2003. The first report of this restudy which covers the first two SCPC units is expected to be complete in mid-July. The preliminary results clearly indicate that no, new long 345 kV line is required to provide reasonable stability responses for the first two 650 MW SCPC units. (One of the original study solutions for adequate stability was a 345 kV from Pleasant Prairie to Libertyville via Zion.)

The expected results of the restudy, as of June, are summarized below. The detail projects are described in Table 6-10. Some stability performance issues still need to be determined for Phases I and II. The solution possibilities beyond the other transmission lines:

- Another 345 kV breaker line position at Elm Road
- Series breakers at two Pleasant Prairie 345 kV lines
- And either a power system stabilizer on Oak Creek Generator #9 or a restriction on it's operation

The original study had the cost assessed as follows;

Phase I	$117,711,544
Phase II	$ 46,338,542
Total	$164,050,086

The incomplete restudy has the follow estimate:

Phase I	$ 16,639,391	plus move the 345 kV and 138 kV substations
Phase II	$ 64,320,789	
Total	$ 80,960,180	plus move the 345 and 138 kV substations

It has not been estimated when the transmission studies for all three phases will be completed. Another uncertainty factor is the potential retirement of Oak Creek Units 5 and 6 which total 550 MW. That could have a significant influence on the transmission requirements for the third ERGS unit, the IGCC.

Table 6-7 Estimated costs for Phase 1 Improvements - original study

Item No.	Project	Projected Cost ($2002)
System Reinforcements for System Stability (Required)		
1.	Expand Oak Creek 345 kV Switchyard into 10 position breaker and a half design[a, b]	17,647,133
2.	Construct Oak Creek – Brookdale 345 kV Line a. Construct new line from Oak Creek – Brookdale 345 kV line b. Convert/Reconductor non-operative 230 kV line segment from C&NW RR to St. Martins c. Convert/Reconductor 5 miles of Bluemound-St. Martins 138 kV line (KK5066) from St. Martin Substation to Brookdale site	17,277,670
3.	Construct Brookdale 345/138 kV Substation with 1,500 MVA 345/137 kV transformer	14,813,630
4.	Construct Brookdale – Granville 345 kV Line a. Convert/Reconductor 5.6 miles of Bluemound St. Martins 148 kV line (KK5066) from Brookdale to Bluemound Substation b. Rebuild western lower line from Bluemound to Carmen site and install 7-mile 345 kV line segment c. Convert Carmen to Granville (3 miles) segment of Tamarack Granville 138 kV line (KK3444) to 345 kV	18,196,380
5.	Install line breaker and termination equipment at Granville 345 kV substation	1,112,000
6.	Convert Oak Creek to Bluemound 230 kV line (K873) to 345 kV	18,983,330
7.	Construct Bluemound 345 kV Substation with 1,500 MVA 345/138 kV Transformer	4,933,164

Item No.	Project	Projected Costs ($)
System Reinforcements for System Stability (Required)		
8.	Install two series line brakers at Pleasant Prairie Substation[c]	2,126,684
Subtotal		**95,089,991**
System Reinforcements for Short Circuit (Required)		
9.	Replace at Bluemound Substation seven 138 kV overdutied circuit breakers having an interrupting rating of 42 kA with breakers having a interrupting rateing of 63 kA	2,435,391
Subtotal		**2,435,301**
Total		**97,525,382**
System Reinforcements for Thermal (Optional)		
10.	Install two breakers and termination equipment at Oak Creek Switchyard 138 kV [d]	1,643,377
11.	Construct Oak Creek-St. Martins circuit #2 (Refer 4a) [d]	3,276,000
12.	Relay modification St. Martins Substation [d]	114,000
13.	Construct Butler to Carmen line segment to form Butler-Tamarack Line (Refer 4c) [d]	332,300
14.	Butler Substation (add one line breaker and ancillary equipment) [d]	523,170
15.	Install Bluemound-Butler Line (KK5051) on new 345 kV structures (Refer 4b) [d]	582,220
16.	Reconductor Oak Creek-Ramsey 138 kV	138,000
17.	Reconductor underground segment Harbor-Ramsey 138 kV line	11,535,000
18.	Reconductor Oak Creek-Allenton 138 kV	2,034,000
19.	Reconductor Harbor-Norwich-43rd Street 138 kV [e]	———
Total		**20,178,067**
Grand Total		**117,703,449**

Notes:

a. Includes transfer of unit #7 from 230 kV to 345 kV bus.

b. Transmission breakers for unit connections are required for stability purposes in Phase 3. These breakers are not required for stability purposes in this phase and have not been included. However, the additional breakers may be included in Phase 1 pending development of connection standards presently under review.

c. Alternate solution is construction of 345 kV ring bus at Bain Substation ($4,481,132).

d. System reinforcements needed to maintain the integrity and thermal capability of transmission system due to facilities converted to 345 kV operation for stability purposes.

e. Included in Lakeside retirement project.

Table 6-8 Estimated costs for Phase 2 improvements - original study

Item No.	Project	Projected Costs ($) (2007)
System Reinforcements for System Stability (Required)		
1.	Install two breakers and termination equipment at Oak Creek 345 kV Switchyard to accommodate second 650 MW unit [a, b]	4,211,858
2.	Install 345 kV breaker and termination equipment at Pleasant Prairie Substation	1,063,342
3.	Construct Pleasant Prairie-Libertyville 345 kV line (~ 23 miles). [d]	40,000,000
4.	Install 345 kV breaker and terimation equipment-Libertyville Substation (Exelon/CECo)	1,063,342
Subtotal		**46,338,542**
System Reinforcements for Short Circuit (Required)		
	Replacement of overdutied circuit breakers	0
Subtotal		**0**
Total		**46,338,542**
System Reinforcements for Thermal (Optional)		
	No items to be entered [e]	0
Total		**0**
Grand Total		**46,338,542**

Notes:

a. Includes addition of the second 650 MW generating unit.

b. Transmission breakers for unit connections are required for stability purposes in Phase 3. These breakers are not required for stability purposes in this phase and have not been included. However, the additional breakers may be included in Phase 2 pending development of connection standards presently under review.

c. Short Circuit Study for Phase 2 did not identify any overdutied circuit breakers.

d. An alternative line being considered is a Big Bend-Paddock 345 kV Line ($61,544,474):
- Construct initial 3-position 345 kV ring-bus at Big Bend Switching Station site ($4,481,132).
- Install circuit breaker #4 at Paddock 345 kV ring-bus and termination equipment ($1,063,342).
- Construct 56 mile Big Bend-Paddock 345 kV line by rebuilding existing 138 kV ROW with double circuit structures to accommodate existing 138 kV circuits and new 345 kV circuit ($56,000,000).

e. The reinforcements identified in the thermal study for Phase 2 are already required in Phase 1 for stability purposes (Refer to Table 6-4.).

Table 6-9 Estimated costs for Phase 3 improvements - original study

Item No.	Project	Estimated Cost (2010)
System Reinforcements for System Stability (Required)		
1.	Expand Oak Creek 345 kV Switchyard breaker and a half design to 16 positions.[a]	21,880,544
2.	Install three breakers and termination equipment at Oak Creek 138 kV Switchyard.[b]	6,848,088
3.	Convert Oak Creek-Bluemound 230 kV line (K862) to 345 kV and reroute line into Arcadian Substation.	28,171,000
4.	Expand Bluemound 345 kV Substation into 7-position ring-bus with 2,500 MVA, 345/138 kV transformers.	17,194,478
5.	Install two 345 kV circuit breakers and termination equipment at Arcadian Substation.	5,568,096
6.	Convert Oak Creek-Racine 138 kV line to 345 kV to create second Oak Creek-Racine 345 circuit.	7,036,000
7.	Install 345 kV circuit breaker and termination equipment at Racine Substation.	1,112,000
Subtotal		**87,810,206**
System Reinforcements for Short Circuit (Required)		
8.	Replace a total of 22-138 kV overdutied circuit breakers at Harbor, Everett, and Haymarket Substations having an interrupting rating of 50 kA with breakers of 63 kA.[d]	7,654,086
Subtotal		**7,654,086**
Total		**95,464,292**
System Reinforcements for Thermal (Optional)		
9.	Install two 500 MVA 345/138 kV transformers at Arcadian Substation	55,700,370
Total		**55,700,370**
Grand Total		**151,164,662**

Notes:

a. Includes the transfer of unit 8 from the 280 kV to the 345 kV bus. Includes seven transmission breakers for unit connection plus one line connection required for stability purposes.

b. Includes the transfer of units 6 and 9 from the 230 kV to the 138 kV bus.

c. Includes re-route of Brookdale-Granville into Bluemound Substation.

d. Except for the one project listed here all reinforcements identified in the thermal study for Phase 3 are already identified and required for stability purposes for Phase 3.

Table 6-10 Estimated costs for restudied improvements associated with the ERGS project

[illegible]	Restudy Projects	Projected Cost ($2007)
	Not detailed by type or requirement	
RI.1	Replace and relocate Oak Creek 345 kV 5 position ring bus with new Elm Road 4 section, 8 position, conventional breaker-and-half	Not completed
RI.2	Replace and relocate Oak Creek 138 kV 9 section, 12 position, inverted breaker-and-half, with new Elm Road 8 section, 13 position, inverted breaker-and-half	Not completed
RI.3	Reconductor Oak Creek – Ramsey6 138 kV (0.8 mile)	135,000
RI.4	Reconductor Oak Creek - Allenton 138 kV (5.4 miles)	2,034,00
RI.5	Reconductor underground segment Harbor – Ramsey5 138 kV (5.7 miles)	11,535,000
RI.6	Replace at Bluemound substation 7 – 138 kV overdutied circuit breakers having an interrupting rating of 42 kA with breakers with an interrupting rating of 63 kA	2,435,391
	Subtotal Phase I	**16,139,391** w/o RI.1 & RI.2
RII.1	Install bus section with three breakers and termination equipment at Elm Road 345 kV for second 650 MW unit and one 345 kV line	4,211,858
RII.2	Add line position (2 circuit breakers) to Oak Creek 138 kV inverted breaker-and-half bus design	1,643,337
RII.3	Construct Oak Creek – Brookdale 345 kV line (25.1 miles)	17,277,670
RII.4	Construct Brookdale – Granville 345 kV line (16.6 miles)	18,196,380
RII.5	Build Brookdale 345 & 138 kV substation including 3 position 345 kV ring bus with single 500 MVA 345/138 kV step down transformer and initial 2 section, 8 position 138 kV radial bus	14,813,630
RII.6	Install 345 kV line breakers and termination equipment at Granville substation	1,113,000
RII.7	Construct Oak Creek – St. Martins 138 kV line (17.3 miles)	3,276,000
RII.8	Construct Butler – Carmen 138 kV line segment to form Butler – Tamarack (1.6 miles)	443,400
RII.9	Install Bluemound – Butler line (KK5051) on new 345 kV structures (5.4 miles)(Reference RI.4)	582,220
RII.10	Add line breakers and ancillary equipment at Butler substation	523,170
RII.11	Add two - series line breakers at Pleasant Prairie substation	2,126,684
RII.12	Relay modifications at St. Martins substation	114,000
	Subtotal Restudy Phase II - Preliminary	**64,321,349**
	Total for Phase I and II (w/o R1.1 & RI.2)	**80,460,740**

Table 11-39 Advantages and disadvantages of an underpass at Six Mile Road on an offset alignment to the north (with dedicated bike path bridge over Six Mile Road)

Advantages	Disadvantages
1. No relocations	1. Reverse curves
2. Provides property access	2. More land disturbance than Alt #2 (underpass on existing alignment with dedicated bike path bridge)
3. Easiest to construct	3. Shares these disadvantages with Alt #2: Pumping station – requires generator & maintenance More land disturbance than Alt. #1 (at-grade crossing) Bridge maintenance Possible high water table could make underpass drainage cost exceedingly high Possible unacceptable well drawdown for underpass drainage Additional cost for bike bridge
4. No sanitary sewer relocation	
5. Less land disturbance than overpass alternatives	
6. No impacts to transmission line	
7. Fewer impacts to Michna Road than overpass alternatives	
8. Can be widened to 4 lanes easier than overpass	
9. Shares these advantages with Alt #2 (underpass on existing alignment with dedicated bike path bridge): Less aesthetic impacts Positive consideration by OCR Easier E-W bike path access Eliminates rail vs. traffic/bike/pedestrian conflicts	

Electric Transmission Proposals and Impacts

Introduction

Figures Vol. 2-6, 2-7, and 2-8 and Tables 6-4 to 6-6 represent the best available information to date on the electric transmission needs for the ERGS proposed project. This representative list is the basis of the environmental impact analysis that follows. The discussion covers the impact associated with one short (four-mile) new transmission line, one long new transmission line, and many upgrades to existing lines.

Specific portions of the transmission improvements listed could change with further study by the ATC or the MISO, as the time for implementing the transmission changes nears. In addition, it is possible that new studies would show that the ERGS proposal does not create the need for a new, long transmission line in southern Wisconsin (although the line may still be needed for other reasons). However, without additional studies (which are not scheduled at this time), the following analysis assumes the need for a major, new transmission line in order to connect two or more of the proposed ERGS coal units to the electric system.

Process for electric transmission line/substation approval

The ATC has not yet applied to the PSC for approval of any of the listed transmission projects. The projects that require approval from the PSC, due to their size or cost, would receive further ATC study, PSC review, and public input.

Definitions of electric terms

Table 11-40 provides definitions for words that Tables 6-4 to 6-6 use to describe transmission line projects. The only word used to show the need for new right-of-way is "construct." All other words involve working with existing structures on existing rights-of-way. This could include simply replacing wires, to actually

replacing or raising the existing structures. Words used to describe proposed work at substations are more unclear. However, the ATC provided a description of proposed substation work, as shown in Table 11-41.

Table 11-40 Definition of term used to describe proposed electric transmission system improvements

Word used	Meaning	Level of environmental effects
Construct	Build a new set of transmission line structures on new or expanded[1] right-of-way.	Various, with a severity that depends on the location of the new right-of-way and the design of the structures.
Convert	Change the voltage of an existing transmission line by changing small equipment or electrical arrangements.	Usually little to no environmental effect.
Expand	Used for changes at an existing electric transmission substation[2]	Usually requires expansion of the existing fenced area; may require property expansion – environmental effects dependent on the surrounding environment.
Install	Used for changes at an existing electric transmission substation.[2]	Usually does not require any changes outside the substation fence; may require an expansion of the fenced area on utility property - environmental effects usually negligible.
Rebuild	Upgrade an existing transmission line in an existing right-of-way by replacing the old structures with new structures or raising the height of existing structures.	Environmental effects depend on the location of the existing right-of-way and the design of the structures – new structures are likely to be taller and may not be in exactly the same location as existing structures.
Reconductor	Replace existing wires on existing transmission structures with new wires capable of carrying more power. This may also require new insulators.	Effects would be caused by access to the existing– environmental effects would be dependent on the location of the poles.
String	Place new wires where there is an unused position ready for them.	Little to no environmental effect.

1 Right-of-way expansion would occur if a new transmission line is placed next to an existing transmission line so that their rights-of-ways could overlap, reducing the amount of new right-of-way required.

2 Refer to Table 11-41 in this section for information about substation changes proposed for this project.

Differences due to site selection or the number of units

Use of the North Site or the South Site would have no effect on electric transmission line requirements or impacts. The number of units may have an effect, but it's unclear without further study. There is some indication that constructing one SCPC unit would have a different effect on the electric transmission system than constructing more than one unit. However, there are many complicating factors, including the need for upgrading the existing transmission system just to serve customers in southeast Wisconsin. In addition, the effects on the electric transmission system caused by regulatory changes at the federal level continue to make planning for new transmission lines in Wisconsin uncertain. The only certainty is that many upgrades are needed, and probably at least one major, new extra-high voltage (345 kV) transmission line. Construction of three new coal units for the ERGS is most likely to contribute to or accelerate the need for these transmission line upgrades and new transmission construction.

Effect of proposed rebuilds of existing electric transmission lines

Using existing electric transmission line rights-of-way tends to minimize environmental effects, because land uses have adjusted to the barrier of the right-of-way and because the right-of-way is already disturbed to

some extent. The impacts of a rebuilt line tend to be incremental rather than wholly new. The exception is where an existing electric line is in a poor location, such as through a large, valuable natural area or the middle of potentially irrigable farm fields. There are no such lines included in the current transmission proposals.

The biggest impacts associated with rebuilding existing transmission lines are those associated with construction (e.g. noise or damage to a lawn or garden planted around a transmission structure) or construction access (e.g. compaction of soil on a farm field by construction equipment crossing the field). Construction impacts are usually temporary in nature.

Long-term effects of transmission construction include visual impacts and changes in electromagnetic fields (EMF). Taller transmission structures are more visible from a distance, but this may be an incremental visual effect. By raising the structures, or increasing the voltage or size of the conductor, the electromagnetic fields (EMF) below these transmission lines are likely to decrease. While there is no scientific consensus as to the effect (or lack of effect) of EMF on human health, some residents are concerned about issue. If existing structures are replaced by new structures, it's likely that the new structures would not be in the same location as the existing ones. This makes it possible for landowners to request minor changes to the location of structures to make them more compatible with surrounding land uses.

Effect of proposed substation work

The only proposed new substations would be at existing power plant sites (Oak Creek, Pleasant Prairie) or at an existing substation site (near an interstate interchange). Any environmental effects are likely to be minimal.

Table 11-41 Proposed construction work at electric substations[1]

Substation name	Property needs and potential environmental effects
Arcadian	Changes to this substation would likely fit within the existing substation fence.
Bain	Preliminary engineering indicates that the substation would have to be expanded to accommodate the new 345 kV ring bus. However, no facilities layout has been prepared from which to evaluate size or environmental impacts.
Bluemound	This 345 kV substation would likely be constructed immediately west of the existing substation's western fence on property currently being utilized by WEPCO's distribution training center.
Brookdale	Some expansion of the existing substation would be required although it is likely that there is enough land on the existing site for this expansion.[2]
Granville	Preliminary engineering indicates that no expansion is required.
Oak Creek	The existing 345 kV substation would be expanded to the west with dimensions of approximately 500 feet x 500 feet. This equates to approximately a 40% increase in overall size. ATC does not believe there to be any environmental concerns.[3]
Pleasant Prairie	No information was presented in the interconnection study reports for this substation.[4]
Racine	Preliminary engineering indicates that no expansion is required.
St. Martins	Preliminary engineering indicates no expansion is required.

1. Information provided by ATC in response to a PSC question concerning whether or not proposed substation work would require expanding the fenced area of the substation.
2. There is space on existing utility-owned property for this new substation. The property is located near the interchange of Highways 894 and I-43.
3. The location of this new substation on the site layout has changed since this answer. However, no environmental impact is expected.
4. Any changes to this substation would have minimal impact since the substation is located at an existing power plant.

Effect of a proposed new 4-mile transmission line

The proposed new transmission line is a 345 kV line that would extend from the substation on the OCPP/ERGS site to the Chicago and Northwest (C&NW) railroad track (It is listed as reinforcement 2a on Table 6-4). This new line would be one transmission circuit, (a set of three conductors) with three insulator strings. Some transmission structures carry two circuits (six conductors) on two sets of arms. At the C&NW railroad track, the circuit from this new line would continue on existing, two-circuit structures which are only carrying one operating circuit now.

Paralleling existing transmission lines

The most direct route from the Oak Street Substation to the rail track would parallel existing transmission line corridors. The first corridor contains two existing transmission lines (two sets of structures) and extends from the Oak Creek site to beyond Botting Road. The second corridor contains one existing line (one set of structures) and continues on to the railroad. Neither corridor has a right-of-way that is wide enough to accommodate a new transmission line.

On the first corridor, both transmission lines are already carrying two circuits each and there is not sufficient room on the existing right-of-way to locate a new set of structures. If ATC places the new line next to the existing right-of-way, the right-of-way would need to be expanded and ATC would need to remove two barns (located on the south side of the existing right-of-way). On the north side of the existing line are three houses that would probably need removal if a new power line were located on the north side of the existing corridor.

One alternative at this location is for ATC to change the design of the two transmission lines in order to provide room for one additional circuit on the existing right-of-way. Perhaps ATC could replace the existing structures with structures that would require less right-of-way, leaving room for a third structure or perhaps one of the transmission lines could be replaced with a new one that could carry three circuits. Until the ATC studies this problem, there is no definitive information about possible alternatives.

Route and potential environmental effects

Figure Vol. 2-4 shows the approximate, geographic, location of existing transmission lines in the project area. A series of photos, Figures 11-31 through 11-36 show features at various locations along the four-mile route. Although the right-of-way primarily passes through pastureland, cropped fields and old fields, there are several homes, and farmsteads with out-buildings located adjacent to the right-of-way. The two existing transmission lines leave WEPCO property and cross STH 32. Figure 11-31 shows that there is mostly open land on the south side of the existing right-of-way looking west from STH 32. A house is located near the north edge of the right-of-way near STH 32 (see Figure 11-32). Further west, there is a house and two barns on the south side, and one house on the north side of the right-of-way. As the lines approach Botting Road, another house and shed are located close to the north side (see Figure 11-33). After crossing Botting Road, there is another house close to the north edge of the right-of-way and an out-building adjacent to the south edge (see Figures 11-34 and 11-35). Between Botting Road and Foley Road, the two transmission lines separate; one of the lines turns due south, while the other continues to the west. This is shown in Figure 11-36. The proposed new line would follow the existing line that continues west. Near Foley Road, the existing line is routed around the edge of a small wetland, and crosses an old field. For the remainder of the route, the existing line crosses farm fields and the Root River.

In farmland, transmission lines can slow equipment that has to navigate around the structures and it can reduce the area of land in cultivation, especially if weeds grow around the base of the transmission pole and encroach further out into the field. Structures that are guyed can cause hazards for the safe operation of large farm equipment. Transmission lines can also produce noise during certain weather conditions. Loose hardware or loose connections between the conductors, insulators and the poles may cause a humming or buzzing sound under windy conditions. In fog and other damp weather conditions, a slight crackling sound may occur due to ionization of the moist air surrounding the wires. If the potential crossing of the Root River requires placement of structure(s) below the high water mark, ATC would need a permit from the DNR.

Effects of a new, long 345 kV transmission line

Information is available on two major transmission lines, each suggested as a possible solution for problems in the southeast area (and to enable the second SCPC unit of the proposed ERGS project to connect to the existing electric transmission system safely). One major line would connect the Pleasant Prairie power plant in Kenosha to the Libertyville substation in Illinois. This line would also connect with the Zion substation in Illinois on route to Libertyville. The second possible line would go from a new substation at Big Bend in Waukesha County to the Paddock substation in southern Rock County. Both of these lines are part of the ATC's 10-Year Transmission System Assessment, as reported in the Full Report dated August 2002. This document is available on the ATC's website at www.atcllc.com/Report.shtml Table 11-42 provides some information about resources located in routing study corridors for these two transmission line alternatives.

Figure 11-31 Open land on the south side of the transmission right-of-way looking west from STH 32

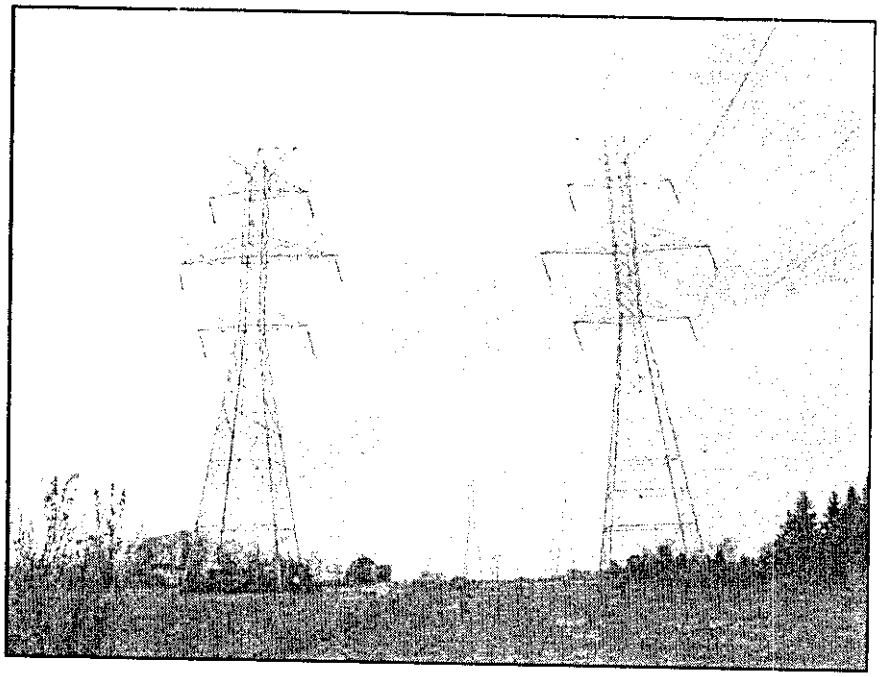


Figure 11-32 House located on the north side of the right-of-way looking west at STH 32

Figure 11-33 House and shed located on the north side of the right-of-way near Botting Road

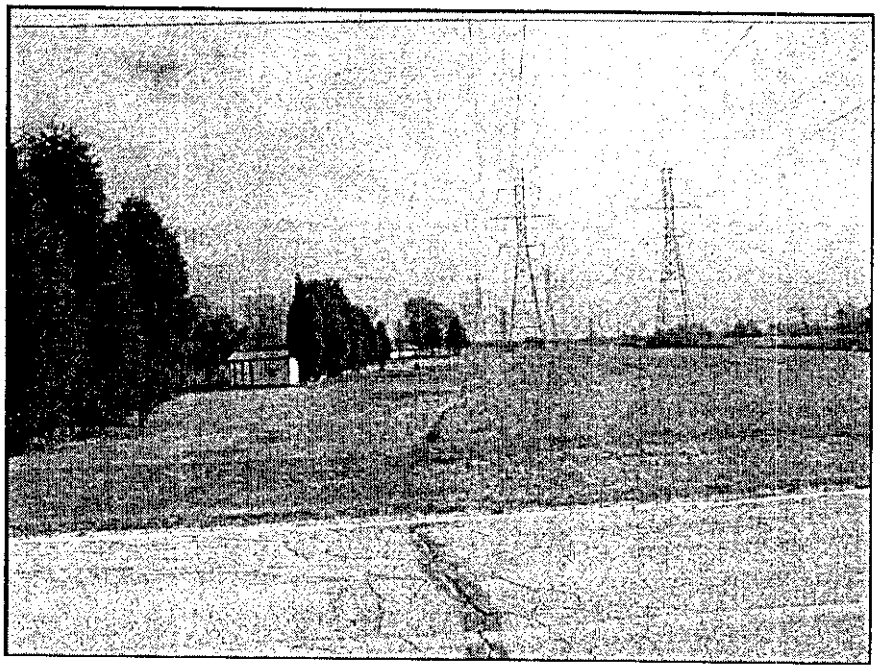


Figure 11-34 House on the west side of Botting Road near the north edge of the right-of-way

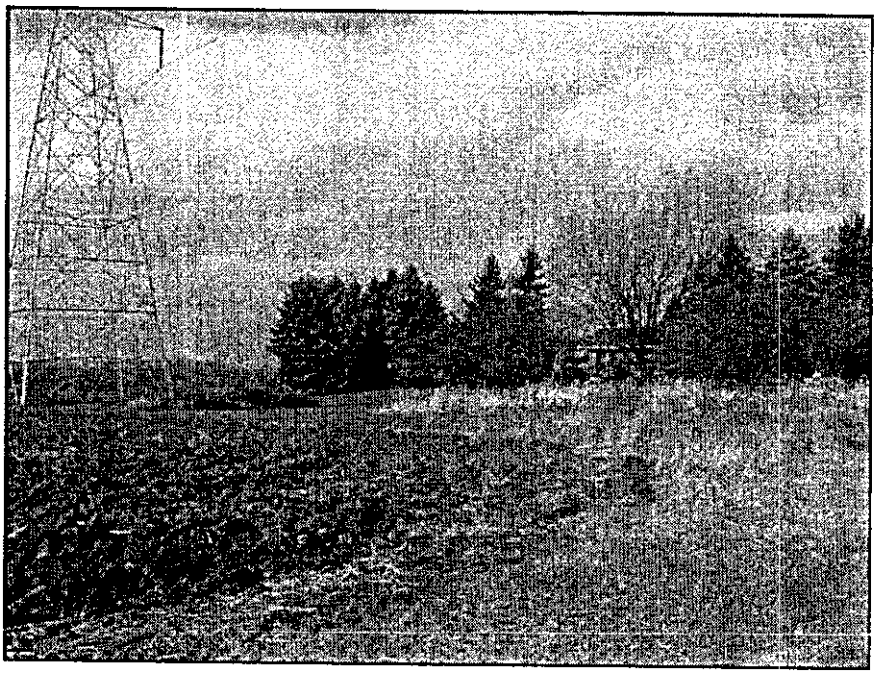


Figure 11-35 Outbuilding located adjacent to the south edge of the right-of-way west of Botting Road.

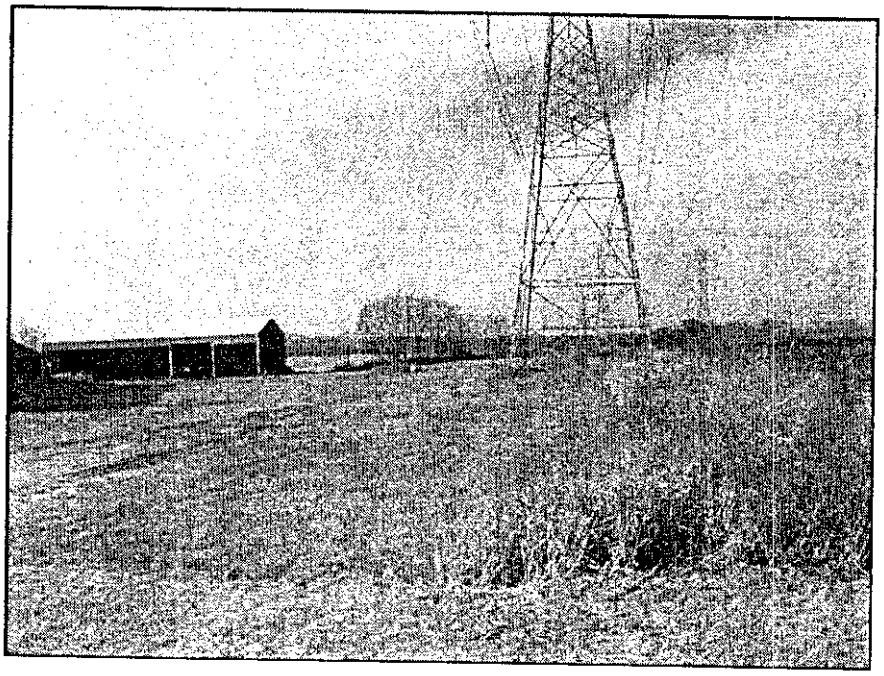


Figure 11-36 One transmission line approaching Foley Road heading west - the second line (in the background) turns south

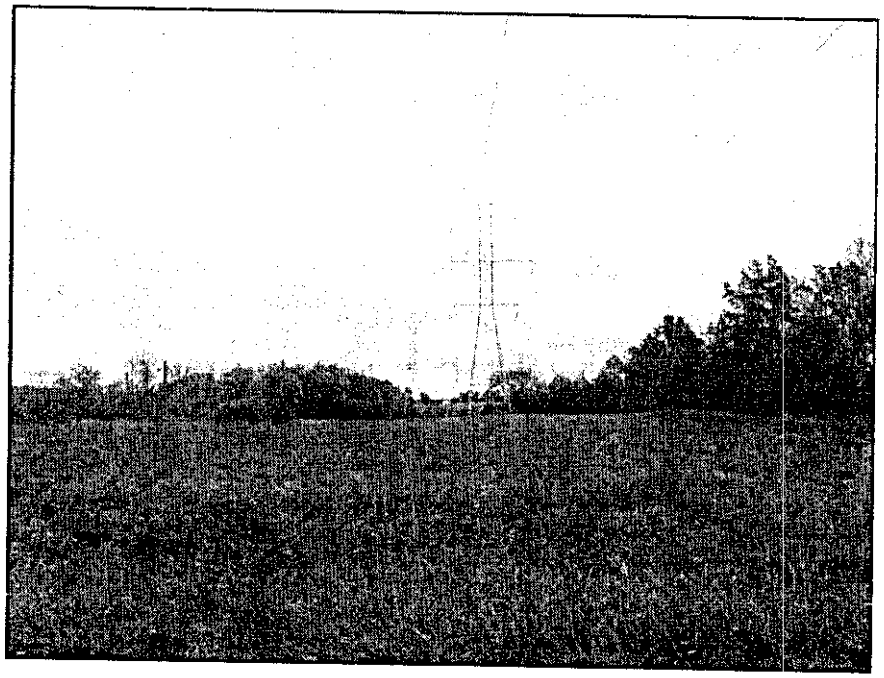


Table 11-42 Some information about resources affected by potential new 345 kV transmission lines in southeastern Wisconsin

[illegible] Libertyville – Pleasant Prairie [illegible]	[illegible] Big Bend – Paddock [illegible]
Length about [illegible] miles	Length [illegible] miles
Potential conflicts with resources	
Public lands: Numerous city, county, and state parks including Illinois Beach State Park, Chain O'Lakes State Park, Anderson Park, Red Arrow Park, Sunnyside Park, Beulah Park, Shiloh Park, and Prairie Springs Park.	Public lands: Numerous city, county, and state parks including Kettle Moraine State Forest, Big Foot Beach State Park, Muskego and Mukwonago County Parks, Carver-Roehl Park, Starin Park, LaMar Park, Memorial Park, Springs Park, Bong Recreation area, Ela Park, Phantom Glen Park, Denoon Park, and Heg Park. Numerous state wildlife areas and trails are located within the study area.
Sensitive resources: The Chiwaukee Prairie, Carol Beach Low Prairie, and Tobin Road Prairie state natural areas are found within the Wisconsin portions of the project area. The Van Patten Woods Forest Preserve, Wadsworth Savanna Forest Preserve, Waukegan Savanna Forest Preserve, Lyons Woods Forest Preserve, and Wedgewood Creek Forest Preserve, 15 natural areas within the Illinois Beach and Illinois Dunes area, and an additional 72 natural areas in the Chain O'Lakes-Fox River area in the portion of the project area in Illinois. The Des Plaines River watershed runs through much of the project area.	Sensitive resources: The Kettle Moraine State Forest, numerous state wildlife areas, and state natural areas including Beulah Bog, Lulu Lake, Bluff Creek Springs, Eagle Oak Openings, C.F Messinger Dry Prairie, Avon Bottoms, Scuppemong Prairie, Kettle Moraine Fens and Low Prairie, Muskego Park Hardwoods, Cherry Lake Sedge Meadow, and Karcher Springs among others are found within the project area.
Cultural Resources: The Third Avenue Historic District, Florence Parry Heide Home, Orson Welles Home, and the Library Park Historic District are among those cultural resources located in the Wisconsin portion of the project area.	Cultural resources: The Frances Wiggins Ford Farm, Old World Wisconsin, the General Atkinson Mound Group, Statesan Historic District, Governor Harvey Home, Clinton Village Hall, the Jefferson Prairie Norwegian Settlement, East Milwaukee Street Historic District, Prospect Hill Historic District, Conrad Cottages Historic District, the Grace and Pearl Historic District and many others, as well as numerous museums are located within the project area.
Corridor Sharing Opportunities**: State and County roads, railroad and existing transmission line corridors.	Corridor Sharing Opportunities**: State and County roads, railroad and existing transmission line corridors.

* Resources listed for the project's study area. The study area is defined as the length of the line multiplied by 30 percent of the line length for lines over 15 miles long.

** Corridor sharing means adjoining or overlapping the proposed transmission line right-of-way with the right-of-way of an existing linear corridor.

BEFORE THE
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REBUTTAL TESTIMONY OF JEFF KNITTER

ON BEHALF OF APPLICANTS

Q. Please state your name, business address and title.

A. My name is Jeffrey E. Knitter. My business address is 231 West Michigan Street, Milwaukee, Wisconsin 53290. I am Manager–Special Projects in the Legal Department of We Energies.

Q. Did you also provide direct testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony in this proceeding?

A. I am responding to the direct testimony of James Shield on behalf of Calpine regarding the economics of gas vs. coal plants and Scott Norwood on behalf of S.C. Johnson regarding energy priorities, the timing of baseload capacity and the wind assumptions I used in my EGEAS analysis.

Q. Calpine witness James Shield characterizes Calpine's proposal as a lower cost option than the ERGS proposal (p. 12, line 3). Is this accurate?

A. I have not seen the pricing or terms of Calpine's proposal to the PSCW but there is only one scenario where one or more combined cycle plants is even close to an economic proposition: when the combined cycle plant is followed shortly thereafter with new coal units. If combined cycle units are NOT followed shortly by new coal units, the combined cycle units will soon become base loaded units and the high fuel costs will make such a plan uneconomic. See Exhibit 32 (JEK-1), p. 53, which shows the "gas-only" (no coal units) scenarios as $1.4 – $6.0 Billion more costly than the scenarios with coal units added.

Q. How do you reconcile your supply plans with Wisconsin's Energy Priorities Law?

A. The energy priorities are, in order:

- energy conservation and efficiency
- noncombustible renewable energy sources
- combustible renewable energy sources
- natural gas
- oil or coal with sulphur content of less than 1 percent
- all other carbon-based fuels

The ERGS SCPC units fall in the last category since the design coal has a higher than 1 percent sulfur content. I will address why each of the higher priority choices is either not cost-effective or not technically feasible as alternatives to the Elm Road Generating Station.

- energy conservation and efficiency

As analyzed by NERA, a planning target (p. 15, line 15) of some 50 MW and 360,000 MWh of energy efficiency for $58 million (KAM-5) through 2008 appears cost-effective.

However, the supply gap in 2008 is over 500 MW if new generation is not added, so energy conservation and efficiency by itself is not a cost effective or technically feasible solution. And as discussed below, there are no other cost-effective options to combine with energy efficiency so there is also no "hybrid" cost-effective technically feasible solution.

- noncombustible renewable energy sources

Wind is the leading noncombustible renewable energy source and was modeled directly in EGEAS. The base case results show that wind is not a cost-effective solution. Notwithstanding that, Wisconsin Electric continues to pursue additional wind generation including the recent purchase of 214 MW from wind developers.

- combustible renewable energy sources

Biomass is the leading combustible renewable energy source and was modeled directly in EGEAS. The base case results show that biomass is not a cost-effective solution.

- natural gas

Two types of natural gas fueled plants, peakers and combined cycle, were modeled directly in EGEAS. In the base case, both peakers and new coal are added by 2009, in addition to the combined-cycle generating units being added in Port Washington. Twenty scenarios were also developed and in every scenario, coal units are added by 2008, 2009 or 2011. In other words, there is no cost-effective alternative to new base load coal units. The base case results show that additional natural gas combined cycle is not a cost-effective solution.

- oil or coal with sulphur content of less than 1 percent

1 Neither oil nor 1 percent sulfur coal were modeled directly. Oil as a combustion turbine
2 fuel is not cost-effective and probably not permittable from an air permit perspective,
3 except as a backup fuel to natural gas. Coal with less than 1 percent sulfur (generally
4 western sub-bituminous coal such as PRB) was considered, but was rejected because of
5 concerns related to the certainty of capture of mercury emissions, the volume of fuel
6 transportation and other factors discussed in Mr. Mihm's direct testimony.

7 Q. **Mr. Norwood states on page 10 of his direct testimony that "WEPCO and WPPI**
8 **have asserted that the timing of the need for baseload capacity is not important..."**
9 **(p. 10, line 7). What are the qualitative reasons for avoiding any delay in approving**
10 **new coal units?**

11 A. There are several factors that argue for earlier rather than later approval of new coal
12 plants:

13 • the approval process for new coal plants is lumpy – if denied now, the next
14 opportunity for a new coal plant is probably 2012
15 • new coal is supply insurance as Point Beach goes through the relicensing process and
16 as controls and early retirements are implemented at existing coal units
17 • building larger, more capital intensive projects now while interest rates are at
18 historical lows makes sense compared to waiting 3-4 years then building when
19 interest rates are unknown

20 Q. **What do you mean the approval process is lumpy?**

21 A. Just as the addition of large power plants results in small amounts of excess capacity
22 (lumps) in the year they are installed generally followed by a year or two to absorb the
23 new capacity, the power plant approval process is cyclic in much the same way. The coal

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DIRECT TESTIMONY OF ALLAN MIHM

ON BEHALF OF APPLICANTS

Q. Please state your name, business address and occupation.

A. My name is Allan Mihm and my business address is 301 West Wisconsin Avenue, Milwaukee, WI 53203. I am the Director of Engineering for W.E. Power LLC (W.E. Power).

Q. Please describe your educational and business experience.

A. I was hired by Wisconsin Electric in 1974. Prior to recently being named as the Director of Engineering for W.E. Power, I was the Manager of Engineering for the Fossil Operations Business Unit (FOBU) in Wisconsin Electric. In that role, I was responsible for the engineering function of Wisconsin Electric's 21 coal-based generating units totaling 3,600 megawatts (MW), 14 combustion turbine units with a generating capacity of approximately 1,200 MW, and about 80 MW of hydro generation. The engineering function included routine support and major upgrades to these facilities and, until the formation of W.E. Power, the addition of new generation.

1 A. We evaluated domestic eastern and western bituminous and sub-bituminous coals from
2 the western U.S.
3 **Q. Why was bituminous coal selected?**
4 A. An eastern bituminous coal was selected because it allows achievement of higher thermal
5 efficiency, which reduces the impact on the local community and because of its improved
6 ability to control mercury emissions when compared to western bituminous and sub-
7 bituminous coals.
8 From a community impact perspective, since bituminous coal in general, and
9 particularly eastern bituminous coals improve unit efficiency, fewer trains will be
10 required to support the operation of the proposed units. Additionally, bituminous coals
11 have higher heat content, usually expressed as British thermal units per pound (BTU/LB),
12 than sub-bituminous coals. The heating value of the proposed bituminous coal is 13,100
13 BTU/LB, whereas the heating value of a typical sub-bituminous coal is 8,400 BTU/LB.
14 If the three additional units were fueled with sub-bituminous coal, seven to eight trains
15 per week of approximately 125 cars each would be required to deliver the fuel. Only four
16 to five trains per week would be required for bituminous coal.
17 From an environmental perspective, the use of a bituminous coal is also favorable
18 because it has a lower moisture content. Since this additional moisture does not need to
19 be heated in the combustion process, bituminous coal can be converted to electric energy
20 more efficiently than a sub-bituminous coal. For the proposed units, the increased
21 efficiency of bituminous coal relative to sub-bituminous is around 4 percent. Higher
22 efficiencies generally result in lower emission rates. In the case of CO_2, the inherent
23 chemistry of bituminous coal results in an additional 4 percent reduction in CO_2 relative

1 to sub-bituminous. As a result, use of bituminous coal results in an 8 percent total
2 reduction in CO_2 emissions, which is a reduction of 40 million tons of CO_2 over the life
3 of the proposed units. Mercury is an emission that is gaining attention at both state and
4 federal levels. We believe that to ensure high levels of mercury capture, the combination
5 of bituminous coal and the proposed air quality equipment, which includes a selective
6 catalytic reactor, a baghouse, a wet flue gas scrubber, and a wet electrostatic static
7 precipitator, provides the highest degree of certainty. Finally, the IGCC technology
8 developed to date is currently more well understood when applied to bituminous coals
9 than sub-bituminous or lower rank coals.

10 Q. **Please discuss the schedule for construction of the new units.**

11 A. Exhibit 89 (AM-2) contains an updated schedule which assumes the start of site
12 preparation for the first SCPC occurs on or about February 1, 2004. The commercial
13 operations dates for the Elm Road units 1-3 are then respectively May 1, 2008, May 1,
14 2009, and May 1, 2011. Although this schedule shows the in-service date for unit 1 as
15 May 1, 2008, we have not entirely eliminated the possibility of having the unit available
16 for the summer of 2007.

17 Q. **Have local communities, civic groups, regulators, or other concerned parties raised**
18 **concerns regarding the location of the coal storage and handling areas and the**
19 **height of the chimneys proposed for the Oak Creek SCPC units?**

20 A. Yes.

21 Q. **Please describe the nature of these concerns.**

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RESPONSIVE TESTIMONY OF DAVID F. SEITZ

Q. Please state your name, business affiliation and address.

A. My name is David F. Seitz. I am a Project Director and Milwaukee Office Manager at RMT, Inc. (RMT). My business address is 150 N. Patrick Boulevard, Suite 180, Brookfield, WI 53045-5854.

I have over twenty-four years of experience in air pollution regulatory compliance. As a Project Director, I provide guidance, direction, and oversight to project managers and staff for air permitting, compliance demonstration, and other environmental compliance projects for clients. I have directed RMT's services for electric generation projects in Wisconsin and in other states, and have been involved in preparing air permit applications for a variety of electric generation projects and manufacturing facilities in Wisconsin and throughout the United States. My curriculum vitae is attached in Exhibit 152 (DFS-1).

Q. What is the business of RMT?

A. RMT is an environmental and management consultant providing services to a wide range of businesses across the United States. Our services include regulatory permitting and

oversight for the implementation of the ambient air monitoring provisions of the Agreement, assisting in the selection of an appropriate ambient air monitoring site for total suspended particulate matter (TSP), inhalable particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$).

Q. Please comment on the results of your review and your independent air quality impact assessments.

A. There are several issues that my review and our independent studies reveal. First, I believe that the air quality impact studies conducted for the Draft EIS rely upon questionable information to characterize the existing ambient air quality near the proposed project site. Second, the interpretation of air quality impacts that are predicted by the models is in error, attributing the impacts to the proposed generating units, while in reality, the impacts are most heavily influenced by assumed emission rates for the existing generating units at the Oak Creek Power Plant. Third, the air quality impacts of total suspended particulate matter (TSP) can be substantially reduced by the optional "coal in loop" layout as presented by We Energies. Fourth, air quality impacts for TSP and inhalable particulate matter (PM_{10}) are highly influenced by emission rates. Emission rates are dependent on assumed control efficiencies and small reductions in assumed control efficiencies can cause the modeled results to exceed state and federal ambient air quality standards in residential areas of Oak Creek, immediately north of Elm Road. Fifth, the air quality impacts of the Primary Site, with the "coal in loop" option results in the lowest ambient air concentrations of most air pollutants.

in percentage of increments consumed for 5 of the 6 PSD increments. They each rank third in one category, and never rank last in any of the categories. The North CUP site ranks best by very wide margins in two very important categories: PM_{10} (24-hour average) and SO_2 (24-hour average). The South site options rank third or fourth (worst) in 5 of the 6 categories, though they each rank best in one category. This data indicates that the North CUP option is the most favorable option with respect to consumption of PSD increments.

Q. In your professional opinion, is one site the best alternative with respect to air quality impacts?

A. Yes. Clearly, with respect to air quality impacts. the North (Oak Creek) CUP site has the least impact on nearby communities. From that perspective, it is the best alternative.

Q. Are there any other environmental advantages to the CUP Site that are not noted in the FEIS?

A. Yes. In general, the goal of the CUP was to address and mitigate environmental impacts that the proposed site would have on area residents, as opposed to the land as was the focus of the FEIS's discussion of the CUP. Issues were not restricted to "fugitive dust from the coal storage and handling areas and the aesthetic concerns surrounding the two proposed chimneys" as referenced on page 391 of the FEIS. The CUP also addresses a comprehensive set of issues that are not addressed or emphasized in the FEIS to protect the area residents including the following:

1. Noise limits during construction and operation – It is important to remember that the PSC has no requirements for noise levels at power plants. The CUP provides significant noise mitigation protection for the

residents during construction and operation of the plant. Contrary to what the FEIS indicates on page 405, the CUP does provide noise reduction relative to the other options by limiting times and locations of construction activities relative to the nearby residents, setting setback buffers, and establishing berm design criteria. Adding soil berms to the site also decreases the amount of noisy truck traffic offsite and minimizes vehicle dust. Without the CUP, these protections would not have been provided.

2. Fire and emergency management services – The CUP provides a means for cooperative planning of fire, police, and emergency response between the City and WEC. Without the CUP, these protections would not have been provided.
3. Potable water supply service – The CUP option provides for potable water supply to the site. If a South Site option is chosen, City of Oak Creek water would not be available. Costs for an alternative water supply would be significant.
4. Sanitary sewer service - The CUP option provides for sanitary sewer service to the site. If a South Site option is chosen, City of Oak Creek sewer lines would not be available. Costs for an alternative sewer services would be significant. It is our understanding that the Milwaukee Metropolitan Sewage District does not serve Racine County in that area.
5. Construction hours and locations – As noted above, the CUP restricts construction hours and locations on site to minimize impacts to the

residents. Without the CUP, these protections would not have been provided.

6. Construction access, traffic control, and parking – The CUP conditions related to these issues are significant. The FEIS does not cover the positive impacts that these conditions have on the residents. Focusing access during construction to only Hwy 32 and closing access to the site from Elm Road provide significant resident protections that no other site option requires. During public meetings, the City heard from residents about concerns for their children using Haas Park during construction. Closing Elm Road eliminates that problem. Without the CUP, these protections would not have been provided.
7. Outdoor equipment and supplies storage – all equipment and supplies are required to be stored on site within the setback buffers to minimize visual impact to the residents. Without the CUP, these protections would not have been provided.
8. Inspections of facilities – The CUP provides for inspections of facilities in conjunction with state law. This is an important public protection that the FEIS fails to mention.
9. Grading, easements, and setbacks – Grading criteria, easement rules, and setback requirements protect the residents from noise, dust, and visual impacts. Grading under the CUP provides 3:1 outboard side slopes which is the standard of practice for earthwork and similar to the current slopes at the Oak Creek South Ash Landfill. Moving the coal piles and coal

handling facilities to inside the rail loop eliminates the impact that they have on the prairie area and minimizes the impacts to the residents as compared to the North Site option. Contrary to page 406 of the FEIS, the City believes that the relocation of the coal piles and coal handling facilities will improve the visual aesthetics for the surrounding residents – especially those living along Elm Road and those using Haas Park. It is noted that FEIS Figures 2-13 thru 2-18 for the North Site, South Site, and South Site Exp show no coal handling facilities or coal stockpiles, though Figures 2-19 thru 2-20 for the North Site CUP option do show these features. The impact of these facilities should be shown on the figures for all site options, not just the North Site CUP. Without the CUP, these protections would not have been provided.

10. Landscaping and lighting – Final landscaping of the areas seen by the public are of importance to the City. The CUP provides City input to the visual appearance of these areas. It also requires that area lighting be kept directed away from area residents, during construction and operation periods.

11. Surface water management - The City has ordinance authority to address drainage and surface water management. The CUP requires that these codes be addressed to protect adjacent properties from adverse storm water runoff conditions.

The CUP does not have any requirement of WEC to place the switchyards in the locations shown on FEIS Figures 2-18 and 2-19. It may be possible to reconfigure those

1 Steidl?

2 MR. STEIDL: Heidi Hopkins.

3 HEIDI HOPKINS, DNR WITNESS, DULY SWORN

4 EXAMINER WHITCOMB: State your name and

5 spell it for the record.

6 THE WITNESS: Heidi Hopkins,

7 H O P K I N S

8 DIRECT EXAMINATION

9 BY MR. STEIDL:

10 Q. Ms. Hopkins, in conjunction with preparing for

11 testimony at today's hearing, did you prepare

12 eight pages of prefiled direct testimony in this

13 matter?

14 A. Yes.

15 Q. And if I were to ask you today the questions

16 which are included in that testimony, would you

17 give the same responses?

18 A. Yes.

19 Q. Ms. Hopkins, you have responsibility for

20 processing the chapter 30 permit applications for

21 the applicant; is that correct?

22 A. Yes.

23 Q. Does that process continue as we speak?

24 A. Yes.

25 Q. Could you please for the record update the

1 chapter 30 permits was had?
2 A. I've been in so many meetings with We Energies, I
3 can't tell you if that one occurred in July.
4 Q. But you did participate in such a meeting prior
5 to issuance of the first version of the public
6 notice, didn't you?
7 A. I did participate in a meeting with We Energies
8 and DNR staff to discuss timing of the permit
9 application before I issued that initial public
10 notice, yes.
11 Q. And was there some discussion also of the timing
12 of the permit issuance to be scheduled after the
13 Public Service Commission decision in this case?
14 A. Yes.
15 Q. And was there agreement among the parties at the
16 meeting from DNR and WEPCO that that timing on
17 those DNR permits could be after the CPCN
18 decision as long as it did not slow down the site
19 work at ERGS?
20 A. Could you please repeat the question for me.
21 Q. Was there agreement among the representatives of
22 WEPCO and DNR at the meeting that the DNR water
23 permits could follow the PSC CPCN decision as
24 long as the permit decision did not slow down the
25 site work at ERGS?

1 A. The department staff and We Energies agreed that
2 the permitting for chapter 30 and the water
3 quality certification could not come before the
4 CPCN decision. But it did not necessarily say
5 that it couldn't slow down their site grading
6 work.
7 Q. The DNR did not agree that the permits could not
8 slow down the site grading work?
9 A. No, the permits may slow down site grading work.
10 MR. OWEN: Okay. Thank you for that
11 clarification. That's all I have. Thank you.
12 EXAMINER WHITCOMB: Thank you. Staff?
13 MR. LUDWIG: No.
14 EXAMINER WHITCOMB: Redirect?
15 MR. STEIDL: A couple.
16 REDIRECT EXAMINATION
17 BY MR. STEIDL:
18 Q. Ms. Hopkins, with respect to the consideration of
19 alternative forms of energy and alternative site
20 locations other than the alternative sites that
21 have been proposed, is it your understanding that
22 the proceedings, the CPCN proceedings will take
23 into account those issues?
24 A. Yes.
25 Q. And hypothetically if the commission were to make

1 a determination, a CPCN determination with
2 respect to those issues, would the department
3 give deference to that in the chapter 30
4 permitting for the project?
5 A. Yes.
6 MR. STEIDL: No further questions.
7 EXAMINER WHITCOMB: Okay. That may
8 generate -- go ahead.
9 RECROSS-EXAMINATION
10 BY MR. SINDERBRAND:
11 Q. I have a clarification question on this. Do I
12 understand you correctly that if the commission
13 decides to approve three sites, DNR would not
14 require consideration of a alternative
15 configuration with two sites?
16 A. No.
17 Q. The unit -- let me start that over. That didn't
18 start right. If the commission approved the ERGS
19 project as requested with three units, are you
20 saying the DNR would not require consideration of
21 a practical alternative with two units?
22 A. No, the department would request information or
23 require the applicant to submit information that
24 would possibly reconfigure the site, maybe using
25 only -- maybe using fewer units or maybe

January 14, 2004

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO: 4530-1

Mr. Scott A. Patulski
Vice President, Fossil Operations
231 W. Michigan
Milwaukee, WI 53201

Dear Mr. Patulski:

Your application for an air pollution control construction permit has been processed in accordance with sec. 285.61, Wis. Stats.

The enclosed construction permit is issued to provide authorization for your source to construct and initially operate an Electric Generating Facility referred as Elm Road Generating Station - North Site With Accommodations at 4801 E. Elm Road, Oak Creek, Wisconsin in accordance with the requirements and conditions set forth within Parts I and II of the permit. Please read it carefully. This permit expires 90 months after the day this permit is issued. This source may not operate after this construction permit expires unless you have been issued an operation permit.

Enclosed with the permit there are two copies of a bill for the cost of reviewing and acting upon your air pollution control permit. This bill is due and payable within 30 days of the date of the issuance of the permit. Your check should be made payable to Wisconsin Department of Natural Resources and returned to the address on the bill. Please include one copy of the bill with your payment.

A copy of this permit should be available at the source for inspection by any authorized representative of the Department. Questions about this permit should be directed to the Wisconsin Department of Natural Resources,
Wisconsin Department of Natural Resources, Southeast Region, 2300 North Dr. Martin Luther King Jr. Drive, Milwaukee, WI 53212, Phone (414) 263-8500

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes establish time periods within which requests to review Department decisions must be filed.

To request a contested case hearing pursuant to s. 285.81, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for a contested case hearing on the Secretary of the Department of Natural Resources. Any such petition for hearing shall set forth specifically the issues sought to be reviewed, the interest of the petitioner, the reasons why a hearing is warranted and the relief desired.

For judicial review of a decision pursuant to ss. 227.52 and 227.53, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

This notice is provided pursuant to s. 227.48(2), Stats.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

Raj Vakharia, Review Engineer
Permits & Stationary Source Modeling Section
Bureau of Air Management

cc: SER Air Program Air Program
SER, Sturtevant Service Center Air Program
US EPA Region V
Kathy Zuelsdorff, PSC, 610 N. Whitney Way, P.O. Box 7854, Madison, WI 53707-7854

Enclosure

BEFORE THE DEPARTMENT OF NATURAL RESOURCES
AIR MANAGEMENT PROGRAM
FINDINGS OF FACT
CONCLUSIONS OF LAW
AND DECISION

Findings of Fact

The Department of Natural Resources (DNR) finds that:

1) Elm Road Generating Station (Referred as North Site with Accommodations), 4801 E. Elm Road, Oak Creek, Wisconsin, Wisconsin has applied for an air pollution control construction permit. The authorized representative of the facility is Scott A. Patulski – Vice President, Fossil Operations.

2) Elm Road Generating Station (Referred as North Site with Accommodations), submitted an air pollution control permit application and plans and specifications and any additional information describing the air contaminant source between June 18, 2002 and January 9, 2004.

3) DNR has reviewed Elm Road Generating Station (Referred as North Site with Accommodations)'s air permit application and the plans and specifications submitted to DNR.

4) This permit is for an air contaminant source.

5) DNR has complied with the procedures set forth in s. 285.61, Stats.

6) The proposed air contaminant source meets all of the applicable criteria in s. 285.63, Stats.

7) DNR has complied with the requirements of s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code.

Conclusions of Law

DNR concludes that:

1) DNR has authority under s. 285.11(a), Stats., to promulgate rules contained in chs. NR 400-499, Wis. Adm. Code, including, but not limited to, rules containing emission limits, compliance schedules and compliance determination methods.

2) DNR has the authority under ss. 285.11(a), (e), and (f), 285.27 and 285.65, Stats., and chs. NR 400-499, Wis. Adm. Code, to establish emission limits for sources of air pollution.

3) DNR has the authority to issue air pollution control permits and to include conditions in such permits under ss. 285.60, 285.61, 285.63 and 285.65, Stats.

4) The emission limits included in this permit are authorized by ss. 285.65, Stats., and NR 400-499, Wis. Adm. Code.

5) DNR is required to comply with s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code, in conjunction with issuing an air pollution control permit.

Decision

Elm Road Generating Station (Referred as North Site with Accommodations), is authorized to construct and initially operate an Electric Generating Facility referred at 4801 E. Elm Road, Oak Creek, Wisconsin, as described in the plans and specifications dated between June 18, 2002 and January 9, 2004 in conformity with the emission limits, monitoring, recordkeeping and reporting requirements and specific and general conditions set forth in this permit.

AIR POLLUTION CONTROL CONSTRUCTION PERMIT

EI FACILITY NO. PERMIT NO. 03-RV-166

STACK NO.(S). S18 –S174 SOURCE NO.(S). B18, B19, B20,P62, P63, P64, P175, P76P, P41, P42, P43, B44, T16, T188, T121, T122, T123, T119, T120

THIS CONSTRUCTION PERMIT EXPIRES NINETY (90) MONTHS FROM THE DATE OF ISSUANCE OR WHEN THE OPERATION PERMIT IS ISSUED FOR THE EMISSION UNITS INCLUDED IN THIS PERMIT, WHICHEVER COMES FIRST.

In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source: Elm Road Generating Station (Referred as North Site with Accommodations)

Street Address: 4801 E. Elm Road
Oak Creek, Milwaukee County, Wisconsin

Responsible Official & Title: Scott A. Patulski – Vice President, Fossil Operations

is authorized to construct and initially operate an Electric Generating Facility described in the plans and specifications submitted between June 18, 2002 and January 9, 2004 in conformity with the conditions herein.

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Madison, Wisconsin this 14th day of Januray 2004.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By signed by Lloyd L. Eagan
Lloyd L. Eagan, Director
Bureau of Air Management

Before The
State Of Wisconsin
DIVISION OF HEARINGS AND APPEALS

In the Matter of an Air Pollution Control Construction Permit Issued to Wisconsin Electric Power Company for the Elm Road Generating Station, Permit No. 03-RV-166, located in Oak Creek, Wisconsin	Case No.: IH-04-03

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

Background

Wisconsin Electric Power Company ("Wisconsin Electric"), 231 West Michigan Street, Milwaukee, Wisconsin, submitted an air pollution control permit application to construct a new electric generating station that would be located on or adjacent to property at its existing Oak Creek Power Plant (OCPP) site in Milwaukee County.

The proposed new facility is identified as the Elm Road Generating Station (ERGS). The ERGS as proposed would consist of two super-critical pulverized coal (SCPC) units and a single integrated coal gasification combined cycle (IGCC) unit, which would have a collective capacity of approximately 1,830 megawatts of coal-based generating power. The two proposed SCPC units are each sized at 615 megawatts, and the IGCC unit is sized at 600 megawatts. Wisconsin Electric originally proposed to construct the SCPC units first, placing one in service in 2008 and the other in 2009. Wisconsin Electric originally proposed to construct the IGCC unit thereafter, with an original planned in service date of 2011.

On January 14, 2004, the DNR issued a construction permit authorizing Wisconsin Electric to build the ERGS as proposed, with two SCPC units and one IGCC unit.

Wisconsin Electric sought also to have the Public Service Commission of Wisconsin ("PSC") issue a Certificate of Public Convenience and Necessity ("CPCN") for the ERGS project configured with the two SCPC units and the single IGCC unit. In a decision dated November 10, 2003, the PSC approved construction of the two SCPC units, but delayed by one year the respective dates for each to be placed in service. The PSCW denied the request for a CPCN to construct the IGCC unit.

By order dated November 29, 2004, the circuit court in Dane County vacated the PSC's issuance of a CPCN and remanded the matter to the PSC for further proceedings. Appellate review of the circuit court order is presently pending before the Wisconsin Supreme Court.

Pursuant to due notice, a hearing was conducted by the Division of Hearings and Appeals in Milwaukee on October 18, 19 & 20, 2004 before the undersigned Administrative Law Judge ("ALJ"). The Parties filed simultaneous principal and responsive briefs pursuant to an established briefing schedule, with the final responsive briefs being filed on December 30, 2004. Also, the Northeast States for Coordinated Air Use Management ("NESCAUM") was granted leave to file a brief as *amicus curiae*, which was filed on November 30, 2004.

In accordance with Wis. Stat. §§ 227.47 and 227.53(1)(c), the PARTIES to this proceeding are certified as follows:

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Summary of Issues and Rulings

On May 21, 2004, the Petitioners duly filed an "Issues List and Statement of Requested Relief." By orders dated August 3, 2004, and August 30, 2004, the ALJ delimited the scope of the contested case hearing by striking certain issues and pre-filed evidence from consideration, and delimiting the scope of other certain issues. The ALJ recasts the issues that remain and that were litigated in the contested case hearing as follows:

1. Did the DNR err in excluding IGCC from its BACT/LAER analysis of the SCPC units? (Petitioners' Issues 11 & 12).

RULING: The DNR did not err.

2. Did the DNR err in not establishing a more stringent mercury emissions limit for the IGCC unit? (Petitioners' Issue 10).

RULING: The DNR did not err.

3. Did the DNR comply with the requirement that it determine that the benefits of the proposed project significantly outweigh its environmental and social costs based upon an analysis of alternative sites, sizes, production processes and environmental control techniques? (Petitioners' Issues 6, 7 & 8).

RULING: The DNR complied with the requirement.

4. Did the DNR err in determining that all major stationary sources operated by Wisconsin Electric in the state were in compliance or on a schedule of compliance with all applicable emission limits? (Petitioner's Issue 9).

RULING: The DNR did not err.

There being no demonstrated error in the DNR's issuance of the Air Pollution Control Construction Permit number 03-RV-166, the issuance of the permit is accordingly AFFIRMED.

FINDINGS OF FACT

Background

1. On June 18, 2002, and in subsequent submittals, the applicant, Wisconsin Electric Power Company ("Wisconsin Electric"), submitted an application (the "Application") to the Wisconsin Department of Natural Resources ("DNR") for an air pollution control construction permit under Wis. Stat. § 285.60 and related administrative regulations. The DNR determined the Application to be complete in October 2003.

2. The Application sought a permit to construct a three-unit generating station located on and adjacent to property of Wisconsin Electric's existing Oak Creek Power Plant ("OCPP").

3. The proposed project is to be known as the Elm Road Generating Station ("ERGS"). The ERGS would be situated along the shore of Lake Michigan in both the City of Oak Creek and the Town of Caledonia.

4. All three generating units in the ERGS would use bituminous coal as the original fuel source.

5. Wisconsin Electric and certain affiliated entities also applied for a certificate of public necessity and convenience ("CPCN") for the proposed ERGS project from the Wisconsin Public Service Commission ("PSC") under Wis. Stat. § 196.491(3).

6. The PSC issued a CPCN on November 10, 2003. The PSC approved the construction of two super critical pulverized coal ("SCPC") units, with the first unit to be placed in service in 2009 and the second to be placed in service in 2010. The PSC denied the request to construct the IGCC unit, which Wisconsin Electric had proposed to construct after the SCPC units.

7. The PSC and the DNR prepared an environmental impact statement ("EIS") in conjunction with the CPCN and the various permits and approvals required from the DNR. The PSC issued its final decision on the EIS as part of its CPCN decision. The DNR issued a separate decision on the EIS on December 17, 2003.

8. The DNR issued air pollution control construction permit number 03-RV-166 (the "Permit") on January 14, 2004. The Permit authorizes Wisconsin Electric to construct the two SCPC units and the single IGCC unit as it had applied for, even though the DNR was aware that the PSC had earlier denied the request for a CPCN to build the IGCC unit.

9. The Petitioners requested a contested case hearing on the Permit on February 6, 2004. The DNR granted the hearing request on February 23, 2004.

IGCC as BACT/LAER for SCPC

10. The area in which the ERGS would be located is in attainment of national ambient air quality standards (NAAQS) for all criteria pollutants except for ozone, for which the area has been designated to be a severe nonattainment area.

11. The ERGS is required to be subject to the best available control technology (BACT) for all criteria pollutants except for ozone.

12. Emissions from the ERGS of an ozone precursor, volatile organic compounds (VOC's), must be at the lowest achievable emissions rate (LAER).

13. In the SCPC process, water is heated to higher temperatures and pressure so that the energy content of the steam delivered to the turbines is greater, thereby reducing the amount of fuel consumed per unit of electrical output. In the IGCC process, coal is "gasified" to produce a synthetic gas ("syngas"), which is used as fuel for combustion turbines. Waste heat from this process is also used to produce steam for steam turbine use.

14. The DNR determined not to include IGCC in the BACT/LAER analysis for the ERGS SCPC units for the stated reason that IGCC is a "different type of process technology" from SCPC.

15. The ERGS SCPC and IGCC units would use the same fuel stock of Pittsburgh No. 8 bituminous coal.

16. The ERGS IGCC unit would emit fewer pollutants per unit of power generated than either of the ERGS SCPC units.

17. Gasification of coal in the IGCC production process is not a combustion process. The chemical reactions that occur within an IGCC gasifier are different than the reactions that occur during coal combustion, and the products of those reactions are different.

18. Each of the ERGS SCPC units is composed of a power block, an air quality control equipment block, and the waste handling and byproduct systems.

19. The power block for the ERGS SCPC units is the portion of the plant where coal is burned and electricity is generated. Coal is pulverized to a powdery consistency and then transferred to the boiler where it is combusted as fuel for the steam generator to heat steam. The heated steam turns the steam turbine, which is connected to the electric generator that generates the desired end product -- electricity. The steam then passes through the steam condenser, where it is cooled and then routed to the steam generator.

20. In the air quality control equipment block of the ERGS SCPC units, the exhaust gases from the power block are routed through the air quality control equipment. This equipment includes the following: the baghouse, where particulate is removed; the flue gas desulfurization scrubber, which removes acid gases (SO_2); the selective catalytic reduction (SCR) system, which converts NO_x into nitrogen and oxygen gas; and the wet electrostatic precipitator, which removes sulfuric acid mist and fine particulates.

21. The waste handling and byproduct systems of the ERGS SCPC units include the forced oxidation gypsum plant, the limestone system, the stack, and the systems for handling gypsum and fly ash.

22. An IGCC unit has three separate components: the gasification block, the acid gas removal equipment, and the power block. The gasification block is composed of the air separation unit and the gasifier. The acid gas removal equipment is composed of the acid gas recovery unit and the sulfuric acid plant. The power block is composed of the combustion turbines, heat recovery steam generator, and the steam turbine generator.

23. The ERGS IGCC unit would include the following components: an air separation unit; three oxygen-blown coal gasifiers; two combustion turbines; two heat recovery steam generators; a steam turbine generator; an acid gas recovery unit; a sulfuric acid production facility; a coal slurry/preparation facility; slag handling equipment; and a flare.

24. In order to replace a SCPC coal unit with an IGCC unit, the following major equipment for the SCPC units would have to be removed: components of the power block (steam generator, steam turbine, generator, condenser); air quality control equipment (SCR, baghouse, flue gas scrubber, wet precipitator, stack and limestone handling system); and waste and byproduct handling systems (gypsum system, bottom and fly ash systems).

25. To complete the replacement of a SCPC unit with an IGCC unit, the following equipment would have to be added: an air separation unit; three oxygen-blown coal gasifiers; two combustion turbines; two heat recovery steam generators; a steam turbine generator; an acid gas recovery unit; a sulfuric acid production facility; the coal slurry/preparation facility; slag handling equipment; a storage facility for the slag; a 200-foot tall gas flare.

26. The footprint of an IGCC unit is 200% to 350% the size of an SCPC unit.

27. There are fourteen IGCC facilities generating electricity in the world. Of those fourteen, four are designed to operate with coal as the primary feedstock, and only three of these four are presently operating. These four facilities each have approximately 250 megawatts of generating capacity.

28. No permitting authority has established IGCC as the BACT or LAER for a coal fired power plant.

29. IGCC and SCPC are different process technologies for the production of electricity from coal feedstock. To substitute either of the ERGS SCPC units with an IGCC unit would redefine the design of the ERGS.

Mercury Emissions from ERGS IGCC

30. The Permit set the mercury emissions limit for the ERGS IGCC based upon a determination that the carbon bed filter or equivalent control technology to be employed was capable of achieving 95% removal of mercury from the syngas before combustion.

31. The use of a single carbon bed filter in an IGCC electric generating plant may achieve 99% mercury removal from the syngas, but a removal rate of greater than 95% has never been verified.

32. None of the four IGCC facilities existing worldwide that are designed to generate electricity from coal feedstock has employed carbon bed filter technology to remove mercury from syngas.

33. No IGCC facility anywhere has employed dual carbon bed filters to remove mercury from syngas. It is not known whether use of a dual carbon bed filter to remove mercury from syngas would achieve 99% or greater removal of mercury from the syngas.

Analysis of Alternatives to ERGS

34. The DNR determined that the benefits of construction of ERGS significantly outweighed the environmental and social costs imposed as a result of its location and construction.

35. The DNR summarized its analysis of alternatives in the preliminary determination for the ERGS air permit, which references information provided by Wisconsin Electric, and the Final Environmental Impact Statement (FEIS) that was prepared jointly by the DNR and the PSC.

36. The FEIS assessed the negative economic impact of developing additional generating capacity that risked being unreliable or too expensive.

37. The FEIS assessed the need for sizing the ERGS at approximately 1830 megawatts of generating capacity.

38. Wisconsin Electric considered alternate sites for locating the ERGS and settled on its existing location at OCPP, where there was existing infrastructure and existing land use compatible with the proposed project.

39. The DNR identified and assessed alternatives to the ERGS project in the FEIS. Alternatives considered included: increasing energy efficiency and conservation to reduce overall demand; renewable resources such as wind turbines, biomass, solar power, fuel cells; natural gas; and nuclear power. The FEIS included specific consideration of a proposed natural gas fired generating plant in Fond du Lac County, proposed by Calpine. The DNR also assessed the ERGS IGCC in the FEIS, including addressing the maturity and reliability of IGCC technology.

40. The DNR conducted air quality modeling and determined that emissions from the ERGS project would comply with the NAAQS for criteria pollutants, as well as the PSD increments for those Pollutants.

41. Wisconsin Electric set emissions limits for the ERGS that met all applicable air pollution control standards, including BACT/LAER and required emissions offsets for VOC's. The DNR determined that the ERGS would not likely pose a significant inhalation risk if operated according to required standards.

42. The DNR conducted an additional impact analysis to determine the effects of the project on visibility, secondary growth, soils, and vegetation, and found these impacts to be within acceptable levels under state and federal regulations.

43. The DNR did not attempt to quantify the potential human health impacts resulting either from ERGS air emissions or from alternative power sources or sites for the ERGS.

44. In its analysis of alternative energy sources and alternative sites, the DNR did not attempt to include among the environmental and social costs of the ERGS any quantification in dollar or human terms of the health impacts of the ERGS or of any alternative power sources or sites.

Compliance Status of Other Facilities

45. The DNR contacted its compliance engineers for each facility that Wisconsin Electric operates in Wisconsin. Based upon that review, the DNR determined that Wisconsin Electric's sources were in compliance with all applicable air regulations on the date the ERGS air permit was issued.

DISCUSSION

I. IGCC as BACT or LAER for SCPC Units

The DNR was required to determine that the proposed project utilized the best available control technology ("BACT") for criteria pollutants for which the area was in attainment of national ambient air quality standards (NAAQS). Wis. Stat. § 285.63(3)(a); Wis. Admin. Code Chap. NR 405. The area in which the ERGS is to be located is in attainment of the NAAQS for all criteria pollutants except for ozone.

As for ozone, the DNR was required to determine that the proposed project utilized the lowest achievable emission rate ("LAER"). Wis. Stat. § 285.63(2)(b); Wis. Admin. Code Chap. NR 408. In the case of the ERGS, the LAER would apply to emissions of the ozone precursor "volatile organic compounds" (VOC's).

BACT is defined generally in Wis. Stat. § 285.01(12) as follows:

> "Best available control technology" means an emission limitation for an air contaminant based on the maximum degree of reduction achievable as specified by the department on an individual case-by-case basis taking into account energy, economic and environmental impacts and other costs related to the source.

BACT is defined more specifically within the DNR rule titled "Prevention of Significant Deterioration," Wis. Admin. Code Chapter NR 405, as follows:

> "Best available control technology" or "BACT" means an emissions limitation, including a visible emissions standard, based on the maximum degree of reduction for each air contaminant subject to regulation under the act which would be emitted from any proposed major stationary source or major modification which the department, on a case-by-case basis, taking into account energy, environmental, and economic impacts, and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including clean fuels, fuel cleaning or treatment or

> innovative fuel combination techniques for control of the air contaminant. . . .

Wis. Admin. Code § NR 405.02(7).

The DNR rule titled "Construction Permits for Direct Major Sources in Nonattainment Areas," Chapter NR 408 of the Wisconsin Administrative Code, contains the substantially identical definition of BACT in section NR 408.02(4) as that set forth above in Chapter NR 405.

The more detailed definition of BACT in the Wisconsin Administrative Code echoes the definition of BACT contained in the federal Clean Air Act, which is as follows:

> The term "best available control technology" means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this title emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant....

42 U.S.C. § 7479(3).

LAER, the emissions limitation that must be established for ERGS for VOC's, is defined in Wis. Stat. § 285.01(23) as follows:

> "Lowest achievable emission rate" means the rate of emission which reflects the more stringent of the following:
>
> (a) The most stringent emission limitation which is contained in the air pollution regulatory program of any state for this class or category of source, unless an applicant for a permit demonstrates that these limitations are not achievable; or
>
> (b) The most stringent emission limitation which is achieved in practice by the class or category of source.

The DNR employs EPA's recommended "top down" methodology for BACT and LAER analysis. The "top down" methodology requires an applicant first to rank order control technologies in descending order of effectiveness. As to BACT analysis, the top alternative must be selected as the BACT for a pollutant unless it is shown that technical considerations, or energy, environmental, or economic impacts, justify a conclusion that this most stringent technology is not "achievable" in that case. If the most stringent technology is eliminated in this fashion, then the next most stringent alternative is considered, and so on, until the BACT is established. See *ADEC v. EPA*, 540 U.S. 461, 475-76 (2004), quoting EPA's "New Source Review Workshop Manual (Draft Oct. 1990)" [hereinafter referred to as "NSR Manual"].

The principal difference in BACT and LAER analysis is that LAER analysis does not consider economic factors, except to the extent that LAER is not considered "achievable" if the cost of the control is determined to be prohibitive.

During the application review process, counsel for one of the Petitioners asked the DNR to consider IGCC in its analysis of BACT and LAER for the proposed SCPC units. (Ex. 53). The Secretary of the DNR provided a written response to this request, stating that BACT and LAER analysis "does not specifically allow for consideration of different process technologies." (Ex. 54). The Secretary recognized that while SCPC and IGCC both utilize coal as feedstock, "they do so using very different methods." The Secretary concluded that IGCC and SCPC were "different process technologies," so that the DNR did not intend to include IGCC in the top down BACT/LAER review for the SCPC units. Consistent with the Secretary's response, the DNR did not consider IGCC process technology in its analysis of BACT and LAER for the proposed SCPC generating units. The Petitioners contend that the DNR was required to do so by law.

The DNR and Wisconsin Electric assert that "production processes" or "available methods, systems and techniques" for pollutant reduction that would "redefine the design of the source" are not required to be included in BACT/LAER analysis. The most direct statement of this principle is set forth in the NSR Manual, which the Supreme Court had quoted at length in *ADEC v. EPA*. The salient portion of the NSR Manual provides as follows:

> CONSIDERATION OF INHERENTLY LOWER POLLUTING PROCESSES/PRACTICES
>
> Historically, EPA has not considered the BACT requirement as a means to redefine the design of the source when considering available control alternatives. For example, applicants proposing to construct a coal-fired electric generator have not been required by EPA as part of a BACT analysis to consider building a natural gas-fired electric turbine although the turbine may be inherently less polluting per unit product (in this case electricity). However, this is an aspect of the PSD permitting process in which states have the discretion to engage in a broader analysis if they so desire. Thus, a gas turbine normally would not be included in the list of control alternatives for a coal-fired boiler. However, there may be instances where, in the permit authority's judgment, the consideration of alternative production processes is warranted and appropriate for consideration in the BACT analysis. A production process is defined in terms of its physical and chemical unit operations used to produce the desired product from a specified set of raw materials. In such cases, the permit agency may require the applicant to include the inherently lower-polluting process in the list of BACT candidates.

The evidence establishes that the design of the ERGS as proposed by Wisconsin Electric would be redefined if IGCC units were substituted for either or both of the

proposed SCPC units. The DNR did not err in not including IGCC in the BACT/LAER analysis for the SCPC units.[1]

The SCPC and IGCC units employ radically different processes to produce electricity from coal. These different processes require radically different physical plants. The main commonality is that, as proposed by Wisconsin Electric, both types of units would use coal as the fuel stock (though IGCC plants can be constructed to use fuel stocks other than coal, such as petroleum coke). Beyond the fuel stock, however, there are few similarities between IGCC and SCPC units.

A SCPC unit combusts pulverized coal to create electricity. An IGCC unit "gasifies" the coal in a chemical reaction, and thereafter combusts the syngas product to power its combustion turbines.

An IGCC unit employs a chemical reaction to convert coal into a gaseous stream that consists primarily of hydrogen and carbon monoxide. The raw syngas is cleaned before it is fed to a combined cycle combustion turbine and combusted. This syngas combustion in a combined cycle combustion turbine bears greater similarity to a natural gas combustion turbine than it does to a coal-fired power plant boiler. (Tr. 839). Combustion turbines used to combust syngas in an IGCC plant are similar to those employed in a natural gas fired power plant. (*Id.*). Combustion turbines are designed for gaseous or liquid fuels and cannot burn pulverized coal. (Tr. 754). Combustion turbines designed for an IGCC plant could not be used in a SCPC plant. (*Id.*).

An IGCC unit includes a number of components that do not exist in a SCPC plant. These include the following: a cryogenic air separation unit, which generates oxygen for the gasifier and nitrogen for the combustion turbine (Tr. 752); coal gasifiers, which chemically convert a mixture of coal and water into synthetic gas ("syngas") and acid gas (Tr. 753); an acid-gas recovery unit, which separates out the sulfur from the syngas (Tr. 755); a coal-slurry production facility (Tr. 755); slag handling equipment (Tr. 756); a sulfuric acid production facility (Tr.753); a 200-foot tall flare (tr. 756); a heat recovery steam generator (Tr. 754).

An SCPC unit includes components that do not exist in an IGCC unit. These include components of the power block (steam generator, steam turbine, generator, and condenser), the air quality control equipment (baghouse, flue gas scrubber, the forced

[1] The pre-hearing motions of Wisconsin Electric and the DNR for summary judgment on this issue were denied in the ALJ's order dated August 3, 2004 upon the conclusions that the record on summary judgment was "insufficient to establish as a matter of law that DNR acted within the law in determining not to identify IGCC in the BACT/LAER analysis for the coal-fired SCPC units" and that "[d]evelopment of a fuller factual record will lead to a more informed decision on these potentially complicated and mixed questions of law and fact." Order, p. 12. The factual record on this issue has now been fully developed and establishes that the DNR did not err in excluding IGCC from its BACT/LAER analysis for the SCPC units.

oxidation the wet precipitator, the limestone system, the stack), and the byproduct and waste handling systems, including the gypsum plant.

Because of the different processes and components of IGCC and SCPC, the footprint for an IGCC unit would be from two to three and one-half times the size of the footprint of an SCPC unit with similar generating capacity. Exhibits, 69, 70, and 71 aptly depict the different processes and components of the two types of power plants.

Another innate difference between IGCC and SCPC units is the different regulatory treatment of their respective combustion technologies. The new source performance standards (NSPS) for the combustion units of a SCPC unit are specified by Section NR 440.20 for "electric steam generating units," Wis. Admin. Code, while the NSPS for the gas combustion turbines of the IGCC unit are specified by section NR 440.50, respecting "stationary gas turbines." These different regulatory treatments support the conclusion that IGCC and SCPC are different process technologies, and that to substitute one for the other would redefine the design of the source.

The NSR Manual illustrates the "redefining the design of the source" limitation on BACT analysis with one concrete example. The manual instructs that requiring an applicant for a coal-fired power plant to construct a natural gas-fired plant would be an example of redefining the design of the source that BACT analysis does not require. Thus, the longstanding EPA protocol in administering the statutory BACT requirement under the federal Clean Air Act and implementing regulations (which are mirrored by Wis. Stat. Chapter 285 and DNR rules) is to exclude a natural gas-fired power plant from the BACT analysis for a coal-fired power plant.

The emissions from a syngas-fired IGCC unit would be significantly less than emissions from the proposed SCPC units, just as the emissions from a natural gas-fired plant are significantly less than from any coal-fired plant. Substantial design and process differences exist between syngas-fired and coal-fired plants, as they exist between natural gas and coal-fired plants. (Tr. 838-39). SCPC and IGCC thus represent "different process technologies," as characterized by the Secretary of the DNR. (Ex. 54). The great weight of the evidence demonstrates that substitution of IGCC's different process technology for either or both of the proposed SCPC units at the ERGS would "redefine the design of the source," so that inclusion of IGCC in the BACT analysis for the SCPC units is not required.

The approach described in the NSR Manual is consonant with the regulatory definition of BACT, which requires considering the "*application* of production processes or available methods, systems and techniques" to control contaminants from a "proposed" source. Wis. Admin. Code §§ 405.02(7) [emphasis supplied]. The source as proposed by Wisconsin Electric included two coal-fired SCPC units. IGCC is not a "production process" or an "available method, system, or technique" that can be *applied* or incorporated into the design of an SCPC unit. Rather, IGCC is an altogether different

method of generating electricity that would involve the wholesale substitution of one type of physical plant for another. The definition of BACT allows for the exclusion from the top down analysis of a "production process or available method, system or technique" that can not be applied or incorporated into a proposed source without fundamentally altering the source as proposed. As the NSR Manual puts it, the BACT requirement is not "a means to redefine the design of the source when considering available control alternatives."

The NSR Manual recognizes that permitting authorities may exercise discretion to require an applicant to include control technologies and processes in the BACT analysis that could result in a redefinition of the design of the source. It is apparent that this is what the permitting authorities in Illinois, New Mexico, and West Virginia have done by recently considering IGCC in the BACT analysis for coal-fired power plants.[2] In contrast, permitting authorities in Wyoming (Ex. 77), Montana (Ex. 76; Tr. 855-56), and Kentucky (Ex. 78) have recently determined not to include IGCC in the BACT analysis for a coal-fired plant on the rationale that selection of IGCC as BACT would redefine the design of the proposed coal-fired plants. The varying determinations of different state permitting authorities on inclusion of IGCC in a BACT analysis for a coal-fired plant reflect the discretion that the law accords them to include in the BACT analysis a production process that would redefine the design of the source. See *In re Kendall New Century Development*, PSD Appeal No. 03-01, 2003 WL 21213227, n.14 (E.P.A. April 29, 2003)("redefinition of the source is not always prohibited" but "is a matter for the permitting authority's discretion").

The decision *In the Matter of Hawaiian Commercial & Sugar Co.*, PSD Appeal No. 92-1, 4 E.A.D. 95, 99-100, 1992 WL 191948 (July 20, 1992), is instructive on this issue. There the state permitting authority issued a permit for the construction of a boiler that would be fueled by coal, fuel oil, or biomass. The permit was challenged in part on the basis that the permitting authority should have required a combined cycle facility that would not be fueled by coal. The Environmental Appeals Board concluded that regulations for determination of BACT "do not mandate that the permitting authority redefine the source in order to reduce emissions." *Id.* at 99. The board ruled that requiring a combined cycle facility over the coal-fired facility "would in effect redefine the source." *Id.* at 100. The Board quoted at length the NSR Manual respecting "redefining" a source in BACT analysis, observing that "the [state] permitting authority is entitled to a wide latitude in how broad a BACT analysis it wishes to conduct in this regard." *Id.* at 99-100. Accord, *In re Kendall New Century Development* (affirming state permitting authority's determination that the addition of heat recovery steam generator to transform a single cycle

[2]Of these states, permitting authorities in Illinois and West Virginia have made BACT determinations, and neither selected IGCC as BACT or LAER for the proposed coal fired units. The permitting authority in New Mexico has yet to make its BACT determination.

gas turbine to a combined cycle turbine system would "redefine the source" and was not required in BACT analysis).

The range of control options evaluated under LAER is generally the same as those evaluated under a BACT analysis. (Tr. 237). The principal difference between the LAER and BACT analysis is the substantially diminished role that cost considerations have in establishing the LAER for a source or for a particular emissions unit within a source. As with BACT analysis, the DNR was not required to include IGCC in establishing the LAER for VOC's for either or both of the SCPC units. To require this would likewise have resulted in a redefinition of the design of the source.

The DNR considered the Petitioners' assertion that the DNR should consider IGCC in the BACT/LAER analysis for the proposed SCPC units. The DNR reasonably applied settled protocols in the conduct of the established methodology in determining not to include IGCC in the top down BACT/LAER analysis for the SCPC units.

II. IGCC Mercury Emissions

The Petitioners claim that the emission rate for mercury for the permitted IGCC unit is "insufficiently stringent because DNR failed to consider available techniques that could lower mercury emissions from IGCC units." (Petitioners' Issue 10). The Permit set the mercury emissions limit for the IGCC unit based upon a determination that "carbon bed filter" control technology would achieve 95% removal of mercury from the syngas before combustion. (Ex. 43, p. 118).

A verified 95% removal rate utilizing a single carbon bed filter has been achieved at an IGCC plant operated by Eastman Chemical Company. (Ex. 13). The Eastman Chemical plant is not an electricity generating facility, however, but rather it uses IGCC to create syngas to use as a feedstock to produce chemicals. No existing IGCC power plant utilizes the carbon bed filter technology to remove mercury from syngas, and thus there is no historical data on how this technology would perform as part of an IGCC power plant.

In Wisconsin Electric's permit application, its analysis for mercury included discussion of the carbon bed filter technology employed at the Eastman Chemical plant, stating that "we expect that the use of carbon should provide approximately 99% overall mercury control." (Ex. 39, Att. 4, p. 6). It is apparent that Wisconsin Electric viewed carbon bed filter technology to be capable of being applied in its proposed IGCC unit. (Ex. 13, p. 22). The DNR apparently agreed and included use of carbon bed filter or similar technology in establishing the mercury emissions limit.

In September 2002, a study prepared for the Department of Energy titled "The Cost of Mercury Removal in an IGCC Plant" indicated that mercury removal of better than 99% may be achievable by using *dual* carbon bed filters in a series, in contrast to a single carbon bed filter as employed at the Eastman Chemical plant. (Ex. 13). The report noted, however, that mercury removal from syngas at a rate higher than 95% has "not yet been

verified." (Ex. 13, p. 5). The use of *dual* carbon bed filter technology has not been employed in any IGCC plant.

Section NN of the Permit requires Wisconsin Electric to "submit information for reevaluating BACT ... at least 18 months prior to the commencement of construction of any permitted processes that may have not begun construction within eighteen months from the date of the issuance of the final permit." (Ex. 43, p. 140). The DNR's formal response to a public comment that the proposed ERGS IGCC mercury emissions limit was insufficiently stringent makes it apparent that the DNR expected to revisit the mercury emissions limitation for the ERGS IGCC unit before construction of the unit began:

> The BACT/LAER analysis for the IGCC unit is based on the current state of technology, the best engineering judgment of the performance of similar units and current expected economics, energy and other impacts. If construction of the IGCC unit does not begin within 18 months of the permit issuance, then Wisconsin Electric is required to undergo a reevaluation of the BACT/LAER in the future, but no later than 18 months prior to beginning construction. The current BACT/LAER analysis cannot predict what may be considered as BACT/LAER several years in the future.

(Ex. 40, Tab 4.D.).

Wisconsin Electric expected to be able to achieve "approximately 99% overall mercury control" with a single carbon bed filter. (Ex. 39, Attachment 4, page no. 6)(Tr. 818). However, since a mercury removal rate of greater than 95% has never been verified, the prospect of achieving a greater reduction is not a certainty. (Ex. 39, Attachment 4, page numbered "6")(Tr. 818). With respect to the use of a single carbon filter, achieving 99% mercury removal remains a rate that is considered possible, but possible in theory only. (Tr. 818-19). And with respect to potential use of *dual* carbon filters, achieving 99% or better mercury removal is the unexplained and unconfirmed conclusion of the authors of the September 2002 DOE study. (Ex. 13).

When the Permit was issued it was a virtual certainty that Wisconsin Electric would not under any likely scenario begin construction of the permitted IGCC unit within eighteen months of the January 14, 2004 issuance of the Permit. Wisconsin Electric thus will likely be required to resubmit to the DNR updated information on control technology for mercury before commencing construction on the permitted IGCC unit. If the time ever comes for Wisconsin Electric to commence construction of the permitted IGCC unit, Wisconsin Electric's reevaluation of control technology for mercury should explicitly address the efficacy of a dual carbon bed filter technology posited by the September 2002 study commissioned by the DOE. Given the expectation for achieving 99% reduction utilizing a single carbon bed filter, the DNR acted reasonably in establishing the IGCC mercury emissions limitation at an anticipated 95% removal rate to allow for a margin to assure that the permittee would achieve compliance consistently. See *In re Masonite Corp.*, 5 E.A.D. 551, 560-61 (EAB 1994)(where an expected optimal removal efficiency had never been proven, a permitting authority has "a certain degree of discretion to set the

emissions limitation at a level that does not necessarily reflect the highest possible control efficiency, but will allow the permittee to achieve compliance consistently").

III. Alternatives Analysis

By virtue of the ERGS being located in a nonattainment area for ozone, the DNR was required to conduct an "analysis of alternatives" before issuing the permit. Section 285.63(2)(d), Stats., prescribes this "alternatives analysis" as follows:

> (2) REQUIREMENTS FOR PERMITS FOR NEW OR MODIFIED MAJOR SOURCES IN NONATTAINMENT AREAS. The department may approve the application for a construction permit ... for a major source that is a new source or a modified source and is located in a nonattainment area if the department finds that all of the following conditions are met:
>
> * * * *
>
> (d) *Analysis of alternatives.* Based on an analysis of alternative sites, sizes, production processes and environmental control techniques for any major source that is located in an area designated under 42 USC 7407(d), that the benefits of the construction or modification of the major source significantly outweigh the environmental and social costs imposed as a result of the major source's location, construction or modification.

In implementing this statutory requirement, the DNR has by rule required an applicant for a permit to "demonstrate to the satisfaction" of the DNR that the proposed source satisfies the required alternatives analysis:

> By means of an analysis of alternative sites, sizes, production processes and environmental control techniques for proposed new or modified stationary source, the owner or operator of the proposed stationary source or modification can demonstrate to the satisfaction of the department that the benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

Wisconsin Admin. Code § NR 408.08(2).

These provisions of state law establish the same requirement contained in the federal Clean Air Act, 42 U.S.C. 7503(a)(5), enacted in 1977, which imposed this and other requirements on proposed sources located in nonattainment areas. 42 U.S.C. §§ 7501-08.

The statutes and rules contain no express standards respecting the particular content of the "alternatives analysis," and neither the DNR nor the EPA has promulgated a rule or regulation specifying a methodology for the required analysis. *In re Campo Landfill Project*, NSR Appeal No. 95-1, 6 E.A.D. 505, 1996 WL 344522 (EAB 1996); *City of Seabrook v. EPA*, 659 F.2d 1349, 1361-63 (5th Cir. 1981). The Environmental Appeals Board has characterized the "alternatives analysis" as "inherently subjective." *Campo*

Landfill Project, 6 E.A.D. at 521. As recently as last year, EPA Region V (which encompasses Wisconsin) officially expressed its view that a "case-by-case" approach to the alternatives analysis comports with federal law. (Ex. 88).

In the DNR's preliminary determination on Wisconsin Electric's application, the DNR found that the ERGS project withstood this alternatives analysis. (Ex. 39: Vol. 1, p. 67; Vol. 2, Tab 13). The Department's analysis referred to the Final Environmental Impact Statement ("FEIS") dated July 2003 that was prepared jointly by the PSC and the DNR, particularly Chapters 3 and 4, which are respectively titled "Need for Baseload Capacity in Southeastern Wisconsin" and "Alternatives to Proposed Project." The DNR relied as well on the PSC's determination that increased capacity was needed to address energy needs in the state, and on the DNR's own determinations that the proposed project would meet BACT/LAER emission limits and all applicable air quality requirements. (Ex. 40, Tab 4-D, response to comments 7 & 8). Upon issuing the Permit, the DNR made the ultimate finding that the application met the criteria of Wis. Stat. § 285.63, which includes the "alternatives analysis" requirement. (Ex. 39, p. 3, "Finding of Fact" 6).

The Petitioners claim the alternatives analysis was inadequate. The gist of their contention is that the DNR should have quantified the "environmental and social costs" resulting from the emissions from the proposed project as well as from "alternative sites, sizes, production processes, and environmental control techniques," such as for example natural gas fired units or IGCC units. After having quantified the "environmental and social costs" of the various alternatives, the Petitioners contend that the DNR then should have weighed these alternative costs in determining whether the benefits of the proposed project "significantly outweighed" its environmental and social costs. The Petitioners assert that the required alternatives analysis is not complete until these alternative costs are quantified, compared, and then weighed against the benefits of the project. In their argument, the Petitioners have particularly focused on human health impacts as "environmental and social costs" that it asserts could have been empirically determined, including predicting the economic health care costs caused by emissions from a specific source.

The DNR certainly could have attempted to conduct such an alternatives analysis, if in its discretion it had deemed it possible, practicable, or necessary in assessing the environmental and social costs of the project. Nothing in the law or administrative rule, however, requires utilization of this form of analysis, either in general or with respect to this particular permit.

There was abundant information before the DNR from which it could reasonably (1) compare the proposed project with alternative sites, sizes, production processes and environmental control techniques, and then (2) weigh the environmental and social costs of the proposed project and alternatives against the benefits of the proposed project. This information included the material submitted and collected in the permitting process and in the preparation of the joint FEIS with the PSC. An air permitting authority may utilize an

environmental impact statement prepared by another agency in making an alternatives analysis under the federal Clean Air Act. See *In re Campo Landfill* (EPA regional office did not err in relying on an environmental impact statement prepared by another federal agency as part of its "alternatives analysis"). Wisconsin statutes contemplate the DNR and the PSC engaging in a coordinated process in the review and processing of applications for construction of an electric generating facility. See Wis. Stat. § 196.491(3).

A. *Benefits of the proposed project.*

In making its alternatives analysis, the DNR expressly relied on Chapter 3 of the FEIS, which explored the need for the proposed 1,830 megawatts of electricity generating capacity in southeastern Wisconsin in the coming years. The FEIS observed that the absence of sufficient baseline capacity in southeastern Wisconsin would lead to an "unreliable" electric system that "would impose a tremendous economic cost on the economy" that would be difficult to estimate but that "would likely be substantial in dollar and qualitative terms." (Ex. 41, Vol. 1, p. 75).

B. *Alternative Sites.*

The FEIS recounts that Wisconsin Electric preliminarily considered 140 potential sites. Many of these were eliminated "through a process that evaluated the sites on various social, environmental, and technical/economic parameters that were embodied in 55 screening criteria and weighted according to their importance." (Ex. 41, Vol. 1, p. 95). This winnowing process explicitly evaluated "environmental and social" factors (i.e., "costs"), as is required in an "alternatives analysis" under NR 408.08(2). From these 140 original site possibilities, five site alternatives were identified, each in a different county -- Milwaukee, Kenosha, Sheboygan, Ozaukee, and Oconto. An important factor in the selection of these five sites was the ability to locate all three proposed units at a single site, and the potential re-use of existing infrastructure, as at the "brownfield" sites in Milwaukee and Kenosha counties. (Ex. 41, Vol. 1, p. 95). The fact that a new facility is proposed on a brownfield site and will be able to utilize existing facilities is a valid basis upon which to reject other sites for purposes of the alternatives analysis. See *In re Operating Permit Formaldehyde Plant Borden Chemical, Inc.*, Permit No. 2631-VO, Petition No. 6-01-1 (Dec. 22, 2000).

C. *Alternative Sizes*

The FEIS concluded that Wisconsin Electric's forecast of demand in ten years was "not unreasonable" but "may be on the high side." (Ex. 41, p. 45). In its assessment of alternatives, the FEIS considered the option of not building the proposed project. The FEIS also considered the alternative of increasing "energy efficiency" (which connotes conservation, load management, fuel switching) as a means of reducing the need for additional generating capacity. (Ex. 41, Vol. 1, pp. 48-53). The FEIS provided sufficient information on the required size of the electric generating facility to enable the PSC to determine whether the proposed project was appropriately sized to meet future needs.

Before it issued the Permit, the DNR certainly knew that the PSC had determined not to issue a CPCN for the IGCC unit, applying its expertise in assessing the need and the state of IGCC technology for generating power. It was appropriate for the DNR to rely on the expertise of the PSC to determine the size of the project that would best serve the public convenience and necessity, and for the DNR to focus on the air quality impacts of the proposed project.

D. *Alternative Production Processes and Environmental Control Techniques*

The FEIS includes an assessment of fuel alternatives including noncombustible renewable resources (wind, solar, hydro), and combustible renewable resources (fuel cells fueled by hydrogen, and biomass fuel). (Ex. 41, Vol. 1, pp. 53-61). This analysis included a discussion of the availability and efficacy of these renewable resources and processes as well as recognition that they generally constituted a cleaner means of generating electricity than coal or gas combustion, particularly the noncombustible renewable resources.

Chapter 4 of the FEIS also included an analysis on the relative merits of natural gas combined cycle or simple cycle plants, or purchasing the electricity from an independent power producer, including specifically consideration of a natural gas fired project in Fond du Lac County. (Ex. 41, Vol. 1, pp. 65, 417-30). The FEIS included assessments of the relative environmental impacts of this Fond du Lac County project. *Id.*

Despite the present statutory prohibition on construction of new nuclear power plants, the FEIS nevertheless considered nuclear power among the potential alternatives because the construction bar could be lifted by the year 2010. (Ex. 41, Vol. 1, pp. 76-77).

The FEIS analyzed the environmental impacts of natural gas extraction and compared it with the impacts from coal mining and coal transport. The FEIS explored in detail the uncertainties that would accompany increased reliance on natural gas power plants. (Ex. 41, pp. 79-93). The FEIS also assessed the proposed ERGS IGCC and SCPC units, noting differences in capacity and efficiency factors, as well as obstacles to reliability of IGCC compared to SCPC. (*Id.* at 103-20).

The FEIS elsewhere includes extensive information on the differing levels of emissions from SCPC units and IGCC units (Ex. 41, Vol. 1, Chap 7), as well as a comparison of air emissions from the two proposed SCPC units compared emissions from similar sized natural gas-fired units. (Ex. 41, Vol. 1, pp. 429-430). Between the three processes, SCPC has the greatest volume of emissions per unit of power generated, while as between IGCC and natural gas, natural gas is less polluting for some pollutants but higher for others. The DNR recognized that fewer emissions means lower environmental and social costs, though it observed nonetheless that the inhalation risk posed by the proposed project would not "be likely to cause to a significant inhalation risk." (Ex. 41, Vol. 3, p. 20).

The DNR certainly knew that natural gas and IGCC plants emit fewer pollutants than SCPC plants. As addressed above in part I of this Discussion, the DNR reasonably

determined not to include those production processes as control technologies in establishing the BACT/LAER for the SCPC units. The BACT analysis is by definition a case-by-case analysis that takes into consideration "energy, environmental and economic impacts and other costs," Wis. Admin. Code § NR 408.02(4), and to this extent bears relevance to the environmental and social costs that are to be considered in an alternatives analysis. The DNR expressly took into account the effect of BACT/LAER analysis on the ERGS emissions in its assessment of the "environmental and social costs" in the alternatives analysis. (Tr. 387). This was an appropriate consideration, and it was similarly appropriate for the DNR to consider that the proposed project would comply with the "offset" requirements for VOC's, which would lead to a net reduction of current levels of VOC emissions. See, e.g., *Borden Chemical,* at 39-40.

E. *Environmental and Social Costs of the Proposed Project*

Chapter 7 of the FEIS was authored principally by the DNR and extensively addressed the air quality impacts of the proposed project. (Ex. 41, Vol. 1). The FEIS recognized that "coal-burning power plants can create harmful impacts to the environment and to human health" and that "[r]egardless of whether the facility meets existing standards, there is often a question whether sensitive individuals are adequately protected." *Id.* at 134-35. Elsewhere in the FEIS, the DNR recognized that emissions from coal-fired power plants, even those that do not result in any violation of state or federal standards, carry environmental and social costs, implicitly recognizing that these emissions have no intrinsic benefit. (Ex. 41, Vol. 3, pp. 20-21). The FEIS did not attempt to quantify those health impacts in human or dollar terms for either the project as proposed or for any alternative forms of the project. The FEIS noted, that "[p]ast DNR analyses ... have found that, from an inhalation perspective, the risks resulting from well controlled facilities with tall stacks are low," so that a "facility that meets applicable Wisconsin DNR requirements would not be likely to cause a significant inhalation risk." Id. at 20.

F. *Weighing Costs and Benefits*

The EPA has recently adopted an air dispersion model known as CALPUFF as the "preferred technique for assessing long range transport of pollutants and their impacts on Federal Class I areas." 68 Fed. Reg. 18,440 (April 15, 2003). Some experts in the field believe the CALPUFF model and similar models may be employed to provide a reasonably reliable calculation of the human health costs and impacts of air emissions from a specific source. (Ex. 44, Tab 2, p. 4019-20). Indeed, in the process of developing the FEIS, the Petitioners had submitted a study prepared by a Harvard University professor and associates that relied at least in part on the CALPUFF model. This study undertook to quantify the human health impacts that would result from the $PM_{2.5}$ emissions from the ERGS as proposed and under alternative configurations, including a scenario of powering the ERGS wholly by natural gas. (Ex. 44, Tab 1, pp. 4013-14).

Despite the apparent emergence of analytical techniques that attempt to quantify the adverse health impacts from a particular source with some reasonable degree of

reliability, the Petitioners have not identified any air permit authorities in any jurisdiction that have required such quantification as a component of an alternatives analysis. Presumably, there are none. No precedent from any state or federal authority suggests that such a study should be conducted as a part of an alternatives analysis under the federal Clean Air Act or its state analogs. Absent any such precedent, the burden of demonstrating that the DNR acted unreasonably in not conducting this type of study is quite high. The Petitioners have not met this burden.

Owing in large part to its "inherently subjective" nature (*Campo Landfill* at 521), there is ample room within an alternatives analysis for reasonable persons to disagree on whether the benefits of a proposed project significantly outweigh its environmental and social costs. This is certainly true with respect to the ERGS project. Though reasonable persons may disagree, it falls to the DNR to see that an alternatives analysis is done and to make a determination upon it. The Petitioners have not demonstrated that the matters that the DNR either considered or did not consider in this endeavor were unreasonable or that the alternatives analysis failed to meet minimum legal requirements.

IV. Compliance of Other Wisconsin Electric Facilities

Because the ERGS is located in a nonattainment area for ozone, the DNR was required to determine that all of Wisconsin Electric's other major sources in Wisconsin "are in compliance, or on a schedule to come in compliance with all applicable emissions limitations and standards under the federal clean air act." Wis. Stat. § 285.63(2)(c); see also Wis. Admin. Code § NR 408.08(1); 42 U.S.C. § 7503(a)(3).

In its permit application, Wisconsin Electric stated that all its major sources in Wisconsin were in compliance with applicable emissions limitations. (Ex. 40, Attachment 4-D, response to comment 9). The DNR permit engineer responsible for processing the application consulted the DNR's air compliance engineers involved in inspecting and monitoring Wisconsin Electric's major sources. These compliance engineers had monitoring and compliance records available to them, and they confirmed that all of Wisconsin Electric's major sources in the state were in compliance with all applicable emission limits. (*Id.*; Tr. 413-14, 419, 434-35).

Wisconsin Electric's permit application was completed on October 1, 2003. Some five months earlier, on April 29, 2003, the United States had filed a complaint against Wisconsin Electric in federal district court alleging that since 1982 Wisconsin Electric had modified and thereafter operated coal-fired electricity generating units in Wisconsin and Michigan without first obtaining required permits. (Ex. 46). The same day that the complaint was filed, a proposed "Amended Consent Decree" was also filed with the federal district court, that if approved by the district court would resolve the dispute. The proposed Amended Consent Decree recited that Wisconsin Electric denied having violated the air pollution control laws as alleged in the complaint. (Ex. 48). The federal district court has not yet approved or disapproved the proposed consent decree. (Ex. 47).

The DNR was aware of the federal lawsuit and proposed amended consent decree at the time that it determined Wisconsin Electric to be in compliance with all applicable emissions limitations. The DNR was not obliged by virtue of the federal complaint to make an independent determination on the validity of the allegations in the federal complaint. It was entitled to reasonably rely on periodic compliance reports and records respecting Wisconsin Electric's other major sources in the state in determining that Wisconsin Electric was in compliance with all applicable emissions limits. No evidence beyond the bare allegations of the federal complaint were offered in the contested case hearing that would show that Wisconsin Electric was not in compliance with all applicable emissions limitations when the DNR issued the Permit. The DNR did not err in allowing the matter alleged in the federal lawsuit to take its course and in reasonably relying on the information in its possession regarding Wisconsin Electric's compliance with emission standards. The DNR reasonably concluded that other major sources owned or operated by Wisconsin Electric in the state were in compliance with all applicable emission limits.

V. Other Issues Raised in Petitioners' Issues List

The Division's Order dated August 3, 2004 limited the scope of the Petitioners' enumerated issues 1, 2, 3, 4, 14 and 15. In their post hearing briefs, the Petitioners have not presented evidence or made any assertions within the remaining scope of issues 1, 2, 3, 4, 14 and 15, so there is nothing further to determine respecting those issues beyond the matters determined by the Order of August 3, 2004.

In their enumerated issue 5, the Petitioners claimed that the "air dispersion modeling upon which the Air Permit is based is flawed" for several stated reasons. The Petitioners have presented no evidence and made no argument respecting issue 5 and have thus not met their burdens of proof and persuasion on this issue. Wis. Stat. § 285.81(1)(b); Wis. Admin. Code § NR 2.13(3)(b). The Petitioners have likewise not met their burdens or proof or persuasion regarding issue 13, which challenges application of hazardous air pollutant regulations.

CONCLUSIONS OF LAW

1. The Division of Hearings and Appeals has authority to hear contested cases relating to air pollution permits. Wis. Stat. §§ 227.43 and 285.81(a). "Following the hearing the [DNR's] action may be affirmed, modified or withdrawn." Wis. Stat. § 285.81(1)(b).

2. The BACT and LAER analyses and the air quality review for the ERGS project complied with all applicable requirements of Wis. Admin. Code §§ NR 405.08 and NR 408.04.

3. An applicant for an air pollution control construction permit is not required to redefine the design of the proposed source in selecting control technologies or production processes for inclusion in the BACT or LAER analysis. Wis. Stat. § 283.63.

4. Selection of IGCC process technology in a BACT/LAER analysis for a SCPC unit would result in redefining the design of the proposed source. The DNR was not required to include IGCC process technology in the top down BACT/LAER analysis for either or both SCPC units for the proposed ERGS. The DNR acted within its discretion in not requiring Wisconsin Electric to include the IGCC process technology in the BACT/LAER analysis for the ERGS SCPC units. Wis. Stat. § 283.63.

5. The DNR reasonably established the ERGS IGCC mercury emissions limitation based upon a verified rate of 95% mercury removal that had been demonstrated by control technology in use in another IGCC plant. Wis. Stat. § 283.63.

6. The DNR considered alternative sites, sizes, production processes and environmental control techniques to the ERGS project. Wis. Stat. §285.63(2)(d); Wis. Admin. Code § NR 405.08(2).

7. The DNR considered environmental and social costs of the ERGS and alternatives to the ERGS. Wis. Stat. §285.63(2)(d); Wis. Admin. Code § NR 405.08(2).

8. The DNR weighed environmental and social costs of the ERGS against its benefits. Wis. Stat. §285.63(2)(d); Wis. Admin. Code § NR 405.08(2).

9. The DNR reasonably determined that the benefits of the ERGS project would significantly outweigh the environmental and social costs that it would impose. Wis. Stat. §285.63(2)(d); Wis. Admin. Code § NR 405.08(2).

10. The DNR reasonably determined that all of Wisconsin Electric's facilities in Wisconsin were in compliance or on a schedule for compliance as of the date of permit issuance. Wis. Stat. § 285.63(2)(b); Wis. Admin. Code § NR 408.08(l).

ORDER

WHEREFORE, IT IS ORDERED that the Department's issuance of Air Pollution Control Construction Permit No. 03-RV-166 on January 14, 2004 is affirmed.

Dated at Milwaukee, Wisconsin on February 3, 2005.

STATE OF WISCONSIN
DIVISION OF HEARINGS AND APPEALS
819 North 6th Street, Room 92
Milwaukee, Wisconsin 53203-1685

By: _____
William S. Coleman, Jr.
Administrative Law Judge

NOTICE

Set out below is a list of alternative methods available to persons who may desire to obtain review of the attached decision of the Administrative Law Judge. This notice is provided to insure compliance with Wis. Stat. § 227.48 and sets out the rights of any party to this proceeding to petition for rehearing and administrative or judicial review of an adverse decision.

1. Any party to this proceeding adversely affected by the decision attached hereto has the right within twenty (20) days after entry of the decision, to petition the secretary of the Department of Natural Resources for review of the decision as provided by Wisconsin Administrative Code § NR 2.20. A petition for review under this section is not a prerequisite for judicial review under Wis. Stat. §§ 227.52 and 227.53.

2. Any person aggrieved by the attached order may within twenty (20) days after service of such order or decision file with the Department of Natural Resources a written petition for rehearing pursuant to Wis. Stat. § 227.49. Rehearing may only be granted for those reasons set out in Wis. Stat. § 227.49(3). A petition under this section is not a prerequisite for judicial review under Wis. Stat. §§ 227.52 and 227.53.

3. Any person aggrieved by the attached decision which adversely affects the substantial interests of such person by action or inaction, affirmative or negative in form is entitled to judicial review by filing a petition therefor in accordance with the provisions of Wis. Stat. §§ 227.52 and 227.53. Said petition must be filed within thirty (30) days after service of the agency decision sought to be reviewed. If a rehearing is requested as noted in paragraph (2) above, any party seeking judicial review shall serve and file a petition for review within thirty (30) days after service of the order disposing of the rehearing application or within thirty (30) days after final disposition by operation of law. Since the decision of the Administrative Law Judge in the attached order is by law a decision of the Department of Natural Resources, any petition for judicial review shall name the Department of Natural Resources as the respondent. Persons desiring to file for judicial review are advised to closely examine all provisions of Wis. Stat. §§ 227.52 and 227.53, to insure strict compliance with all its requirements.

Before The
State Of Wisconsin
DIVISION OF HEARINGS AND APPEALS

In the Matter of the Waterway and Wetland Alterations Relating to the Wisconsin Electric Power Company Oak Creek Power Plant Expansion, Called the Elm Road Generating Station	Case Nos. 3-SE-01-41-0005-0019 & 1456MW

FINDINGS OF FACT, CONCLUSIONS OF LAW AND PERMIT

Wisconsin Electric Power Company, 231 West Michigan Street, Milwaukee, Wisconsin, 53201, applied to the Department of Natural Resources for permits to alter waterways and wetlands at and near its existing Oak Creek Power Plant, located in the City of Oak Creek with related facilities in the Town of Caledonia. The proposed activities are listed below:

On the bed of Lake Michigan under Wis. Stat. § 30.21
Place fill on the bed for the purposes of dock extension for harbor facilities and public utility structures and appurtenances, place and operate intake and discharge structures, stabilize the shoreline and dredge materials from the bed.

Navigable Waterways under Wis. Stat. §§ 30.12, 30.123 and 30.20
Place bridges and culverts over or in navigable waterways, and dredge materials from the bed, for the purposes of railroad expansion and road construction. If any construction occurs within Racine County, the Company has also submitted permit applications under 30.19 to grade more than 10,000 square feet on the banks of a navigable waterway and to construct ponds within 500 feet of a navigable waterway.

Wetland Impacts under 401 Water Quality Certification, Wis. Stat. § 281.36 and Wis. Admin. Code NR 103 and 299
Place fill and or disturb wetlands as a result of power plant expansion, road construction and railroad improvements.

The proposed Elm Road Generating Station (ERGS) will add new coal-fired generating units at the existing Oak Creek Power Plant site, as a component of the Company's *Power the Future* program. The Company applied for a Certificate of Public Convenience and Necessity (CPCN) from the Public Service Commission of Wisconsin (PSCW or PSC) under Wis. Stat. § 196.491.

On November 10, 2003 the PSCW issued a CPCN for the ERGS project in which it approved construction of two new 615 megawatt coal-fired generating units and construction of common facilities sufficient to accommodate up to 3000 megawatts of generation at the site. The site approved by the PSCW is referred to as the "North Site-CUP", and is the site for which the Company is seeking the permits to alter waterways and wetlands.

The electrical generating facilities will be located in the City of Oak Creek, Milwaukee County in the SW ¼ and NW ¼ of Section 31, T5N, R23E and the NE ¼ and SE ¼ of Section 36, T5N, R22E. Related facilities will be located in the City of Oak Creek, Milwaukee County in portions of Section 31, T5N, R23E and lakebed adjacent to Section 31. Related facilities will also be located in Section 36, T5N, R22E and in the Town of Caledonia, Racine County in portions of Section 6, T4N, R23E and Section 1, T4N, R22E. Road construction and railroad improvements will also be located in the Town of Caledonia, Racine County in portions of Section 1, T4N, R22E and Sections 6, 7 and 18 of T4N, R23E.

An Environmental Impact Statement (EIS) on the proposed project has been jointly prepared by the Public Service Commission of Wisconsin and the Wisconsin Department of Natural Resources.

The Department of Natural Resources issued a Notice of Proposed Power Plant Expansion which stated that unless written objection was made within 30 days of publication of the Notice, the Department may issue a decision without a hearing. Timely objections were received. On March 25, 2004, the Department filed a Request for Hearing with the Division of Hearings and Appeals (the Division).

Pursuant to due notice hearing was held on August 23-25, 2004, at Oak Creek, Wisconsin, Jeffrey D. Boldt, administrative law judge (the ALJ) presiding. The parties submitted written briefs. The last brief was received on October 6, 2004.

In accordance with Wis. Stat. § 227.47 and 227.53(1)(c) the PARTIES to this proceeding are certified as follows:

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FINDINGS OF FACT

1. Wisconsin Electric completed filing an application with the Department for permits under Wis. Stat. §§ 30.12, 30.21, 30.123, 30.20 30.19, and for Section 401 Water Quality Certification at a project site near its existing Oak Creek Power Plant. The project is located in the City of Oak Creek and Town of Caledonia in Milwaukee and Racine County. The Department and the applicant have fulfilled all procedural requirements of Wis. Stat. § 30.02 and 30.12. Wisconsin Electric has filed an application for the following permits: (1) to place fill on the bed of Lake Michigan for the purpose of dock extension, for the placement of an intake and discharge structure and to stabilize the shoreline, (2) to remove materials from the bed of Lake Michigan, (3) to place bridges and culverts over or in navigable tributaries to Lake Michigan and remove materials from the bed of those tributaries for the purposes of railroad expansion and road construction, (4) to grade more than 10,000 square feet and to construct ponds within 500 feet of a navigable waterway in Racine County and (5) to impact wetlands under 401 Water Quality Certification, Wis. Stat. § 281.36 and Wis. Admin. Code Chapters NR 103 and 299 as a result of a power plant expansion, road construction and railroad improvement project known as the Elm Road Generating Station (ERGS).

2. The applicant owns real property located in the City of Oak Creek, Milwaukee County and the Town of Caledonia, Racine County also described as being a part of Section 1, T4N, R22E, all of Section 6, T4N, R23E, part of Section 35, T5N, R22E, all of Section 36, T5N,

R22E, part of Section 31, T5N, R23E, part of Section 12, T4N, R22E, and part of Section 7, T4N, R23E. The above-described property abuts Lake Michigan and other tributaries which are navigable in fact at the project site.

3. The applicant proposes to place fill on the bed of Lake Michigan for the purposes of dock extension, for the placement of an intake and discharge structure and to stabilize the shoreline. Further, the applicant proposes to dredge materials from the bed of Lake Michigan and to place bridges and culverts over or in navigable tributaries to Lake Michigan and dredge materials from the bed of those tributaries for the purposes of railroad expansion and road construction. The applicant proposes to grade more than 10,000 square feet and to construct ponds within 500 feet of a navigable waterway in Racine County and to impact wetlands subject to 401 Water Quality Certification, Wis. Stat. § 281.36 and Wis. Admin. Code chs. NR 103 and 299 as a result of power plant expansion, road construction and railroad improvements.

4. The purpose of this project is to construct two coal-fired electric power generating units at the existing Oak Creek Power Plant. Each unit will have a minimal full load generating capability of 615 net megawatts. The project also includes support systems including providing cooling water, a full delivery system and transmission connections.

5. On November 10, 2003, the PSC issued a CPCN and Final Order authorizing construction of ERGS at a site known as the North Site-CUP alternative. (Ex. 1) As approved, in the CPCN, the ERGS project consists of constructing two 615-megawatt supercritical pulverized coal (SCPC) generating units and associated facilities.

6. The overall construction plan is described in the prefiled direct testimony of Wisconsin Electric witnesses Scott Patulski and Gregory Kasel. Exhibit 28 is a series of drawings detailing the proposed construction. Construction of the project will entail the following:

> Bluff Excavation. Approximately 6 million cubic yards of the existing bluff along Lake Michigan will be excavated to facilitate the placement of facilities near lake level so that the SCPC units may utilize a once through cooling system. The excavated material will be placed in several stock piles and berms located throughout the approximately 1,000 acres owned by Wisconsin Electric.
>
> Water Intake Structure. A water intake system will be constructed to provide cooling water for the existing Oak Creek Power Plant and the two new SCPC units. Construction of the water intake system will require boring a 24-27 foot diameter tunnel approximately 130 feet below the bed of the lake. The tunnel will extend 7,900 feet from the shore out into Lake Michigan where the depth of the water is approximately 43 feet. Four 10-12 foot diameter downshafts will be drilled down about 130 feet from the lake bottom to the top of the tunnel. These downshafts will convey water from four manifold pipes that will be 9 foot in diameter and 112 feet long. Each manifold pipe will contain six wedge wire T-screens (24 total T-screens) for the intake of water. These T-screens will be 8 feet in diameter and approximately 32 feet long with a slot size of 9.5 millimeters and a

lakebed clearance of 5 feet. To protect the T-screens, riprap will be placed around the intake area. The total amount of lakebed occupied by the T-screens and the riprap is approximately 100 feet by 580 feet or 1.33 acres. The installation of these pipes, scour protection and downshafts will require approximately 11,500 cubic yards of materials to be dredged from the bed of Lake Michigan.

Discharge Structure. A new discharge structure will also be constructed. The new discharge structure will include a seal well and two jetties constructed of either sheet pile or consisting of a large rubble mound which extend 500 feet into Lake Michigan. The jetties will create an 80-foot wide channel that will be lined with rock and will require about 25,000 cubic yards of material to be dredged from the bed of Lake Michigan. The discharge structure will occupy about 3.1 acres of lakebed. Due to the public's interest in fishing near the discharge structure, the north jetty will be constructed to provide a public fishing pier. A separate public access and parking area associated with the fishing pier is proposed for security and safety purposes.

Dock Extension. The existing dock, built in the early 1950s as part of the existing Oak Creek Power Plant, is approximately 18 acres. As part of the project, the dock will be extended by approximately 11.7 acres; approximately 7.7 acres will be on the bed of Lake Michigan (below the ordinary high water mark) and approximately 4.0 acres will be on the upland (above the ordinary high water mark). Shoreline protection for the dock and dock extension and for the shoreline between the dock and the south jetty of the discharge structure will be provided by creation of a rubble mound containment dike that will occupy approximately 2.6 acres of lakebed. Facilities located on the existing dock and dock extension will be materials handling and processing facilities for limestone and gypsum which will be delivered to or transported from the site by barge. Coal is currently stored on the dock; it is proposed that coal storage on the dock be phased out over time.

Barge, Rail and Vehicular Access. To construct a back-up water intake system and accommodate transportation by barge of construction equipment, limestone and gypsum, about 123,500 cubic yards in the area adjacent to the existing intake channel will be dredged. Coal will be delivered by rail. Therefore, railroad improvements are needed to avoid the blockage of several local roads. An underpass will be constructed at Six Mile Road. Seven Mile Road will be closed with two cul-de-sacs. These road improvements will allow for the construction of additional railroad tracks to the existing railroad corridor and an improvement to the car unloading and maintenance systems. The railroad improvements will result in the modification of seven existing culvert crossings over four navigable waterways. There will also be new construction access roads, employee entrance roads and a public bike trail constructed as part of the project. These new or modified roads and the trail will result in six crossings over three navigable waterways.

Wetland, Stream and Environmental Corridor Impacts. The new road and railroad crossings will result in new or modified bridge/culvert crossings over navigable

waterways which are tributary to Lake Michigan and a non-navigable waterway will be impacted by the excavation of the bluff. The project will directly impact 23.47 acres of wetland (of over 100 acres delineated within the project boundary) either through the placement of fill associated with the railroad modifications and access road construction, or excavation of the bluff. Approximately 57 acres of primary environmental corridor and isolated natural resource area (of approximately 322 acres delineated within the project boundary) will be impacted by the construction activities.

7. Wisconsin Electric is the riparian owner of the property on which ERGs is proposed to be constructed. (Schubilske; Hopkins)

8. The construction, maintenance and operation of the proposed structures in Lake Michigan, including the dock extension, shoreline stabilization, cooling water intake and discharge structures, will not materially obstruct navigation. (Patulski; Kasel; Hopkins; Eggold)

9. The construction, maintenance and operation of the proposed structures in Lake Michigan, including the dock extension, shoreline stabilization, cooling water intake and discharge structures, will not result in the use of private property not owned by Wisconsin Electric. (Patulski; Schubilske; Kasel)

10. The dredging associated with construction of the proposed structures in Lake Michigan, including the dock extension, shoreline stabilization, cooling water intake and discharge structures, will not adversely affect water quality in Lake Michigan, will not increase water pollution and will not cause environmental pollution as defined in Wis. Stat. § 283.01(6m). (Klump; Helker)

11. The impacts of the construction dredging will be short-lived and minor. (Klump; Helker)

12. The Division has modified the proposed permit to limit authorized maintenance dredging to a period not to exceed five years. After this period, all future maintenance dredging shall be subject to the permitting requirements of Wis. Stat. § 30.20. This amended condition is consistent with DNR practice for maintenance dredging as described in the Waterway and Wetland Handbook, Chapter 120, p. 12.

13. The facilities proposed to be located on the dock extension are authorized by Wis. Stat. § 30.21. (Patulski; Hopkins) The dock structure is necessary to efficiently and safely handle the quantities of limestone necessary to operate air pollution control equipment for the ERGS units, and the gypsum that is produced as a by-product of wet flue gas desulfurization. (Patulski; TR pp. 26-30)

Section 30.21 Issues

14. On September 2, 2003, the City of Oak Creek adopted a resolution under Wis. Stat. § 30.21 which granted a permit to Wisconsin Electric to construct, maintain and operate the ERGS project. (Haskin; Ex. 404)

15. The relationship between Wisconsin Electric and ERGS LLC is complicated. Wisconsin Electric created an elaborate set of lease agreements. The facility lease (Ex. 203) is one of three leases: there is also a ground lease, whereby Wisconsin Electric will lease the land to ERGS LLC, and a sublease, whereby ERGS LLC will sublease the land back to Wisconsin Electric during the term of the facility lease (*i.e.*, Wisconsin Electric's period of maintenance and operation). (TR p. 988) The facility lease for ERGs LLC, as approved by PSC, is for 30 years. WEPCO has the option to renew that lease. (Ex. 203 at ¶ 14.2) Additionally, WEPCO has the option to purchase the facility, either at the end of the lease term or in the event ERGS LLC chooses to divest. (Id. at ¶ 14.4) Taken together, these leases constitute a lease generation contract within the meaning of Wis. Stat. § 196.52(9)(a)(3). (Ex. 1, p. 35)

16. The lease agreements comport with the requirements of Chapter 196 relating to Regulation of Public Utilities. (Id. p. 43) Chapter 196 imposes eleven separate conditions for such leased generation contracts under § 196.795(5)(k)(3). (*Id.* p. 43) The WPSC approved the proposal of Wisconsin Electric to authorize treatment of a leased generation contract, and maintained "jurisdiction to ensure that the construction of ERGS is completed as provided in the lease generation contracts." (*Id.*)

17. Wisconsin Electric is a public utility as defined in Wis. Stat. § 196.01 and as that term is used in Wis. Stat. § 30.21. (Schubilski; Ex. 1) The leased generation contracts comport with Chapter 196 and do not alter the status of the applicants as a "public utility" within the meaning of Wis. Stat. § 30.21. (*Id.*, Schubilski, TR pp. 198-199, Ex. 21)

18. The objectors established and the DNR concedes that the plain language of Wis. Stat. § 30.21 requires that no construction related to this permit shall be undertaken prior to a determination relating to the grant or denial of a WPDES permit authorizing operation of the water intake structure. (Hopkins, TR pp. 621-622) Accordingly, Permit Condition 43 is modified as follows:

> You shall not construct, maintain or operate the new intake structure or the new discharge structure until the Department issues a new or reissued Wisconsin Pollutant Discharge Elimination System permit for the intake structure and discharge.

19. The facilities proposed to be located on the dock extension are authorized by Wis. Stat. § 30.21. (Patulski; Hopkins)

Other Chapter 30 Issues

20. The placement of culverts and bridges as proposed by Wisconsin Electric will not materially obstruct navigation in any navigable waterway. (Schumacher; Hopkins).

21. The placement of culverts and bridges as proposed by Wisconsin Electric will not reduce the effective flood flow capacity of any navigable waterway. (Schumacher; Hopkins; Bruch)

22. The dredging associated with the placement of culverts and bridges as proposed by Wisconsin Electric will not adversely affect water quality in any navigable waterway, will not increase water pollution and will not cause environmental pollution as defined in Wis. Stat. § 283.01(6m). (Schumacher; Hopkins)

23. The placement of bridges and culverts as proposed by Wisconsin Electric will not be detrimental to the public interest. (Schumacher; Hopkins)

24. The grading in Racine County associated with the placement of bridges and culverts and the construction of road and railroad improvements will not injure public rights or interests, including interests in fish and game habitat, and will not cause environmental pollution. (Hopkins)

NR 216 Issue

25. The design of the proposed stormwater ponds complies with the requirements of NR 216. Construction of these ponds and the Stormwater Pollution Prevention Plan and Erosion and Sediment Control and Stormwater Management Plan submitted by Wisconsin Electric will protect against injury to public rights or interests, including fish and game habitat, and will not cause environmental pollution. (Kasel; Hopkins; Wood).

Wetland Issues

26. Wisconsin Electric made its first submittal for a Chapter 30 permit for ERGS in June 2002. In early 2003, DNR and Wisconsin Electric discussed the appropriate scope of the practical alternatives analysis (PAA) required by NR 103. DNR also consulted with staff of the Public Service Commission in light of the fact that both DNR and PSC have regulatory responsibilities with respect to approval of ERGS. (Lee; Hopkins)

27. In the first half of 2003 Wisconsin Electric and DNR reached an understanding that Wisconsin Electric would prepare preliminary PAA materials looking at each of the four sites being considered by PSC independently of the other sites. (Hopkins; Lee) On June 30, 2003, Wisconsin Electric submitted preliminary PAA materials containing wetland delineation and site plans for each of the four sites so that the DNR could evaluate them for the PSC. (Id.)

28. The Public Notice published in August 2003 advised the public that the PSC had two sites under consideration – the "primary" and the "alternative" sites – and would approve

one or the other, but not both, if the PSC determined the ERGS facilities were needed. The Public Notice further explained that Wisconsin Electric would need to obtain DNR permits for the site approved by the PSC, and that if a contested case hearing was held it would be scheduled to take place after the PSC made its decision so that the subject of the hearing would be Wisconsin Electric's application for DNR permits for the site approved by the PSC. (Ex. 23)

29. DNR provided testimony during the PSC proceedings that specifically identified the number of wetland acres that were expected to be impacted on each site and expressed an opinion to the PSC as to which site was the preferable site from the standpoint of impacts to wetlands. DNR would have advised the PSC if DNR considered any of the sites to be unpermittable, but did not do so because DNR did not consider any of the four sites to be unpermittable. Based on its review of the preliminary PAA materials, DNR was prepared to accept whichever of the four sites the PSC approved and to proceed with evaluating a Chapter 30 permit application, including PAA materials, for that site. (Hopkins)

30. The Department of Natural Resources Water Management Specialist Heidi Hopkins testified that the DNR decided to limit the scope of its review of practicable alternatives to the site approved by the Commission, pursuant to Wis. Admin. Code § NR 103.08(1). Hopkins noted that Wisconsin Admin. Code NR 103 specifically provides that "the Department, upon request, meet with a project proponent and other interested persons to make a preliminary assessment of the scope for an analysis of alternatives. . . ." Wis. Admin. Code § NR 103.08(1)

Hopkins offered two essential reasons for the DNR's approach to the PAA in this matter. First, the Department did not believe it was appropriate to require a full PAA for each site being considered by the PSC in the context of its review of the CPCN. (Hopkins, TR p. 570) Second, the DNR agreed to essentially defer to the PSC with respect to which sites were "available and capable of being implemented" because the PSC has a more comprehensive set of factors to consider when reviewing the siting of a power plant facility. Hopkins testified as follows: "They look at more things and have more experts than the department could ever evaluate such as modification—railroad modifications and transportation issues and the need of having that type of facility, and also they look at various alternatives regarding what type of energy should be generated and how it should be generated which the department does not have experts for or the capability of reviewing that detail of analysis or doing that evaluation." (Hopkins, TR p. 571)

31. The Department's determination to limit the scope and content of the PAA was within its regulatory discretion and authority under Wis. Admin. Code NR 103.08(1). Given the complexity of the power plant siting process, the Department's decision to limit the PAA process was reasonable under the then-existing regulatory framework.[1] (Hopkins)

32. As part of the CPCN process, the PSC specifically considered the Development Agreement and the conditional Use Permit that had been negotiated between the City of Oak

[1] It should be noted that under the current regulatory scheme, the DNR would be required to limit the PAA as it has in this case. (*See*: Wis. Stat. § 30.025) While the new statute does not provide a legal authority for the Department's actions in this case, it does go to the reasonableness of the DNR's exercise of discretion under the then-existing regulatory process. (Hopkins, p. 575)

Creek and Wisconsin Electric. (Haskin, TR pp. 7-8) Consideration of local land use and development plans and environmental values are required elements of the PSC review. *See,* Wis. Stat. § 196.491(3)(d). No other site had any comparable local approval or comparable local controls. Given the extensive review of multiple factors considered by the PSC, and the fact this was the only site in which local approvals were in place, it was a reasonable exercise of discretion to limit the PAA review.

33. Following the November 10, 2003 CPCN decision in which PSC selected the North Site-CUP, rejected the three other sites and authorized Wisconsin Electric to construct two of the three proposed generating units, Wisconsin Electric provided revised PAA materials relating exclusively to the North Site-CUP. DNR reviewed those materials and in a letter dated January 27, 2004 requested additional information. The January 27, 2004 letter included a request that Wisconsin Electric review an "alternative alignment" to see if it could be implemented to eliminate some of the bluff grading and reduce wetland impacts, and other questions concerning wetland impacts at the North Site-CUP and potential ways to reduce or eliminate them. Wisconsin Electric's February 9, 2004 response addressed all of DNR's questions, including explanations of the environmental consequences, impacts on the scope of the construction project, impacts on the construction schedule, logistics and sequence, future operating and maintenance inefficiencies, and cost implications which made the "alternative alignment" impracticable. Wisconsin Electric's February 9, 2004 response satisfied DNR's request, and DNR determined that the PAA materials submitted by Wisconsin Electric complied with NR 103 and NR 299. (Lee; Hopkins; Exhibit 26)

34. Within the Project boundaries over 130 wetlands were identified and delineated by staff from the Southeastern Wisconsin Regional Planning Commission (SEWRPC), Graef, Anhalt, Schloemer and Associates (GAS) or the Department. The total acreage of wetlands delineated at this site is over 100 acres. A majority of the wetlands (over 93 percent) are two acres or less in size. However, eight of the wetlands are over 2 acres in size and account for 50 acres of wetland. The largest wetland on the site is 11.9 acres. There are various types of wetlands present including but not limited to fresh (wet) meadow, Southern wet to wet-mesic lowland hardwood forests and shallow marsh. Functional Values Assessments were completed for all of the wetlands located within the project boundaries by GAS and the Department. (Hopkins, TR p. 597)

35. Noel Cartwright testified on behalf of Wisconsin Electric that "the wetlands that will be impacted on the North Site-CUP are not unique, are relatively small and isolated in nature, many have already been disturbed and, therefore, the impacts will not result in a significant loss to the regional ecosystem." (TR p. 383) Further, that the two highest quality wetlands, Plant Community Areas 1 and 6 discussed by Dr. Reed, will not be impacted by the project because of the site layout re-design. (Cartwright, TR p. 383) Dr. Reed conceded this point on cross-examination. (Reed, TR pp. 858-875)

36. The site configuration for ERGS proposed by Wisconsin Electric on the North Site-CUP avoids detrimental impacts to wetland functional values to the maximum extent possible. (Kasel; Lee; Hopkins)

37. Approximately 23.47 acres of wetlands are impacted by the site configuration proposed by Wisconsin Electric on the North Site-CUP. Wisconsin Electric has taken all practicable measures to minimize direct adverse impacts to the functional values of those affected wetlands. (Kasel; Hopkins)

38. Given the loss of wetlands and the significance of this resource, the applicants should submit a plan to minimize secondary detrimental impacts to wetlands not filled in conjunction with this project. (Reed; Hopkins) The plan shall include but not be limited to reducing siltation and sedimentation, preventing invasive exotic species from entering into wetland areas, and maintaining the existing hydrology and habitat values to the extent practicable during construction and operation of the proposed facilities. (Reed, TR p. 876) Further, because of the loss of the critical wetland habitat, the applicants shall take all reasonable steps to preserve valuable habitat in areas directly contiguous to remaining wetlands (TR pp. 858-875) Special care should be taken to preserve state threatened species in remaining wetland areas and directly contiguous upland areas. (TR p. 882-883)

39. Dr. Reed suggested that filling the 23.47 acres would result in a detrimental cumulative impact to wetland functional values. (TR p. 859) The Division finds that while there would be some detrimental cumulative impact, it is not sufficient to warrant denial of the water quality certification. First, power generating plant applications are complex and uncommon. It is unlikely that issuance of the Water Quality Certification will result in any significant increase in "similar activities in the affected area." (*See*: NR 103.08(3)(d)) Second, the most important wetlands have largely been preserved and will be protected and enhanced by the plan to minimize secondary impacts.

WEPA Issues

40. An environmental impact statement (EIS) on the proposed project was jointly prepared by the Public Service Commission and the Department of Natural Resources. The EIS is contained in three volumes totaling approximately 900 pages. The Public Service Commission and Department of Natural Resources held EIS scoping sessions in Oak Creek to provide the public information regarding the project and to receive the public's input. A joint draft EIS was issued on April 21, 2003 and broadly distributed. There was a 45-day comment period during which meetings were held with the public in the affected area. Following the comment period, a joint final EIS was issued which reflected comments received and new information collected. A contested case hearing was held after the final EIS was issued at which any interested person was provided an opportunity to present evidence regarding environmental impacts and cross-examine members of the Public Service Commission and Department of Natural Resources staff involved in the preparation of the EIS. Interested persons were provided further opportunities in this proceeding to address the environmental impacts of the project including any of those associated with the change in the design of the water intake structure. (Ex. 1)

41. The Department of Natural Resources issued a Record of Decision on December 17, 2003. The Record of Decision determined that the project complies with Wis. Stat. § 1.11 and Wisconsin Admin. Code Ch. NR 150.

42. The Public Service Commission in its decision authorizing construction of the project determined that it had complied with Wis. Stat. § 1.11.

43. Both the Department of Natural Resources' December 17, 2003 decision and the Public Service Commission's decision are the subject of a judicial review proceeding in Dane County Circuit Court. This review includes the issue of whether any supplementation of the EIS is appropriate.

44. The Department of Natural Resources has complied with the procedural requirements of Wis. Stat. § 1.11 and Wis. Admin. Code ch. NR 150 regarding assessment of environmental impact. (*See*: Discussion for further reasoning on this issue)

SUMMARY

There were numerous disputed issues in this matter, but three subjects were the focus of much of the testimony. First, the objectors raised questions regarding the sufficiency of the PAA and other concerns relating to the Department's wetland review under NR 103. The Division finds that the DNR properly exercised its regulatory discretion in its limitation of the PAA under NR 103. The Division further finds that the project meets the standards of NR 103, and that the Water Quality Certification (WQC) should be issued, with one additional condition to reduce secondary impacts to remaining wetlands on the project site.

The second group of issues related to whether the applicants meet the definition of a "public utility" within the meaning of Wis. Stat. § 30.21. The Division finds that the applicant is a public utility eligible to place the intake structure under Wis. Stat. § 30.21. The fact that the project will be structured as a lawful "lease generation" contract does not impact the status of the applicants as a "public utility" within the meaning of Wis. Stat. § 30.21. A related issue under this statute is whether a WPDES operation permit is required prior to construction of the water intake structure on Lake Michigan. The Division finds that the plain language of the statute requires approval of such an operation permit prior to commencement of construction.

The third issue related to compliance with WEPA. The Division has limited authority as it relates to WEPA compliance.[2] The Division finds that the procedural requirements of that statute were met, and that the substantive issues relating to WEPA compliance are properly before the Circuit Court.

SUMMARY OF PERMIT MODIFICATIONS

Based upon the Findings, and the record as a whole, the proposed permit is modified with respect to three conditions. Permit Condition #38 is modified to limit maintenance dredging to a period of five years and to require issuance of a dredging permit after this period of time. This brings the permit into compliance with standard Department practice as it relates to maintenance dredging. Permit Condition #43 is revised to make it clear that no construction on the new water

[2] *See:* Ruling on Motion Limiting Issues, Division ALJ Boldt, July2, 2004. All prior rulings are hereby incorporated by reference, including the June 4, 2004, Oral Ruling Limiting Issues.

intake structure or new discharge structure can be undertaken prior to issuance of a new or reissued WPDES permit. This brings the permit into compliance with the language of Wis. Stat. § 30.21. A new permit condition #52 has been added to require preparation of a plan to minimize secondary impacts to remaining wetlands on the subject parcel. This condition is reasonable and necessary to protect, preserve and enhance water-quality related wetland functional values and to meet the standards of NR 103.

DISCUSSION

Wetland Issues

The first issue is whether the practicable alternatives analysis (PAA) was sufficient as it relates to compliance with NR 103. The objectors argue that the PAA was on its face inadequate because the DNR concedes that it did not consider alternative off-site locations as part of the PAA. This indeed is the usual practice for many development projects.[3] The PAA issue is fairly close, but the Division concludes that the DNR properly exercised its regulatory discretion in limiting consideration of available "alternatives" in connection with this project.

Ms. Hopkins testified that the DNR ". . . decision was that the provisions of Wis. Stat. ch. 196 and the decision by the PSCW in the CPCN would limit the scope and content of the PAA to the approved facilities and site footprint." (Hopkins Direct, TR p. 601) Further, the DNR deemed the PAA submittals of Wisconsin Electric to be sufficient for the Oak Creek site. (Id., p. 599) Both conclusions were appropriate, given the complex interplay between the PSC and the DNR regulatory review processes.

The Department's determination to limit the PAA was within its regulatory discretion and authority under Wis. Admin. Code NR 103.08(1). That provision provides as follows:

> NR 103.08 Department determinations. (1) . . . The department shall, upon request, meet with a project proponent and other interested persons to make a preliminary assessment of the scope for an analysis of alternatives and the potential for compliance with this chapter.

It was reasonable for the DNR to limit the PAA to the site chosen in the CPCN. Given the complexity of the power plant siting process, the Department's decision to limit the PAA process was a reasonable use of the regulatory authority set forth in Wis. Admin. Code NR 103.08. The "scope for the analysis is if the alternatives" was limited to the site authorized in the PSC CPCN. Had it not been so limited, the applicants would have been required to analyze numerous alternatives that might not meet the PSC's complex siting approval criteria.[4] As it

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[3] *See*: NR 299.03(2) & *Bersani v. USEPA*, 850 F.2d 36 (2nd Cir. 1988) *See* Also: Ruling Limiting Issues, 7/2/04, pp. 9-15) The Division denied motions by both Wisconsin Electric and S. C. Johnson to find the PAA either sufficient or inadequate as a matter of law.

[4] As previously noted, under the current regulatory scheme, the DNR would be required to limit the PAA as it has in this case. Wis. Stat. § 30.025. The parties agreed that this statute does not apply to this application. While the new statute does not provide a legal authority for the Department's actions in this case, it does reinforce the reasonableness of the DNR's exercise of its discretion under the then-existing regulatory process. The Department's

was, the Department had already received enough information to evaluate all of the other sites sufficiently for the PSC to consider the likely impact on wetlands for purposes of its review in conjunction with the CPCN.

As Wisconsin Electric argues, the limitation of the PAA focused the DNR's regulatory oversight to two critical stages in the CPCN process. First, before the PSC made its site selection, the DNR reviewed the wetland delineation and site plans for each of the four sites under consideration by the PSC. To this extent, the DNR did consider "alternative locations" as part of its review of the project proposal even if not specifically as part of the PAA. Second, after the PSC decision Department staff met with Wisconsin Electric to modify the proposal to reduce detrimental impacts to wetlands to the extent possible. "This approach assured that the PSC would have the benefit of the DNR's assessment of the wetland sites when the PSC made its site selection decision, and that DNR would work with Wisconsin Electric to assure that the wetland impacts would be avoided and minimized to the extent practicable after a site was selected by PSC." (WE, brief p. 21) This was a reasonable exercise of its regulatory authority under Wis. Admin. Code NR 103 and NR 299.

Hopkins offered two essential reasons for the DNR's approach to the PAA in this matter. First, the Department did not believe it was appropriate to require a full PAA for each site being considered by the PSC in the context of its review of the CPCN. (Hopkins, TR p. 570) Second, the DNR agreed to essentially defer to the PSC as to what constituted available alternatives because the PSC has a more comprehensive set of factors to consider when reviewing the siting of a power plant facility. (Id.)

For example, as part of the CPCN process, the PSC specifically considered the Development Agreement and the conditional Use Permit that had been negotiated between the City of Oak Creek and Wisconsin Electric. (Haskin, TR pp. 7-8) Consideration of local land use and development plans and environmental values are required elements of the PSC review. *See*, Wis. Stat. § 196.491(3)(d). No other site had any comparable local approval or comparable local controls. It is also significant that no other alternative site would avoid detrimental impacts to wetlands.[5] Given the extensive review of multiple factors considered by the PSC, and the fact this was the only site in which local approvals were in place, it was a reasonable exercise of discretion to limit the PAA review. The Division finds that the DNR properly exercised its regulatory discretion in limiting the PAA.[6]

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action was not arbitrary or capricious but based upon a reasonable exercise of its discretion under NR 103. (Hopkins, p. 575)

[5] While the record does not provide a sufficient basis to conclude that the Caledonia alternative site was a "practicable alternative", it is clear that construction at that site would also result in detrimental impacts to wetlands, although perhaps wetlands of lower quality. (*See*: TR pp. 859-860)

[6] With respect to the PAA, it should also be noted that the USACOE has not completed its review of the wetland fill associated with this project. Approval by the USACOE is required before the WQC can take effect. (Permit Condition #4) The USACOE review includes a related PAA review that may be wider in scope than the DNR's NR 103 analysis. (Ex. 210; TR p. 624)) The USACOE process also provides for mitigation of wetland impacts and the applicant has submitted preliminary mitigation plans to the USACOE. (TR p. 148-150) Such a mitigation

The purpose of NR 103 is to set forth the conditions necessary to protect water quality related functions and values of wetlands. (NR 103.03(1)) Greg Kasel, an engineering supervisor for the Bechtel Corporation, testified that Wisconsin Electric configured the project on the north side CUP to avoid and minimize detrimental impacts to wetland functional values to the extent practicable. (TR pp. 292-300) This was borne out in the testimony of Dr. Reed, a distinguished wetland scientist employed by SEWRPC. Reed noted that an earlier iteration of the project threatened a plant community (PCA No. 1) with a high floral quality index, but that this was not the case in the latest project design as set forth in Ex. 28. (TR pp. 858-875) The DNR Area Water Management Specialist, Heidi Hopkins, testified that Water Quality Certification should issue because the project proponents had taken all practicable measures to minimize adverse impacts to the functional values of affected wetlands. (TR. pp. 598-605)

The primary opponents of these permits provided almost no testimony on wetland functions and values, focusing instead on the PAA issue. S. C. Johnson's primary witness on wetland issues, Scott Norwood, admitted that he had no training in any wetland sciences, had never delineated a wetland, had never prepared a practicable alternative analysis and had not even visited the site. (Norwood, TR pp. 1010-1011) There is surprisingly little evidence in the record relating to direct detrimental impacts on the functional values of affected wetlands. The record is more extensive as it relates to likely secondary impacts to wetland areas which are not filled as a result of this project.

The Sierra Club, relying on the testimony of Dr. Reed, argues persuasively that the DNR has not sufficiently analyzed and regulated potential secondary detrimental impacts to wetlands that are not filled in conjunction with this project. (Sierra Club, Brief p. 3) The Division has added a condition to the water quality certification that requires that the applicant submit a plan acceptable to the DNR to reduce such secondary impacts. Specifically, the plan should include further details relating to reducing sedimentation, pro-active prevention of invasion by exotic plant species, and a plan to maintain the existing hydrology and habitat values to the extent practicable in remaining wetland areas. To the extent reasonable, buffer areas directly contiguous to remaining wetlands should also be preserved. The Division is aware that the Department has already required an extensive erosion control plan and other permit conditions relating to reducing sedimentation during construction. However, the plan to reduce secondary impacts will go beyond these construction requirements to "protect, preserve and enhance" other functional values in remaining wetland areas.[7]

Dr. Reed concluded that loss of the 23.47 acres of wetland would have a detrimental cumulative impact on wetland functional values. (TR p. 879) This testimony was the closest the objectors came to countering the testimony of the Department that the project could be approved despite the loss of wetlands. Some relatively high quality wetlands will be filled during

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requirement is not available under Wisconsin law for projects that impact wetlands along Lake Michigan. (TR p. 611)

[7] It should be noted that WE has a very capable wetland scientist on staff, a former DNR Water Management Specialist, and that this provision is not unduly burdensome.

construction of the ERGS Bowl and the related destruction of the bluff along Lake Michigan. (Kasel, TR p. 295) The "bowl" is necessary to construct the ERGS units at lake level to install an "open cycle cooling system". (*Id.*) The highest quality wetland in this area, R 22 B, will lose 2.3 acres and preserve 1.3 acres of wetland. (Reed, TR p. 884) As Dr. Reed testified, it is unlikely that any future mitigation efforts will create wetlands with the same level of functional values. (Reed, TR pp. 884-885) However, the record does not support denying Water Quality Certification solely on the basis of detrimental cumulative impacts resulting from "similar activities" in the affected area. It is unlikely that there will be many "similar activities" in the affected area. Large coal-fired electricity generating plants are quite rare, as the CPCN makes clear. Further, the applicants and the DNR have done a commendable job in reducing wetland impacts to a minimum. The initial proposal involved a plan to fill up to 60 acres of Lake Michigan lakebed and adjacent wetland areas. (TR p. 578) Many of the most valuable wetland areas have been preserved, and should continue to function at a high-value under the required plan to minimize secondary impacts.[8]

Section 30.21 Issues

The second issue is whether the applicant has demonstrated compliance with Wis. Stat. § 30.21. The central issue in this context relates to the definition of a "public utility" under the statute in light of complex financing and lease arrangements. The Division finds that the financing/lease arrangements do not bar the applicant from being treated as a "public utility" under Wis. Stat. § 30.21.

Wis. Stat. § 30.21 authorizes a public utility to "construct, maintain and operate" certain structures "upon and under" the bed of a Great Lake. There is no dispute that Wisconsin Electric is a public utility. (TR p. 1006) Further, there is also no dispute that it is Wisconsin Electric that will "maintain and operate" the ERGS. (TR p. 1006) As Wisconsin Electric argues, the dispute is over a legal issue: "under the lease transactions between Wisconsin Electric and ERGS, LLC, is Wisconsin Electric "constructing" ERGS for the purposes of Wis. Stat. § 30.21?"

The Wisconsin Electric Assistant Treasurer, James Schubilske, testified that the nominal owner of the ERGS units will be ERGS, LLC. (TR p.192) ERGS, LLC is obligated to construct the ERGS units for the benefit of Wisconsin Electric under the express terms of the 30-year lease agreement. (*Id.*) This approach was authorized under recent legislation, Wis. Stat. § 196.52(9) (the "Leased Generation Law") which permits a public utility to build generating resources through an affiliate that finances the construction. (*Id*) Under the structure, ERGS, LLC is solely a vehicle to finance the ERGS units. (*Id.*)

Section 30.21 does not require Wisconsin Electric to "own" the structures being built on the lakebed. Rather, it requires Wisconsin Electric to "construct" those facilities. Obviously, it will seldom, if ever, be the case that a public utility itself will physically construct the type of structures authorized by § 30.21. Typically, such construction will be done by another entity

[8] While mitigation is imperfect and not specifically authorized for fills along Lake Michigan, a USACOE required plan to mitigate losses would lessen concerns related to cumulative impacts. However, while likely, no such plan has yet been formally developed by the applicant, or approved by the USACOE.

acting on behalf of the public utility. In any event, as Mr. Schubilske testified, " . . . in a real sense the utility for all intents and purposes gets all the benefits of ownership and the lease is strictly a financing mechanism they use. They have all the rights to the power, they have the rights of quiet enjoyment, they can use it as they wish. They are in fact, from an economic perspective, the owner of the facility." (TR p. 207)

More fundamentally, the state legislature recently passed the Leased Generation Law in part to provide an incentive to compensate investors for the risks associated with construction of new coal plants. (EIS, p. xix) The Leased Generation Law has been essentially authorized by various energy-related regulatory agencies, including both the WPSC and the FERC.[9] (TR p. 194; Ex. 1) It is simply not within the scope of the DNR review of this proposal to effectively strike down this funding mechanism that has been duly authorized by the legislature.

The Division finds that the applicant may not undertake construction until such time as it receives a permit to operate the water intake structure under the WPDES permitting process. As S. C. Johnson demonstrated, this result is mandated by the plain language of Wis. Stat. § 30.21. If a new or reissued WPDES operating permit is not granted for the intake structure, the applicant is not permitted to "operate" the structure and therefore it is not "necessary" to build it within the meaning of Wis. Stat. § 30.21. At hearing and in its brief the DNR modified its previous position and agreed with the objectors that a permit restriction preventing construction until issuance of the WPDES operating permit is appropriate and required by the plain language of Wis. Stat. § 30.21. (TR pp. 621-622; DNR brief)

WEPA Issues

The third issue relates to whether the WEPA process was sufficient and complete. The Division finds that the DNR has complied with the procedural requirements of WEPA. The Division's jurisdiction over the WEPA process is very limited. Many of the same issues raised by S. C. Johnson and the other objectors are currently being considered by a circuit court that properly has jurisdiction over these issues. For purposes of the decision of the Division, the DNR has met every procedural requirement of the WEPA process. WEPA is a procedural statute and does not impose substantive requirements beyond those imposed under substantive regulatory requirements. *Larsen v. Munz Corp.*, 167 Wis. 2d 583, 482 N.W. 2d 332 (1992)

S. C. Johnson and the Sierra Club argue that the state failed to comply with WEPA because it did not produce and release for public viewing and comment a supplement to the environmental impact statement. This issue arises out of the post-environmental impact statement changes made by the Wisconsin Electric to the design and operation of the intake system. Specifically, the changes identified by S. C. Johnson and the Sierra Club are 1) replacing the timber cribs with wedge-wire screens, which changes the footprint on the lakebed from approximately 0.5 acres to 1.3 acres, 2) the alleged addition of copper to Lake Michigan and 3) the periodic operation of the existing intake as a back-up.

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[9] The FERC decision specifically found that a Project Company similar to ERGS is not the owner of such a facility, but " . . . acts as a passive investor and the utility, which will operate and maintain the plant, remains a regulated entity subject to FERC jurisdiction." (TR p. 194)

The cooling water intake system is discussed at pages 203 to 208. As the DNR argues in its brief, "the first three sections are labeled Description and location of proposed water intake system, Construction methods for the water intake transport system, and Potential impacts of construction of the water intake system. Almost all of what appears there remains accurate today. (DNR response brief, p. 11)

Most of the changes are minor, and certainly nothing close to a procedural deficiency – reductions on the length and diameter of the pipes and tunnel system. The only significant change relates to the change to include wedge-wire screens rather than timber cribs as part of the cooling water intake design. The objectors make much of this change, but it does not rise to the level of a procedural defect for the EIS. The substance of the design change will be addressed in the WPDES permitting process. The EIS itself made it clear that the public should expect specific design changes to occur in conjunction with the WPDES permitting. (EIS, p. 204)

There is simply no basis to conclude that the EIS was procedurally defective.

CONCLUSIONS OF LAW

1. The Division of Hearings and Appeals has authority under Wis. Stat. §§ 30.12, 30.21, 30.123, 30.20 30.19 and 227.43(1)(b) and in accordance with the foregoing Findings of Fact, to issue the permits for the construction and maintenance of the project described above subject to the conditions specified.

2. The ERGS project, as proposed by Wisconsin Electric, will comply with all applicable requirements of Wis. Stat. §§ 30.02, 30.03, 30.12, 30.123, 30.19, 30.20, 30.21, 182.017, 281.15, 281.36 and 281.37 and Wis. Admin. Code Chapters NR 102, 103, 115, 116, 117, 170, 216, 299, 320 and 347 to (1) place fill on the bed of Lake Michigan for the purpose of dock extension, for the placement of an intake and discharge structure and to stabilize the shoreline, (2) remove materials from the bed of Lake Michigan, (3) place bridges and culverts over or in navigable tributaries to Lake Michigan and remove materials from the bed of those tributaries for the purposes of railroad expansion and road construction, (4) grade more than 10,000 square feet and to construct ponds within 500 feet of a navigable waterway in Racine County and (5) impact wetlands with discharge and/or fill.

3. The applicant is a riparian owner within the meaning of Wis. Stat. § 30.12.

4. The proposed facilities described in the Findings of Fact constitute structures within the meaning of Wis. Stat. § 30.12.

5. The ERGS project as proposed by Wisconsin Electric will comply with all applicable requirements of Wis. Stat. § 30.20 with respect to dredging for activities on the bed of Lake Michigan.

6. The Department has authority to limit "the scope for an analysis of alternatives and the potential for compliance with NR 103". § NR 103.08(1) The DNR properly exercised this regulatory discretion in its review of the PAA in this matter.

7. The Practicable Alternatives Analysis satisfies the requirements of Wis. Admin. Code NR 103. Practicable alternatives must be "available and capable of being implemented taking into consideration cost, available technology and logistics in light of overall project purposes." Wis. Admin. Code NR 103.07(2). The Division ruled previously that the "overall project purpose" is the construction of coal-fired generating stations to produce electricity. No practicable alternatives to the North Site-CUP site that will avoid and minimize adverse impacts to wetlands are "available" or "capable of being implemented."

8. The wetlands described above are designated as wetlands in an area of special natural resource interest under NR 103.04(2), because they have a hydrologic connection to Lake Michigan. This factor was considered by the Department and the Division and is a basis for the requirement for the plan to minimize secondary wetland impacts.

9. The condition requiring a plan to minimize potential secondary impacts on wetland functional values is reasonable and necessary to meet the requirements of NR 103.08(3)(d-f).

10. The Department and the Division have considered all of the factors listed under NR 103.08(3), in connection with review of the WQC. The proposed project meets the standards found in NR 103 and NR 299 and issuance of Water Quality Certification is appropriate.

11. The permit as modified meets the requirements of NR 103 and NR 299.

12. The ERGS project meets the definition of a "public utility" within the meaning of Wis. Stat. § 30.21. No construction of the intake structure shall be undertaken until a WPDES "operation" permit is issued or reissued. (*Id.*)

13. The Department and the PSC prepared a joint Environmental Impact Statement (EIS) in connection with review of the project. The DNR has met the procedural requirements of Wis. Stat. § 1.11 and NR 150.

PERMIT

Wisconsin Electric Power Company is hereby granted under Wis. Stat. §§ 182.017, 30.02, 30.03, 30.12, 30.123, 30.19, 30.20, 30.21, 281.15, 281.36, 281.37 and Wis. Admin. Code chs. NR 102, 103, 115, 116, 117, 150, 216, 299, 320, 347, a permit to 1) place fill on the bed of Lake Michigan for the purposes of dock extension, for the placement of an intake and discharge structure and to stabilize the shoreline 2) to dredge materials from the bed of Lake Michigan 3) to place bridges and culverts over or in navigable tributaries to Lake Michigan and dredge materials from the bed of those tributaries for the purposes of railroad expansion and road construction 4) to grade more than 10,000 square feet and to construct ponds within 500

feet of a navigable waterway in Racine County and 5) to impact wetlands under 401 Water Quality Certification, Wis. Stat. § 281.36 and Wis. Admin. Code chs. NR 103 and 299 as a result of power plant expansion, road construction and railroad improvements.

The project is located in the City of Oak Creek, Milwaukee County and the Town of Caledonia, Racine County also described as being a part of Section 1, T4N, R22E, all of Section 6, T4N, R23 E, part of Section 35, T5N, R22E, all of Section 36, T5N, R22E, part of Section 31, T5N, R23E, part of Section 12, T4N, R22E, and part of Section 7, T4N, R23E subject to the following conditions:

1. You must notify the Department of Natural Resources (Department) Point of Contact at phone 262-884-2355 before starting constructing on each of the five phases of the project as identified in the introductory paragraph above and again not more than 5 days after each phase of the project is complete.

2. You must complete the project as described on or before December 31, 2011. If you will not complete the project by this date, you must submit a written request for an extension prior to the expiration date of the permit. Your request must identify the requested extension date and the reason for the extension. A permit extension may be granted, for good cause, by the Department. You may not begin or continue construction after the original permit expiration date unless the Department grants a new permit or permit extension in writing.

3. You are not authorized to do any work other than what is specifically described in the application packages and associated plans which were submitted to the Department on June 30, 2003, December 19, 2003 and February 9, 2004, and as modified by Exhibit 28 (GKK-6) and the conditions of this permit. These final Department approved plans and accompanying documents, as well as plans developed and approved pursuant to conditions of this permit are a part of and are conditions of this permit. If you wish to alter the project or permit conditions, you must first obtain written approval of the Department.

4. You are responsible for obtaining any permit or approval that may be required for your project by local zoning ordinances and by the U.S. Army Corps of Engineers before starting your project.

5. Upon reasonable notice, you shall allow access to your project site during reasonable hours to any Department employee or a Department monitor who is investigating the project's construction, operation, maintenance or permit compliance.

6. The Department may modify or revoke this permit if the project is not completed according to the terms of the permit, or if the Department determines the activity is detrimental to the public interest.

7. You must post a copy of this permit at a conspicuous location on the project web site for at least five days prior to construction, and remaining at least five days after construction. You must also keep a copy of the permit and approved plan available at the project site at all times until the project is complete. All employees, consultants and contractors who are working on the

project must be made aware of the permit and its conditions and all appropriate managers and supervisors in charge of or working on construction or compliance must be provided with copies of the permit.

8. Your acceptance of this permit and efforts to begin work on this project signify that you have read, understood and agreed to follow all conditions of this permit.

9. You, your agent, and any involved contractors or consultants may be considered a party to the violation pursuant to Wis. Stat. § 30.292, for any violations of Wis. Stat. ch. 30 or this permit.

10. You and/or your contractor shall provide financial assurance mechanisms related to the performance of construction requirements of this permit. The assurance mechanism will be in an amount and form satisfactory to the Department.

11. You shall establish and implement an Environmental Compliance Monitor (ECM). This shall be an independent firm or individual, which will monitor the overall environmental compliance of the project during every phase of the construction. The ECM shall work under the direction of the Department.

12. You must submit to the Department, through the ECM(s), clear photographs once a month documenting the progress of the wetland disturbance, lakebed fill, railroad construction, bluff excavation and overall stabilization efforts.

13. Nothing in the ECM procedures or in the financial assurances mechanism(s) substitutes for or restricts the Department's statutory authority to enforce its permits or Wisconsin Laws and environmental regulations, including its authority to require the cessation of unlawful activities causing environmental harm.

14. To avoid disruption to the stocking and spawning of fish species in Lake Michigan construction on the lakebed shall not occur between March 1st and July 1st with the following exceptions: a) construction of the intake screen system; b) construction within the existing intake channel; and c) construction of the dock extension after placement of the outside containment dike.

15. To avoid disruption to spawning fish species and avoid seasonally high water levels in the navigable waterways located within the project boundaries, construction of road and railroad crossings shall not occur between April 1st and June 1st.

16. A Project Implementation Plan (PIP) shall be submitted to the Department at least 14 days prior to beginning construction on any activity regulated under this permit. Each PIP shall contain the following information:

a) Written summary of the project methods, staging and timing.
b) Two copies of the updated construction plans.
c) Construction materials – type of equipment and materials to be used.

d) Erosion Control & Turbidity Control Plans. The plans must include:
- Timing of Vegetation Removal
- Type of best management practice or BMPs utilized during this phase
- Location and timing of BMP placement
- How often and who will maintain BMPs
- Timing for final stabilization
- Emergency Action Plan- What is the procedure if something fails?

e) Location of dewatering and disposal areas for dredged or stockpiled materials.

f) Contact information for this phase of the project

General Erosion Control- Applicable to all construction activities.

17. Construction shall be accomplished in such a manner as to minimize erosion and siltation into surface waters and as specified in the plans and procedures that are part of or approved pursuant to this permit. All erosion control measures must meet or exceed the approved Stormwater Construction Technical Standards found on the Department's Runoff Management Website http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm#Construction developed by the Department under Wis. Admin. Code chs. NR 151.31.

18. You must maintain a log of the erosion control inspections, repairs made and rain events. This must be kept on site and made available to Department personnel upon request.

19. You must follow field protocols for activities in proximity to landfills or areas known to contain contaminated material and any solid waste encountered shall be disposed of in accordance with Wis. Admin. Code ch. NR 500 or as required by any authorizations issued by the Department.

20. The removal of vegetation shall be restricted to the areas proposed for construction. Vegetation removal shall be staged so that the existing vegetative cover is not removed earlier than 48 hours before grading work is scheduled to commence for that phase of the construction. If the duration of the vegetation removal is longer than 48 hours, grading work shall begin within 48 hours after vegetation removal is completed for that phase. Except for removal of material from the bluff that is necessary to construct the powerblock sediment basin, excavation of the bluff shall take place after the powerblock sediment basin is constructed. Temporary sediment control measures shall be installed to protect against erosion until the powerblock sediment basin is completed.

21. The construction of the 3 largest stockpiles shall be staged as described in this condition. Specifically, these stockpiles are located on the Oak Creek North Landfill, the Oak Creek South Landfill and the former Spang parcel just north of 7-mile road. The Oak Creek North Landfill and the Oak Creek South Landfill will be stripped of topsoil as needed and that topsoil will be stockpiled on those sites. Fill excavated from the bluff will then be placed on these sites to reach the grade shown on the rough grading plans submitted as part of the application. When those elevations are reached, finish work will begin on these two sites to

create the parking and laydown areas necessary. At that time, fill excavated from the bluff will then be placed on the former Spang parcel just north of 7-mile road. All stockpiles and the stockpile side slopes shall be stabilized within 7 days of reaching final grade per the Surfacing plan developed by Bechtel for this project. If the stockpiles or stockpile side slopes will be left inactive for more than 30 days you shall implement methods to temporarily stabilize the stockpiles per the technical standards developed by the Department or per the Surfacing plan developed by Bechtel for this project.

22. Site stabilization between October 1st and April 15th requires sodding or seeding and mulching with a non-toxic tackifier.

23. This permit has been issued with the understanding that any construction equipment used is the right size to do the job, and can be brought to and removed from the project site without unreasonable harm to vegetative cover or fish and wildlife habitat.

24. Unless otherwise specified in this permit or approved pursuant to this permit, erosion control measures must be in place and operational at the end of each working day. All erosion control measures shall be inspected and any necessary repairs or maintenance performed after every rainfall exceeding ½ inch and at least once per week.

25. You must not deposit or store any of the dredged or graded material in any wetland, below the ordinary high water mark, or in the floodplain of any waterway unless specifically authorized by this permit or within the approved plans.

26. Other than site stabilization and erosion control activities, construction activities within navigable (inland) waterways shall be conducted during low flow periods and shall not be conducted during precipitation events exceeding ½ inch, or when excessive precipitation is anticipated within 12 hours. Construction activities on Lake Michigan shall not be conducted when weather conditions are severe and constant enough to cause wave overtopping of erosion controls that could cause a significant release of sediment to the Lake environment.

27. Any area disturbed during construction that is at the final grade or will be left inactive for a period greater than 30 days shall be stabilized within 7 days of the end of the land disturbing activities.

28. Areas where soil is exposed must be protected from erosion by seeding and mulching, sodding, diversion of surface runoff, installation of hay bales or silt screens, construction of settling basins, or similar methods as soon as possible after the removal of the original ground cover as described in the site specific erosion control plan approved by the Department or in the Stormwater Construction Technical Standards found on the Department's Runoff Management Website http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm#Construction developed by the Department under Wis. Admin. Code chs. NR 151.31.

29. Final site stabilization requires the re-establishment of vegetation and should not contain any plant species listed as invasive by the Department. A listing of what the Department

considers invasive species can be found on the Department's website http://dnr.wi.gov/org/caer/ce/invasives/

30. All construction work shall take place from either a barge, a temporary staging platform, or from an upland location. Construction equipment must not be operated on the bed (below the ordinary high water mark) of any navigable waterway.

Dewatering Activities- for all dewatering activities such as the removal of groundwater, surface water or the dewatering of dredged materials within work areas or other similar circumstances, in addition to the conditions listed above.

31. Any water pumped from pits, trenches or ponds shall be treated using a BMP found in the technical standards developed by the Department. The type of Dewatering Practice utilized at this site shall be a suitable practice listed for "Fine to Very Fine Particles" in the Dewatering Practice Selection Matrix found in the Dewatering Technical Standard. The Dewatering technical standard is found in the Stormwater Construction Technical Standards found on the Department's Runoff Management Website http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm#Construction developed by the Department under Wis. Admin. Code chs. NR 151.31.

32. If at any time you notice the accumulation of sediment into a wetland or waterway as a result of dewatering, or if water pumped from pits, trenches or ponds begins to discharge excess amounts of sediment to a wetland or waterway you shall immediately stop dewatering and contact the Department to determine an adequate dewatering method.

33. During bluff excavation, if at any time the bluff drainage system is undersized or incapable of capturing surface or groundwater discharges within the excavation footprint, you shall immediately stop excavation work and develop and implement a plan, which provides for an adequate dewatering system.

Water Diversion- during railroad expansion and all road crossings, in addition to the conditions listed above.

34. While constructing all road crossings and during railroad modifications, you shall submit to the Department for review and approval a plan showing the specific means and methods proposed for the diversion of the waterway flows around the work site. This plan may be submitted in conjunction with the PIP plan for that phase of the construction.

Dredging- for the navigational channel, discharge structure, intake structure and other incidental dredging, in addition to the conditions listed above.

35. Bottom materials must be removed with equipment and practices designed to minimize the amount of sediment that can escape into the water. If available a covered clam shell bucket shall be utilized during dredging operations. If a covered clam shell bucket cannot be utilized for dredging, for construction of the discharge structure and navigational channel, a silt

curtain must be installed in the lake isolating the proposed dredged area from the remainder of the lake.

36. All of the material dredged for the navigational dredging and dock expansion shall be disposed of at a Department approved landfill unless an exemption is authorized by the Department for stockpiling and beneficial reuse. Dredged materials from the discharge structure and intake structure may be placed in one of the proposed stockpiles but may not be placed in any waterway or wetland and may not be placed in the floodway of any waterway.

37. You may only dredge to the dimensions and depths as described in your permit application. Removal must not exceed 160,000 cubic yards.

38. This permit allows for the maintenance of the navigational channel at the dimensions and depths approved under this permit for a period of five years. After this period of time, you should obtain a § 30.20 dredging permit for future maintenance dredging for a period not to exceed five years. At least 5 days prior to conducting any maintenance dredging you must notify the Department of your intent to dredge.

39. You may only remove sediments within the intake channel (which is the lakebed between the south coal dock seawall and the jetty to the south, including the half circle created by the breakwall angling to the south) and may only remove sediments within these dimensions and to this bottom elevation: the bottom elevation from the Oak Creek Power Plant intake structure to the mouth of the intake channel will be maintained to an elevation of –22 low water datum, and from the mouth of the intake channel to the point of intercept it will be maintained to –18 low water datum. This is shown on Bechtel drawing 24896-000-CT-7303-00002, titled "Backup Surface Water Intake Plan". During maintenance dredging operations you must follow all of the erosion control, dewatering and dredging conditions listed in this permit. You must notify the Department at least 14 days prior to conducting any maintenance dredging. At this time you must provide the Department with the following information:

- Total Cubic Yards to be dredged
- When the dredging will take place
- Location of where the dredging will occur
- Location of where the dredge spoil will be placed.

Lake Michigan Structures- for the expansion of the dock, the discharge structure, shoreline protection and the intake structure, in addition to the conditions listed above.

40. All structures placed for the construction of dock expansion, the discharge structure, the shoreline protection and the intake structure shall be placed according to the plans approved by the Department. All material shall be appropriately sized or protected to withstand wave action and ice formation and other environmental factors common to Lake Michigan.

41. All fill materials utilized during construction of these structures shall not consist of material which is considered solid waste under Wis. Admin. Code ch. NR 500.

42. You shall regularly inspect the dock, intake structure, discharge structure and shoreline protection for accumulation of debris and structural stability. You shall remove any excessive accumulation of debris and shall maintain all structures per the approved plans.

43. You shall not construct, maintain or operate the new intake structure or the new discharge structure until the Department issues a new or reissued Wisconsin Pollutant Discharge Elimination System permit for the intake structure and discharge.

44. You shall follow all US Coast Guard requirements for informational, regulatory or warning buoys or navigational requirements during and after construction.

45. All facilities and materials located on the dock shall be for the purposes of handling and processing materials, which are delivered or transported, via Lake Michigan.

45a. In accordance with Wis. Stat. § 30.21, this approval is for the Wisconsin Electric Power Company's construction, operation and maintenance of the Elm Road Generating Station. If the land use changes to other than a public utility, the use of the lakebed for private purposes is not authorized under the approval.

Road and Railroad Crossings of Navigable Waterways- for railroad expansion, construction access roads and new or modifications to plant access roads, in addition to the conditions listed above.

46. All road and railroad crossings shall be installed in a manner, which does not impede the passage of fish and wildlife. All temporary culverts will be sized so as to ensure that during the 100-year flood event there will be no backwatering on properties not owned by Wisconsin Electric Power Company. All culverts shall be installed according to the plans submitted as part of the application, with the following exceptions:

a. The culvert at navigable stream #1, as identified on the Department's January 15, 2003 navigability determination, shall be buried between 12 and 18 inches below the existing bed elevation of the waterway;

b. The culvert at navigable stream #3, as identified on the Department's January 15, 2003 navigability determination, may be required by DNR to be buried between 12 and 18 inches below the existing bed elevation of the waterway; within 30 days of this Order, the DNR shall evaluate that culvert and advise Wisconsin Electric if the culvert must be buried.

47. You shall stage the proposed crossings so that no more than 2 crossings in a single drainage basin are being installed at any one time.

48. You must inspect bridge/culvert openings periodically for debris and within 5 days of any rainfall exceeding ½ inch, and you must remove any restriction of flow. Any debris removed from the openings must be deposited in an upland site and out of any floodplain.

49. You assume all responsibility and liability for direct or indirect damage caused or resulting from the presence of the waterway crossings and hold the State of Wisconsin and its employees harmless.

50. The temporary roads shall be removed prior to completion of the project. After the temporary roads are removed the bed and banks of the waterways and any areas disturbed by the temporary crossing shall be restored to pre-construction topographic elevations and flow regimes, unless otherwise authorized by the Department.

Wetland and Environmental Corridor Impacts- specific conditions in Addition to the general conditions above.

51. No wetlands or environmental corridors may be disturbed other than where specifically authorized in the plans approved by the Department. In areas where you will be working within or adjacent to wetlands or environmental corridors, you shall install silt fence and snow fence along the construction boundaries to prevent accidental disturbance to areas outside of the construction boundaries.

52. Prior to undertaking any construction, you shall submit a plan acceptable to the Department to minimize secondary detrimental impacts to wetland areas on the subject parcel. This plan shall include but not be limited to reducing siltation and sedimentation, preventing invasive exotic species from entering into wetland areas, and maintaining the existing hydrology and habitat values to the extent practicable during construction and operation of the proposed facilities. You shall take all reasonable steps to preserve valuable habitat in areas directly contiguous to remaining wetlands. Special care should be taken to preserve state-threatened species in remaining wetland areas and directly contiguous upland areas.

53. Construction site runoff and stormwater runoff shall be treated by an approved BMP for the removal of pollutants prior to discharge to any waterway or wetland.

Dated at Madison, Wisconsin on November 22, 2004.

STATE OF WISCONSIN
DIVISION OF HEARINGS AND APPEALS
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Telephone: (608) 266-7709
FAX: (608) 264-9885
By: Jeffrey D. Boldt
Jeffrey D. Boldt
Administrative Law Judge

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NOTICE

Set out below is a list of alternative methods available to persons who may desire to obtain review of the attached decision of the Administrative Law Judge. This notice is provided to insure compliance with Wis. Stat. § 227.48 and sets out the rights of any party to this proceeding to petition for rehearing and administrative or judicial review of an adverse decision.

1. Any party to this proceeding adversely affected by the decision attached hereto has the right within twenty (20) days after entry of the decision, to petition the secretary of the Department of Natural Resources for review of the decision as provided by Wisconsin Administrative Code NR 2.20. A petition for review under this section is not a prerequisite for judicial review under Wis. Stat. §§ 227.52 and 227.53.

2. Any person aggrieved by the attached order may within twenty (20) days after service of such order or decision file with the Department of Natural Resources a written petition for rehearing pursuant to Wis. Stat. § 227.49. Rehearing may only be granted for those reasons set out in Wis. Stat. § 227.49(3). A petition under this section is not a prerequisite for judicial review under Wis. Stat. §§ 227.52 and 227.53.

3. Any person aggrieved by the attached decision which adversely affects the substantial interests of such person by action or inaction, affirmative or negative in form is entitled to judicial review by filing a petition therefor in accordance with the provisions of Wis. Stat. §§ 227.52 and 227.53. Said petition must be filed within thirty (30) days after service of the agency decision sought to be reviewed. If a rehearing is requested as noted in paragraph (2) above, any party seeking judicial review shall serve and file a petition for review within thirty (30) days after service of the order disposing of the rehearing application or within thirty (30) days after final disposition by operation of law. Since the decision of the Administrative Law Judge in the attached order is by law a decision of the Department of Natural Resources, any petition for judicial review shall name the Department of Natural Resources as the respondent. Persons desiring to file for judicial review are advised to closely examine all provisions of Wis. Stat. §§ 227.52 and 227.53, to insure strict compliance with all its requirements.

STATE OF WISCONSIN
SUPREME COURT

CLEAN WISCONSIN, INC. p/k/a Wisconsin's Environmental Decade Institute, Inc., SC JOHNSON & SON, INC. and CALPINE CORPORATION,
Petitioners-Respondents-Cross-Appellants-Cross-Respondents,
TOWN OF CALEDONIA,
Petitioner-Cross-Respondent,
v.
PUBLIC SERVICE COMMISSION OF WISCONSIN and WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondents-Co-Appellants-Cross-Respondents,
WISCONSIN ELECTRIC POWER COMPANY, W.E. POWER, LLC and WISCONSIN ENERGY CORPORATION,
Interested Parties-Appellants-Cross-Respondents,
DAIRYLAND POWER COOPERATIVE,
Interested Party-Cross-Respondent,
MADISON GAS & ELECTRIC COMPANY and WISCONSIN PUBLIC POWER, INC.,
Interested Parties-Co-Appellants-Cross-Respondents,
CITY OF OAK CREEK,
Interested Party-Respondent-Cross-Appellant,
ROBERT H. OWEN,
Interested Party-Respondent-Cross-Respondent.

Appeal No. 04-3179

Circuit Court Case Nos. 03-CV-003478, 03-CV-003731, 04-CV-000133, 04-CV-000149, 04-CV-000530, 04-CV-000533

(Caption continued on following pages)

BRIEF OF INTERESTED PARTY-RESPONDENT-CROSS-APPELLANT CITY OF OAK CREEK

APPEAL FROM A FINAL ORDER OF THE CIRCUIT COURT FOR DANE COUNTY, THE HONORABLE DAVID FLANAGAN PRESIDING

CALPINE CORPORATION,
Petitioner,

v.

PUBLIC SERVICE COMMISSION OF WISCONSIN and WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondents,

WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION, W.E. POWER, LLC, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, ROBERT H. OWEN, JR., and CITY OF OAK CREEK,
Interested Parties.

CLEAN WISCONSIN, INC. p/k/a Wisconsin's Environmental Decade Institute, Inc. and SC JOHNSON & SON, INC.,
Petitioners,

v.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondent,

WISCONSIN PUBLIC POWER, INC., CITY OF OAK CREEK, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION and W.E. POWER, LLC,
Interested Parties.

CALPINE CORPORATION,
Petitioner,

v.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondent,

CITY OF OAK CREEK, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, WISCONSIN PUBLIC POWER, WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION and W.E. POWER, LLC,
Interested Parties.

CITY OF OAK CREEK,
Petitioner,
v.
PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent.

TOWN OF CALEDONIA,
Petitioner,
v.
PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent,
WISCONSIN ELECTRIC POWER COMPANY,
WISCONSIN ENERGY CORPORATION, W.E.
POWER, LLC, DAIRYLAND POWER
COOPERATIVE, MADISON GAS & ELECTRIC
COMPANY, ROBERT H. OWEN, JR., and
WISCONSIN PUBLIC POWER, INC.,
Interested Parties.

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TABLE OF CONTENTS

Page

Table of Authorities iv

Issues Presented for Review vi

Statement on Publication vi

Statement of the Case 1

I. Nature of the Case 1

II. Procedural Status of the Case 2

III. Disposition Before the Public Service Commission 3

IV. Disposition in Circuit Court 5

V. Facts 7

A. Background 7

B. The City Has Made Substantial Efforts to Protect the Health and Safety of its Residents 8

1. The Agreement 9

2. The Conditional Use Permit (CUP) 11

3. There will be Significant Direct Impacts on the City as a Result of the Construction and Operation of the ERGS, including "Health and Safety Impacts" Related to Air Emissions, Noise, City Services, and Other Impacts 11

C. The City Loses Out on Property Tax Revenue on the ERGS Site Because Utilities Do Not Pay Property Taxes, the ERGS Decreases Neighboring Property Values, and the ERGS will Prevent Redevelopment 17

Standard of Review 19

Argument 21

I. The Payments to the City Under the Development Agreement Should be Restored in All Respects ... 23

A. The Legislature Made Changes to Wis. Stat. § 196.20 with the Addition of Subsection (7) that Preclude the PSC from Reducing the Mitigation Payments to the City 23

B. The Changes Made to Wis. Stat. § 196.20 by the Addition of Subsection (7) Removed the Authority of the PSC to Examine the Reasonableness of Payments to the City for "Health and Safety Impacts" 29

C. Under Wis. Stat. § 196.20(7), Payments for Impacts other than "Health and Safety Impacts" are Permissible if the PC Received the Agreement before June 10, 2003, and the Payments are Reasonable 33

D. The PSC Failed to Conduct any Meaningful Analysis of the Reasonableness of the Mitigation Payments 34

E. The PSC Decision is not Entitled to any Deference because it Misapplied a New Law, Failed to Conduct the Proper Reasonableness Analysis, and Ignored Major Facts of Record 40

F. The Circuit Court Ignored an Exception in Wis. Stat. § 196.20(7) that Excluded the Mitigation Payment from the Reach of the Statute and Erroneously Ruled that the PSC Could Only Reject or Approve the Agreement Entirely 44

II. The Circuit Court Erred in Ruling that the Alternative Site Requirement was not Satisfied and this Court Should Restore the PSC's Decision to Grant a CPCN 45

III. The Circuit Court Erred in Ruling that the Application was Incomplete and this Court Should Restore the PSC's Decision to Grant a CPCN 46

Conclusion 47

Form and Length Certification 49

TABLE OF AUTHORITIES

STATE CASES

Esparza v. DILHR, 132 Wis.2d 402, 393 N.W.2d 98 (Ct. App. 1986) 19

Harnischfeger Corp. v. LIRC, 196 Wis.2d 650, 539 N.W.2d 98 (1995) 20, 46

Kelley Co., Inc. v. Marquardt, 172 Wis.2d 234, 493 N.W.2d 68 (1992) 20

Marten Trans., Ltd. v. DILHR, 176 Wis.2d 1012, 501 N.W.2d 391(1993) 20

In re Paternity of Robert Jo W., 218 Wis.2d 225, 578 N.W.2d 185 (1998) 32

State v. Chrysler Outboard Corp., 219 Wis.2d 130, 580 N.W.2d 203 (1998) 27

State v. Jones, 226 Wis.2d 565, 594 N.W.2d 738 (1999) 32

UFE Inc. v. LIRC, 201 Wis.2d 274, 548 N.W.2d 57 (1996) 19, 20, 21

Wis. Citizens Concerned for Cranes and Doves v. DNR, 2004 WI 40, 270 Wis.2d 318, 677 N.W.2d 612 ..... 32, 41

STATE STATUTES

Wis. Stat. § 196.20(7) ..... passim

Wis. Stat. § 196.20(7)(a) 30

Wis. Stat. § 196.20(7)(c) 27, 40, 45

Wis. Stat. § 196.37 ..... 31, 35

Wis. Stat. § 196.491 vi

Wis. Stat. § 196.491(3)(a)1 47

Wis. Stat. § 196.491(3)(d) 9

Wis. Stat. § 227.52 1

Wis. Stat. § 227.57(6) 21, 42

MISCELLANEOUS

Wis. Admin. Code § PSC 111.53 ..... vi, 46, 47

2003 Wis. Act. 31, § 23 ..... 23, 24, 25, 38

2003 Wis. Act. 89, § 33 ..... 25, 26, 29, 41

ISSUES PRESENTED FOR REVIEW

1. Is the City of Oak Creek entitled to mitigation payments from Wisconsin Energy Corporation for the siting of a power plant in the City in light of unrefuted evidence presented by the City of substantial "health and safety impacts" and a recent statutory change protecting payments from utilities to host communities for "health and safety impacts"?

ANSWER FROM THE PUBLIC SERVICE COMMISSION: Yes, mitigation payments are allowed, but only for the period of construction, until state shared revenue payments to the City begin.

ANSWER FROM THE CIRCUIT COURT: Yes, mitigation payments are allowed, but the Public Service Commission must reject or approve entirely a mitigation payment agreement and cannot subsequently modify the agreement in this case.

2. Did the Public Service Commission comply with Wis. Admin. Code § PSC 111.53 by considering alternative sites for the power plant proposed by Wisconsin Energy Corporation?

ANSWER FROM THE PUBLIC SERVICE COMMISSION: Yes.

ANSWER FROM THE CIRCUIT COURT: No.

3. Was the application for a certificate of public convenience and necessity of Wisconsin Energy Corporation complete within the meaning of Wis. Admin. Code § 111.53 and in compliance with Wis. Stat. § 196.491?

ANSWER FROM THE PUBLIC SERVICE COMMISSION: Yes.

ANSWER FROM THE CIRCUIT COURT: No.

STATEMENT ON PUBLICATION

The legal issues involved in this case are complicated, are of statewide importance, and are likely to recur in administrative and judicial proceedings in the

future. In addition, the primary issue addressed by the City of Oak Creek is novel and involves interpretation of a new statute. In light of these factors, and this Court's practice of publishing decisions, the City of Oak Creek suggests that a decision from this Court should be published.

STATEMENT OF THE CASE

I. NATURE OF THE CASE

This is an appeal from a final order entered on November 29, 2004, in Dane County Circuit Court, the Honorable David Flanagan presiding. Numerous parties sought judicial review pursuant to Wis. Stat. § 227.52 in circuit court of the decision of the Public Service Commission of Wisconsin ("PSC") to grant Wisconsin Energy Corporation and its affiliates (collectively, "WE") a certificate of public convenience and necessity ("CPCN").[1] The CPCN related to WE's request to build the Elm Road Generating Station ("ERGS"), a power plant proposed to be built in the City of Oak Creek ("City"). The PSC granted the CPCN for two of the three electric generating units requested for the ERGS.

The City was a party to the administrative proceedings before the PSC. In addition, the City sought judicial review of those proceedings and was a litigant in the consolidated judicial review in Dane County Circuit Court.

In contrast to what many communities might have done when this new power plant was proposed, the City decided from a very early juncture to cooperate with WE's effort to

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[1] All references to the Wisconsin Statutes are to the 2003-04 volumes unless otherwise noted.

build the ERGS. As part of that effort, the City and WE negotiated a number of agreements to protect the health and safety of the City's residents, which included WE's agreement to make mitigation payments to the City to offset the impacts of the ERGS on the City and its residents. The agreements between WE and the City attempt to protect the City and its residents from the unavoidable impacts of a power plant. Unfortunately, the PSC modified and reduced the mitigation payments to the City, pursuant to the PSC's rate-setting authority. The City asks this Court to restore the mitigation payment agreement between it and WE, which calls for annual payments of $2.25 million, because the unmitigated impacts of the ERGS on the City far exceed those payments. The City requests that this Court rule the City has the right to the full mitigation payments as a matter of law, pursuant to Wis. Stat. § 196.20(7), which is a new provision in the law that protects the payments.

II. PROCEDURAL STATUS OF THE CASE

This matter is before this Court after numerous parties appealed the decision of the circuit court, and this Court later decided to preside over this appeal on bypass of the court of appeals and in expedited fashion. In a written decision issued on November 29, 2004, the

circuit court vacated and remanded the PSC's determination to issue a CPCN for the ERGS.

This case requires the Court to review the decision of the PSC, as with all appeals of agency determinations. However, because the circuit court vacated and remanded the PSC's decision to grant a CPCN, and laid down principles of law for the PSC to follow, it also requires this Court to examine the impact of the circuit court's rulings on the administrative determination.

III. DISPOSITION BEFORE THE PUBLIC SERVICE COMMISSION

This matter involves the second phase of WE's "Power the Future" proposal, the ERGS. The first phase involved a generating station in Port Washington, which was approved. In November 2003, after lengthy administrative proceedings, the PSC approved two of the three electric generating units requested by WE for the ERGS. In doing so, the PSC concluded that there was substantial need for additional electric generating capacity in Wisconsin.

As part of its written decision issuing the CPCN, the PSC approved, in part, a Development Agreement ("Agreement") between the City and WE which calls for the utility to make annual payments to the City to mitigate economic, environmental, safety, and health impacts of the

ERGS upon the City.[2] Unfortunately, the PSC decided to restrict the payments negotiated at arms-length between the City and WE. For this reason, the City sought judicial review of the PSC decision in circuit court, and other parties challenged the PSC decision on other grounds.

The PSC ruled in favor of the mitigation payments from WE to the City as contained in the Agreement, for an initial period of time. However, the PSC decided that the City should only receive mitigation payments during the construction period of the ERGS, whereas the City and WE agreed that such payments would continue after the ERGS began operating. R.18, at Item 150, at page 50.[3]

Under the PSC decision, once operation of the ERGS commences, the City would receive only shared revenue from the state, which, as estimated by the PSC, will be

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[2] The pertinent portions of the Agreement are set forth below in Section V.B.1. The Agreement is also included at page 142 of the City's Appendix.

[3] The record developed before the PSC has been compiled by the Clerk of Circuit Court in a way that a couple of "record" entries on the Clerk's "Index of Record" contain a large number of materials, and which are further broken down into "items" as denominated by the Clerk. All of the citations to the record in this brief are to the Index for Circuit Court Case 03-CV-3478. The City's Appendix contains the "Record of Proceedings" before the PSC, which is helpful and specifically lists many "items" in the record. A sample full cite by the City to the transcript is as follows: R.18:157:2500:18-20, which means record entry 18, item number 157, page 2500, at lines 18-20.

approximately $1.6 million annually once the first SCPC unit is operational and $3.2 million annually once the second SCPC unit is operational. *Id.; see also* R.18:157:388-89. A state shared revenue program provides relief to local communities that host power plants, because utility properties do not pay property taxes.

The PSC decision also states that in the event that the state shared revenue program is modified and the City is to receive less than the currently estimated shared revenue payment from the state, WE will be required to pay mitigation payments to the City in an amount that, accompanied with shared revenue, equals $3.2 million annually. R.App.149-50 (R.18:150:49-50).

The PSC decided to eliminate the payments from WE to the City as noted above despite no party presenting evidence to refute the costs that the City will incur as a result of the ERGS and despite no party opposing the payments in the proceeding before the PSC.

The City, along with other parties challenging the PSC decision on other grounds, sought judicial review of the PSC decision.

IV. DISPOSITION IN CIRCUIT COURT

Numerous parties challenged the PSC's decision. Every party that sought review, other than the City, argued on a

variety of grounds that the PSC should not have issued the CPCN. Meanwhile, the City sought judicial review on the basis that the PSC erroneously applied and interpreted the law governing payments between WE and the City, failed to conduct statutorily required analysis, and ignored significant facts in the record. The circuit court agreed with the City that the PSC erred in reducing and altering the payments agreed to by the City and WE.

The circuit court ruled that the PSC only had the authority under a newly passed law, Wis. Stat. § 196.20(7), to reject or approve the payment agreement between the City and WE. R.App.224 (R.18:84:52). Thus, the PSC was to either approve the payments entirely or not at all, according to the circuit court. *Id.* The circuit court stated this was the relief the City sought, which is incorrect.[4] R.App.223-24 (R.84:51-52); R.76:7-20. The circuit court remanded the issue of the mitigation payments to the PSC (along with the rest of the case) to either reject or approve entirely the mitigation payments. R.App.224 (R.84:52). However, the circuit court itself erroneously interpreted the law in vacating the decision of

[4] The City argued that the PSC did not have the right to modify the payments to the City once approved, not that the payments had to be rejected or approved entirely in the first place. R.76:7-20.

the PSC. Accordingly, the City appeals to this Court on that issue.

The circuit court also brought the entire ERGS project to a halt by ruling that the PSC should not have issued the CPCN. *Id.* at 124-26 (R.84:52-54). The circuit court overturned the PSC's decision on a number of bases, including that the application for a CPCN submitted by WE to the PSC was incomplete, in part because the PSC failed to consider an alternative site for the proposed power plant. *Id.*

V. FACTS

A. Background

The City is located in Milwaukee County, at the county's southeastern corner, and along the Lake Michigan shoreline, and has about 30,000 residents. R.18:157:2626:6. A coal-fired power plant has operated near the proposed location since the 1950s. R.18:119:Vol.1:287.[5] WE retired four of the eight units at the existing plant more than a decade ago, and there are plans to keep at least some of the remaining units operational. *Id.* at 286-87. With the ERGS, WE proposes to build a state-of-the-art coal-fired

[5] All subsequent references to this document, the Final Environmental Impact Statement ("FEIS"), are to Volume 1 unless otherwise noted.

power plant, near the existing plant. As approved by the PSC, the new plant will consist of two super-critical pulverized coal (SCPC) units – 615 megawatts (MW) each.[6]

The ERGS is believed to be one of the largest construction projects in state history and will cost more than $2 billion. R.18:1:16; R.18:119:12. Construction of the ERGS will be ongoing in the City for about five years. R.18:119:300-01; R.18:150.57 (PSC requiring operation of second unit by 2010).

B. The City Has Made Substantial Efforts to Protect the Health and Safety of its Residents.

If the ERGS is built, the impacts on the City will be significant. In an effort to protect its residents' health, safety, and quality of life, and to mitigate the overwhelming adverse financial impacts of the ERGS, the City entered into a Development Agreement with WE (defined above as the "Agreement"), and the City approved a Conditional Use Permit ("CUP") for WE's construction and operation of the ERGS. The Agreement and CUP address environmental concerns, safety issues, noise concerns, land use and development matters, the cost of local services such as police, fire, emergency medical, and other

[6] When proposed, the ERGS was also to have one integrated gasification combined-cycle (IGCC) unit, a 600 MW unit. R.18:119:103, 115. The PSC did not approve that unit.

concerns, all of which are matters falling within the ambit of Wis. Stat. § 196.491(3)(d), a statute governing the CPCN. R.App.242 (R.18:158:*Ex.142*) (Agreement); R.App.252 (R.18:158:*Ex.144*) (CUP). While the City is satisfied that it has adequately protected the health and safety of its residents, the Agreement represents only a partial mitigation of the adverse impacts on the City.

1. The Agreement

Following arms-length negotiations with WE, the City entered into the Agreement with the utility on April 2, 2003. R.App.242-51 (R.18:158:Ex.142); *see also* R.18:157:2632:1-9; R.18:157:2182:8-17. The pertinent provisions of the Agreement include:

- There is not to be any increase in total critical air emissions from the existing power plant operations (Units 5-8) and the new ERGS units, as compared to baseline emission in the year 2000. (¶1.A.-C.) R.App.243-44.

- WE agreed to a local enforcement mechanism for air emissions if the construction and operation air permit or equivalent state or federal order does not include emission limitations to guarantee no increase in baseline emissions. (¶1.D.) R.App.244.

- WE agreed to install, operate, and maintain two air monitoring stations in the City, an Elm Road Monitoring Site near the ERGS at Haas Park and a Carrollton Monitoring Site at the Carrollton Elementary School. (¶1.E.1.-2.) R.App.244-45.

- WE must comply with specific air emission and ambient air monitoring data reporting requirements to the City and the Wisconsin Department of Natural Resources (DNR). (¶1.E.3.) R.App.245.

- WISPARK, an unregulated affiliate of WE, is required to submit a Market Study, Environmental Site Conditions Analysis, and a Land Use Plan to the City. (¶2.A.) R.App.246.

- WISPARK must invest $10 million for property development in the City for each of the first two units that are approved for the ERGS (for a possible total of $20 million) to facilitate land development in the City. Such development may include demolition of structures, environmental remediation, construction of improvements, etc. (¶2.B.) R.App.246-47.

- WE will make annual mitigation payments to the City, subject to the approval of the Commission, during the term of the proposed 30 year lease and any extensions of the lease, as follows: $1.5 million upon commencement of construction of the first ERGS unit; and $750,000 upon commencement of construction of the second ERGS unit. (¶3.) R.App.247.

- WE agreed to reimburse the City for out-of-pocket expenses incurred while participating in the application proceeding, with a cap, after which such expenses will be shared on an equal basis. (¶5.) R.App.247-48.

- The City and WE agreed to cooperate and work in good faith to have the pending application approved. (¶7.) R.App.248.

- The City gave up certain rights to sue WE for claims caused by the substantial effects of construction and operation of the ERGS, including without limitation safety concerns, noise, need for additional fire, police and emergency medical services. (¶8.) R.App.248.

- WE agreed to participate in the City's CUP application process. (¶6.) R.App.248.

The pertinent provisions of the Agreement are only effective if the ERGS is built within the City. R.App.250 (R.18:158:Exh.142:¶21).

2. The Conditional Use Permit (CUP)

Following separate negotiations with WE, the City Plan Commission unanimously approved the CUP on May 13, 2003, and the City Common Council unanimously passed the CUP as an ordinance on June 3, 2003. R.App.252-72 (R.18:158:Ex.144); *see also* R.18:157:2634:16-21, 2683:6-15. The CUP contains specific details concerning noise limitations and monitoring stations, location of coal storage and handling facilities, construction activities, site setbacks, traffic, roads, grading, operation of the ERGS, issues related to water supply, sewerage, and the like. The provisions of the CUP are only effective if the ERGS is built within the City. R.App.252-72 (R.18:158:Ex.144).

3. There will be Significant Direct Impacts on the City as a Result of the Construction and Operation of the ERGS, including "Health and Safety Impacts" Related to Air Emissions, Noise, City Services, and Other Impacts.

While the region and the state benefit from the energy generated, only 3% will be used locally and it is the local

community that bears all of the adverse impacts. R.18:119:Vol.3:12. The Agreement between the City and WE provides for mitigation payments as an integral part of the Agreement. The record establishes substantial bases for these payments to offset the impacts that otherwise could not be limited or avoided. The record further establishes that this payment does not adversely impact ratepayers. The PSC has previously approved similar mitigation payments for Port Washington (the other half of WE's "Power the Future" proposal). The cost of mitigation payments to the ratepayers is deminimis, a mere 4 cents per month for the average residential customer. R.18:157:2725:1-2, 4779:15-19.

There is no dispute that the mitigation payments called for by the Agreement are designed to directly offset the direct financial impacts the City will experience as a result of the ERGS. R.18:157:21-24. Further, there is *no evidence* in the record to contradict the City's evidence that the mitigation payments from WE relate to "health and safety impacts" and will fall well short of meeting the direct economic impacts of the ERGS on the City. R.18:158:Ex.151. These impacts include more than $2 million in annual costs related to health and safety.

The ERGS's impacts on the City will be substantial and extensive, and will mark an indelible print on the everyday lives of all 30,000 City residents, during both the construction and operation phases.

While air quality studies indicate that the ERGS as proposed will meet state and federal ambient air standards, operations at the ERGS and the existing plant could, at times, operate at times at levels close to those state and federal standards. *Id.* at 2790:14-18, 2793:9-21. In light of these facts, the City and WE have agreed on two air monitoring stations, and the utility will promptly report its emissions levels to the City and DNR. R.App.244-45 (R.18:158:Ex.142:¶1.E.1.-2). One of the effects of the Agreement is that the City will need to continuously review the air reporting done by WE, throughout the numerous decades the plant is operating, to ensure that residents are protected and that the utility does not exceed permissible emissions levels. *Id.* The City will incur costs as a result of the air monitoring.

Another direct impact on the City will be the noise resulting from the operation of the ERGS. Residential areas in the City are located in close proximity to the proposed site. R.18:119:285. Environmental noise is

recognized as a health concern by organizations such as the World Health Organization. R.18:157:2572:8-10.

The City has developed an Oak Creek Power Plant Local Noise Abatement Program. R.18:157:2649-50. The program addresses individual home or duplex conditions which will reduce the noise levels inside the dwelling units. *Id.* at 2649, lines 13-14. The City estimates an annual expenditure of up to $500,000 per year related to the ERGS. *Id.* at 2650:1-2. Further, the City has agreed to reimburse WE up to $250,000 per year for 10 years for specific projects that have the greatest benefit in terms of mitigating noise levels to nearby residences during construction and operation of the ERGS. *Id.* at 2650:8-10. The funding for these noise alleviation measures is supposed to come from the annual mitigation payments to the City. *Id.* at 2649:23-2650:11-14. The City will also incur expenses in reviewing the data from noise monitoring stations. R.App.266-69 (R.18:158:Ex.144:¶11.A.1 & 12.A.1)).

A significant impact on the City will be the burden of the ERGS on the City's fire and police departments. For example, the construction phase of the project will especially tax the resources of the fire department. The construction is expected to last five years and employ an

estimated 1,000 workers. R.18:150.57:3823:11-12. The fire department will be required to respond to emergencies at the ERGS. *Id.* at 3823:12-16. It is estimated that there will be a need to increase the department budget by 5%. *Id.* at 3824:6-9. The City Fire Chief calculated the initial cost of confined spaces training (for the water intake tunnel at the ERGS) to be $600,000, with additional costs in subsequent years. *Id.* at 3824:16-24-3825:1-2;R.18:119:200-08. When taking into account the hiring of additional personnel, increased emergency medical, paramedic, and fire services, and special training, increased annual costs to the City will exceed $588,000. R.18:158:Ex.141. The City also estimates it will initially spend $120,000 on an ambulance, $350,000 on a fire engine, and $406,500 on fire station modifications, all directly attributable to the ERGS. *Id.*

The ERGS also will require extensive expenditures for additional police services. The City's Chief of Police testified that the department will have to hire an additional five officers and purchase one new squad car (with an estimated three-year service life), with a cost of $300,000 per year for the officers and a purchase of the squad car for about $25,000. R.18:157:3814:19-22, 3816:2-3. In light of increased calls due to the ERGS, the

Police Department will have to increase its annual budget by $319,000, in addition to the cost of hiring additional officers. *Id.* at 3815:19-23. Finally, the department's SWAT team will require additional training at a cost of about $4,500 annually. *Id.* at 3816:7-11. Therefore increased annual costs for the police department will exceed $615,000, all of which is directly attributable to the ERGS. R.18:158:Ex.141.

One of the main impacts that construction will have on the City is increased traffic on City roads and State Highways 32 and 100, which run through the City. *See generally* R.18:157: 2624-36, 3831-33. The State Department of Transportation has scheduled construction work on these highways in 2004 and 2005, with completion of Highway 100 not expected until 2007 or 2008. *Id.* at 3831:19-22. In terms of direct costs to the City, construction traffic and related employee traffic that would otherwise be on State Highways 32 and 100 will be forced to use City roads, which will add to the City's costs of maintaining the roads. *Id. at* 2631:7-10.

Construction of the ERGS also will besiege the City with undesirable noise. "Construction noise is typically high intensity, intermittent and can be impulsive." R.18:119:336. Unfortunately for area residents, this noise

may be very loud at times and may occur into the evening and on weekends. *Id.* Construction traffic also will contribute to the noise problem, as will new rail construction. *Id.* at 337. Finally, for the first year of construction there will be massive earth moving activities on the site which will result in noise levels that are "fairly intense with a predominant low frequency component." *Id.* at 338.

In addition, the City will incur more than $209,000 annually in engineering supervision and building inspection costs for the ERGS. R.18:158:Ex.141.

C. The City Loses Out on Property Tax Revenue on the ERGS Site Because Utilities Do Not Pay Property Taxes, the ERGS Decreases Neighboring Property Values, and the ERGS will Prevent Redevelopment.

The City will incur lost revenues due to the ERGS. Lost revenues include direct lost tax revenue, decreased neighboring property values, and lost opportunity revenue.

Public utilities do not pay property taxes. R.18:157:2637:10. Therefore, as a result of having a power plant in its community, the City loses out on tax revenue it could be collecting on the WE site from a non-utility owner for at least the term of the proposed lease, which is 30 years and provides for possible extensions of the lease. *Id.* at 2627:22-23-2628:1-3. The City estimates that the

presence of the utility property results in annual lost tax revenues of up to $10.4 million in terms of property tax revenues from other developments that could be built there. *Id.* at 2707:14-20.

The City also will lose property tax revenue because residences located close to power plants suffer reduction in value simply by being close to a plant. *Id.* at 2715-17. This of course results in a direct loss to City residents and decreased tax revenues for the City. *Id.* at 2717:10-11.

If the ERGS is built, the City will miss an opportunity for large scale redevelopment of prime lakefront property. The City is one of the fastest growing cities in the state. R.18:157:2640:10-11. Despite the City's rapid growth, the areas closest to the existing power plant have been the slowest to develop. *Id.* at 2640:8-10. Thus, in 1999 the City developed a Lakeview Redevelopment Plan, in conjunction with private developers, for an area along the lakeshore that extends to the existing power plant. *Id.* at 2638:12-16. The proposed redevelopment of this area would have created a substantial revenue stream for the City. *Id.* at 2638:18-19. However, when discussion of the ERGS began, talks of development

ceased, and developers are waiting to see the impact of the ERGS on the area. *Id.* at 2640:2-6.

STANDARD OF REVIEW

"In reviewing a circuit court's reversal of a determination of an administrative agency, this court's scope of review is the same as that of the circuit court." *Esparza v. DILHR*, 132 Wis. 2d 402, 405, 393 N.W.2d 98 (Ct. App. 1986).

This matter involves the PSC's interpretation and application of statutes. An agency's statutory interpretation is reviewed under three different standards of review. These standards are as follows: great weight deference, due weight deference, and de novo review. "Which level is appropriate 'depends on the comparative institutional capabilities and qualifications of the court and the administrative agency.'" *UFE Inc. v. LIRC*, 201 Wis. 2d 274, 284, 548 N.W.2d 57 (1996) (citation omitted).

Great weight deference is appropriate under the following circumstances:

> 1) the agency was charged by the legislature with the duty of administering the statute;
>
> 2) that the interpretation of the agency is one of long-standing;
>
> 3) that the agency employed its expertise or specialized knowledge in forming the interpretation; and

> 4) that the agency's interpretation will provide uniformity and consistency in the application of the statute.

Harnischfeger Corp. v. LIRC, 196 Wis. 2d 650, 660, 539 N.W.2d 98 (1995).

The next level of deference is the "due weight" standard. "Due weight deference is appropriate when the agency has some experience in an area, but has not developed the expertise which necessarily places it in a better position to make judgments regarding the interpretation of the statute than a court." *UFE Inc.*, 201 Wis. 2d at 286. Under due weight deference, "a court need not defer to an agency's interpretation which, while reasonable, is not the interpretation which the court considers best and most reasonable." *Harnischfeger,* 196 Wis. 2d at 660 n. 4.

Finally, if no deference is appropriate as to an agency decision, a reviewing court will review the matter de novo:

> A de novo standard of review is only applicable when the issue before the agency is clearly one of first impression, *Kelley Co., Inc. v. Marquardt,* 172 Wis. 2d 234, 244-45, 493 N.W.2d 68, 73 (1992), or when an agency's position on an issue has been so inconsistent so as to provide no real guidance, *Marten Transport, Ltd. v. DILHR,* 176 Wis. 2d 1012, 1018-19, 501 N.W.2d 391 (1993).

UFE Inc., 201 Wis. 2d at 285.

For reasons discussed below, de novo review is appropriate on the issue of the mitigation payments to the City from WE, particularly because of the new statutory language at play. Meanwhile, the Court should give great weight deference to the PSC on the issues of the alternative site requirement and the completeness of the application for a CPCN.

With regard to any factual findings by the PSC, under Wis. Stat. § 227.57(6), this Court should set aside an act by the PSC if the act is not supported by "substantial evidence" in the record.

ARGUMENT

The PSC erroneously modified and reduced mitigation payments agreed to by the City and WE. The circuit court agreed with the City that the PSC did not have authority to modify the mitigation payments. The circuit court should have reversed the decision of the PSC on this issue and restored the mitigation payments as a matter of law. However, the circuit court erred by remanding this issue to the PSC with the direction that it modify or approve the mitigation payments in their entirety.

It is critical to note that, while the Agreement calls for WE to make "mitigation payments" to the City, this is

not a reference to "mitigation payments" as defined by Wis. Stat. § 196.20(7), which is a statutory subsection passed into law well after the signing of the Agreement.[7] That statute excludes payments related to "health and safety impacts" from the definition of mitigation payments, thereby taking those payments out of the PSC's purview. The City's primary argument to this Court is that that statutory exclusion prevents the PSC from tinkering with the payments from WE in any respect.

In modifying the payments to the City, the PSC erroneously applied Wis. Stat. § 196.20(7) and decided to reduce the mitigation payments the City would receive in the future by the amounts the City may receive from the state shared revenue program. The PSC decision failed to recognize that the mitigation payments from WE to the City were designed to partially mitigate substantial environmental and economic impacts that the City would incur as a result of the long-term operation of the ERGS, and that these impacts are not compensated by the state shared revenue program. When the City negotiated the

[7] The term "mitigation payment" is a general term used to describe a payment to defray costs in a situation like this. The Legislature used this term in Wis. Stat. § 196.20(7), but it chose to exclude payments for "health and safety impacts" from the definition of that term, which results in such payments being excluded from the statute.

payments with WE, it did so with the reasonable expectation that it would receive community mitigation payments from WE throughout the life of the ERGS, in addition to any funds it was eligible to receive from the state shared revenue program, as stated in the Agreement. R.App.242-51 (R.18:158:Ex.142). Furthermore, the PSC failed to address the fact that the state shared revenue program is designed to compensate host communities for lost property taxes, not for "health and safety impacts." The PSC's position directly conflicts with the legislative mandate to protect payments related to "health and safety impacts."

The circuit court agreed with the City that the PSC erroneously reduced the mitigation payments to the City.

I. THE PAYMENTS TO THE CITY UNDER THE DEVELOPMENT AGREEMENT SHOULD BE RESTORED IN ALL RESPECTS.

A. The Legislature Made Changes to Wis. Stat. § 196.20 with the Addition of Subsection (7) that Preclude the PSC from Reducing the Mitigation Payments to the City.

A review of changes in the law made during this regulatory process is necessary to understand the City's position. In July 2003, the Legislature made numerous changes to the state shared revenue law, which provides increased compensation for communities that host power plants, because power plants do not pay property taxes. 2003 Wis. Act 31.

In July 2003, Governor James Doyle vetoed three parts of Act 31, the last of which was to create a new statutory subsection. Wis. Stat. § 196.20(7) (affecting mitigation payment agreements between utilities and municipalities, like the Agreement between the City and WE). The pertinent vetoed portion of 2003 Wis. Act 31 provided as follows:

> 7)(a) In this subsection, "mitigation payment" means, as approved by the commission, an unrestricted or recurring monetary payment to a local unit of government in which an electric generating facility is located to mitigate the impact of the electric generating facility on the local unit of government. "Mitigation payment" does not include payments made or in-kind contributions for restricted purposes to directly address health or safety impacts of the electric generating facility on the local unit of government.
>
> (b) Except as provided in par. (c), an electric public utility may not recover in rates any of the following:
>
> 1. The cost of mitigation payments paid by the utility.
>
> 2. The cost of mitigation payments paid by the owner or operator of an electric generating facility that the owner or operator recovers from the utility by selling electricity to the utility, by leasing the facility to the utility, or by any agreement between the owner or operator of the electric generating facility and the public utility.

> (c) The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003, and, if the commission finds the agreement to be reasonable, shall not subsequently modify the agreement.

2003 Wis. Act 31, § 23 (vetoed by Governor James Doyle in July 2003).

In the early fall of 2003, the public hearings and technical hearings concluded in this matter. In November 2003, the PSC issued its decision regarding the ERGS. The PSC decided to modify and limit the mitigation payments to the City because, according to the PSC, the mitigation payments were no longer "required" in light of changes to the state shared revenue law that went into effect in July 2003. R.18:150:49-50. On November 11, 2003, the City petitioned for judicial review of the PSC decision on the basis that the PSC improperly reduced the mitigation payments.

On December 3, 2003, (after the PSC decision) the Legislature passed the same legislation related to mitigation payments that was vetoed by Governor Doyle in July 2003. 2003 Wis. Act 89, § 33. The Governor did not veto the legislation this time around and the language quoted above from 2003 Act 31 is the exact language in Wis. Stat. § 196.20(7) today. The law was enacted on December 3, 2003, and published on December 17, 2003. By its very

language, the statute operates retroactively to compel a different type of examination of mitigation payment agreements than was previously necessary.[8] Wis. Stat § 196.20(7) ("The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003 . . . ."). The City, aware that this time limitation on mitigation payment agreements was being considered by the Legislature, formally delivered a copy of the Agreement to the PSC before June 10, 2003. R.App.242 (R.18:158:Ex.142).

The modification to Wis. Stat. § 196.20 accomplished a number of things that are critical to this matter. First, the law specifically excludes payments made for "health and safety impacts" from the reach of the statute. Wis. Stat. § 196.20(7) ("'Mitigation payment' does not include payments made or in-kind contributions for restricted purposes to directly address health or safety impacts of the electric generating facility on the local unit of government.")

Second, the law places a time limitation on agreements, only allowing the PSC to approve certain

[8] In discussing the retroactivity of 2003 Wis. Act 89, the City is only addressing the section of the law that created subsection (7) of Wis. Stat. § 196.20, which addresses agreements submitted to the PSC before June 10, 2003.

agreements submitted by June 10, 2003. Wis. Stat. § 196.20(7)(c) ("The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003, ..."). The time limitation in the law makes it clear that payments for other types of impacts (non-"health and safety impacts") are permissible if the PSC received the agreement before June 10, 2003, and they are reasonable.

Third, the law prohibits the PSC from subsequently modifying a mitigation payment agreement once it makes a finding that the payments are reasonable. Wis. Stat. § 196.20(7)(c) (". . . [I]f the commission finds the agreement to be reasonable, shall not subsequently modify the agreement.") Prior to the change to Wis. Stat. § 196.20, no statute or rule differentiated between payments for "health and safety impacts" and other types of impacts. If the PSC finds an agreement regarding any non-"health and safety impacts" to be reasonable, it cannot subsequently modify the agreement.

Generally, the rule of statutory effectiveness is that statutes do not apply retroactively. However, when a statute by its language or implication shows the Legislature intended retroactive application, the statute applies retroactively. *State v. Chrysler Outboard Corp.*,

219 Wis. 2d 130, 162, 580 N.W.2d 203 (1998) (citing numerous cases and concluding that statute applied retroactively by "necessary implication"). Wisconsin Stat. § 196.20(7) by its plain language applies retroactively to any agreement regarding mitigation payments submitted to the PSC before June 10, 2003.[9]

The time limitation in the statute expressly applies to past acts. This part of the statute was passed in December 2003 (after the Governor had vetoed this part six months earlier) and requires that, in order to be binding on the PSC, mitigation payment agreements were to be filed with the PSC before June 10, 2003. Prior to the passage of the statute, there was never a statutory or administrative requirement that a party file independently a copy of a mitigation payment agreement with the PSC (except as a part of an ongoing proceeding). By its language and operation, the Legislature clearly intended the provisions of the new statutory subsection to apply retroactively. At a minimum, the statute by "necessary implication" applies retroactively.

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[9] Under a prospective application of Wis. Stat. § 196.20(7), meaning the exclusion for "health and safety impacts" would not apply, the PSC nevertheless failed to conduct a meaningful analysis of the reasonableness of the mitigation payments. See Section I.D. below.

Furthermore, the PSC conceded in a circuit court brief and at oral argument that the new subsection (7) applies to this matter.[10] R.63:68; R.89:10-11.

B. The Changes Made to Wis. Stat. § 196.20 by the Addition of Subsection (7) Removed the Authority of the PSC to Examine the Reasonableness of Payments to the City for "Health and Safety Impacts."

For numerous reasons, the PSC decision does not comport with subsection (7) of the statute. The PSC decision fails to account in any respect for the fact that the City presented a mountain of evidence at the technical hearings related to "health and safety impacts." There is no discussion at all in the PSC decision regarding the fact that the payments in the Agreement are designed to mitigate, in part, some of these impacts on the City. The Agreement expressly acknowledges that the City will suffer impacts related to health and safety and that the Agreement is designed to mitigate those impacts. R.App.242-51 (R.18:158:Ex.142:¶2.A.3 & 2.A.8).

Wisconsin Stat. § 196.20(7) specifically excepts payments related to "health and safety impacts" from the

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[10] While Wis. Stat. § 196.20(7) was not signed into law by the Governor until December 3, 2003, Senate Bill 300 (which became 2003 Wis. Act 89) was pending in the Legislature from the end of October 2003 until passed by the Senate on November 11, 2003, and the Assembly on November 13, 2003.

reaches of the statute. The Legislature chose to define "mitigation payment" so that the concept "does not include payments made . . . to directly address health or safety impacts of the electric generating facility on the local unit of government." Wis. Stat. § 196.20(7)(a). In adopting this exception from the statute, the Legislature ensured that communities such as the City do not disproportionately suffer the "health and safety impacts" naturally associated with the siting of a power plant. The Legislature's protection of these types of payments shows a strong preference for allowing municipalities and utilities to come to arms-length agreements on remedying the "health and safety impacts" of a power plant, as happened here.

At a hearing before the circuit court, both the circuit court and the PSC agreed that the Agreement is exempt from language in the new statute prohibiting mitigation payments. R.89:10-13. However, both the PSC and the circuit court only made this recognition with regard to the Agreement being received by the PSC before June 10, 2003. The PSC and the circuit court did not address the effect of the exclusion based on "health and safety impacts," which is the more important provision in the new law. This distinction is important because it is the City's position that this exclusion prevents the PSC

from examining the payments to the City, so long as the payments are for "health and safety impacts."

Prior to the adoption of subsection (7), the PSC had the general authority to determine whether it is reasonable to pass the costs of all mitigation-type payments on to ratepayers. Wis. Stat. § 196.37. However, with subsection (7), the Legislature curtailed that authority with regard to payments related to "health and safety impacts." The law continued the authority of the PSC to determine the reasonableness of other types of impact payments.

By specifically excluding payments related to "health and safety impacts" from the definition of "mitigation payment" under the statute, and at the same time specifically requiring a reasonableness analysis of other types of payments, the Legislature made a strong statement that the PSC is no longer able to examine the reasonableness of payments for "health and safety impacts." The PSC maintains its general statutory authority over rate-setting, but the new law, which is more specific as to "mitigation payments" and payments for "health and safety

impacts," governs because it is more specific.[11]

At the technical hearing on this matter, the City's witnesses pointed out that the City will incur impacts related to health and safety in excess of $2 million annually. Despite conceding in the circuit court that this new statute applies to this matter, (R.63:68; R.89:10-11), the PSC chose to selectively apply parts of the new law and outright ignore others, including the "health and safety impacts" provision.

Under the new statute, local communities are allowed to receive payments for "health and safety impacts," even if the agreement was received by the PSC after June 10, 2003. The PSC and the circuit court missed this concept in the statute entirely. This Court should reverse the decision of the PSC and the payments to the City should be restored as a matter of law.[12]

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[11] A more specific statute should be applied when a general statute applies to the same subject, including statutes related to an agency's power. *State v. Jones*, 226 Wis. 2d 565, 576, 594 N.W.2d 738 (1999); *see also Wis. Citizens Concerned for Cranes and Doves v. DNR*, 2004 WI 40, ¶32, 270 Wis. 2d 318, 677 N.W.2d 612; *In re Paternity of Robert Jo W.*, 218 Wis. 2d 225, 578 N.W.2d 185 (1998).

[12] The record contains only undisputed evidence of "health and safety impacts" to account for the amount of the payments from WE; therefore, this Court may rule as a matter of law that the full payments should be restored to the City.

C. Under Wis. Stat. § 196.20(7), Payments for Impacts other than "Health and Safety Impacts" are Permissible if the PSC Received the Agreement before June 10, 2003, and the Payments are Reasonable.

The time limitation in the law makes it clear that payments for impacts *other than* "health and safety impacts" are permissible if the PSC received the agreement before June 10, 2003, and if the payments are reasonable. Rather than determining whether the payments for such impacts are reasonable, the PSC merely determined that such payments were "not required." R.App.150 (R.18:150:50). The PSC's decision is deficient in that it did not truly address or analyze the reasonableness of payments for non-"health and safety impacts." There is no discussion whatsoever in the PSC's decision regarding the appropriateness of the payments in light of the evidence presented by the City at the technical hearings.

As discussed above, the City presented evidence of annual lost tax revenues of up to $10.4 million. R.18:157:2707:14-20,2711:6-16. The PSC did not discuss this evidence before the circuit court or any of the other evidence demonstrating the losses of the City that exceed by millions annually the combined total of state shared revenue and the WE payments.

The PSC admits that the payments were found to be reasonable for the period when the City is not receiving state shared revenue. R.89:10-12. However, in deciding that the City should not receive the WE payments after the state shared revenue dollars "kick in," the PSC failed to complete the required reasonableness analysis because it did not examine the overwhelming evidence presented by the City which shows that even with state shared revenue plus the WE payments, the impacts on the City far exceed that total. The PSC substituted its judgment for the will of the Legislature by determining that the mitigation payments are "not required" in its decision.

D. The PSC Failed to Conduct any Meaningful Analysis of the Reasonableness of the Mitigation Payments.

The PSC failed to conduct any meaningful analysis of the reasonableness of the payments called for by the Agreement, and to the extent it did, it incorrectly concluded that the payments to the City are "not required." A reasonableness analysis was only required if (a) the "old law" applies, or (b) under the "new law," the PSC retained the authority to review some or all of the payments under

the Agreement.[13] Under either of those scenarios, the reasonableness analysis would have required the same considerations by the PSC.[14]

The PSC found the payments reasonable before state shared revenue dollars "kick in." R.89:10-13. The City supports that part of the PSC decision. However, having found the mitigation payments reasonable *before* state shared revenue dollars begin, the PSC's statutory charge was to analyze the reasonableness of the payments once the state shared revenue dollars begin. In other words, the PSC should have discussed and considered whether, for example, it was reasonable for the City to receive $2.25

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[13] Prior to the modification of Wis. Stat. § 196.20, the PSC's task in analyzing the payments from WE to the City, which were to be passed on to ratepayers, was to determine whether the rates including those payments are unjust or reasonable pursuant to Wis. Stat. § 196.37.

[14] The City acknowledges that the "new law," subsection (7) of Wis. Stat. § 196.20 was not yet in effect at the time of the PSC decision. However, by its terms it retroactively went into effect soon after. Under the general law governing rate setting in effect on the date of the PSC decision is applied, the PSC did not carry out its statutory duty to examine whether the payments were unreasonable or unjust such that they should not be passed on to ratepayers, *see* Wis. Stat. § 196.37, and to the extent that it did, its conclusion that the payments to the City were not required after the ERGS began operating was without a rational basis when the evidence presented by the City is considered. Furthermore, the PSC has had one year to modify its decision, a decision which was made in contravention of undisputed evidence and despite no party to the proceedings opposing the mitigation payments.

million per year from WE Energies, based on the very specific evidence of "health and safety impacts" and other impacts presented by the City.

The City contends that the addition of subsection (7) to Wis. Stat. § 196.20 eliminated the authority of the PSC to examine the reasonableness of payments related to "health and safety impacts." Meanwhile, the PSC believes it still has the authority to examine the reasonableness of all mitigation-type payments. Even under the standard applied by the PSC, the PSC failed to demonstrate that it actually examined the reasonableness of the payments to the City compared to the actual costs (health, safety, and otherwise) that will be incurred by the City.

Under either the "old law" or an interpretation of the "new law" that includes a reasonableness examination, the PSC did not measure the evidence against that standard. The City presented substantial evidence at the technical hearings of the impacts on health and safety. This evidence included undisputed testimony and exhibits from the City Administrator, Police Chief, Fire Chief, and others indicating that the City would suffer significant impacts related to health and safety as a result of the ERGS. Testimony indicated that, in addition to the annual

lost revenues of up to $10.4 million, the ERGS would result in the following annual costs to the City:

Annual health and safety costs:

$588,000	Fire Department
$623,500	Police Department
Unknown	Air Quality Monitoring
$500,000	Noise Abatement Program
$250,000	Noise Abatement Projects
Unknown	Noise Monitoring
Unknown	Road maintenance
$219,000	Engineering and building inspection
$2,170,500	**Total Annual Costs (plus unknown costs)**

In addition, the City presented substantial evidence regarding one-time health and safety costs it will incur as a result of the ERGS:

One-time Costs:

$600,000	Confined spaces training
$120,000	Ambulance
$350,000	Fire engine
$406,500	Building modifications
$ 30,000	Police car
$1,506,500	**Total One-Time Costs**

See Section V.B.3. above. The PSC's decision does not address the fact that the City will incur all of these costs. The PSC did not discuss one of these costs in depth or even mention one of them by category in its decision. The PSC decision is devoid of any consideration of the nature of the impacts on the City.

The PSC engages in circular logic to conclude that the increased shared revenue payments brought about by 2003 Wis. Act 31 mean that payments to mitigate such costs "are not required." R.App.150 (R.18:150:50). The rationale put forth for this decision is that "the annual state shared revenue payments to the city of Oak Creek when ERGS is completed will exceed the amount the city is requesting in the form of mitigation payments from WEPCO ratepayers." *Id.* at 50. Notably absent from the PSC's arguments to the circuit court is any actual reason that the City is not entitled to *both* payments from WE and state shared revenue payments:

> It [the PSC] concluded that this new law, which expands shared revenue payments, will completely replace the mitigation dollars specified in the city's contract with WEC, and therefore that mitigation payments are unnecessary as long as this stream of shared revenue continues to flow.

R.63:68. It is clear from the PSC's decision and the PSC's position before the circuit court that it ventured on its own to decide that shared revenue payments are enough to compensate the City for impacts caused by the ERGS. Whether the payments from WE are "required" is irrelevant and without basis in law as a tool to determine the appropriateness of the payments.

The payments should have been approved in full by the PSC for numerous reasons. First, the payments are the result of arms-length negotiations between the City and the utility regarding mitigation of impacts. Second, the impact on ratepayers is miniscule. If the payments were approved, an average residential ratepayer would experience a 4¢ monthly increase in electric rates. R.18:157:2725:1-2, 4779:15-19. Third, the payments in the Agreement still fall well short of full reimbursement for the City's costs.

In addition to the evidence on costs related to health and safety, the City presented evidence that the presence of the utility property will result in lost tax revenues that exceed the mitigation payments by millions of dollars R.18:157:2707:14-20.

Whether subsection (7) was in existence or not at the time of the PSC decision, the PSC should have at least examined the reasonableness of the non-"health and safety impacts." As a result of the new law, the PSC was required to approve payments for "health and safety impacts" without such examination.

E. The PSC Decision is not Entitled to any Deference because it Misapplied the Law, Failed to Conduct the Proper Reasonableness Analysis, and Ignored Major Facts of Record.

Under the new law, if the PSC finds an agreement for mitigation payments to be reasonable it cannot subsequently modify the agreement. Subsection (7) of the statute provides as follows:

> The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003, and, if the commission finds the agreement to be reasonable, *shall not subsequently modify the agreement.*

Wis. Stat. § 196.20(7)(c) (emphasis added). This provision applies only to non-"health and safety impacts" because, as discussed above, impacts related to health and safety are altogether excluded from the law.

The PSC decision violates the law because the PSC retained the authority to modify the payments from WE. Its decision states that if the state shared revenue payments decrease during the 30-year lease *and* "are no longer sufficient to offset the mitigation payment that would have been paid under the Development Agreement," WE may make a partial mitigation payment to make up the difference. R.App.149-50 (R.18:150:49-50). The PSC had the opportunity to concede this point before the circuit court but it refused to do so, and the circuit court agreed with the

City's argument in this regard. R.App.224 (R.84:52).[15] The PSC also fails to recognize the exclusion for "health and safety impacts" in Wis. Stat. § 196.20(7).

The PSC's decision limiting mitigation payments to the City is subject to de novo review and no deference because the decision contravened Wis. Stat. § 196.20(7), ignored legislative intent, and was without a rational basis.

The PSC decision is not entitled to great weight or due weight deference because the decision involves a recently enacted statute regarding mitigation payments. The PSC has no experience applying the new provisions in the law that went into effect with 2003 Wis. Act 89, § 33, and which made major changes to how mitigation payments (and other payments) are governed.

Furthermore, the new part of the statute specifically addresses the power and authority of the PSC to review certain types of payments from utilities to municipalities. Courts owe no deference to administrative agencies and should conduct independent review of statutes when an agency attempts to define its own authority. *Wis. Citizens Concerned for Cranes and Doves v. DNR*, 2004 WI 40, ¶¶9-13, 270 Wis. 2d 318, 677 N.W.2d 612. This is because "[t]he

[15] The circuit court agreed with the City and in fact based its decision on this argument. R.App.224 (R.84:52).

nature and scope of an agency's powers are issues of statutory interpretation," which should be performed by a court. *Id.* at ¶6.

The PSC's decision is internally inconsistent because it approves the payments from WE to the City for a period of time and then rejects them for another period. Approving the payments for a period of time required a determination that the payments are reasonable. However, the PSC applied that finding inconsistently by ruling that the payments are not permissible after the state shared revenue dollars kick in. Therefore, no deference is appropriate.

The PSC essentially made no factual findings in its decision with regard to the Agreement and the payments called for by the Agreement. Application of the "substantial evidence" standard, as required by Wis. Stat. § 227.57(6), shows that there is not substantial evidence in the record to support the PSC's decision. The evidence presented by the City with regard to impacts and the need to receive payments to mitigate those impacts is undisputed.

The PSC failed to acknowledge that the City will incur millions of dollars in impacts and lost tax revenue that will greatly exceed the total of state shared revenue and

payments under the Agreement. Further, the PSC was absolutely incorrect in its assertion before the circuit court that the City admits the Agreement has resolved every concern of the City about the adverse effects of the ERGS. R.63:68, 70. Yet, the PSC uses this alleged fact as a basis for denying the City anything beyond the state shared revenue dollars in the many years of operation of the ERGS.

The PSC exceeded its statutory authority in eliminating the payments from WE on the unfounded basis that "[t]he Commission found no reason to burden ratepayers twice." R.63:70. However, in Wis. Stat. § 196.20, the Legislature clearly permitted communities to receive both shared revenue and payments from utilities.

The PSC's decision and its position before the circuit court repeatedly ignored the fact that the City is only seeking partial mitigation of the impacts it will suffer. The PSC argued to the circuit court that, as long as shared revenue payments come in, "they will meet the level of mitigation payments that Oak Creek agreed was sufficient in the Development Agreement and they will make those payments unnecessary." R.63:73. This is simply not true. The Agreement itself indicates payments are not to be affected by state shared revenue. R.App.247 (R.18:158:Exh.142:¶3).

The City did not agree that just one of these two payments was sufficient.

F. The Circuit Court Ignored an Exception in Wis. Stat. § 196.20(7) that Excluded the Mitigation Payment from the Reach of the Statute and Erroneously Ruled that the PSC Could Only Reject or Approve the Agreement Entirely.

The circuit court erroneously ignored the exception in the statute excluding payments for "health and safety impacts." The City presented argument to the circuit court regarding how this exception in the statute operated to prevent the PSC from modifying the payments called for by the Agreement. R.76:7-20. The circuit court (and the PSC) agreed that the new statute applies, but the circuit court decided this issue solely on the basis that the PSC was not allowed to modify the payments after approving them, pursuant to subsection (7). The City agrees that subsequent modification is not allowed. However, the circuit court totally failed to address the more important part of that subsection, which protects these types of payments from PSC interference, i.e., the definition excluding payments for "health and safety impacts" from the reach of the statute. Accordingly, despite the circuit court's efforts to correct the PSC's errors, the decision of the circuit court is erroneous in that it failed to reverse the decision of the PSC. This Court should rule

that the payments from WE to the City are excluded from the reach of the statute and reverse the PSC's decision on this issue.

The circuit court erred in remanding the matter to the PSC with the direction that the PSC only had the authority to reject or approve entirely the mitigation payments. The City argued on this point that the PSC's decision was improper because it retained the authority to modify the payments in the future, in contravention of the last part of Wis. Stat. § 196.20(7)(c), which says "if the [PSC] finds the agreement to be reasonable, [it] shall not subsequently modify the agreement." Saying the agreement cannot be modified in the future is different than saying it can only be rejected or approved in the first place. That is the difference between what the statute says and the ruling by the circuit court.

II. THE CIRCUIT COURT ERRED IN RULING THAT THE ALTERNATIVE SITE REQUIREMENT WAS NOT SATISFIED AND THIS COURT SHOULD RESTORE THE PSC'S DECISION TO GRANT A CPCN.

In the CPCN proceedings the PSC had presented to it four different alternative site locations for the ERGS, namely the North Site, the North Site With Accomodations (a/k/a the North CUP Site), the South Site and the South Exp Site. The circuit court held that the PSC did not have at least two alternative sites for consideration. R.App.

224-25 (R.84:52-54). This Court should give great weight deference to the PSC on the issue of the alternative site requirement. *Harnischfeger Corp.*, 196 Wis. 2d at 660.

The record in this case, including the application, the Draft and Final Environmental Impact Statements, and the hearings conducted by the PSC, clearly demonstrate the four alternative sites and the significant differences among them, including differences with regard to location, community support, provision of police and fire services, air impacts, noise impacts, and wetland impacts. R.18:157:2620-60, 4787:5-17 (City support); R.18:157:5353-58; R.18:157:561:8-10, 2182:21-25, 4782:5-9 (Town of Caledonia opposition); R.18:158:Ex.141; R.18:157:3823-25; R.App.248 (R.18:158:Ex.142:¶8) (fire and emergency medical services to be provided by the City); R.18:119:298-99; R.18:158:Ex.143 (City made necessary zoning changes); R.18:157:2830-32 (differences in air quality impacts); R.18:157:2584-85 (differences in noise impacts); R.18:119:217, 400 (differences in wetland impacts).

III. THE CIRCUIT COURT ERRED IN RULING THAT THE APPLICATION WAS INCOMPLETE AND THIS COURT SHOULD RESTORE THE PSC'S DECISION TO GRANT A CPCN.

This Court should reverse the circuit court's decision regarding the completeness of the application. The circuit court rewrote the PSC's administrative rule, Wis. Admin.

Code § PSC 111.53, while citing no authority and exercising unwarranted de novo review. Furthermore, the circuit court's ruling directly conflicts with Wis. Stat. §§ 196.491(3)(a)1, the statute which allows the PSC to decide what makes an application for a CPCN complete.

CONCLUSION

The PSC erred when it reduced the mitigation payments from WE to the City, and its decision in this regard does not deserve any deference. The circuit court agreed with the City that the PSC erred, but the circuit court also erred in its application of the relevant statute, Wis. Stat. § 196.20(7). The City requests that this Court reverse the PSC decision and restore the mitigation payments to the City in full as a matter of law, based on that statute.

The City also requests that this Court rule the PSC properly considered the application of WE complete and that the "alternative site" requirement was satisfied, and reverse the decision of the circuit court, which vacated and remanded the PSC's determination to issue a CPCN.

Dated this 4th day of February, 2005.

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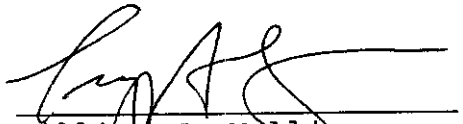
By: 

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FORM AND LENGTH CERTIFICATION

I hereby certify that this brief conforms to the rules contained in § 809.19(8)(b) and (c) for a brief and appendix produced with a monospaced font. The length of this brief is 47 pages.

Dated this 4th day of February, 2005.

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STATE OF WISCONSIN
SUPREME COURT

CLEAN WISCONSIN, INC. p/k/a Wisconsin's Environmental Decade Institute, Inc., SC JOHNSON & SON, INC. and CALPINE CORPORATION,
Petitioners-Respondents-Cross-Appellants-Cross-Respondents,
TOWN OF CALEDONIA,
Petitioner-Cross-Respondent,
v.
PUBLIC SERVICE COMMISSION OF WISCONSIN and WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondents-Co-Appellants-Cross-Respondents,
WISCONSIN ELECTRIC POWER COMPANY, W.E. POWER, LLC and WISCONSIN ENERGY CORPORATION,
Interested Parties-Appellants-Cross-Respondents,
DAIRYLAND POWER COOPERATIVE,
Interested Party-Cross-Respondent,
MADISON GAS & ELECTRIC COMPANY and WISCONSIN PUBLIC POWER, INC.,
Interested Parties-Co-Appellants-Cross-Respondents,
CITY OF OAK CREEK,
Interested Party-Respondent-Cross-Appellant,
ROBERT H. OWEN,
Interested Party-Respondent-Cross-Respondent.

Appeal No. 04-3179

Circuit Court Case Nos. 03-CV-003478, 03-CV-003731, 04-CV-000133, 04-CV-000149, 04-CV-000530, 04-CV-000533

(Caption continued on following pages)

APPENDIX OF INTERESTED PARTY-RESPONDENT-CROSS-APPELLANT CITY OF OAK CREEK

APPEAL FROM A FINAL ORDER OF THE CIRCUIT COURT FOR DANE COUNTY, THE HONORABLE DAVID FLANAGAN PRESIDING

CALPINE CORPORATION,
Petitioner,
v.
PUBLIC SERVICE COMMISSION OF WISCONSIN and WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondents,
WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION, W.E. POWER, LLC, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, ROBERT H. OWEN, JR., and CITY OF OAK CREEK,
Interested Parties.

CLEAN WISCONSIN, INC. p/k/a Wisconsin's Environmental Decade Institute, Inc. and SC JOHNSON & SON, INC.,
Petitioners,
v.
WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondent,
WISCONSIN PUBLIC POWER, INC., CITY OF OAK CREEK, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION and W.E. POWER, LLC,
Interested Parties.

CALPINE CORPORATION,
Petitioner,
v.
WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
Respondent,
CITY OF OAK CREEK, DAIRYLAND POWER COOPERATIVE, MADISON GAS & ELECTRIC COMPANY, WISCONSIN PUBLIC POWER, WISCONSIN ELECTRIC POWER COMPANY, WISCONSIN ENERGY CORPORATION and W.E. POWER, LLC,
Interested Parties.

CITY OF OAK CREEK,
Petitioner,
v.
PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent.

TOWN OF CALEDONIA,
Petitioner,
v.
PUBLIC SERVICE COMMISSION OF WISCONSIN,
Respondent,
WISCONSIN ELECTRIC POWER COMPANY,
WISCONSIN ENERGY CORPORATION, W.E.
POWER, LLC, DAIRYLAND POWER
COOPERATIVE, MADISON GAS & ELECTRIC
COMPANY, ROBERT H. OWEN, JR., and
WISCONSIN PUBLIC POWER, INC.,
Interested Parties.

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TABLE OF CONTENTS

R.18:150	Final Order of Public Service Commission	R.App.101
R.84	Order upon Judicial Review of Public Service Commission Order	R.App.173
R.17	Record List of Respondents Public Service Commission of Wisconsin and Department of Natural Resources	R.App.227
R.18:158:Ex.142	Development Agreement	R.App.242
R.18:158:Ex.144	Conditional Use Permit	R.App.252

Date Mailed
November 10, 2003

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Three Large Electric Generation Facilities, the Elm Road Generating Station, and Associated High Voltage Transmission Interconnection Facilities to be Located in Milwaukee and Racine Counties	05-CE-130
Application for Approval of Affiliated Interest Agreements Between Wisconsin Electric Power Company and Elm Road Generating Station	05-AE-118

Introduction

This is the final decision regarding Part II of the proposal filed by Wisconsin Energy Corporation (WEC) and several of its subsidiaries to construct new electric generating plants, which the applicants have named Power the Future (PTF). The Commission received the initial application for the approvals needed to build PTF on January 31, 2002.

In its original form, the PTF application proposed to construct a total of five new generating plants: two natural gas-fired units at Port Washington, to replace the existing coal-fired plants there, and three new coal-fired units added to the existing Oak Creek Power Plant (OCPP) site. The application also includes other components, in addition to the proposals to construct new generating stations. It commits WEC to further reduce environmental emissions by upgrading its existing fleet of generating plants, to work in a collaborative group for the purpose of reaching a target of 5 percent of energy derived from renewable resources by

the year 2012, to pursue carbon dioxide mitigation projects that are energy-focused and Wisconsin-focused, and to increase its existing investment in energy conservation.[1]

The Commission separated WEC's request for authority to construct new natural gas-fired units at Port Washington, known as the Port Washington Generating Station (PWGS), from its request to construct new coal-fired units at Oak Creek. On December 19, 2002, the Commission issued a Certificate of Public Convenience and Necessity (CPCN), approving Part I of PTF by granting authority to construct PWGS; on February 27, 2003, the Commission issued a subsequent order reopening and amending its initial decision.

WEC is proposing to finance each of these new generating units using leased generation contracts. Leased generation is governed by a law the Wisconsin Legislature enacted as part of 2001 Wis. Act 16, which took effect on September 1, 2001. Leased generation contracts are affiliated interest transactions and are regulated under Wis. Stat. § 196.52(9). WEC offered proposed leases for each generating unit, consisting of a Facility Lease, a Ground Lease and a Ground Sublease, and the Commission approved leased generation contracts to finance Part I of PTF. The leased generation contracts now being offered for Part II are based upon these approved contracts.

On November 15, 2002, the Commission issued a determination that WEC's CPCN application for Part II of the PTF project was complete. This triggered the 180-day period under

[1] Subject to regulatory review and provision for cost recovery, the PTF application commits WEC to spending $1.3 billion over ten years to reduce emissions from its existing units, $6 million annually for ten years on the pursuit of additional renewable resources, $10 million over five years on carbon dioxide mitigation projects, and $20 million over ten years for additional energy conservation activities. (PTF Application, pp. 4-5, 10-11; Vol. 1 Enclosure 1, pp. 2 and 11.)

which the Commission is required to conduct its review of this CPCN application regarding Part II of PTF. The Commission extended this period to 360 days by petitioning the Dane County Circuit Court for additional review and received the necessary order, pursuant to Wis. Stat. § 196.491(3)(g)1, on April 29, 2003. During this period Commission staff prepared an Environmental Impact Statement (EIS) for this project in collaboration with staff of the Wisconsin Department of Natural Resources (DNR), which was subsequently introduced into the record at hearing.

Part II of PTF is comprised of two Super Critical Pulverized Coal units (SCPC 1 and SCPC 2), each sized at 615 megawatts (MW), which WEC proposes to place in service in the years 2008 and 2009, and an Integrated Gasification Combined Cycle (IGCC) unit, sized at 600 MW and projected to be on-line in the year 2011.[2] Bituminous coal would be the principal fuel for each of the three units. WEC describes these three units as its Elm Road Generating Station (ERGS). Calpine Corporation and LS Power, Inc., both independent power producers (IPPs), entered the case in opposition to the ERGS project, arguing that independent power sources could meet the current energy and capacity needs of Wisconsin Electric Power Company (WEPCO) more economically than this leased generation project that WEC has proposed. S.C. Johnson & Son, Inc. also entered as a party in opposition; it alleges that ERGS is not the least-cost alternative for reliable electric service and is not in the public interest. All parties to the docket are listed in Appendix A.

[2] Both Wisconsin Public Power, Incorporated (WPPI) and Madison Gas & Electric Company (MGE) have options to acquire ownership interests of 50 MW in SCPC 1 and in SCPC 2. If these options are exercised, the capacity available to WEPCO from each SCPC unit would be 515 MW.

The Commission held 11 days of hearings before Administrative Law Judge David Whitcomb, commencing August 25, 2003, and continuing through September 12, 2003. At these hearings, witnesses with technical and professional expertise testified on behalf of the parties, Commission staff and DNR staff. In addition, in the cities of Oak Creek and Racine, Wisconsin, the Commission held three more days of hearings for the public on September 17 to 19, 2003. All those who appeared and testified are listed in the Commission's files. The parties then submitted briefs to the Commission. At its open meeting on October 29, 2003, the Commission considered this matter in oral deliberations.

This Final Decision approves the PTF application in part, denies it in part, and modifies it. The Final Decision APPROVES that portion of the PTF application regarding construction of two SCPC units at the North Site—CUP alternative, subject to conditions, but DENIES that portion regarding construction of the IGCC unit. The Commission APPROVES the construction of the first SCPC unit with an in-service date of 2009, and the second SCPC unit with an in-service date of 2010, rather than the dates of 2008 and 2009 that the applicants had proposed. The Commission APPROVES WEC's use of leased generation contracts, as modified by this Final Decision, to procure coal-fired generation through non-utility affiliates for its electric utility, WEPCO.

Findings of Fact

1. Energy conservation, renewable resources, or other energy priorities listed in Wis. Stat. §§ 1.12 and 196.025, or their combination, are not cost-effective or technically feasible alternatives to the projects proposed in this docket.

2. TheWEPCO's demand forecast demonstrates a need for new baseload generation within the next decade.

3. Part II of PTF, consisting of the two SCPC units and WEC's other commitments to secure additional energy conservation and renewable resources, satisfies the reasonable needs of the public for an adequate supply of electric energy.

4. The public convenience and necessity require WEC to construct the two SCPC units, subject to the conditions specified in this final decision.

5. The two SCPC units are reasonable and in the public interest after considering alternative sources of supply, individual hardships, engineering, economic, safety, reliability, and environmental factors. The IGCC unit does not meet this standard.

6. The North Site—CUP alternative is in the public interest after considering alternative locations, individual hardships, engineering, economic, safety, reliability, and environmental factors.

7. The two SCPC units will not have undue adverse impact on other environmental values.

8. The two SCPC units will not unreasonably interfere with orderly land use and development plans for the area involved.

9. The two SCPC units will not have a material adverse impact on competition in the Wisconsin Upper Michigan System (WUMS) wholesale electric service market.

10. Leased generation contracts are a reasonable means of financing the two SCPC units.

11. The leases proposed in this docket, as modified by this Final Decision, are reasonable and in the public interest.

12. The conditions attached to the CPCN for the two SCPC units, as described in this Final Decision, are reasonable.

13. Requiring that ERGS-SCPC 1 LLC commence construction of SCPC 1 within 12 months after it receives all necessary government permits and approvals is reasonable, so the generating plant will satisfy the reasonable needs of the public for electric energy in a timely manner. Requiring that the applicants file an updated demand and energy forecast and updated EGEAS modeling[3] before commencing construction on SCPC 2 is reasonable.

Conclusions of Law

The Commission has jurisdiction under Wis. Stat. §§ 1.11, 1.12, 196.02, 196.025, 196.395, 196.40, 196.49, 196.491, 196.52, and 196.795 to issue certificates authorizing W.E. Power LLC, through its subsidiaries ERGS-SCPC 1 LLC and ERGS-SCPC 2 LLC, to construct and place in operation two 615 MW SCPC electric generating units at the site described below, and to impose the conditions specified in this Final Decision.

Opinion

This proceeding involves the second half of WEC's proposal to meet forecasted electric demand of its electric utility, WEPCO, by constructing large-scale coal-fired generating facilities

[3] "EGEAS" is the Electric Generation Expansion Analysis System, a complex interactive computer model developed by the Electric Power Research Institute. Over the past decade, the Commission has consistently used and required utilities to use EGEAS to evaluate electric generation expansion plans for cost-effectiveness and optimality.

through an affiliated entity. The proposed baseload[4] generation facilities, if the applicants receive all regulatory approvals, would represent the largest energy project ever constructed in Wisconsin. Wisconsin's Leased Generation Law, Wis. Stat. § 196.52(9), permits load-serving entities to lease generating resources from an affiliated entity, subject to the approval of the Commission. As with Part I, the Commission has consolidated WEC's application for construction authority with its application for Commission approval of the proposed leases as affiliated interest transactions. In these consolidated dockets the Commission has balanced its responsibilities under the Leased Generation Law, as well as its other obligations under the power plant siting law and the affiliated interest statute, with its paramount obligation to the consuming public.

Project Description

WEC has created separate limited liability corporations for the purpose of constructing and owning the generating units that comprise ERGS. WEC also created W.E. Power LLC, a non-utility affiliate within the WEC holding company that would have majority ownership of these limited liability corporations.

ERGS-SCPC 1 LLC and ERGS-SCPC 2 LLC would build the two SCPC units, for operation as baseload facilities. The design would also allow for cycling, to accommodate load changes required by the electrical system demand. SCPC technology involves heating water to a temperature and pressure that exceeds its critical point, which is 705 degrees Fahrenheit at a pressure above 3,200 pounds per square inch absolute. The steam then exits the steam generator

[4] A utility's "baseload" energy demand is driven by high load factor customer needs, i.e., electric uses such as commercial lighting, refrigeration, and industrial loads that run constantly. Generally, electric generating plants that are cost-effective when running at least 70 percent of the time are considered "baseload" units.

and moves to the high-pressure turbine, to which an electric generator is attached. Pulverized coal and combustion air mix together, flowing to the coal nozzles at the various furnace elevations. The hot combustion products heat the water to supercritical conditions in the steam generator, then move through the selective catalytic reduction system, preheater, fabric filter, induced draft fans, flue gas desulfurization system, and stack. The higher temperatures and pressures achieved in a supercritical steam generator increase the energy content of the fluid delivered to the turbines, which improves efficiency, as would the use of cold Lake Michigan water in the condenser. In general, the SCPC units would convert approximately 38 to 39 percent of their fuel's heat content into electricity. Greater plant efficiency means less fuel burned per unit of electrical output. The expected life of the SCPC plants is 40 to 45 years.

The proposed IGCC unit would use a process that breaks down coal into its basic constituents and obtains a synthetic gas (syngas) for use in two combustion turbines. The gas conditioning process enables the separation of any pollutants from the syngas prior to its use as fuel. If the quality of the syngas is not adequate for use in the combustion turbines, it would be ignited in a stack, with a resulting flare approximately 80 feet high. During normal startups, syngas would also be flared for a few hours.

An IGCC facility would employ industrial frame, advanced technology combustion turbines. Hot exhaust gases from the combustion turbines would also be used to produce steam, which would be expanded in a steam turbine to drive an electric generator and produce electricity. An IGCC plant would operate for the majority of the year as a baseload facility, with an expected life span of 40 years.

Trains deliver coal to the existing OCPP units and would also be used to deliver coal to the new units. The existing on-site rail facilities are over 35 years old, and their continued use for both OCPP and ERGS would exacerbate off-site impacts. The rail unloading facilities lack a complete rail loop, which increases the number of movements needed to get a train into and out of the rail yard and increases the time required to unload a train. Existing track allows room for only one coal train to park on-site, so that if one train is present when another arrives, the second must wait off-site. The applicants propose to modernize the rail unloading facilities by adding track to create an on-site rail loop, adding another rail spur, installing a new rail car positioner (indexer) and dumper, moving the location of repair-in-place track, and making other needed changes. The new rail facilities would allow two full and two empty trains to park on WEPCO's property and would shorten the current unloading time of approximately 16 hours to five or six hours. The proposed rail system improvements would also mitigate the off-site effects associated with existing and future coal delivery.

WEC proposes to construct a once-through cooling system for ERGS, with an intake structure resting on the bed of Lake Michigan and a transport system to move the lake water from the intake structure to the generating units on shore. The intake structure would consist of four timber cribs, located about 9,000 feet from shore and 45 feet below the water surface. Water would be drawn into the cribs at a velocity of about one foot per second. Each crib would be connected via a 14-foot diameter pipe to the water transport system, with the water traveling through a 32-foot diameter tunnel located about 200 feet below the bed of Lake Michigan to the shoreline, where it would be pumped upward and through screening facilities before entering the plant. Water use for each SCPC unit would be about 700 million gallons per day. The

cumulative water use for the existing OCPP Units 5-8 and the two new SCPC units would be about 2.56 billion gallons of water per day.

For its water discharge structure, WEC proposes to build a seal well with concrete retaining walls and a rock-lined dredged channel. The channel, which would control erosion and reduce the velocity of the discharged water, would be approximately 200 feet wide and extend approximately 750 feet into the lake. To create the discharge channel, about 10,000 to 15,000 cubic yards of material would need to be dredged from the bed of Lake Michigan. The proposed discharge structure for the North Site-CUP alternative would be located north of the existing coal dock.

The new generating units of ERGS would require step-up unit transformers adjacent to the buildings that house the generators. Electric generators produce power at approximately 20 kV, which is then raised to 345 kV so it can be moved efficiently over the transmission network. The American Transmission Company (ATC) has conducted several studies to determine the cost of interconnecting ERGS to the transmission system and the cost of upgrading the transmission system so it can transmit power from ERGS. It completed a partial transmission restudy of ERGS on July 25, 2003, estimating the transmission costs associated with installing SCPC 1 and SCPC 2 at $65.5 million and $100.5 million, respectively. Determining transmission system requirements for ERGS, though, depends upon the amount of forecasted generation in southeast Wisconsin and northern Illinois. Recently, several proposed generating units in the area have dropped from ATC's queue and will not be operating in the same time frame as the ERGS units. This will require ATC to restudy the interconnection needs, to minimize the amount of transmission facilities installed and recalculate the costs involved. This

analysis is quite complex, depends upon the site chosen, and requires several months of sequential computer model runs.

ATC's preliminary Facility Study Report indicated that the construction of SCPC 1 would require changes in the 345 kV, 230 kV, and 138 kV substations, while the construction of SCPC 2 would require further upgrades to the existing transmission lines and substations in the area. Some of the possible line and associated substation work includes Oak Creek–Brookdale 345 kV, Brookdale–Granville 345 kV, Oak Creek-St. Martins #2 138 kV, Butler-Tamarack 138 kV, and Bluemound-Butler 138 kV; most of this transmission work would be on existing rights-of-way.

The applicants proposed four site alternatives, all located on the OCPP property. The existing north OCPP building, which originally housed OCPP Units 1-4, is now empty and serves only to support the existing coal handling facilities. WEC intends to dismantle and dispose of this building. The remaining OCPP Units 5-8 would continue to operate in the south OCPP building, though Units 5 and 6 may be retired as part of the PTF plans.

Three of the sites were originally proposed in the CPCN application; these have been designated the North Site, the South Site, and the South Site—Exp. The North Site is in the city of Oak Creek in Milwaukee County at the east end of Elm Road, north of the existing OCPP units. The South Site would place the generating units on a portion of the OCPP property south of existing Units 5-8, in the town of Caledonia in Racine County. The South Site—Exp is a variation on the South Site, placing the SCPC units in the same location but with the IGCC facility on a federal/state-owned shooting range (land that WEC would need to purchase).

In May 2003, the applicants and the city of Oak Creek negotiated a Conditional Use Permit (CUP), making some changes to the original North Site. The North Site—CUP alternative would move the coal handling facilities and coal storage piles south about 1,500 feet, to a location inside the existing OCPP rail loop. This would require relocation of the existing 138/345 kV substations, which are currently within that rail loop. These substations could be separated and relocated on site to avoid the new rail and coal facilities, connect the new SCPC units at 345 kV, and facilitate transmission ROW exits to the west.

Delivery of coal to the plant site could block vehicles for significant periods of time at the Seven Mile Road and Six Mile Road crossings of the Union Pacific rail line. To eliminate this impact the applicants would pay for road improvements to separate or eliminate at-grade rail crossings at these roads. In addition, the town of Caledonia is concerned about lengthy blockages of vehicular traffic at Four Mile Road, due to existing train deliveries to OCPP. The applicants maintain that their improvements to on-site rail facilities should eliminate this problem, allowing trains to cross Four Mile Road at speed. It is reasonable to require that the applicants monitor the effect of train deliveries on vehicular traffic at this road, and address valid concerns the town may have about road blockage. Any changes at the rail crossings ultimately require the approval of the Office of the Commissioner of Railroads, which also has the authority to determine the nature of the changes. Local government and the Union Pacific Railroad would own any new roads, tunnels, bridges, or other elements of approved crossing changes.

Reasonable Needs of the Public; Forecasting Capacity and Energy Demand

An important threshold determination the Commission must decide is whether or not there is a need for the generation facilities proposed by WEC and its subsidiaries. Wisconsin's

Power Plant Siting Law requires that a proposed facility satisfy "the reasonable needs of the public for an adequate supply of electric energy" in order to receive a CPCN. Wis. Stat. § 196.491(3)(d)2. To justify the need and timing of the three units that comprise ERGS, WEC submitted WEPCO's forecast of growth in electric demand and energy over the next ten years and then provided optimal expansion plan results from the EGEAS computer model.

WEPCO forecasts that, between 2003 and 2012, total electric demand (including reserves and new wholesale sales) will grow 1,995 MW or 2.8 percent annually. Excluding new wholesale sales, the rate of retail electric demand growth would be 2.5 percent annually. Total electric energy for the same period is expected to grow 2.5 percent annually. These growth rates also incorporate WEPCO's existing energy efficiency and demand-side management (DSM) efforts, and assume that similar efforts will continue into the future. When used in the EGEAS model, these forecasts demonstrate a need for new baseload supply resources.

The Commission is not persuaded by the argument raised by certain parties concerning the reasonableness of WEPCO's capacity and energy needs. S.C. Johnson criticizes the demand and energy forecasts as too high and argues that they improperly include wholesale requirements load for WPPI and Municipal Electric Utilities of Wisconsin (MEUW), which WEPCO is not obligated to supply. The forecast growth rates are consistent with WEPCO's historical growth patterns and those adopted in the Port Washington order.[5] WEPCO's total demand has been growing 2.5 percent per year since 1997. In addition, WEPCO has a long-standing relationship supplying electric energy and power to wholesale municipal customers and this relationship will

[5] Final Decision, *Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E. Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Two Large Electric Generation Facilities the Port Washington Generating Station, and Associated High Voltage Transmission and Natural Gas Interconnection Facilities to be Located in Ozaukee County*, PSCW docket 05-CE-117.

continue. Commission staff reviewed WEPCO's forecasts in the EIS and considered them reasonable; the Commission agrees. For these reasons, the Commission concludes that WEPCO's demand forecast is reasonable.

Statutory Energy Priorities

Another important legal and policy issue this Commission must decide is whether or not there is enough energy conservation, renewable resources, or a cleaner burning fuel to cancel or delay the construction approvals sought for the SCPC units in this proceeding. State law provides guidance to the Commission in carrying out the state's energy policy. Our obligations are set forth in Wis. Stat. § 1.12.

Wis. Stat. § 1.12(4) establishes energy priorities for Wisconsin. The statute provides as follows:

> **1.12(4)** PRIORITIES. In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:
>
> (a) Energy conservation and efficiency.
> (b) Noncombustible renewable energy resources.
> (c) Combustible renewable energy resources.
> (d) Nonrenewable combustible energy resources, in the order listed.
>
> 1. Natural gas.
> 2. Oil or coal with a sulphur content of less than 1 percent.
> 3. All other carbon-based fuels.

In addition, Wis. Stat. § 196.025 declares that the Commission must implement these priorities in its energy-related decisions, to the extent "cost-effective, technically feasible and environmentally sound."

Several parties have suggested that the Commission, in construction cases involving a lower priority fuel source like coal, is obligated to select a higher priority fuel source

(e.g. natural gas) in order to fulfill its obligations under the Energy Priorities Law. S.C. Johnson asserts that it is not enough that ERGS be close in price to other higher priority options and that the applicants in the present proceeding must prove a "compelling reason" not to abide by the energy priorities described in Energy Priorities Law. Under this reasoning, the Commission would be obligated to select a higher priority fuel option unless the applicants have demonstrated that the proposed units at ERGS will be provided at a substantially lower cost than available higher energy priorities.

This Energy Priorities Law, however, is not a mandate to state agencies that must be mechanically applied to achieve a specific outcome. In the Prefatory Note to 1993 Wis. Act 414, which enacted this law, the Legislature declares that it "does not want to create inflexible mandates or deprive decision makers of the discretion needed to respond appropriately to the circumstances surrounding energy-related decisions." The Legislature explains that this law uses "a combination of directives and encouragement, while reserving substantial discretionary authority to the decision maker." Such discretion must be applied in this case, to harmonize the directives of the Energy Priorities Law with those of the Power Plant Siting Law. The statutory framework for analyzing whether approving a CPCN project would be in the public interest involves a number of factors, beyond those specified in the Energy Priorities Law. The Commission must consider the extent to which a proposal may cause individual hardships, as well as concerns about its engineering, economics, safety, reliability, environmental impacts, interference with local land use plans, and impact upon wholesale competition. The Commission is required to balance all of these competing elements, which frequently lead in different directions; no single primary factor is the measure of a CPCN project. Thus, the Commission is

responsible for harmonizing the Energy Priorities Law and the Power Plant Siting Law, in order to determine what is in the public interest.

WEPCO's forecast of future demand and energy needs already includes some level of energy efficiency, because WEPCO uses an econometric method that relies upon historical electric energy usage data. Incorporated in its historical usage data is the net impact of energy efficiency and the increased use of energy efficiency programs. While it is not possible to quantify how much energy efficiency is included in WEPCO's forecast, it assumes that the future impacts of energy efficiency will be similar to historical impacts. For this reason, in their testimony on energy efficiency potential, both the applicants and Commission staff attempted to estimate the amount of potential energy efficiency savings above that already included in the forecast, i.e., the "achievable potential."

The applicants' energy efficiency analysis consists of three scenarios, which reflect differing assumptions about the rate at which consumers will adopt energy efficiency measures based on the level of program intervention. The applicants' analysis suggests an achievable potential in 2008 for the Minimally Aggressive, Moderately Aggressive, and Highly Aggressive Scenarios of 23, 55, and 79 MW, respectively. The corresponding achievable potentials identified in 2016, the final year of the applicants' analysis, are 119, 172, and 186 MW. The applicants' energy efficiency witnesses testified that they are confident that, by 2008, over 50 MW of cost-effective energy efficiency will be achievable in WEPCO's service territory.

Commission staff also conducted an energy efficiency analysis. Commission staff calculated achievable energy efficiency potential in 2007, 2009, and 2011 of about 200, 400, and 600 MW, respectively. These are the upper bound of the range of estimates provided. The

estimates of energy efficiency potential provided by both the applicants and Commission staff have shortcomings related to the unknown amount of energy efficiency already included in WEPCO's forecast, restrictions on the measures included in the analysis, and the limited availability of current data on energy efficiency measures.

In the Commission's Port Washington order, the Commission highlighted the difficulty in attempting to substitute energy efficiency for needed intermediate load facilities. The Commission stated:

> The Commission lacks sufficient evidence on energy in this case on energy efficiency to make the judgment that energy efficiency gains—which will ultimately be in the hands of consumers and businesses—are either of a sufficient quantity or are demonstrably achievable such that they may serve as a substitute for traditional generation in a cost-effective way. The Commission's concern is that there is no way to dictate this type of behavior to consumers that it is both technically feasible and practically feasible to alleviate the need demonstrated in this proceeding. The testimony of the various parties indicates that it is not possible to evaluate all possible technologies and programs in order to ascertain their realizable potential as well as their accuracy.

The same reasoning is equally applicable in the present proceeding. The applicants' and Commission staff's estimates of achievable energy efficiency do not demonstrate that energy efficiency could reliably or cost-effectively serve to substitute, or postpone, the SCPC units. On the other hand, the record demonstrates that a moderate level of intervention in the energy efficiency market would produce at least 55 MW of cost-effective and technically feasible energy efficiency in WEPCO's service territory by 2008. As part of the PTF proposal, WEPCO has committed to spending $20 million over the next ten years to support energy efficiency activities. A key component to WEPCO's efforts is to work with other parties to support building code reforms that increase the energy efficiency of buildings. It is appropriate for WEPCO to implement energy efficiency programs to capture, at a minimum, this additional

55 MW of cost-effective energy efficiency by 2008 as identified by its consultants. Based on the consultants' estimate of a cost of about $60 million to capture this 55 MW, an additional commitment of dollars may be needed to capture this savings. Although WEPCO is now in a rate freeze, it can commence these energy efficiency programs without delay by using its conservation escrow. The associated expenditures will then be held for recovery in the utility's next rate proceeding. It is therefore reasonable for WEPCO to submit a plan to the Commission, by March 1, 2004, for capturing at least 55 MW of additional energy efficiency.

(Chairperson Bridge dissents and would capture at least 100 MW of additional energy efficiency.)

After energy conservation, the state Energy Priorities Law favors renewable resources. The two forms of renewable generation most likely to be cost-effective during the forecast period are wind and biomass combustion, both of which were reviewed in the record.

As part of the PTF proposal, WEPCO has committed to a goal of obtaining 5 percent of its energy from renewable resources by 2011. This is more than twice the renewable portfolio standard set forth under Wis. Stat. § 196.378, which requires that at least 2.2 percent of each electric provider's retail energy must be from renewable resources by this date. WEC has also declared its intent to spend up to $6 million per year for ten years on emerging technologies and activities, to encourage the development of renewable resources.

WEPCO has taken steps to meet its 5 percent goal by issuing two requests for proposals (RFPs). The first RFP was issued on December 18, 2002, for up to 200 MW of wind power capacity. In July 2003, the utility selected and signed power purchase agreements with three wind power projects having a total capacity of 214 MW. WEPCO issued the second RFP on

August 14, 2003, for 25 MW of biomass. The biomass proposals must be submitted to the utility by November 26, 2003.

The Commission does not believe that renewable resources are either cost-effective or technically feasible to meet WEPCO's baseload needs. The EGEAS model runs in the record select large quantities of wind during the forecast period, but these runs rely upon an assumption that much of these wind resources can be sited in Lake Michigan, a new location for wind turbines that has never previously been used. Furthermore, these runs assume that the existing federal production tax credit for wind energy will remain in effect indefinitely. This federal production tax credit allows a wind facility owner to take a 1.8 cent/kWh tax credit for a period of ten years, but is now available only to projects that go online by December 31, 2003.

Whether Congress will extend this credit again, and for how long, are unknown. It would not be prudent to rely upon a wind production tax credit, which may or may not continue to exist, to meet WEPCO's major baseload needs. Furthermore, the EGEAS runs do not show that significant quantities of biomass would be cost-effective during the forecast period. For these reasons, the Commission finds that renewable resources are not cost-effective, technically feasible alternatives.

(Chairperson Bridge dissents, and would direct WEPCO to implement its plan to install 200 MW of new wind resources by 2005 and 50 MW by 2011.)

The Commission also considered whether gas-fired generation is a cost-effective or technically feasible alternative that could replace the need for new baseload generating facilities. No gas-fired, baseload facilities were presented as either a cost-effective or technically feasible alternative in this record.

A critical part of the Commission's ultimate preference for coal-fired generation over gas-fired generation rests heavily on the discretion accorded to the Commission under the Energy Priorities Law and the Power Plant Siting Law. More significantly, the crux of this case is really about the appropriate timing to construct new baseload generation. A fundamental policy choice presented in this case is whether the Commission believes that WEPCO needs to take steps now to address needs for new baseload facilities over the next decade. The Commission believes that the applicants should take those steps now to ensure these facilities are in service in 2009 and 2010.

The quantitative evidence presented in this proceeding supports the construction of new baseload generation to address WEPCO's needs. Almost every EGEAS run shows the need for new baseload generation over the next decade.[6] Commission staff did conduct an "integrated alternative" EGEAS analysis that examines the feasibility of combining renewable resources with natural gas, while also reflecting a more aggressive energy efficiency approach. This modeling run includes all of the energy priority generation alternatives, while also reducing WEPCO's base demand forecast in 2011 by 600 MW in order to incorporate Commission staff's energy efficiency potential estimate. Even this integrated alternative run shows that an SCPC unit is needed during the forecasting period.

These EGEAS runs demonstrate that the energy priority resources, alone or in combination, cannot replace the need for new baseload, coal-fired units to serve WEPCO. EGEAS also shows the extent to which these resources can delay the need for additional

[6] The only EGEAS model runs that do not confirm a need for additional baseload capacity by 2012 or sooner are conditioned upon either a permanent federal tax credit for wind or upon the taxation of carbon dioxide emissions. The former is unlikely, given the amount of wind that would be produced as a result of an unlimited tax credit, and the record is too speculative to reach conclusions regarding the latter.

baseload units, and the Commission has considered this evidence in order to reach its conclusion that the first SCPC unit should be placed in service in 2009, rather than 2008 as proposed by WEC.

(Chairperson Bridge dissents and would authorize in service dates of 2010 and 2012 for SCPC 1 and 2.)

There are qualitative factors set forth in Wis. Stat. § 196.491(3)(d) that also support the Commission's conclusion that new coal-fired generation is in the public interest and that ERGS is the most cost-effective and technically feasible way to address WEPCO's baseload needs. The Commission's decision to approve SCPC 1 and 2 balances its obligations under the Energy Priorities Law and the Power Plant Siting Law. It also reflects the Commision's policy judgment that while natural gas-fired generating facilities may be better suited for peak and intermediate load generation, coal-fired generation provides the most practical means to serve WEPCO's needs for baseload capacity. The evidence in this proceeding demonstrates the advantages of using cleaner burning coal technologies like SCPC as a baseload resource over gas-fired generation.

The need for new baseload generation is the critical factor that distinguishes this decision from the Port Washington order. The Port Washington order addressed WEPCO's need for new intermediate capacity. The Commission has not approved construction of any new baseload, coal-fired generation in Wisconsin since 1980. The evidence presented reflects the fact that WEPCO's existing fleet of baseload plants is aging. WEPCO's aging baseload resources may be asked to maintain or even increase their historical production as older facilities are retired over the next decade and transmission constraints within WUMS continue to limit the ability of

Wisconsin load-serving entities to import electricity. In fact, in Phase I of PTF the Commission approved the retirement of 320 MW of existing baseload, coal-fired generation at Port Washington. The record in this docket demonstrates that WEPCO needs more baseload capacity.

The Commission believes it is in the public interest to have more reliable baseload generation in place sooner rather than later as a matter of public policy. Concerns over electric reliability are paramount today and the Commission concurs with the policy arguments raised by the applicants, transmission-dependent utilities and consumer groups that it is better to err on the side of planning for more baseload needs sooner rather than later. Based on a number of qualitative and quantitative factors, the Commission believes that coal-fired generation provides the most cost-effective, prudent and practical means of meeting WEPCO's baseload capacity needs over the next decade.

The Commission also considered qualitative environmental factors in concluding that the construction of SCPC 1 and 2 is in the public interest under the Energy Priorities Law and the Power Plant Siting Law. The applicants' proposed units utilize the best available control technology (BACT) that are designed to substantially reduce the amount of emissions from WEPCO's existing fleet of baseload, intermediate and peaking units. The applicants will install BACT for several emissions, including SO_2, NO_X and PM_{10}. Taken together with the applicants' other regulatory consent decrees and voluntary emissions reductions agreements that were presented in this record, the evidence also demonstrates that total air emissions will decrease substantially from current levels after the completion of all PTF projects.

Finally, the Legislature stated that compliance with its Energy Priorities Law is based upon "the overall pattern of decisions made by each agency." Since the enactment of that law in 1994, the Commission has authorized the construction of over 6,900 MW of natural gas-fired generation and 20 MW of wind-fired generation that have addressed peaking and intermediate capacity needs. The total mix of energy sources that the Commission has approved over this time period shows a pattern of decisions for baseload, intermediate and peaking generating facilities that complies with the state's energy policy.

Reasonable Needs of the Public; EGEAS Modeling Results

As in other Commission decisions over the past decade, including Part I of PTF, this docket relies extensively upon computer expansion plan modeling of the electric system to identify cost-effective means of meeting a utility's future electric demand. Both Commission staff and the applicants relied on the EGEAS model in this proceeding as the primary tool to consider optimal resource options on a quantative basis for WEPCO's future electric demand. The EGEAS model is a quantitative tool requiring three forms of inputs: data about the utility's existing generating system; economic and engineering data for proposed new generating units; and a variety of base forecasts for demand and fuel prices. The existing unit data reflect the operational characteristics of the utility's current generating fleet. New unit data, in this docket, concern the ERGS facilities, Calpine's projects, wind and biomass renewable resources, and generic gas-fired combustion turbines and combined-cycle units. The EGEAS model then uses these data to calculate the overall system cost of adding different new units to the electric system, ultimately producing an optimal expansion plan for a minimum period of 30 years.

WEC submitted the results of its EGEAS runs and introduced them into the record. Commission staff then conducted its own independent review of this submission, examining the reasonableness of the company's data inputs and preparing its own EGEAS model runs. The results of this work appear in the EIS and in other evidence that Commission staff introduced in the record. Commission staff concluded that the forecasts WEC submitted with respect to base demand, energy, and fuel were not unreasonable. Commission staff also built into its EGEAS model the Commission's approval of the 545 MW, natural gas-fired Port Washington facilities in 2005 and 2008, as well as WEPCO's commitment to procure up to 250 MW of wind resources by 2012.

After considering the quantifiable evidence presented in the EGEAS runs, the key question in this docket is not whether additional coal-fired baseload generation should be approved, but when it should be installed. The principal difference among the various EGEAS runs concerns the proper timing of such an addition. Almost every sensitivity run of the EGEAS model, including runs that integrate more energy conservation and lower demand and energy growth, demonstrate a need for additional baseload capacity by 2012. Even those runs that support the use of additional gas-fired generation in the next few years also point to a baseload coal capacity need for WEPCO.

Commission staff performed one EGEAS model run using inputs it considered reasonable within a central range of estimates, which it described as its "base case," and modeled ten other EGEAS scenarios. These ten additional runs used different data inputs regarding factors such as WEPCO's demand forecast or the cost of fuel, in order to demonstrate the sensitivity of the model to changes in input assumptions and to depict the results when different

forecasting assumptions are used. Under Commission staff's modeling approach, the base EGEAS runs pick the SCPC units in 2011 and 2013. WEC argues, based upon both its EGEAS runs and its qualitative concerns, that the proper timing should be 2008 and 2009 for these units.

The EGEAS model is an engineering tool that depends upon a great deal of numerical data inputs, assumptions, and forecast uncertainty. Although its results are complex estimates, EGEAS is a useful tool—albeit one important quantitative tool —for the Commission to use in deciding the timing of the proposed generating facilities. Power supply planning is not a science. Determining what resource options will ensure low cost, reliability and environmental sensitivity for the consuming public requires the exercise of judgment and consideration of a wide variety of qualitative factors. The complexity of the assumptions built into this docket's EGEAS runs make it reasonable to select an outcome that is within the range of years proposed by Commission staff's and WEC's results. Given the requirement that it must maintain a reliable electric system, the Commission finds it prudent to construct these units slightly sooner, rather than later. For these reasons the Commission approves a timeline that places SCPC 1 in service in 2009 and places SCPC 2 in service in 2010.

Some parties suggest that the Commission should focus its attention in this docket solely upon the utility's near-term needs, arguing that looking more than five years into the future is too speculative. Baseload projects, however, can take five years to construct after all permits are received, and the process of preparing the project applications and receiving the required state and federal permits may add years to this timeline, especially if litigation follows. For this reason alone, when a utility's baseload needs are under consideration a more appropriate

forecasting period would be approximately ten years. The EGEAS runs show that new baseload SCPC units are cost-effective within this time period.

With respect to the proposed IGCC unit, EGEAS demonstrates that the proposed IGCC unit is never cost-effective and must be denied. The EGEAS model does not select an IGCC unit in any of its optimal runs. When the EGEAS model is forced to take an IGCC unit in 2011, the expansion plan becomes $349 million more expensive in present value terms. The EGEAS model strongly dismisses the IGCC unit as non-economic because of its higher construction cost. An IGCC would cost $1,579/kW to build, as compared to the lower construction cost of an SCPC unit ($1,400 to $1,440/kW). The guaranteed heat rate for the IGCC units, 9,500 Btu/kWh, is also inferior to the guaranteed 8,850 Btu/kWh heat rate for the SCPC units. IGCC technology, while promising, is still expensive and requires more maturation. For these reasons, the application to construct the IGCC unit is denied.

S.C. Johnson criticizes a number of modeling inputs, alleging that WEC is using improper engineering and fuel data for existing WEPCO units, an improper common systems cost allocation to the OCPP units, a demand and energy forecast that is too high, an improper addition of 200 MW of demand obligations for WPPI and MEUW, overly favorable engineering assumptions for the proposed SCPC units, and an improper early retirement of certain OCPP and Presque Isle units, while it is also ignoring the likely availability of additional energy efficiency efforts that would reduce the growth in electric demand. Commission staff evaluated these concerns, revised some of its assumptions, and prepared an EGEAS run to demonstrate how these changes would affect the optimal expansion plan. Because it includes additional energy efficiency to control electric demand, in addition to generation options, Commission staff

described this run as an "integrated alternative" that integrates the energy priorities described in Wis. Stat. §§ 1.12(4) and 196.025. For example, this EGEAS run includes lower forecast demand and energy growth rates of 1.8 to 2.1 percent per year, instead of the 2.5 to 2.9 percent per year growth rates in the base forecast. In addition, a total of 600 MW of demand is stripped away from the WEPCO base electric demand forecast, in 200 MW increments every two years through 2011, to reflect a more aggressive approach to energy conservation. This integrated alternative also includes a less favorable 4 percent forced outage rate for the SCPC units.

Even with the revised input assumptions of this integrated alternative, the EGEAS model results are not significantly different. EGEAS still selects an SCPC unit, by the year 2012. In addition, the record would not support such an aggressive estimate of cost-effective energy conservation, nor does the Commission agree that the 200 MW of demand for the WPPI and MEUW should be excluded. These are continuing power sales arrangements; for WPPI, the relationship with WEPCO has spanned decades. S.C. Johnson's concern that WEC has improperly allocated common system costs to OCPP Units 5 and 6 (which WEC is proposing to retire early) does have merit, but Commission staff also identified that such an allocation would underestimate the actual costs of the SCPC units and modified its EGEAS cost figures accordingly.

Effect on Wholesale Competition

Under Wis. Stat. § 196.491(3)(d)7., the Commission may issue a CPCN for a proposed facility only if it "will not have a material adverse impact on competition in the relevant wholesale electric service market." Such a determination requires an analysis of market power, which is the ability of a firm to charge prices for its product above what a competitive market

would allow. Since WEPCO has turned over operational control of its transmission system to ATC, the analysis need only focus on horizontal market power issues associated with the construction and operation of ERGS. Vertical market power issues associated with the combined operation of proposed facilities and the transmission system do not need review, given the existence of the Midwest Independent System Operator and its control over the ATC transmission system. The relevant wholesale electric service market is the area designated by the WUMS because this region is an electric "island system," a limited market due to transmission constraints in which a large electric generating firm can obtain leverage over the prices paid for electricity.

Capacity and energy from ERGS will be provided to WEPCO via the Facility Lease, at rates this Commission regulates through its review of the lease's economic terms and conditions. This regulation prevents any material adverse impact on competition in WUMS. As the market power study conducted for the Commission in 2000 by Tabors, Caramanis and Associates found, fixed price contracts (such as the proposed Facility Lease) mitigate market power. In addition, the Federal Energy Regulatory Commission only allows WEPCO to sell in WUMS at cost-based rates. For these reasons, the Commission finds that approval of ERGS will not create material adverse impacts on competition.

Calpine and LS Power, however, express concern that approval of ERGS would have a material adverse impact on competition by preventing the development of a competitive wholesale generation sector and hindering further electric industry restructuring in Wisconsin. However, WEPCO plans to continue contracting for power with independent power producers. Furthermore, a stand-alone generation company such as W.E. Power LLC could more easily be

divested by WEC than generating assets that are held within WEPCO, should a future legislature split generating plant assets away from utilities. For these reasons, the Commission does not concur that ERGS would materially harm competition.

Competing IPP Proposals

LS Power argues that WEC should have conducted an RFP for the capacity represented by ERGS. The Commission does not agree. In an earlier ruling on the applicants' request for a declaratory ruling on Part I of PTF, the Commission expressly declined the opportunity to mandate a formal RFP process.[7] No statute, rule or order of this Commission requires such a process, even when purchasing from an affiliate. WEC has already used competition in its selection of an engineering vendor for this project, Bechtel Corporation.

The company also indicates that it will continue to use competitively bid contracts and subcontracts for various aspects of ERGS. Such competition will directly benefit ratepayers. At hearing, Commission staff indicated that the major component of ERGS not facing a market test per se was with respect to project financing. However, the Commission's selection of competitive financing terms can substitute for such a test. The Commission has broad experience in setting such financing terms in rate proceedings and other recent construction cases. The record, particularly as established in the affiliated interest docket, contains ample evidence on what the appropriate financing terms and conditions should be.

In Part I of PTF, the Commission compared WEC's PWGS project against several bids filed by IPPs. In this proceeding, one IPP filed a competing bid for Commission consideration.

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[7] *In the Matter of Wisconsin Electric Power Company's Request for Declaratory Ruling Approving a Proposed Plan to Increase Generation in Wisconsin*, Docket 6630-DR-104 (October 17, 2001).

On its own volition and as an alternative to the ERGS project, Calpine submitted a proposal to the Commission on February 19, 2003, offering to develop a 523 MW combined-cycle natural-gas-fired power plant in the town of Fond du Lac, Fond du Lac County, with similar additional 500 MW units located elsewhere in the state.[8] In addition, on June 20, 2003, Calpine updated its February 2003 proposal by including 260 MW of combined-cycle, natural gas-fired capacity from Calpine's recent purchase of the Fox Energy Center located in the town of Kaukauna. Construction on that project commenced in October 2003.[9] The Fox Energy Center is rated at 510 MW, with 250 MW of that capacity already under contract to Wisconsin Public Service Corporation. Calpine also submitted to the Commission a sample power purchase agreement, identifying and bidding relevant economic and engineering terms and conditions.[10]

Calpine's projects are natural gas-fired, combined-cycle units. Ordinarily, such units are considered intermediate load generating stations, with capacity factors up to 50 percent. Almost without exception, though, the EGEAS model runs in this record show that WEPCO needs additional baseload capacity within the next decade, in which generating stations must operate between 70 and 90 percent capacity factors. This is also the need for which the applicants have proposed the construction of ERGS.

Over a shorter forecasting period, WEPCO may need additional gas-fired, intermediate or peaking units. For example, some EGEAS runs identify a $57 million cost reduction if a 523 MW, combined-cycle Calpine plant is included in 2006 or 2007. Yet the EGEAS models demonstrate that approving such units would not replace the need for additional coal-fired,

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[8] In docket 9343-CE-100, the Commission issued a CPCN for Calpine's Fond du Lac Energy project on May 5, 2003.

[9] In docket 05-CE-115, the Commission issued a CPCN for the Fox Energy Center on November 7, 2002.

baseload generation. In addition, relying upon natural gas to meet WEPCO's baseload needs as well as its intermediate and peaking requirements would raise the risk of not properly diversifying the utility's fuel mix. Calpine may be an appropriate, cost-effective resource to meet intermediate load needs of WEPCO. However, this docket is focused upon the utility's baseload requirements and it is not necessary simultaneously to determine what intermediate facilities may be appropriate for WEPCO in the interim.

WPPI and MGE Ownership Options

Both WPPI and MGE have options to obtain 50 MW of ownership interests in each of the SCPC units. Historically, WPPI has met some of its baseload requirements through system power purchases from WEPCO, and MGE has acquired baseload capacity through joint ownership of power plants. As a result, the EGEAS model assumes that WEPCO only takes 515 MW from each of these 615 MW units. A decision by WPPI and MGE not to exercise their options would have significant financial consequences to WEPCO's ratepayers. For example, if the WPPI and MGE options are not exercised, WEC's modeling runs show total system costs increasing by approximately $80 million. The record indicates that WPPI and MGE do intend to acquire ownership, so the Commission finds it reasonable to authorize construction of the SCPC units at 615 MW. If WPPI or MGE fails to do so within nine months after the date when the Facility Lease becomes final, however, WEC must return to the Commission and provide a plan that eliminates the risk of WEPCO ratepayers acquiring and paying for too much capacity. One

[10] Calpine filed its power purchase agreement as a confidential document, due to the trade secret nature of its terms and conditions.

means of protecting ratepayers that WEC can consider is the sale of these ownership shares to another entity.

Cost of Construction; Approved Amounts

In approving construction of the SCPC units for 2009 and 2010, the Commission must ascertain the appropriate costs to be placed into each Facility Lease as the "Approved Amount." ERGS includes common facilities that would serve 1,800 MW of new coal-fired capacity as well as 1,200 MW of existing coal-fired capacity from OCPP, i.e., a 3,000 MW "campus" at this site. Although the Commission has rejected the IGCC unit, it finds that a 3,000 MW coal campus remains an appropriate size, because it affords future planning flexibility to WEC. The additional cost of sizing common systems at 3,000 MW, instead of 2,400 MW, is approximately $20 million, which is a modest amount to pay in order to provide additional planning flexibility.

(Chairperson Bridge dissents, and would size the common systems at 2,400 MW.)

The record does not describe the cost of constructing these units, with common facilities to serve 3,000 MW, in 2009 and 2010. It does, however, show the following cost structure under assumed construction dates of 2008 and 2009:

	Generating Unit and SCPC Common Systems	**Site Common Costs Shared with OCPP**	**Inflation**	**Approved Amount**
SCPC Unit 1	$922,140,000	$375,190,000	$129,344,000	$1,426,674,000
SCPC Unit 2	$623,470,000	$ 22,730,000	$ 77,932,000	$ 724,132,000
			Total:	$2,150,806,000

The right-hand column reflects values in year-of-occurrence dollars, meaning that a level of expected inflation is included. Since the Commission has moved the dates of construction back one year, the values in this table must be adjusted by one more year of inflation. Within 45 days after the date this Final Decision is signed, the applicants are instructed to submit to the Commission, for its approval, corrections to the above table to incorporate this adjustment. The EGEAS model uses a 1.87 percent general annual inflation rate during the 2008-2010 timeframe. The applicants shall use no more than 1.87 percent as the annual inflation rate when making this adjustment.

If the Commission approves this submitted correction, the amounts shown therein shall become the Approved Amounts to be used in each Facility Lease. Because these figures are in year-of-occurrence dollars, W.E. Power LLC assumes the risk that inflation will cause actual construction costs to exceed the Approved Amounts by more than the cost overrun collar that is discussed below.

In their Facility Leases the applicants propose that actual construction costs be allowed to exceed the Approved Amounts by up to 10 percent, if the Commission determines that the excess cost is prudent. The applicants describe this as a 10 percent cost "collar" and indicate that W.E. Power LLC incurs the risk of larger cost overruns. The cost estimates in this record, however, are based upon engineering estimates at a point in time when only 5 percent of the actual engineering has been completed. To protect ratepayers from the risk that these estimates are too high, the Commission finds it reasonable to reduce the allowable margin of prudently incurred cost overruns by imposing a smaller, 5 percent cost collar. Parties representing certain customer groups also recommended that the Commission only allow costs meeting the definition

of "Force Majeure," "Excused Event," or "Event of Loss" under a Facility Lease be billed to WEPCO if the Commission determines that such costs are prudently incurred. The Commission agrees that this revision to the Facility Lease is necessary to protect ratepayers. Finally, the Commission agrees with the recommendation of these parties that the Approved Amount recoverable through the Facility Lease may not exceed the unit's actual construction cost. The applicants concurred with this latter recommendation.

Financing Mechanism

Background

In its resource planning, WEC considered both utility-owned, rate-based generation, procurement from wholesale merchant plant suppliers, and leased generation financing. After reviewing these alternatives, WEC decided to pursue leased generation financing to fulfill WEPCO's supply needs.

One of the reasons a lease option needs to be pursued, according to WEC, is that WEPCO will not be allowed sufficient return on a traditional rate base investment to compensate investors for the risks associated with the plant. Although the rate-based option is clearly one feasible alternative based on the evidence presented in this case, the Commission concludes that leased generation financing is in the public interest and is a reasonable method to finance SCPC 1 and 2.

The lease approach presents an innovative opportunity for procuring capacity and, as modified by this Final Decision, the terms of the leases WEC has offered are reasonable. The plant owner acts as a passive investor and the utility, which will operate and maintain the plant, remains a regulated entity under the Commission's jurisdiction. This can provide ratepayers

with protections similar to those afforded under a rate-based paradigm. Moreover, the changes the Commission has made to the lease arrangement, as discussed in this Final Decision, provide further protection to ratepayers.

In addition, recent legislative changes in Wisconsin have fundamentally altered the regulatory landscape for utilities, their customers and regulators. Public utilities have an obligation to serve their customers and in this proceeding, the Commission needs to give WEPCO some flexibility in transacting for energy to meet those needs in a manner that results in low and stable rates for consumers. One of the means to fulfill the Commission's mandate to ensure just and reasonable rates and reliable service includes leased generation financing. The Commission finds that the inter-affiliate leased generation proposal is the most reasonable choice for this ERGS facility and provides certainty that consumers will have these needed baseload facilities in 2009 and 2010.

Review of the proposed leases

The PTF leases are affiliated interest agreements under Wis. Stat. § 196.52(9). WEC proposes financing and operating each ERGS unit with a Facility Lease, a Ground Lease, and a Ground Sublease. Taken together, these leases constitute a leased generation contract. The ERGS leases filed in this case are based upon the final leases approved in docket 05-AE-118 for PWGS.

In general, the Commission finds that the Ground Lease, Ground Sublease, and Facility Lease are reasonable, but some changes to the Facility Lease are needed to balance risk and responsibility properly between the parties to this contract. These modifications are discussed in this Final Decision.

Because a leased generation contract is an affiliated interest transaction, under Wis. Stat. § 196.52(3)(a) the Commission may approve such a contract "only if it shall clearly appear and be established upon investigation that it is reasonable and consistent with the public interest." This law grants the Commission continuing supervisory control over the terms and conditions of most affiliated interest contracts or arrangements, which means it can modify such agreements as needed to protect the public interest. Wis. Stat. § 196.52(9)(e), however, limits the Commission of this control over a leased generation contract unless the contract itself grants the Commission this authority, or unless the Commission specifically reserves continuing supervisory control in its order approving the contract. Therefore, the Commission's jurisdiction over these PTF leases will be limited by the terms of the leases themselves and by this Final Decision.

Financial terms

The Commission finds it reasonable to set the following financial terms of the Facility Lease:

1. Return on equity

To attract investment capital of the size and scope needed to construct the SCPC units, the Commission must include a return in the lease payments at a level that compensates investors for the risks they take by providing that capital. The record in this proceeding contains a wide range of estimates of what that return level should be. It is very difficult to determine precisely what return investors require, especially when the estimates of that return as developed by well-respected finance experts vary by hundreds of basis points. Given this difficulty, selecting the final return on equity figure involves as much art as science.

The applicants initially requested a return on equity of 12.9 percent. After a series of negotiations with representatives of customer groups took place, the applicants agreed to lower the requested return on equity to 12.7 percent.[11] This is the same return on equity the Commission authorized for PWGS. Others suggested that the compromise return was too high and that the SCPC units could be financed at a lower return on equity. While it is conceivable that the projects could be financed at a return on equity that is slightly lower than the negotiated figure, given the critical need for the SCPC capacity it is prudent to set the return on equity at a level sufficient to ensure that those units will be constructed rather than selecting a level that contains some risk that units could not be financed at reasonable terms for the applicants. The applicants were able to secure financing for the PWGS units at a 12.7 percent return on equity. The Commission therefore finds it reasonable to set this the return on equity at 12.7 percent in this proceeding as well.

(Chairperson Bridge dissents, as shown in the attached opinion.)

The dissent proposes to include in this order a condition requiring the Commission to revisit this provision of the lease, and others, after the conclusion of the first five years of the Facility Lease. The inclusion of this provision would introduce an unacceptable level of financial uncertainty into the lease. One of the principal advantages of affiliated lease generation financing terms is the certainty they provide ratepayers and the applicants over the next three decades to ensure that low-cost, reliable baseload generation is constructed in Wisconsin.

[11] The customer groups that negotiated and supported these lease provisions were the Wisconsin Industrial Energy Group, the Citizens' Utility Board, and the Customers First! Coalition (AARP-Wisconsin, Dairyland Power Cooperative, IBEW Locals 2150 and 2304, League of Wisconsin Municipalities, MGE, MEUW, National Federation of Independent Business-Wisconsin, RENEW Wisconsin, Wisconsin Alliance of Cities, Wisconsin Community Action Program Association, Wisconsin Electric Cooperative Association, Wisconsin Federation of Cooperatives, Wisconsin Merchants Federation, WPPI, Wisconsin Retired Educators' Association, and Wisconsin Towns Association).

2. Cost of long-term debt

The cost of long-term debt was an uncontested issue in this docket. As part of the Facility Lease rent calculation, a long-term debt cost is required. The Commission finds it reasonable to use the same computation method that it approved for the PWGS leases. That method requires that the long-term debt cost be determined within 180 days prior to the Facility Lease effective date and that the interest rate reflect an appropriate cost of long-term debt index from Moody's Investors Services for WEC's senior unsecured debt securities. The method also includes an appropriate refinancing or call option.

3. Capital structure

In its decision approving PWGS, the Commission found that a reasonable capital structure to be used in estimating the lease payments was 53 percent common equity and 47 percent long-term debt. In this proceeding the applicants initially requested a capital structure with 58 percent common equity and 42 percent long-term debt. The applicants maintain that, because ERGS would be coal-fired, the project needs a higher common equity ratio than the natural-gas-fired PWGS units. They contend that coal-fired units are inherently more risky than are natural-gas-fired units. A higher common equity ratio reduces the volatility associated with the earnings stream and thus mitigates the higher risk of the project to some extent. After negotiations with representatives of certain customer groups, the applicants agreed to reduce the common equity portion of the capital structure to 55 percent and to increase the long-term debt component to 45 percent.

The Commission finds that a 55 percent common equity, 45 percent long-term debt mix is a reasonable capital structure for the coal-fired SCPC units. This reflects three major risk

factors that cause coal-fired units to be more risky than natural-gas-fired units: (1) coal-fired units are more expensive to construct; (2) coal-fired units take longer to construct; and (3) coal-fired units need larger amounts of ongoing capital investment to maintain the facilities. These risk factors are large enough to require some additional equity in the capital structure, beyond the level that would be appropriate for natural-gas-fired units.

(Chairperson Bridge dissents, as shown in the attached opinion.)

4. Initial lease term

The initial term of the Facility Lease is 30 years. No party disagreed with this length of term, and the Commission finds it reasonable.

5. Rent reduction in first five years

At hearing, the applicants and parties representing certain customer groups supported a 5 percent rent reduction during the first five years of the respective Facility Leases, accompanied by an undefined present value true-up mechanism. The 5 percent rent reduction would be applied to the base rent calculation using the annuity approach, as found in the Facility Lease. After the five-year rent reduction period ends, some type of rent adder to that base annuity rent calculation would be required to maintain the original present value.

The Commission finds that this rent reduction approach is reasonable and will assist in reducing rate shock, but the record does not contain any potential present value true-up mechanism. WEPCO is therefore required to work with Commission staff to prepare, for Commission approval, an appropriate present value true-up mechanism.

(Commissioner Garvin dissents, concerning this rent reduction during the first five years.)

6. Renewal rent terms

The Facility Lease, as proposed, grants WEPCO the right to renew the lease upon its expiration at lower rates. For the first renewal period, the lease payments are reduced to 50 percent of the original payments. For subsequent lease extensions, assuming such extensions can be made,[12] the lease payments drop to 15 percent of the original rent. Parties representing certain customer groups recommended that a more appropriate allocation of risk would decrease the lease payments for the first renewal period to 25 percent of the original payments. The Commission agrees. Such a reduction would provide additional ratepayer protection in terms of overall cost-effectiveness and is therefore reasonable.

7. Damages amount

The Facility Lease, as proposed, provides that if the Lease Effective Date is not achieved due to a failure of WEPCO, the Lessor can terminate the lease and sell the generating plant to WEPCO. As part of the purchase price, the utility would be required to pay a "Damages Amount" that constitutes 60 months of lost return on capital. In order to protect ratepayers, this provision must be eliminated.

(Commissioner Garvin dissents, concerning the elimination of "Damages Amount" from the Facility Lease.)

8. Securitization of lease payments

The stream of rent payments that WEPCO will be making to W.E. Power LLC and its subsidiaries could be "securitized" by the Lessor, i.e., sold for a lump sum that could either be

used as a financing vehicle for other generation improvements or be passed up to the holding company as a special dividend. As the Commission determined in its PWGS order, any such securitization may only occur with the Commission's prior review and approval in order to ensure that securitization will not harm the utility or its ratepayers.

9. WEPCO credit quality degradation

In the PWGS Facility Lease, the Commission mandated certain restrictions regarding the transfer or assignment of the PWGS plant or Facility Lease and, to protect WEPCO's credit quality from degradation, required the inclusion of a "hold harmless" lease provision. This hold harmless provision would apply if a national rating agency downgrades the utility's debt as a result of the transfer or assignment, or if the utility is required to issue equity to avoid such a downgrading of debt. A copy of this "hold harmless" provision, approved for the PWGS leases, was introduced into this docket as part of Ex. 22. As with the PWGS Facility Leases, the Commission finds these terms reasonable and requires that they be included in the ERGS Facility Leases.

Other terms and conditions

1. General changes

The applicants agreed to make the following changes to the Facility Lease:

a. Modify the definition of "Loss Proceeds" in Schedule 1.1 to delete the phrase "pursuant to any insurance policies maintained pursuant to the Facility Lease."
b. Add the phrase "The Project's cost shall not exceed the Approved Amount" to the Development Protocol in Schedule 3.1(a), to conform the ERGS lease to the approved PWGS lease.

[12] In order to be considered a "true" lease for tax purposes, ERGS cannot be leased to WEPCO for more than 80 percent of its useful life. The Facility Lease provides that the length of any renewal period will be 80 percent of the then-estimated useful life of ERGS, as determined by an independent evaluator.

c. Delete Section 9.4 dealing with the Delegation of Operation and Maintenance to one or more agents.

d. Change subsection (a) of the definition of Approved Amount in Schedule 1.1 to read "(a) the specific amount determined to be reasonable in the CPCN Approval, plus."

2. Force Majeure, excused events and events of loss

As discussed above, all construction costs defined as Force Majeure, an Excused Event, or an Event of Loss must have prior Commission approval before being recovered from WEPCO.

3. Guaranteed heat rate; cooling towers

As part of its application, W.E. Power LLC is guaranteeing a heat rate of 8,850 Btu/kWh for the SCPC units. This heat rate assumes once-through cooling; a design that the applicants contend will be approved and successfully installed. This is an important fixed term in the Facility Lease because if the applicants are unable to install once-through cooling, the heat rate may degrade significantly. As a result, W.E. Power LLC and WEPCO may only propose to change this guaranteed heat rate in the Facility Lease if they offer equivalent, offsetting ratepayer benefits and savings.

4. Engineering, Procurement and Construction contract

To ensure that WEPCO ratepayers secure the benefits of all the protections that W.E. Power LLC gains through its Engineering, Procurement and Construction (EPC) contract with Bechtel Corporation, the following Facility Lease terms shall be modified to incorporate any terms found in the EPC contract that are more beneficial to ratepayers than those currently included in the Facility Lease:

a. Commercial Operation Test and Scheduled Commercial Operation Date Damages.

b. Guaranteed Performance Level tests (including heat rate and net electrical output).

c. Duration of construction, in months from the Decommissioning Completion Date to the Scheduled Commercial Operation Date and the Required Commercial Operation Date.

d. Dates on which the Construction Milestones are scheduled to occur.

e. Test Fuel and Test Power Procedures to the extent such procedures are addressed in the EPC contract.

5. Conforming leases

This Final Decision makes modifications to the PTF leases proposed by WEC. It is reasonable to require that WEC rewrite these leases for SCPC 1 and SCPC 2, making the changes specified herein. It is also reasonable to require that WEC return these final documents to the Commission for review and approval, with the revisions highlighted, no later than 45 days after the date this Final Decision is signed.

6. Statutory compliance

A leased generation contract must meet eleven separate conditions under Wis. Stat. § 196.52(9)(b), as well as requirements for land and property transfers under Wis. Stat. § 196.795(5)(k)3. The proposed leases for SCPC 1, as modified by this Final Decision, comply with these statutory requirements. The Commission also approves the modifications WEC proposes to convert these documents into a leased generation contract for SCPC 2. Pursuant to Wis. Stat. § 196.52(9)(f), the Commission shall maintain jurisdiction to ensure that the construction of ERGS is completed as provided in the leased generation contracts.

The Commission retains continuing supervisory control only over the terms and conditions specified in this Order and in each Facility Lease, Ground Lease, and Ground Sublease. This is reasonable and in the public interest, to balance properly the parties' risks and responsibilities, and to protect WEPCO's ratepayers. In addition, any future changes to these leases, whether mutually agreed upon or otherwise, and any transfer or assignment of a lease or of the ERGS facility, must first receive Commission approval.

Site Location

Wis. Stat. § 196.491(3)(d)3. requires that the Commission consider "alternate locations" before determining whether the location of a new project is in the public interest. In addition, Wis. Admin. Code § PSC 111.53(1)(e) requires that a CPCN application for a new generating plant contain "[a]t least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives." The Commission's rules further specify certain site-related information that must be provided for each proposed power plant site. Wis. Admin. Code § PSC 111.53(1)(f).

S.C. Johnson alleges that the four ERGS site alternatives, all located at OCPP, are simply different plant configurations on the same parcel of land and therefore do not satisfy the Commission's statutory and rule requirements. On January 14, 2003, S.C. Johnson and Wisconsin's Environmental Decade (now known as Clean Wisconsin) originally raised this issue by filing a petition with the Commission requesting that it reconsider a determination that WEC's CPCN application was complete. The petitioners alleged that the application failed to include information on at least two proposed sites. On April 17, 2003, the Commission issued an order denying this petition. The petitioners appealed, but Dane County Circuit Judge Moria

Krueger ruled that this order is a "preliminary, interlocutory decision that is not immediately reviewable under Wis. Stat. ch. 227, but is reviewable in an action for judicial review of the final decision." *Clean Wisconsin, Inc. and S.C. Johnson & Son, Inc. v. Wisconsin Public Service Commission*, Case No. 03-CV-1480 (Dane County Circuit Court: Final Order, July 8, 2003).

The completion of hearings and development of a record in this docket provide no new information that would be sufficient to cause the Commission to change its conclusions regarding the four site alternatives for ERGS. S.C. Johnson and Clean Wisconsin, among others, continue to maintain that site alternatives must be geographically distinct and that these site alternatives do not demonstrate real differences. As the Commission declared in its April 17, 2003, order, though, the fact that alternate sites may be geographically close together does not automatically render them unreasonable alternatives. The Commission has accepted CPCN applications for numerous other projects where the alternate sites have been close together, or even adjacent to each other. The Commission determines whether proposed site alternatives are reasonable by applying two standards: the site alternatives must each be feasible locations and they must be sufficiently distinct to offer different packages of costs and benefits. With the benefit of a fully developed record on these site alternatives, the Commission reaffirms its April 17, 2003, decision.

S.C. Johnson and Clean Wisconsin now raise a slightly different argument about the sufficiency of the site alternatives, involving their interpretation of Commission rules. They contend that these rules only allow the use of site alternatives that are all located at a single facility in two specific situations. S.C. Johnson and Clean Wisconsin refer to Wis. Admin. Code § PSC 111.53(2)(b), which states:

> **PSC 111.53(2)(b)1.** An application for a cogeneration facility may meet the requirement under sub. (1)(e) by filing information on 2 sites that are both located at the steam host's existing industrial plant, if the cogeneration facility will be a qualifying facility under 18 CFR 292.205 and none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11(2)(c), Stats.
>
> **2.** An application for repowering an existing generating facility may meet the requirement under sub. (1)(e) by filing information on 2 sites that are both located at the existing generating facility site, if none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11(2)(c), Stats.

These parties conclude that these must be the only conditions where alternate sites at the same general location are permissible, since they are the only exceptions to the "alternative sites" requirements specified in the Commission's rules.

This interpretation, however, mischaracterizes the exceptions. A "cogeneration" project is designed to use waste heat from an electric generating plant, heat that would otherwise be lost up the smokestack, in an industrial process such as paper making or food processing. Wis. Admin. Code § PSC 111.53(2)(b)1. recognizes that in order to achieve this increase in energy efficiency the electric generating unit must be combined with an existing industrial plant, which can only occur by locating the generating unit at the industrial plant site. The same is true when a utility proposes to "repower" a generating plant by removing and replacing the existing units. Wis. Admin. Code § PSC 111.53(2)(b)2. recognizes that the only location for such a project is at the existing electric site. These two exceptions therefore are driven by the first standard of the Commission's requirements for proposed site alternatives—that every alternative must be a feasible location. There are no other feasible locations for cogeneration and repowering projects, and these two exceptions codify that finding.

S.C. Johnson and Clean Wisconsin have improperly interpreted Wis. Admin. Code § PSC 111.53(2)(b). These two exceptions are not the entire universe of situations where the Commission will accept site alternatives that are located in close proximity. In other situations the Commission applies its general rule, examining proposed alternatives to ensure that they are each feasible sites and each provide different packages of costs and benefits, so that the Commission is presented with a real choice. The site alternatives for ERGS do provide such a choice.

The record demonstrates that any of the four sites proposed would meet the standards established under Wis. Stat. § 196.491 and could be selected for construction of ERGS. The North Sites, however, are principally located within the city of Oak Creek and that city, unlike the neighboring town of Caledonia where the South Sites are found, has clearly expressed its willingness to accept this project. Furthermore, the North Site—CUP alternative involves substantial compromise and agreement between the city and the applicants regarding the proper means of mitigating municipal concerns, such as noise, traffic and air emissions. The city of Oak Creek, which has already hosted a power plant for 50 years, favors use of the North Site—CUP alternative and locating ERGS within its municipal boundaries will ensure that the city is in a stronger position to enforce mitigation measures that protect its citizens from undue impact. The city has rezoned this site as being suitable for manufacturing and is both willing and able to provide potable water and sewage service to the site. The Commission finds these to be determining factors in choosing among the four alternatives, and selects the North Site—CUP alternative as the proper location for ERGS.

This site alternative moves the coal pile and coal handling facilities inside the existing OCPP rail loop, which means that a 138/345 kV substation already found in that area must be relocated. At the time of the technical hearing, the possible sites for this substation and the cost of relocation were not clearly defined, though one alternative would split this facility into two substations and place the 345 kV substation southeast of the rail loop, in a wooded wetland designated by the Southeast Wisconsin Regional Planning Commission as an Isolated Natural Resource Area. This location would have unnecessary environmental impacts and would require relocation of the federal/state shooting range, but the applicants have indicated that other locations for the substation are available and are willing to investigate better sites. It is reasonable to require that the applicants work with ATC, DNR, and the neighboring communities to find a suitable location for these substations, minimizing both the adverse environmental effects and the cost of relocation.

Although the two SCPC units would be placed within the city of Oak Creek, even with the selection of the North Site—CUP alternative some of the plant-related facilities will be constructed in the town of Caledonia: new access roads; railroad improvements; possibly the 345 kV substation. The record demonstrates that the town of Caledonia will also experience a variety of environmental and socioeconomic effects because of the construction of ERGS. These effects may include changes in local air quality, noise levels, traffic patterns, and traffic volume, among others. The applicants have committed to working with all neighboring communities to mitigate valid concerns, including the town of Caledonia, and it is reasonable to require that they do so.

Mitigation Payments

In a Development Agreement reached with the city of Oak Creek, WEC agreed to make annual mitigation payments to the city of $1.5 million for SCPC 1 and $750,000 for SCPC 2. In Part I of PTF, the Commission granted an annual mitigation payment of $500,000 to the city of Port Washington, though it reserved the right to review this approval if the state of Wisconsin's shared revenue program was revised and payments to municipalities increased.

The enactment of 2003 Wis. Act 31 on July 15, 2003, has significantly altered the state's shared revenue program. Prior to Act 31, compensation dollars to municipalities and counties were based on a power plant's net book value and declined over time, as the plant depreciated. The maximum payment to a municipality or county under this prior formula is $750,000 per year. This is the amount the city of Oak Creek currently receives for the existing OCPP. In contrast, payments under the new shared revenue program are based on a plant's megawatt capacity multiplied by $2,000 and do not decline over time. The new shared revenue program will pay municipalities double and triple what they would have received under the former program. Cities or villages with power plants that begin operation after December 31, 2003, will annually receive two-thirds of the plant's MW capacity multiplied by $2,000, while the host county will annually receive one-third of the MW capacity multiplied by $2,000.[13] Additional incentive shared revenue payments are also distributed to both the municipality and the county if the unit is non-nuclear and built on or adjacent to an existing or former plant site or on a brownfield site, if the unit is a baseload plant, if the unit derives energy from an alternative energy source, or if the unit is a cogeneration plant. A municipality can receive multiple incentive payments. Under this new law, the city of Oak Creek will also receive annual incentive payments in the amount of $1,200 multiplied by the plant's megawatt capacity.

This new shared revenue program commences the annual payments when a generating unit becomes operational. Shared revenue payments to the city of Oak Creek will be $1.6 million for the first SCPC unit and increase to $3.2 million for the second unit. These payments will be added to the shared revenue payments that the city is currently receiving for the existing OCPP.

Under Act 31, the annual state shared revenue payments to the city of Oak Creek when ERGS is completed will exceed the amount the city is requesting in the form of mitigation payments from WEPCO ratepayers. Thus, mitigation payments are not required while compensating shared revenue dollars for ERGS are forthcoming. The shared revenue payments, however, will not begin until 2009 when SCPC 1 is first scheduled to be in service, and the city has introduced evidence that it will begin incurring costs as soon as construction commences. For this reason, the Commission finds it appropriate to authorize annual mitigation payments, as described in the Development Agreement, for the period from the commencement of construction of SCPC 1 until the year when SCPC 2 enters service, which is scheduled for 2010. The shared revenue payments for ERGS that commence in 2009, however, will partially offset the city's costs and it is appropriate to reduce the annual mitigation payment by the amount of shared revenue that the city receives for ERGS. When ERGS is fully in service, the shared revenue payments will fully replace any mitigation payment under the Development Agreement, so any further mitigation payment cannot be billed to WEPCO. If, however, state shared revenue payments decrease during the course of the 30-year Facility Lease and are no longer sufficient to offset fully the mitigation payment that would have been paid under the Development

[13] The two-third/one-third relationship is reversed if the power plant is built in a town rather than a city or village.

Agreement, the Commission finds it reasonable for W.E. Power LLC to make a partial mitigation payment to the city that equals the remaining portion.

(Commissioner Garvin dissents, concerning the decision to award mitigation payments.)

DNR Permits

Before construction may proceed, a project site selected by the Commission must receive a corresponding air pollution control construction permit from DNR. WEC submitted four permit applications to DNR, one for each site alternative. Before it can issue a CPCN for a project, the Commission must make a number of determinations, including a finding that the project is in the public interest when considering environmental factors. However, if DNR declares that a project will meet the agency's air pollution requirements under Wis. Stat. ch. 285, the Commission loses its authority under Wis. Stat. §§ 196.491(3)(d)3. and 4. to determine that a project would have undue adverse air pollution impacts. DNR issued preliminary determinations that both the North Site and the North Site—CUP alternative should meet applicable criteria for permit approval under Wis. Stat. § 285.63 on October 6 and 9, 2003, and scheduled public hearings on these permit applications on October 28, 2003. DNR also declared that WEC's permit applications for the South Site and South Site—Exp are complete, but it has not yet issued preliminary determinations regarding whether they meet the criteria for permit approval.

The combustion of coal involves the release of numerous air pollutants. During the Commission hearings, health concerns relating to these pollutants were expressed both by expert witnesses testifying on behalf of the parties and by members of the public, particularly regarding the potential health impacts of mercury and particulate matter less than 2.5 microns in diameter

($PM_{2.5}$). Some parties urge the Commission to quantify the monetary cost of these adverse health effects as an additional cost of ERGS that was not included in the EGEAS model inputs.

Mercury emissions are regulated under DNR air pollution control construction permits. DNR considers mercury to be a hazardous pollutant, requiring the use of maximum achievable control technology to meet the emission limits set by permit. DNR's air pollution permits, though, do not yet address $PM_{2.5}$. This is because the U.S. Environmental Protection Agency (EPA) has set National Ambient Air Quality Standards for $PM_{2.5}$ emissions over a 24-hour episode and annually, but has not yet instituted a program for determining non-attainment areas and thus has not taken steps yet to reduce emissions. DNR currently intends to submit a State Implementation Plan to the EPA regarding $PM_{2.5}$ in 2005. S.C. Johnson and other parties requested that the Commission consider the health impacts caused by $PM_{2.5}$ emissions from ERGS and offered evidence regarding the monetary cost of these impacts. WEC introduced contrary evidence on these subjects.

The evidence in the record regarding the externalized health costs associated with air emissions will be valuable to DNR as it examines its air permit applications for ERGS, but the Commission does not have special expertise to render an independent judgment on this topic. To do so would require the Commission to pick appropriate methods for modeling emission dispersion, determine if a causal relationship exists between emissions and adverse health impacts, decide whether a threshold level exists below which no impacts occur, and establish how to translate any identified impacts into dollars. These are primarily the functions of the EPA and DNR, and these agencies have not yet spoken. Any conclusions the Commission might

reach would likely be rendered a nullity by the ultimate decisions of the EPA and DNR. In this docket, the Commission is willing to defer to these decisions of the EPA and DNR.

DNR must also issue a number of water-related permits and approvals before construction may commence. These include: permits for grading work for the generating facilities and for the railroad improvements; the approvals for dredging and for use of lakebed and shoreline structures to construct breakwater and harbor facilities; the approval for use of lakebed to install the cooling water intake and discharge structures; and the water quality certification needed for wetland fill. As of the date the record closed, DNR has deemed the joint state/federal application for water regulatory permits and approvals for ERGS to be incomplete. Five parties to this docket jointly filed with DNR a request for a contested case hearing on WEC's application for water regulatory permits and approvals, which DNR granted on October 6, 2003. A hearing date will not be set until DNR determines that the application is complete.

Section 316(b) of the federal Clean Water Act and Wis. Stat. § 283.31(6) require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts. In December 2001, the EPA published final regulations defining the federal requirements that apply to the construction of "new" facilities and, in April 2002, proposed regulations regarding "existing" facilities. On January 28, 2003, DNR determined that ERGS could be treated as an existing facility. Under this designation ERGS could utilize once-through cooling, as OCPP does now, if the applicants can demonstrate that the intake structure represents Best Technology Available for controlling impingement and entrainment of aquatic organisms.

If the EPA overrules DNR's preliminary decision about whether ERGS is a modification to an existing facility under Section 316(b) of the Clean Water Act, the applicants may not be able to build their proposed once-through cooling system for ERGS. Instead, ERGS would need to be redesigned to utilize cooling towers. The cooling towers would be new features in the plant layout, costing approximately $100 million per SCPC unit. Changes in the cooling efficiency could also change emissions and the environmental impact of the SCPC units, requiring alterations in air pollution control equipment. Because of these substantial effects that would result, if cooling towers are required the applicants must submit a redesigned or relocated plant to the Commission for approval.

DNR has not yet granted its approval for water withdrawal and water loss under Wis. Stat. §§ 281.35 and 281.41. The applicants must provide an accurate water balance for the ERGS facilities in order for DNR to complete its review. A Wisconsin Pollutant Discharge Elimination System (WPDES) permit for discharges related to stormwater during construction and an amendment of the existing OCPP stormwater pollution prevention plan are needed prior to beginning construction. These have not been issued, due to an incomplete application. Finally, DNR has not yet authorized modifications to the existing WPDES permit related to the new cooling water intake structure. The documentation submitted by the applicants, demonstrating that the new intake will meet Best Technology Available standards, is currently being reviewed by the DNR and EPA.

DNR's Bureau of Endangered Resources has indicated that incidental take permits for threatened or endangered species will not be required for the ERGS project. Based on completed surveys, it is unlikely that any rare animal species would be adversely affected by construction of

ERGS. Although it is anticipated that numerous state-endangered blue-stemmed goldenrod plants (*Solidago caesia)* and some yellow gentian (*Gentiana alba*), a state-threatened species, will be destroyed during construction, these plants are not protected on private property and a DNR permit is not required.

Adequacy of EIS

Wis. Stat. § 1.11(2) requires the Commission to prepare a detailed EIS for any "major action" it is considering that would significantly affect the quality of the human environment. The Commission has adopted rules that categorize the types of actions it undertakes, for purposes of complying with this statute. Wis. Admin. Code § PSC 4.10(1) and Table 1, item f., provide that a proposal to construct "an electric generation facility fueled by coal" is a major action, and an EIS is required. As a result, Commission staff collaborated with DNR staff to prepare an extensive EIS about ERGS, including holding scoping sessions in the Oak Creek community at which members of the public could learn about the project and could relate particular concerns about its environmental impacts to Commission and DNR staff. The Commission and DNR released a draft EIS dated April 21, 2003, 450 pages long, plus a second volume of 34 figures, which it distributed broadly to interested persons. The agencies encouraged people to respond with concerns and criticisms during a 45-day comment period, and held meetings with the public in the project area to receive these comments.

Following the comment period, Commission and DNR staff prepared a final EIS that took into consideration the comments received as well as new information collected. The final EIS substantially expanded the draft EIS, adding more figures to Volume 2 as well as a 300-page

Volume 3, which identifies and responds to the comments received. In all, the EIS now totals approximately 900 pages.

Several parties argue that the EIS's discussion of the environmental impacts of ERGS is inadequate. After hearing these concerns and reviewing the detailed record prepared in this case, much of which concerns environmental impacts, the Commission finds that this EIS properly discusses the significant aspects of probable environmental consequences. In those areas where the likely environmental consequences associated with ERGS are unknown, the EIS identifies these uncertainties. ERGS also remains under continuing regulatory review by DNR, the state's primary regulator for most purposes of environmental protection. During its review of numerous permit applications, DNR can respond to remaining areas of uncertainty. The Commission recognizes DNR's continuing regulatory oversight of this project and, by the conditions imposed in this order, defers to DNR's permitting decisions that will mitigate environmental impacts.

For these reasons, the Commission finds that the draft and final EIS comply with the requirements of Wis. Stat. § 1.11 and Wis. Admin. Code ch. PSC 4.

Certificate of Public Convenience and Necessity

W.E. Power LLC, through its subsidiaries ERGS-SCPC 1 LLC and ERGS-SCPC 2 LLC, may commence construction of two 615 MW SCPC electric generating units, as described in WEC's project application and modified by this Final Decision, at an estimated cost of $1,426,674,000 for SCPC 1 and $724,132,000 for SCPC 2 (year-of-occurrence dollars), plus any adjustment that is approved by this Commission for one year of additional inflation.

Order

ERGS Generating Plants

1. W.E. Power LLC and its subsidiaries may construct SCPC 1 and SCPC 2 at the North Site—CUP alternative. The in-service date for SCPC 1 shall be May 1, 2009; the in-service date for SCPC 2 shall be May 1, 2010. W.E. Power LLC and its subsidiaries shall construct these units in conformance with the design specified in the ERGS application, in conformance with the construction schedule specified in the application (as delayed one year by this Final Decision), and subject to the conditions specified in this Final Decision. Although the application to construct an IGCC unit is denied, W.E. Power LLC and its subsidiaries may construct common facilities with the SCPC units to accommodate up to 3,000 MW of generation at this site.

2. W.E. Power LLC and its subsidiaries shall commence construction of SCPC 1 within 12 months after receiving all necessary federal, state, and local permits and approvals. Before commencing construction of SCPC 2, the applicants shall file an updated demand and energy forecast and updated EGEAS computer modeling with the Commission.

3. Within three months of the date when SCPC 2 is fully operational, W.E. Power LLC shall repeat the noise measurements that were taken before project approval, shall measure the maximum noise generated at the site with all units on, and shall measure the noise at the site with all units off. W.E. Power LLC shall report its findings to the Commission, using the same format as its pre-approval noise studies.

4. W.E. Power LLC shall provide documentation to the Commission of all work with individuals who raise concerns about noise or interference with radio or television reception, and of the resolution of those concerns.

5. The applicants shall work with neighboring communities to mitigate valid concerns and impacts.

6. The applicants shall seek the approval of the Office of the Commissioner of Railroads to separate or eliminate the existing at-grade Union Pacific rail crossings at Seven Mile Road and Six Mile Road. The applicants shall also monitor the effect of train deliveries on road blockages at Four Mile Road crossing, following their construction of the new on-site rail facilities, and shall work with the town of Caledonia to address legitimate concerns it may have at this location.

7. The applicants shall work with ATC, DNR, and neighboring communities to minimize the cost and the environmental impact of moving and reconfiguring the 138 kV and 345 kV substations. The applicants shall inform the Commission of the results of this work, documenting the estimated cost involved, the new proposed layout of the substations, and the associated transmission line interconnection routes and routes for exiting from the plant site.

8. If the EPA or DNR determine that once-through cooling is not permittable, WEC shall submit a revised project application for the Commission's approval that redesigns or relocates ERGS, as needed.

Leased Generation Contracts

9. The Facility Lease for SCPC 1 shall use a construction cost of $1,426,674,000 as the Approved Amount and the Facility Lease for SCPC 2 shall use a construction cost of

$724,132,000 as the Approved Amount, but the applicants can alter these amounts by submitting to the Commission for its review and approval revised construction costs that include one year of additional inflation at an annual inflation rate of no more than 1.87 percent. Any such submission shall be provided to the Commission no later than 45 days after the date this Final Decision is signed.

10. W.E. Power LLC and its subsidiaries may only recover construction costs from WEPCO that exceed the amounts approved in this Final Decision if the Commission makes a prior determination, before billing, that the excess cost is prudently incurred. W.E. Power LLC and its subsidiaries may not recover from WEPCO more than 105 percent of the construction costs approved in this Final Decision, except that costs qualifying as Force Majeure, an Excused Event, or an Event of Loss under the definitions of the Facility Lease are not included in this calculation. W.E. Power LLC and its subsidiaries may only recover from WEPCO a cost that qualifies as Force Majeure, an Excused Event, or an Event of Loss if the Commission makes a prior determination, before the cost is billed, that it is prudently incurred. If the actual cost of constructing an ERGS unit is less than the Approved Amount defined in the Facility Lease, the Approved Amount shall be reduced to equal the actual cost.

11. Neither WEC nor any of its affiliates may securitize the lease payment stream under the Facility Lease without the Commission's prior review and approval.

12. WEPCO shall treat each Facility Lease, Ground Lease, and Ground Sublease approved in this docket as operating leases for ratemaking purposes. In future rate cases, WEPCO may not seek a higher authorized return on equity for its rate-based assets, or any other

capital structure adjustments, related to credit quality degradation resulting from a lease's classification as a capital, operating, or true tax lease.

13. WEPCO shall work with Commission staff to develop a tracking mechanism, and appropriate accounting practices, that prevent a double collection of costs from ratepayers through utility rates and lease payments.

14. WEPCO shall work with Commission staff to develop an appropriate present value true-up mechanism for Commission approval, to balance the 5 percent rent reduction in the first five years of each Facility Lease.

15. WEC shall revise the Facility Lease, Ground Lease, and Ground Sublease for SCPC 1 and SCPC 2, reflecting each of the lease modifications approved in this Final Decision. Within 45 days after the date this Final Decision is signed, WEC shall submit these revised leases to the Commission for its review and approval, with the revisions highlighted.

16. No future changes may be made to a Facility Lease, Ground Lease, or Ground Sublease, approved in this docket, whether mutually agreed upon or otherwise, without first receiving the Commission's review and approval. No interest in any of these leases or agreements or in the ERGS facility may be transferred or assigned, without first receiving the Commission's review and approval.

17. All books and records underlying any transaction made pursuant to a Facility Lease, Ground Lease, or Ground Sublease shall be provided to the Commission upon request.

18. The Commission retains limited continuing jurisdiction over those terms and conditions expressly set forth in each lease approved by the Commission and set forth in this Final Decision.

General Requirements

19. WEPCO shall submit a plan to the Commission by March 1, 2004, for capturing a minimum of 55 MW of additional cost-effective energy conservation by 2008.

20. W.E. Power LLC and its subsidiaries shall notify the Commission within five working days of the date when construction commences on each unit. W.E. Power LLC and its subsidiaries shall notify the Commission, in writing, within 24 hours of any decision not to proceed with any of the approved projects or to enter into any partnership or other arrangement with another entity with respect to the project.

21. W.E. Power LLC and its subsidiaries shall submit quarterly progress reports to the Commission that summarize the status of construction, the status of land acquisition, the status of environmental control activities, and the overall percent of physical completion for each unit. Each report shall include a summary of consultations with DNR and other agencies concerning the issuance of permits. The reports shall list dates, names, and the results of each contact and the company's progress in implementing prescribed environmental protection or control standards. The first report for SCPC 1 is due for the quarter ending December 2003; the first report for SCPC 2 is due for the quarter ending December 2004. The reports shall be filed within 31 days after the end of each quarter and shall continue until the certificate holder's project is fully operational.

22. W.E. Power LLC and its subsidiaries shall each provide the Commission with copies of all final executed agreements related to the construction, operation, or ownership of the project when they are obtained, including the final EPC contract with Bechtel Corporation.

23. W.E. Power LLC and its subsidiaries shall promptly inform the Commission of any substantial scope or design modifications in the approved facilities.

24. If WPPI or MGE fails to exercise its purchase option within nine months after the date when a Facility Lease becomes final, within the next 45 days WEC shall provide the Commission with a plan that eliminates the risk of WEPCO ratepayers acquiring and paying for too much capacity. One means of protecting ratepayers that WEC can consider is the sale of these ownership shares to another entity.

25. For each SCPC unit, upon completion of construction W.E. Power LLC and its subsidiaries shall file with the Commission a complete report of the final costs segregated by plant account and shall explain any variances between the authorized and actual costs.

26. This Final Decision takes effect on the day after it is mailed. The CPCN for the ERGS facility only takes effect when the DNR issues all permits and approvals that it identified, pursuant to Wis. Stat. § 196.491(3)(a)3.a., as being required prior to construction of the facility.

(A separate dissent from Chairperson Bridge follows.)

Dated at Madison, Wisconsin, _____

By the Commission:

_____

Lynda L. Dorr
Secretary to the Commission

LLD:JAK:jlt:g:\order\pending\05-CE-130, 05-AE-118 Final draft.doc

See attached Notice of Appeal Rights

Attachment

Notice of Appeal Rights

Notice is hereby given that a person aggrieved by the foregoing decision has the right to file a petition for judicial review as provided in Wis. Stat. § 227.53. The petition must be filed within 30 days after the date of mailing of this decision. That date is shown on the first page. If there is no date on the first page, the date of mailing is shown immediately above the signature line. The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

Notice is further given that, if the foregoing decision is an order following a proceeding which is a contested case as defined in Wis. Stat. § 227.01(3), a person aggrieved by the order has the further right to file one petition for rehearing as provided in Wis. Stat. § 227.49. The petition must be filed within 20 days of the date of mailing of this decision.

If this decision is an order after rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not an option.

This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

Revised 9/28/98

CHAIRPERSON BURNEATTA BRIDGE
DISSENTING OPINION

In this decision the Commission has authorized construction of the largest electric generation project in Wisconsin history. The $2.15 billion price tag used today will undoubtedly grow substantially by the time all related costs are included and construction is completed. This cost will be borne by families and businesses in southeastern Wisconsin. The promised benefit to them should be the assurance of reliable base load generation for the next 35 or 40 years.

The Commission has determined that W.E. Power, LLC is entitled to a return on equity of 12.7 percent, based on a capital structure of 55 percent common equity and 45 percent long-term debt. I believe that this return on equity is extraordinarily high when compared to historic rates and is not in step with current capital markets. Because I believe that the return the Commission has authorized is more generous than necessary to attract investors and will unduly burden future ratepayers, I respectfully dissent.

These lease provisions extend for 30 years. Factoring in the lease terms the Commission has already approved for the Port Washington plant, the result is that a major component of residential, commercial, and industrial customer rates will be locked in for almost two-thirds of W.E. Power, LLC's net investment in electric and gas facilities through the year 2040. Under the financing package approved by the Commission, W.E. Power, LLC's customers will be obligated to pay at least $233 million annually over that period of time.

I proposed that the return on equity be set at 12.1 percent, based on a capital structure of 53 percent common equity. I consider this rate of return and equity structure to be much more in line with current financial markets and with recent actions taken by other state commissions.

Under my proposal, ratepayers would pay approximately $100 million less over the term of the lease on a present value basis.

I also proposed that the Commission reserve the right to review these terms at the end of five years, when the total costs of the project are more certain. At that time, the Commission would have available much more accurate information about actual costs and would be in a much better position to evaluate an appropriate financial structure. In view of the size of the project, the enormous cost, and the attendant uncertainties of a venture of this magnitude, I believe that this approach would be a sound exercise of our responsibility to protect the people who will pay the bills.

Burneatta Bridge
Chairperson

APPENDIX A
(CONTESTED)

In order to comply with Wis. Stat. § 227.47, the following parties who appeared before the agency are considered parties for purposes of review under Wis. Stat. § 227.53.

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STATE OF WISCONSIN CIRCUIT COURT DANE COUNTY

Clean Wisconsin, Inc. et. al.,

Petitioners

vs. Case No. 03 CV 3478

Wisconsin Public Service Commission and Department of Natural Resources,

Respondents

ORDER UPON JUDICIAL REVIEW OF PUBLIC SERVICE COMMISSION ORDER

Application of Wisconsin Electric Power Company; Wisconsin Energy Corporation; and W.E., Power, LLC; for a Certificate of Public Convenience and Necessity for Construction of Three Large Electric Generating Facilities, the Elm Road Generating Station, and Associated High Voltage Transmission Interconnection Facilities to be Located in Milwaukee and Racine Counties.

Public Service Commission Docket No. 05-CE-130

Table of Contents

		page
I.	**Statement of the Case**	3
II.	**Standard of Review**	5
III.	**WEC Application for Certificate of Public Convenience and Necessity Approval**	9
	A. Alternative Site Requirement	11
	B. Regulatory Approvals	16
	C. Transmission Line Agreements	19
	D. Identity of Contingent Owners	22
	E. Completeness of Application as of November 15, 2002	23
IV.	**Commission's Order**	25
	A. Energy Need Projections	25
	B. EGEAS Computer Model	26
	C. Health Care Costs	27
	D. Transmission Facility Design, Location and Cost	30
	E. Wisconsin Energy Priority Law	32
	1. Selection of High-Sulfur Coal over Natural Gas as the Primary Energy Source	34
	2. Lack of Consideration of Oil and Low Sulfur Coal	40
	F. Approval of Expansion Capacity	41
	G. Issuance of CPCN Prior to Obtaining Regulatory Approvals	43
	H. Adequacy of the Environmental Impact Statement	45
	I. Least Cost Alternative	47
	J. Wholesale Power Competition	49
	K. City of Oak Creek Mitigation Payment Agreement	50
V.	**Summary and Order**	52

I. Statement of the Case

This proceeding arises from a Final Decision and Order of the Public Service Commission (PSC), rendered November 10, 2003, (Order). In the Order, the PSC issues a Certificate of Public Convenience and Necessity (CPCN) for the construction of two large coal-fired electric power plants by the Wisconsin Energy Corporation (WEC). The two unit facility is known as the Elm Road Generating Station (ERGS) and is to be located on the shore of Lake Michigan at an existing Oak Creek Power Plant (OCPP) owned by Wisconsin Electric power Company (WEPCO). Each of the two new plants is to be a Super Critical Pulverized Coal unit (SCPC 1 and SCPC 2) and each is to be capable of producing 615 megawatts (MW) of electric power. WEC had sought authorization to build a third new coal-fired facility, that being a 600 MW Integrated Gasification Combined Cycle (IGCC) unit but the PSC, in the Order, declined to authorize construction of the third unit. The projected cost of the two new authorized units is 2.15 billion dollars and apparently will be the largest, most expensive generating facility ever constructed in Wisconsin.

The PSC Order resolves what has been designated as second and final part of a WEC proposal initially submitted to the PSC January 31, 2002 and known as Power the Future (PTF). The original combined proposal was a plan to construct five new power generating facilities, two natural gas-fired units at Port Washington and three new coal-fired units at the existing Oak Creek Power plant (OCPP) site. The Port Washington plants were approved[1] and, thereafter, the PSC undertook consideration of the remaining three proposed new facilities at the Oak Creek site. The new Oak Creek facilities, known

[1] Final Decision, Application of Wisconsin Electric Power Company, Wisconsin Energy Corporation and W.E. Power, LLC, PSCW docket 05-CE-117.

also as the Elm Road Generating Station (ERGS) thus became phase II of the PTF proposal.

This Circuit Court action is a consolidation of five separate petitions[2] for judicial review pursuant to sec. 227.52, Wis. Stats. in the Circuit Court of Dane County; Clean Wisconsin, Inc. and S.C. Johnson & Sons, Inc. v. Wisconsin Public Service Commission and Wisconsin Department of Natural Resources, 03 CV 3478; Clean Wisconsin, Inc. and S.C. Johnson & Sons, Inc. v. Wisconsin Department of Natural Resources, 03 CV 133; Calpine Corporation v. Public Service Commission of Wisconsin, Case no. 04 CV 149; Calpine Corporation v. Public Service Commission of Wisconsin and Wisconsin Department of Natural Resources, Case no. 04 CV 3731; City of Oak Creek v. Public Service Commission of Wisconsin, Case no. 04 CV 533. By order of March 11, 2004, the foregoing separate cases were consolidated into Case no. 03 CV 3478.

The record of the proceedings before the PSC is extensive. Hearings were held on nineteen days and the record contains some 5,945 pages of testimony transcript, of which 302 pages have been designated as confidential pursuant to secs. 134.90 and 196.14, Wis. Stats.

The record begins with a three volume application filed January 31, 2002 by WEC and includes twenty six volumes of testimony, correspondence and exhibits. The record contains a draft Environmental Impact Statement (EIS), issued April, 2003 and a final EIS, issued July, 2003, R. 77 and R. 119, respectively.

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[2] Initially there was a sixth case which was part of the consolidated proceeding, Town of Caledonia v. Public Service Commission of Wisconsin and Wisconsin Department of Natural Resources, Dane County Case no. 04 CV 533. This case was filed in the Circuit Court of Racine County as Case no. 03 CV 2084 and venue was thereafter transferred to the Circuit Court of Dane County. The parties thereafter submitted a stipulation seeking dismissal and, by order of September 2, 2004, this matter was dismissed.

II. Standard of Review

The PSC Order is the product of extensive consideration of complex engineering, economic and environmental matters. Wisconsin must provide adequate electric power for the future and that requires careful, thoughtful planning for facilities needed many years down the road. Generation facilities cannot be built quickly. The planning must consider extremely complex technical, financial and environmental considerations. The PSC is charged by the legislature with oversight of state utilities and possesses both expertise and long experience in that role. In this particular proceeding, involving what is described as the largest utility construction proposal in the history of the state, the PSC has shared regulatory responsibility, as to environmental aspects of the proposal, with the Wisconsin Department of Natural Resources (DNR). This truly is an area where a specialized agency is likely to be far more qualified than any court to analyze the extraordinary volume of relevant factual information. Thus the role of the Circuit Court, in an action which seeks judicial review of an agency Order, should properly be limited. The overarching structure for this great administrative responsibility, however, is a framework of legal principle and while the discretion assigned to the Commission is very great, that discretion must work within the tangible, visible limits of the applicable law.

Section 227.52, Wis. Stats., authorizes a Circuit Court to review a Order of the PSC in this matter and sets forth statutory guidance for court review.

> 2) Unless the court finds a ground for setting aside, modifying, remanding or ordering agency action or ancillary relief under a specified provision of this section, it shall affirm the agency's action.
>
> (3) The court shall separately treat disputed issues of agency procedure, interpretations of law, determinations of fact or policy within the agency's

exercise of delegated discretion.

(4) The court shall remand the case to the agency for further action if it finds that either the fairness of the proceedings or the correctness of the action has been impaired by a material error in procedure or a failure to follow prescribed procedure.

(5) The court shall set aside or modify the agency action if it finds that the agency has erroneously interpreted a provision of law and a correct interpretation compels a particular action, or it shall remand the case to the agency for further action under a correct interpretation of the provision of law.

(6) If the agency's action depends on any fact found by the agency in a contested case proceeding, the court shall not substitute its judgment for that of the agency as to the weight of the evidence on any disputed finding of fact. The court shall, however, set aside agency action or remand the case to the agency if it finds that the agency's action depends on any finding of fact that is not supported by substantial evidence in the record.

(7) If the agency's action depends on facts determined without a hearing, the court shall set aside, modify or order agency action if the facts compel a particular action as a matter of law, or it may remand the case to the agency for further examination and action within the agency's responsibility.

(8) The court shall reverse or remand the case to the agency if it finds that the agency's exercise of discretion is outside the range of discretion delegated to the agency by law; is inconsistent with an agency rule, an officially stated agency policy or a prior agency practice, if deviation therefrom is not explained to the satisfaction of the court by the agency; or is otherwise in violation of a constitutional or statutory provision; but the court shall not substitute its judgment for that of the agency on an issue of discretion.

9) The court's decision shall provide whatever relief is appropriate irrespective of the original form of the petition. If the court sets aside agency action or remands the case to the agency for further proceedings, it may make such interlocutory order as it finds necessary to preserve the interests of any party and the public pending further proceedings or agency action.

(10) Upon such review due weight shall be accorded the experience, technical competence, and specialized knowledge of the agency involved, as well as discretionary authority conferred upon it. The right of the appellant to challenge the constitutionality of any act or of its application to the appellant shall not be foreclosed or impaired by the fact that the appellant has applied for or holds a license, permit or privilege under such act.

Section 227.57, Wis. Stats.,

Certainly the PSC Order reflects determinations of fact reached by the PSC as well as interpretations of law. The petitioners challenge factual determinations reached by the PSC and in undertaking judicial review as to such matters, the court is required to,

> accept findings of the agency if they can be supported by substantial evidence. Section 227.20(6), Stats. Substantial evidence does not mean the preponderance of evidence, but rather whether reasonable minds could reach the same conclusion reached by the agency.
>
> Citizens' Utility Board. v. Public Service Commission, 211 Wis.2d 537, 565 N.W.2d 554 (Ct App. 1997)

As to legal interpretations adopted by the PSC the court must determine, in each instance, the proper level of deference which should be given to the PSC interpretation. All parties recognize that the court should employ one of three levels of deference which may be regarded as a continuum; great weight, due deference and de novo review. If the court accords great weight deference, the court largely defers to the determination adopted by the agency.

> Great weight deference is afforded to an agency's decision under the following circumstances: (1) the agency was charged by the legislature with the duty of administering the statute; (2) that the interpretation of the agency is one of long-standing; (3) that the agency employed its expertise or specialized knowledge in forming the interpretation; and (4) that the agency's interpretation will provide uniformity and consistency in the application of the statute."
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> Brauneis v. State, 236 Wis.2d 27, 612 N.W.2d 635, citing Harnischfeger Corp v. LIRC, 196 Wis.2d 650, 660, 539 N.W.2d 98 (1995)

Moreover, the court is obligated to regard an agency's interpretation of its own administrative regulation as controlling unless that interpretation is "inconsistent with the language of the regulation or clearly erroneous." Pfeiffer v. Board of Regents, 110

Wis.2d 146, 155, 328 N.W.2d 279 (1983), quoting Beal v. First Federal S. & L. Ass'n. 90 Wis. 2d 171, 183, 279 N.W.2d 693 (1979).

At the other end of the spectrum lies de novo review in which the court begins anew to determine independently what should be the proper legal interpretation. De novo review is the appropriate standard when the court is presented with a circumstance in which the agency's interpretation conflicts with the plain meaning of the statute.

> A court does not, however, give deference to an agency's interpretation of a statute when the court concludes that the agency's interpretation directly contravenes the words of the statute, is clearly contrary to legislative intent, or is otherwise unreasonable or without rational basis.
>
> State ex rel. Parker v. Sullivan, 184 Wis.2d 668, 669, 517 N.W.2d 449 (1994), see also, Lisney v. LIRC, 171 Wis.2d 499, 506, 493 N.W.2d 14, (1992)

De novo review is also proper "where there is no evidence that the agency used any special knowledge or expertise, the issue is clearly one of first impression, or the agency's position on an issue has been inconsistent." RURAL v. PSC, 239 Wis.2d 660, 679, 619 N.W.2d 888 (2000)

The middle of the road approach is for the court to give what is termed due weight to the agency's legal interpretation, a level of deference that is appropriate when the agency is acting within its jurisdictional area but with regard to a particular matter that is unusual or novel.

> Due weight deference, the middle ground between great weight deference and *de novo* review, is warranted where an agency has some experience in the area, but has not developed any particular expertise in interpreting and applying the statute at hand that positions the agency more favorably to interpret that statute than a reviewing court.
>
> RURAL v. PSC, supra, 239 Wis.2d at 678, 679

And finally, it must be noted that the burden is upon the petitioners to demonstrate a proper and adequate basis to modify, vacate or remand the Order of the Commission, Shoreline Park Preservation, Inc. v. DOA, 195 Wis.2d 750, 761, 537 N.W.2d 388 (Ct. App. 1995).

The challenges posed by the petitioners may usefully be placed in two groups. The petitioners argue that the Commission's proceeding began based upon an application for CPCN approval which was incomplete and thus legally insufficient. The petitioners also find fault with various aspects of the Order which resulted. This judicial review will discuss first the issues relating to the application and thereafter will consider the Commission's Order.

III. WEC Application for CPCN Approval

WEC is required to obtain from the PSC, prior to beginning construction of the proposed ERGS, a certification that the proposed new facilities that public convenience and necessity require the project (CPCN), sec, 196.49(3)(b); sec. 196.491(3)(a), Wis. Stats. The process of obtaining certification begins with an application in a form prescribed by the Commission, sec. 196.49(2), Wis. Stats. and Wis. Admin. Code. Section 196.491, Wis. Stats. creates a process whereby the PSC has a limited time to consider an application for authorization to construct a new electric generating facility. The procedure includes, at critical points, default provisions which provide to the applicant a favorable determination, if the Commission fails to act within statutorily determined periods.

The first step in the process is a determination by the PSC as to whether the application for a CPCN is complete. The Commission must review the application and

advise the applicant as to whether it is complete, within 30 days. The applicable statute provides,

> The commission shall determine whether an application filed under subd. 1. is complete and, no later than 30 days after the application is filed, notify the applicant about the determination. If the commission determines that the application is incomplete, the notice shall state the reason for the determination. An applicant may supplement and refile an application that the commission has determined to be incomplete. There is no limit on the number of times that an applicant may refile an application under this subdivision. If the commission fails to determine whether an application is complete within 30 days after the application is filed, the application shall be considered to be complete.
>
> Section 196.491(3)(a)(2), Wis. Stats.

Section 196.491(3)(g), Wis. Stats. provides that the PSC must take final action within 180 days from the point that the application is complete. The 180 day time limit can be extended one time, upon approval by a circuit court, by an additional 180 days. Thus, from the date that an application is complete, the PSC has no more than 360 days to take final action. If the Commission fails to do so the application is deemed approved.

The determination that the application is complete is a crucial element in this process. At that point, the statutory deadline for determination is fixed. 360 days appears to be a substantial period of time until consideration is given to the size, cost and complexity of the current proposal as well as the opportunity for public participation that the Commission must provide.

There is a compelling logic to the statutory process which is all the more apparent in this case where extraordinary factual complexity and the need for timely resolution confront the finite resources of a regulatory agency. It is significant and appropriate that the key date in the process, the starting gun as it may be envisioned, is in the hand of the party most interested in the application, the applicant utility. WEC

presumably has the best access to the information that must be assembled to produce a complete application. The applicant utility has the direct, immediate concern and is likely possesses the resources necessary to assemble the required information.

Petitioners now assert that the PSC improperly determined that the WEC application was complete and seek an order vacating the PSC Order upon that basis. The arguments that the application was incomplete evolve essentially to three primary assertions;

1. The application did not present at least two proposed sites as required by sec. 196.491(3)(d)3, Wis. Stats. and Wis. Admin. Code, sec. 111.53(1)(e).

2. The application did not contain the regulatory approvals required by Wis. Admin. Code, sec. 111.53(1)(f) 1.

3. The application did not contain the information about needed new transmission line facilities as required by Wis. Admin. Code, sec. 111.53(1)(f) 4.

A. Alternative Location/Site Requirement

The WEC application offers three proposed configurations of the three proposed new generating plants. The Final EIS describes a 1000 acre parcel owned by WEPCO and states the proposal is one for three new units, "all constructed on or adjacent to a site containing WEPCO's existing Oak Creek Power Plant (OCPP)." Ex. 274, Vol. 1, Final EIS, p. xvii. In the course of the proceeding, a fourth configuration, known as "North CUP", evolved and eventually was the choice of the PSC. This too is located within the 1000 acre parcel.[3]

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[3] At an earlier point, petitioners Clean Wisconsin and Johnson sought reconsideration of the determination that the multiple OCPP configurations were sufficiently separate sites. On April 17, 2003, the PSC issued an order denying the request for reconsideration and the petitioners sought review in the circuit court. The court ruled that the April 17, 2003 order was a

Wisconsin law directs the PSC to consider "alternative locations" for a proposed new power plant facility,

> Except as provided under par. (e) and s. 196.493, the commission shall approve an application filed under par. (a)1. for a certificate of public convenience and necessity only if the commission determines all of the following:
> ...
> 3. The design and location or route is in the public interest considering ... alternative locations...
>
> Sec. 196.491(3)(d), Wis. Stats. , in part.

Moreover, the Commission has adopted a rule which requires the applicant to identify "[a]t least two proposed sites" in order for an application to be deemed complete.

> (1) Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
> ...
>
> > (e) At least two proposed sites for the proposed facility, including a description of the siting process and a list of the factors considered in choosing the alternatives.
>
> Wis. Admin. Code, sec. 111.53, in part.

Finally, the Commission has also adopted a provision which provides that in specific circumstances, there is to be no requirement that an alternate location be identified and described in the application.

> 1. An application for a cogeneration facility may meet the requirement under sub. (1) e) by filing information on 2 sites that are both located at the steam host's existing industrial plant, if the cogeneration facility will be a qualifying facility under 18 CFR 292.205 and none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.
>
> 2. An application for repowering an existing generating facility may meet the requirement under sub. (1) (e) by filing information on 2 sites that are both

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preliminary decision not subject to judicial review prior to the issuance of a final decision, Clean Wisconsin, Inc. and S.C. Johnson & Son, Inc. v. Wisconsin Public Service Commission, Case No. 03-CV-1480, Dane County Circuit Court, Order, July 8, 2003.

> located at the existing generating facility site, if none of the needed infrastructure improvements would constitute a major action significantly affecting the quality of the human environment under s. 1.11 (2) (c), Stats.
>
> Wis. Admin. Code, sec. 111.53(2)(b), in part.

The Order of the PSC acknowledges the requirement that alternative locations/sites must be considered and interprets that requirement as follows,

> the fact alternate sites may be geographically close together does not automatically render them unreasonable alternatives ... The Commission determines that whether proposed site alternatives are reasonable by applying two standards: the site alternatives must each be feasible locations and they must be sufficiently distinct to offer different packages of costs and benefits
>
> PSC Order, page 45

The Commission reads the statute and the rule to require only that the alternative sites be feasible locations which offer alternative costs and benefits. The present application presents three configurations each of which used the 1000 acre parcel, to some degree, in a different manner. Apparently, none of the three submitted alternatives used precisely the same portion of the parcel. But, using the commission's interpretation of the alternative locations/sites requirement, each of the three WEC alternatives could use precisely the exact same land so long as they were each feasible and involved different costs and benefits. Thus the PSC's interpretation of the law permits elimination of the core requirement, the presentation of at least two different locations.

This formulation is one of law and the question becomes one of determining first the degree of deference owed by the court to the PSC as to this determination. Interpretation of the alternative site provisions of sec. 196.491(3)(d), Wis. Stats. and Wis. Admin. Code sec. 111.53, are matters squarely within the jurisdiction of the PSC. It may be that the agency has called upon a degree of expertise in rendering this

interpretation but it does not appear that the interpretation is a matter of long standing. Nor does it appear that the interpretation will provide uniformity of interpretation.[4]

There is no ambiguity as to what is meant by "alternative locations" in sec. 196.491(3)(d)3, Wis. Stats. Similarly, there is no ambiguity as to what is meant by "[a]t least two proposed sites " in Wis. Admin. Code sec. PSC 111.53(1)(e). The statute and the rule require that not less than two distinct locations be submitted as proposed alternate sites. There is no ambiguity and therefore no need to look to other sources for assistance. If there was ambiguity, however, two other related rules adopted by the PSC make clear the intent of Wis. Admin. Code sec. PSC 111.53(1)(e). The PSC, by adopting Wis. Admin. Code secs. PSC 111.53(2)(b)1 and 111.53(2)(b)2 expressly provides for two specific situations where the logic of the alternate proposed sites rule is declared inapplicable. Those two exceptional situations arise when a utility may seeks to undertake a substantial renovation of an existing generation plant or seeks to build a co-generation facility to capture the energy otherwise wasted in steam produced by some other industrial process. In either instance, the proposal is by definition site-specific. In such situations, the Commission has acknowledged that the two site requirement cannot be applied, Wis. Admin. Code, secs. 111.53(2)(b) 2 and 3. If alternate configurations of the same parcel is a sufficient demonstration of alternatives, then these two specific exceptions are needless surplusage. The more reasonable interpretation is that the exceptions are necessary because Wis. Admin. Code sec. PSC

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[4] The decision approving a CPCN as to the Fond du Lac Energy Center includes a consideration of two separate, distinct proposed locations for the new facility, Application of Fond du Lac Energy Center, LLC, Final Decision, May 5, 2003, pp. 6-8, Docket 9343-CE-100, as does the decision in approving the Joint Application of Fox Energy Company, LLC and American Transmission Company, LLC, Final Decision, November 8, 2002, pp. 7, 8, Docket 05-CE-115.

111.53(1)(e) is intended to mean precisely what is clearly says, the applicant must propose at least two distinct, alternative sites for a new plant.

In argument submitted to this court, the PSC suggests that the alternate location requirement should be viewed as a "rule of reason" based upon a requirement in the Wisconsin Environmental Policy Act that state agencies consider "alternatives to the proposed action", sec. 1.11(2)(c)3, Wis. Stats. and caselaw interpreting that statute, together with a parallel provision within the National Environmental Policy Act, 42 U.S.C. sec. 4332 (1970), Wis. Environmental Decade v. Public Service Commission, 79 Wis.2d 161, 175, 255 N.W. 2d 917 (1977). The WEPA requirement is intended to offer general guidance to an extremely wide range of government actions. It is a broad, statement of an approach to be taken generally. By contrast, the statute and rule applicable here speak directly to the number of "proposed sites" or "alternative locations" that must be identified. The express requirement is that more than one must be included in the application and neither the WEPA nor the NEPA are intended to offer guidance of such specificity.

In the alternative, if the court accepts the interpretation offered in the PSC Order, there remains a question as to whether the three alternatives submitted in the WEC application actually meet the test stated, whether the record reflects sufficient evidence upon which the PSC could reasonably conclude that the sites really offer distinct costs and benefits. A fair review of the record reflects the clear picture that there is no significant distinction between the costs and benefits offered by each of the three alternatives. These are not alternative sites or locations; They simply are three

different configurations or utilizations of a single site which means that the application does not meet the legal minimum for consideration by the PSC.

The interpretation of sec, 196.491(3)(d)3, Wis. Stats. and Wis. Admin. Code sec. PSC 111.53(1)(e) is clearly erroneous. It is error for the PSC to deem the WEC application complete on November 15, 2002 because the application failed to include at least two alternative sites as required by applicable rule. The Order based upon that application is hereby vacated and the matter is remanded to the Commission to permit the applicant to submit an application which does comply with sec. 196.491(3)(d)3, Wis. Stats., and Wis. Admin. Code sec. PSC 111.53(1)(e).

B. Regulatory Approvals

The Commission requires that an application for CPCN must demonstrate that regulatory approvals, other than that of the PSC, have been obtained.

> (1) Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> ...
>
> (f) Site-related information for each proposed power plant site, including all of the following:
>
> 1. The regulatory approvals required for construction and operation of the facility.

Wis. Admin. Code, sec. 111.53, in part.

The WEC initial application was filed in January, 2002. WEC thereafter filed a series of four supplements to the application, the fourth on October 23, 2002. On November 15, 2002, PSC Electric Division Administrator Robert Norcross rendered a

determination that the WEC application was complete.[5] That determination was expressly based, however, upon the applicant's commitment to provide further data related to wetlands issues, subsurface sampling as well as aquatic, benthic and lake bottom information. Specifically, the Norcross correspondence stated,

> While the application is determined to be complete at this time, our determination is, in part, based on WE Energies' commitment to supply additional information related to items 6, 7, and 18 of the Commission's October 7, 2002, incompleteness letter. Substantial amounts of information relating to items 6, and 7 have been provided and will allow our review of the wetland delineations to begin. based upon the information contained in Supplement 4 and conversations with WE Energies staff, it is my understanding that the remaining information relative to items 6 and 7, consisting of final wetlands report from the Southeast Regional Planning Commission, will be available in approximately two weeks. In addition, the information relative to the subsurface drilling, sampling and resting survey, the wave/environmental climate date survey and the aquatic/benthic environmental and lake bottom characterization survey in item 18 will be available on the time line set out as answer 5-SUP-021 of Supplement 4.
>
> Norcross correspondence, November 15, 2002, in part.

There is no dispute that the application was deemed complete by Administrator Norcross despite the lack of certain environmental information which was to be submitted later. The Norcross letter speaks in terms of missing information rather than missing regulatory approvals but the PSC Order makes clear that all regulatory approvals still had not been obtained 360 days after the Norcross letter, as of the November 10, 2003 issuance of the Order.

> DNR must also issue a number of water-related permits and approvals before construction may commence. These include: permits for grading work for the generating facilities and for the railroad improvements; the approvals for dredging and for use of lakebed and shoreline structures to construct breakwater and harbor facilities; the approval for use of lakebed to install the cooling water intake and discharge structures; and the water quality certification needed for wetland

[5] The November 15, 2002 correspondence of Administrator Norcross is attached as Exhibit A to the April 30, 2004 brief of Clean Wisconsin/Johnson. This document, the authenticity of which is not challenged by any party, does not appear otherwise to be within the record.

> fill. As of the date the record closed, DNR has deemed the joint state/federal application for water regulatory permits and approvals for ERGS to be incomplete.
>
> Order, at page 53

With regard to air pollution, the legislature has expressly committed such matters to the DNR, sec. 196.491(3)(d) 3, Wis. Stats., but water-related approvals are to be part of the application. Specifically, the applicant is required to provide an engineering plan to the DNR not less than 60 days before the PSC application is submitted which then triggers an obligation by the DNR to list, within 30 days, the permits that will be required, sec. 196.491(3)(a) 3.a, Wis. Stats. This begins a time-limited application and approval process before the DNR, sec. 196.491(3)(a) 3. b., Wis. stats., which is similar to but shorter than that applicable before the PSC under sec. 196.491(3)(g), Wis. Stats. The coordination between the DNR application process and CPCN process before the PSC, particularly the requirement that the DNR process precede that of the PSC is readily apparent in the explicit requirement that the CPCN not issue until all required regulatory permits have issued.

> The commission may not issue a certificate of public convenience and necessity under this subsection until the department has issued all permits and approvals identified in the listing specified in par. (a)3.a. that are required prior to construction.
>
> Section 196.491(3)(g), Wis. Stats., in part.

Here the plain language of the applicable rule states that an application, in order

to be deemed complete, must include the regulatory approvals necessary for construction and operation of the proposed new facility, Wis. Admin. Code, sec. 111.53(1)(f) 1. The requirement of the administrative rule is plain and unambiguous.[6] The application does not contain the required regulatory approvals and thus to deem it complete is an action undertaken in violation of an applicable administrative regulation.

It is error for the PSC to deem the WEC application complete on November 15, 2002 because the application fails to include the regulatory approvals required by Wis. Admin. Code, sec. 111.53(1)(f)1. The Order based upon that application is hereby vacated and the matter is remanded to the Commission to permit the applicant to submit an application which does comply with Wis. Admin. Code sec. PSC 111.53(1)(f)1.

C. Transmission Line Agreements

The third primary area of objection to the completeness of the application is the question of transmission line facilities. The applicable administrative rule provides,

> Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> ...
>
> (f) Site-related information for each proposed power plant site, including all of the following:
>
> ...
>
> 4. Any required transmission line construction, agreements for use of the transmission system to deliver plant power, transmission losses, and effects on system reliability. If a certificate of authority under s. 196.49, Stats., is required to construct the transmission line, the location of termini, length in miles, and voltage for each transmission line.

[6] There is an obvious logic to this requirement. It is clear that the legislature has decreed that the PSC bats last, sec. 196.491(3)(g), Wis. Stats., and that the PSC has a limited period of time within which to consider an application. It follows therefore that the Commission should have before it a truly complete application before it undertakes its significant responsibility.

Wis. Admin Code, PSC, section 111.53(1), in part.

There are other administrative rules which appear to have application as well. A complete application is required to include,

> The estimated capital cost of the generating facility *and all related facilities*, broken down by major plant accounts. All cost escalation factors used in the estimate shall be identified.
>
> Wis. Admin. Code, sec. 111.53,(1)(c) 1, in part, emphasis added.

There is no dispute that the application did not contain agreements for the use of transmission lines for the 1230 MW of new power to be produced by the two proposed plants which were approved, nor does the record appear to contain the much of the other information required by Wis. Admin. Code, sec. 111.53(1)(f) 4.[7] The Commission offered an estimate of $166 million, Order, p. 10.[8] Potentially, construction of the required transmission facilities will require a CPCN from the PSC, Sec. 196.49, Wis. Stats.,Wis. Admin. Code, sec. 111.53(1)(f) 9,[9] which will in turn require a careful consideration of the technical, environmental and economic facts by the PSC, Wis. Admin. Code, sec. 111.55.

In argument, the PSC suggests that recent reorganization of the state utilities, involving the transfer of transmission lines to an entity known as the American Transmission Company (ATC) makes it difficult to obtain the information required by the

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[7] As will be discussed below, the Commission notes that the available transmission data is preliminary and contingent, for resolution at a later time, Order, p. 10, 11.

[8] The total estimate in the Final EIS is $266,216,753 but of that amount, $102,164,662, apparently is allocated for operation of the third, IGCC unit, as to which the PSC did not give approval which would produce an estimate of $164,052,091, Final EIS Vol 1, pp. 15, 126-132.

[9] Hearing transcript, Circuit Court, October 8, 2004, p. 62, ll. 2-7.

applicable rule.[10] The study of the need for transmission facilities does appear to be an on-going process, [11] however, and other recent orders do include transmission facility information.[12]

This is a matter of consequence. The substantial power to be produced is of no use without adequate facilities to transmit it for distribution. A related and necessary facility, required for the use of the power, with an estimated cost equal of $166 million, 7.5% of the cost of the largest utility construction project in the history of the state, appears to be one of the "related facilities" to be considered in the approval process, Wis. Admin. Code sec. PSC 111.53(1)(c)1. In any event, there is no dispute that the applicable Administrative rule requires that agreements for the use of transmission facilities be part of a complete application but that no such agreements are included in the WEC application. The requirement is both clear and unambiguous and it has not been complied with.

It is error for the PSC to deem the WEC application complete on November 15, 2002 because the application fails to include the transmission line agreements required by Wis. Admin. Code, sec. 111.53(1)(f)4. The Order based upon that application is hereby vacated and the matter is remanded to the Commission to permit the applicant

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[10] Hearing transcript, Circuit Court, October 8, 2004, p. 63, l. 1 to p. 64, l. 6.

[11] The Final EIS refers to a 10 year assessment update and interconnections studies relating to the ERGS project prepared by ATC, Final EIS, V. 1, p. 128, R. 119.

[12] Joint Application of Fox Energy Company LLC and American Transmission Company LLC, Final Decision, pp, 10-18, PSC Docket 05-CE-115; Application of Fond du Lac Energy Center, Final Decision, pp. 3, 7 & 8, PSC Docket 9343-CE-100.

to submit an application which does comply with Wis. Admin. Code sec. PSC 111.53(1)(f)4.

D. Identity of Contingent Owners

Petitioner Robert Owen submits that the WEC application was incomplete because it did not identify properly the contingent interests held by Wisconsin Public Power, Inc. (WPPI) and Madison Gas & Electric (MGE). WPPI is a wholesale supplier of power to thirty-seven Wisconsin communities and MGE is a utility located in Dane County. Both WPPI and MGE hold options each to purchase a 50 MW ownership interest in the proposed new facility and the Commission's Order contemplated both the probability that the options would be exercised as well as the possibility that they would not, Order, pp. 31, 32. With regard to the identity of utility owners, the applicable administrative regulation provides,

> Contents of a CPCN application. Except as provided in sub. (2), a CPCN application for a large electric generating facility is not complete until the applicant has filed all of the following information with the commission:
>
> (a) The operating characteristics of the proposed facility, including all of the following:
>
> ...
>
> 4. The names and addresses of owners and investors and the percent of ownership.
>
> Wis. Admin Code, Sec. PSC 111.53(1), in part.

The PSC has interprets the above rule not to require the listing of the type of potential ownership interest, an option to become an owner, which were held by WPPI and MGE at the point that the application was filed. The question posed initially is the level of deference that this court should give to the interpretation adopted by the Commission.

This appears to be a question squarely within the Commission's jurisdiction and one which has been adopted by the Commission in the past. The interpretation adopted by the Commission is not in conflict with the plain meaning of the regulation and will promote uniformity of interpretation. Therefore the court believes great deference should be given to the Commission's interpretation, Pfeiffer v. Board of Regents, supra. The court concludes the Commission acted properly in its treatment of the ownership option interests of WPPI and MGE.

E. Completeness of the Application as of November 15, 2002

The PSC argues that it may properly deem an application substantially complete notwithstanding failure to include every item required by statute or rule. This is, however, a novel interpretation of the law by the Commission[13] and should properly be given no more than due deference, RURAL v. PSC, supra 239 Wis.2d at 679.

The petitoners question the wisdom of embarking upon this complex approval process without the required information but the question now presented is limited to whether the PSC holds the authority to forego the benefit of rules created to assure to the Commission that sufficient information is available in a timely manner to render a decision upon an application. If the PSC is intended to be the exclusive beneficiary of the information required to be included in an application, it might be possible for the Commission, in effect, to waive the right to receive the information in question. The consideration of CPCN is, however, very much a public process. The public is entitled

[13] Hearing transcript, Circuit Court, October 8, 2004, p. 17, L. 4-25

to participate in the process and full participation requires access to a full record of information, the first and perhaps the most critical element of which is a complete application. The PSC therefore must assure that the application be complete, not simply so it has before it all necessary information but also to provide to the public an opportunity to examine the basis for the proposed construction.

The requirements set forth in administrative law defining a complete application serve an important public purpose. The application pending on November 15, 2002, fails to identify at least two alternative locations, fails to include all required regulatory approvals and fails to set forth transmission line agreements. The November 15, 2002 determination by administrator Norcross is that the application was complete and the Commission's April 17, 2003 Order affirms that determination. Both determinations are in violation of the plain meaning of the applicable regulation and are therefore entitled to no deference, State ex rel. Parker v. Sullivan, supra, 184 Wis.2d at p. 669. It is the ruling of this court, as a matter of law, that the application is not complete within the meaning of sec. 196.491(3)(d), Wis. Stats. The law, sec. 196.491(3)(e), Wis. Stats., gives to the PSC only two choices when faced with the incomplete application, it can "reject the application or approve the application with such modifications as are necessary for an affirmative finding under" sec. 196.491(3)(d), Wis. Stats. The PSC chose a third course, however, and permitted the process to begin based upon an incomplete application. In doing so, the PSC acted in violation of the law and the Order which resulted from that procedure must therefore be vacated and the matter remanded to the PSC to do that which is required under sec. 196.491(3)(e), Wis. Stats. Specifically, the Commission must give the applicant an opportunity to submit an

application which meets the requirement of the Wis. Admin. Code secs. PSC 111.53(1)(e), 111.53(1)(f)1 and 111.53(1)(f)4.

IV. Commission's Order

A. Energy Need Projections

The touchstone of any petition for authorization to build a new generating facility is the obvious question of whether there will be a need for the power that will be produced. The WEC has included within its application, forecasts of growing demand over the period 2003 through 2012. Petitioners CW/Johnson and Robert Owen question the projections of need submitted by WEC and Mr. Owen, particularly, asserts that appropriate investment in alternative power sources could reduce the requirements asserted by the applicant. The PSC, in its order, concludes that the proposed plants would not be needed as quickly as WEC suggested and further directs that there be an increased reliance upon alternative sources. The PSC, however, does accept the fundamental position that more generation capacity will be needed both to replace aging facilities and to respond to increasing demand. This is a determination involving both fact and law, a determination squarely within the jurisdiction and expertise committed to the PSC. This clearly is an area as to which the court should properly accord great deference to the legal interpretation of the PSC and also an equivalent deference as to the fact determinations that were made. The criticism and suggestions offered by the petitioners as to projected need are plausible and reasonable. That, however, is not the test and for the court to intrude upon the PSC's determination of future need. That which the petitioners urge would be an improper interference with the agency's exercise

of its expertise and discretion as contemplated and protected by sec. 227.57(6), Wis. Stats. The court therefore affirms the Order of the Commission in this respect.

B. EGEAS Computer Model

The applicant, the PSC and the petitioners, in varying degree, all rely upon a computer program known as the Electric Generation Expansion Analysis System (EGEAS). The operator of the program introduces assumptions as to future power need together with estimates of construction cost, maintenance expense, fuel cost and fuel availability. The program is designed to calculate what are thought to be optimal plans to meet the needs defined. No party suggests that it is error for the PSC to rely, at least in part, upon the EGEAS model and indeed, the program appears to be simply a device that is able to describe and compare alternative future construction scenarios through consideration of a wide range of variables. All parties appear to acknowledge that the product of the AGEAS model can be no more valuable, accurate or complete than the assumed facts that are introduced into the program. As with the projection of future power need, the question of whether the data relied upon by the AGEAS model is reasonable or not, appears to be every bit as much within the PSC's area of responsibility and expertise. The petitioners offer reasonable critiques and suggestions but the test is whether the petitioners have shown that the choices made by the PSC, in selecting the data used in the various AGEAS reports, were unreasonable. That showing has not been made.

The petitioners suggest that the assumptions upon which AGEAS studies are based were inaccurate, improper or incomplete but no petitioner suggests that it was an error of law for the Commission to use the AGEAS program. In essence, the argument

is one of fact; the petitioners suggest that the factual basis for the AGEAS studies relied upon by the PSC began with erroneous assumptions. The question arguably evolves to whether or not the factual assumptions relied upon by the PSC, in utilizing the AGEAS program, are supported by substantial evidence, within the meaning of sec. 227.52(6), Wis. Stats. The burden to demonstrate the basis to vacate the Order is upon the petitioners, Shoreline Park Preservation, Inc. , supra, and it is the determination of the court that petitioners have not shown that the factual assumptions upon which the AGEAS studies were based to be lacking the support of substantial evidence, within the meaning of sec. 227.52(6), Wis. Stats.

C. Health Care Costs

The PSC Order does not attribute any health-related cost to the construction and operation of the two new facilities but instead suggests that the evidence offered as to health cost should be considered by the DNR as that agency considers air pollution permits applicable to the new facility, Order, p. 52.

Petitioners CW & Johnson submit that the record contains competent evidence that reflects that there will be a quantifiable economic impact, that is, a cost attributable to health care and disability caused by the proposed new facilities. The argument is that while there is dispute as to the magnitude of that cost, the Commission must determine there will be operating cost in some amount caused by a need for increased health care. The petitioners' argument flows to the assertion that the PSC does not hold the discretion simply to make no finding as to that cost; Cannot ignore it entirely.

Petitioners CW & Johnson argue that, as part of determining whether or not the PSC should approve a CPCN, the commission must include as an operational cost of

the project, the on-going health costs attributable to air emissions from the new facility. The petitioners assert that the PSC is not precluded from including the on-going economic impact upon health care caused by the operation of the new facilities and they go on to argue that it is reversible legal error to fail to include that as an element of project cost.[14]

The legislature has imposed upon the PSC an obligation to consider environmental issues by requiring that the Commission approve an application for CPCN only if it determines that the proposed facility "will not have an undue adverse impact on other environmental values, such as ... public health and welfare", sec. 196.491(3)(d)4, Wis. Stats., in part. Moreover, the legislature has limited that authority by providing that "[i]n its consideration of the environmental factors, the commission may not determine that the design and location or route is not in the public interest because of the impact of air pollution if the proposed facility will meet the requirements of ch. 285," Sec. 196.491(3)(d)3, in part. The limitation in sec. 196.4191(3)(d) 3, Wis. Stats. is specific and is focused upon the power to approve an application for CPCN. The statute does not expressly preclude the PSC, however, from considering quantifiable health care cost as an operating expense.[15]

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[14] If the DNR had issued air pollution permits pursuant to Chapter 285, it might be arguable that sec. 196.491(3)(d) 3, Wis. Stats. implies an absence of PSC jurisdiction for any consideration of air pollution matters. The petitioners observe correctly, however, that no DNR permit has been issued.

[15] Should the Commission choose to do, however, that would lead to other issues. Typically, operational cost estimates are directed in large part to determining the sums that may be recovered by the utility from rate-payers. In the case of future health care costs to be incurred, the question arises as to how such anticipated costs are to be measured and to whom are they to be paid.

It may be that the PSC could choose to include within its projection of operational cost, presumably as part of the effort to select between various equipment options and alternative locations, the costs attributable to public health matters. That is something very different, however, from the claim that the PSC must, as a matter of law, determine a health care cost whenever a record contains competent evidence as to such costs. Within the statute in question, Sec. 196.491(3)(d) 4, Wis. Stats., the term "public health and welfare" is part of a larger list of factors that the commission is to consider, including "ecological balance, ... geological formations, esthetics of land and water and recreational use," If there is a legal duty to include whatever quantification may be available as to public health, would not that same duty also apply to "esthetics of land ... use"? It may be that certain of the listed concerns can be measured in cost but it appears equally true that other concerns may not be quantifiable. Unquantifiable does not mean unimportant. Another, more reasonable interpretation of Sec. 196.491(3)(d) 4, Wis. Stats., is that the legislature identified important categories of concern which should properly be considered, even if it may not be possible to assign a clear economic value.

The language of the statute does not require quantification but rather directs the PSC to look to the overall impact of a proposal. Moreover, the legislature has not said that no adverse impact may be allowed. Rather it requires the Commission to withhold approval if it determines there to be an "*undue* adverse impact on ... public health", sec. 196.491(4)(d), Wis. Stats., emphasis added. This requirement is one which affords to the Commission substantial discretion to determine whether or not a particular impact is too great or "undue". The Commission has permitted evidence as to such costs to be

presented, apparently has even provided funding to assist the petitioners to prepare and present such evidence.

The court concludes that sec. 196.491(3)(d), Wis. Stats. cannot be read to impose a clear obligation upon the commission to include within the project cost calculation, any amount attributable to health costs. Further, in the alternative, if the statute could be so interpreted, the interpretation adopted by the Commission is one to which great deference should properly be given by this court, Brauneis v. State, supra.

D. Transmission Facility Design, Location and Cost

The cost of additional facilities to permit the transmission of the power generated by the approved plants poses a somewhat different question than that of projected health care costs. The proposed facility cannot serve any purpose whatsoever until sufficient transmission lines are constructed to distribute the power generated. As noted above, no application is complete until it contains whatever agreements are necessary for access to the transmission facilities and, again as noted above, the estimate of cost for these facilities is set at $166 million.[16] This is a cost of a necessary, directly related physical facility. The Commission is prohibited from granting the CPCN until it determines that,

> the design ... is in the public interest considering ... engineering, economic... and environmental factors...
>
> Sec. 196.491(3)(d) 3, Wis. Stats.

[16] The available information, described by the Commission as incomplete, Order, pp. 10 & 11, includes a Generation Interconnection Study Report, dated December 21, 2001, prepared by the American Transmission Company is in the Record at R.1, Vol. 3, Appendix Y.

As to design. cost and location of transmission facilities, the Commission essentially elects not to address the issue. In the Order, the Commission candidly states that it does not have the required information,

> American Transmission Company (ATC) has conducted several studies to determine the cost of interconnecting ERGS to the transmission system and the cost of up grading the transmission system so it can transmit power from ERGS. It has completed a partial transmission restudy of ERGS on July 25, 2003, estimating the transmission costs associated with SCPS 1 and SCPC 2 at $65.5 million and $100.5 million, respectively. Determining transmission system requirements for ERGS, though, depends upon the amount of forecasted generation in southeast Wisconsin and northern Illinois ... This will require ATC to restudy interconnection needs to minimize the amount fo transmission facilities installed and recalculate the costs involved. The analysis is quite complex, depends upon the site chosen; and requires several months of sequential computer model runs.
>
> Order, p. 10-11

Given the lack of definitive information, the Commission is able only to provide as follows in the Order,

> The applicants shall work with the ATC, DNR and neighboring communities to minimize the cost and the environmental impact of moving and reconfiguring the 138 kV and 345 kV substations. The applicants shall inform the Commission of the results of this work, documenting the estimated cost involved the proposed layout of the substations, and the associated transmission line interconnection routes for exiting the plant site.
>
> Order, p. 58, para. 7

The Commission is prohibited from granting the CPCN until it determines that the design of the proposed facility is in the public interest, with particular attention to the engineering, economic and environmental facts, sec. 196.491(3)(d)3, Wis. Stats. The Order, however, grants the CPCN approval while expressly stating that the Commission does not know what the cost or design of the required transmission facilities will be. This determination to approve construction of the largest generating facility in state

history without also determining the cost, design and location of the transmission facilities appears to be unprecedented and is, at best, puzzling. This determination to go forward without the transmission information is, nonetheless, a decision that is within the area of concern assigned to the PSC and it may well be the product of the special expertise possessed by the Commission. The granting of CPCN approval without considering the question of transmission facilities, however, does not appear to be an interpretation of long standing, nor does it appear that this approach will provide uniformity and consistency. It certainly is true that sec. Sec. 196.491(3)(d) 3, Wis. Stats., does not expressly compel the inclusion of transmission facilities but this court concludes that the those facilities are so integral and necessary to the planned generation plant that the decision to grant approval without determining the design, cost and location of those facilities to be contrary to the legislature's intent, sec. 196.491(3)(d) 3, Wis. Stats. and "otherwise unreasonable or without rational basis" within the meaning of State ex. rel. Parker, supra. It is therefore the order of the court that the Order is hereby vacated and the matter remanded to the Commission for a determination as to the design, cost and location of transmission facilities needed to serve the proposed new plant.

E. Energy Priority Law

The PSC Order approves the construction of two 615 MW plants which will use high sulfur coal as the fuel source. The Order considers the contribution that renewable energy sources, wind generation and energy conservation could make to the future energy needs of the state. The PSC also considers a competing proposal,

submitted by Calpine, which would have provided power using equipment that uses natural gas as the fuel. The Commission determines the following as fact,

> Energy conservation, renewable resources, or other energy priorities listed in Wis. Stat. Secs. 1.12 and 196.025, or their combination, are not cost-effective or technically feasible alternatives to the projects proposed in this docket.
>
> Finding of fact, no. 1, Order, p. 4

The petitioners argue that the PSC, in its process, fails to comply with the requirements of the Wisconsin Energy Priority Law, sec. 1.12, Wis. Stats. That statute provides,

> **(4) Priorities.** In meeting energy demands, the policy of the state is that, to the extent cost-effective and technically feasible, options be considered based on the following priorities, in the order listed:
>
> (a) Energy conservation and efficiency.
> (b) Noncombustible renewable energy resources.
> (c) Combustible renewable energy resources.
> (d) Nonrenewable combustible energy resources, in the order listed:
> 1. Natural gas.
> 2. Oil or coal with a sulfur content of less than 1%.
> 3. All other carbon-based fuels.
>
> **(5) Meeting energy demands.** (a) In designing all new and replacement energy projects, a state agency or local governmental unit shall rely to the greatest extent feasible on energy efficiency improvements and renewable energy resources, if the energy efficiency improvements and renewable energy resources are cost-effective and technically feasible and do not have unacceptable environmental impacts.
>
> (b) To the greatest extent cost-effective and technically feasible, a state agency or local governmental unit shall design all new and replacement energy projects following the priorities listed in sub. (4).
>
> Sec. 1.12, Wis. Stats. in part.

Moreover, the foregoing fuel priority policy is reinforced in Chapter 196 where it is stated,

> To the extent cost-effective, technically feasible and environmentally sound, the commission shall implement the priorities under s. 1.12(4) in making all energy-

related decisions and orders, including advance plan, rate setting and rule-making orders.

Sec. 196.025(1), Wis. Stats.

The Order addresses the two top priorities, energy conservation and renewable energy, Order, pp. 16-19, but selects, for the great majority of the future power need, equipment which uses the lowest priority fuel, high sulfur coal.

The question of compliance with the Wisconsin Energy Priorities Law appears to resolve into two distinct issues; The selection of high-sulfur coal over natural gas as the primary energy source for baseload facilities and the lack of consideration of oil and low-sulfur coal as potential fuels.

1. Selection of High-Sulfur Coal over Natural Gas as the Primary Energy Source

The Order of the PSC bases the decision to use high-sulfur coal upon the need to provide what is termed, "baseload" power and a determination that high sulfur coal is substantially better suited to the production of baseload power than is the top priority fuel, natural gas, Order, pp. 19-22, and the petitioners argue that this is in violation of the Wisconsin Energy Priorities Act. . The term, "baseload" is not defined in the statutes, in the administrative regulations or in the Order of the PSC. In the argument submitted to this court, it has become apparent that the parties understand "baseload" to be a generating facility intended to provide power effectively on a constant basis, not less than 70% of the time, day in, day out. [17]

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[17] At hearing, the PSC indicated that the distinction is one of economics rather than technical capacity.

"What you need to recognize is the commission has never contested the fact that

The petitioner's objection is framed as a legal issue, whether the Order reflects PSC compliance with the obligations imposed by sec. 196.025(1), Wis. Stats. which requires the Commission to "implement" the fuel priorities of the Energy Priorities Law Wisconsin to the extent that it is "cost-effective, technically feasible and environmentally sound" to do so. The petitioners suggest that, as to each of the fuel sources listed, the Commission must require the applicant to begin with the highest priority fuel and rely upon that source unless it can be shown that the reliance is not cost effective, not technically feasible or not environmentally sound. The Commission asserts, in effect, that it need only consider or contemplate the priority concept without requiring an actual examination of each possibility.

The Energy Priorities Law lists four types of non-renewable fuels; natural gas, oil, low sulfur coal and everything else. The high sulfur coal that the applicant seeks to rely upon falls into the last and lowest priority. In the decision, the PSC repeatedly states that natural gas is not an appropriate fuel for a power plant intended to provide baseload power but does so without offering a clear factual basis. This appears to be in response to a competing proposal submitted by petitioner Calpine, the owner of a natural gas generating plant recently approved by the PSC to provide baseload power. Calpine submitted to the PSC, as a confidential exhibit pursuant to sec. 196.14, Wis.

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a gas plant is capable of running in baseload mode. It is not a question of whether or not the machinery is strong enough to run night and day. It is a question of whether the gas is available and at what price. And at this point the commission is worried that it would be over extending the use of gas because we are already using it for peakers, we are already using it for intermediate load plants. It is a slightly different question. When you go back are these plants capable of running at baseload? Yes, they are. We are not contesting that."

Hearing transcript, Circuit Court, October 4, 2004, p. 47, l. 19 to p. 48, l. 6

Stats., a proposal to provide the power needed by WEPCO, using natural gas-fired equipment located at Calpine's Fox Energy Center and Fond du Lac Energy Center, R-160, Exhibit 202(c); R-157, pp. 3366, 3367. Calpine argues that its proposal would have provided the power needed at less cost and through the use of a fuel determined to be a highest non-renewable fuel priority by sec. 1.12(4)(d), Wis. Stats.

The rationale for the Commission's preference for high-sulfur coal is not clear and appears to be more of an assumption than a determination of fact. Essentially, the Order simply states, repeatedly, that coal-fired equipment must be used because the need is for baseload power.

> The Commission also considered whether gas-fired generation is a cost-effective or technically feasible alternative that could *replace the need for new baseload generating facilities.*
>
> Order, p. 19, emphasis added

> A critical part of the Commission's ultimate preference for coal-fired generation over gas-fired generation rests heavily on the discretion accorded the Commission under the Energy Priorities Law and the Power Plant Siting Law. More significantly, the crux of this case is really about the appropriate timing to construct new baseload generation. A fundamental policy choice presented in this case is whether the Commission believes that WEPCO needs to take steps now to address needs for new baseload facilities over the next decade.
>
> Order, p. 20

> There are qualitative factors set forth in Wis. Stat. sec. 196.491(3)(d) that also support the Commission's conclusion that new coal-fired generation is in the public interest and that ERGS is the most cost-effective and technically feasible way to address WEPCO's baseload needs. The Commission's decision to approve SCPC 1 and 2 balances its obligations under the Energy Priorities Law and the Power Plant Siting Law.. . The evidence in this proceeding demonstrates the advantages of using cleaner burning coal technologies like SCPC as a baseload resource over gas-fired generation.
>
> Order, p. 21

The problem is that the "qualitative factors" alluded to above are not stated in the Order nor can they readily be inferred. The Commission candidly describes the preference for high-sulfur coal equipment as one which,

> reflects the *Commission's policy judgment* that while natural gas-fired generating facilities may be better suited for peak and intermediate load generation, coal-fired generation provides the most practical means to serve WEPCO's needs for baseload capacity
>
> Order, p. 21, emphasis added.

The above passage is revealing. The selection of the appropriate fuel is not a policy choice. The policy choice has been made by the legislature with the enactment of sec. 1.12, Wis. Stats. The role of the Commission is to implement that policy choice. What is required is a fair examination of fact in the context of the statutorily-enacted policy choice giving preference, where appropriate, to natural gas over high sulfur coal. There is to be a determination of fact as to whether natural gas or natural gas in combination with another fuel would produce power that is "cost-effective, technically feasible and environmentally sound", sec. 196.025, Wis. Stats.

No "policy" as to which fuel is always best for baseload operation has been identified. The Order itself says there has been no approval of "any new baseload, coal-fired generation in Wisconsin since 1980", Order, p. 21.[18]

It is not possible to escape the conclusion that sec. 196.025(1), Wis. Stats. imposes an obligation to make a determination as to each of the four fuel types. That is the plain, straightforward command of the statute. The argument is offered that the

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[18] Although the Order approving construction of the Calpine Fox Energy facility in Outagamie County finds that the gas-fired facility is capable of providing baseload power, Final Decision, p. 7, PSC Docket 05-CE-115 as did the Order approving construction of the Calpine Fond du Lac Energy facility, final decision, p. 5, PSC Docket 9343-CE-100.

PSC considered all priorities, but there is not a single word in the order to suggest that either oil or low sulfur coal[19] was ever, in any manner or degree, contemplated as a potential fuel.

The Commission Order looks to the prefatory note of the Energy Priorities Law to find language that suggests that an agency is to possess great flexibility in meeting the obligations created by the law. There is, however, no need to refer to secondary sources and it would be improper to do so when the language of the statute is as clear and plain as it now the case, City of Muskego, v. Godec, 167 Wis.2d 536, 545, 482 N.W.2d 79 (1992).

The Order further suggests that there is a need to harmonize the Energy Priorities Law and the Power Plant Siting Law but does not explain the need to do so. There is no obvious conflict between the two and each deals with an entirely separate question. The Commission, in argument, suggests the petitioners urge that there be two alternative locations identified for each of the priority list fuels. This claim attempts to mix together two entirely separate requirements. As noted above, the PSC must require the applicant to identify two separate proposed locations and there must be an examination as to feasibility of the various energy sources at each identified location. The minimum number of locations begins at two and does not increase.

The real world application of the Energies Priority Law by the Commission may well be complex and may require sophisticated technical and financial analysis but the intent of the law is extremely simple and clear. There is no ambiguity as to what the

[19] The court was advised during oral argument that the very substantial existing OCPP generating facility currently relies upon low sulfur coal. Hearing transcript, October 4, 2004, p. 20, l. 10.

legislature intended and, as a matter of law, there is no need nor any justification for looking to legislative history or other secondary materials to discern legislative intent. [20]

The PSC argues that it cannot be required to select a higher priority source which is not technically feasible or not cost-effective, Order, p. 15, and that is absolutely true. What is required by the statute as to non-renewable fuels, however, is precisely what the Commission actually did do in looking at renewable sources. As to both energy conservation and wind generation, the PSC carefully considered the extent to which it was feasible and cost-effective to rely upon each as a source of future power, Order, pp. 16-19. That is precisely what was required as to natural gas, oil and low sulfur coal.

Further, the Commission's determination that only high-sulfur coal may be considered as a fuel source to provide baseload power is not supported by facts identified with sufficient clarity in the Order.[21] It is the order of the court that the Order shall be remanded to the Commission to permit the Commission to offer further justification for the determination that only high-sulfur coal can be the fuel source for the proposed new facilities, Connecticut General Life Ins. Co. v. DILHR, 86 Wis.2d 393, 405, 273 N.W.2d 206 (1979).

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[20] Petitioner Clean Wisconsin seeks to buttress its statutory interpretation argument by reference to a transcript description of a public proceeding conducted October 29, 2003. Because, in the view of the court, the language of the Energies Priorities Law is plain and unambiguous, this court need not and does not base its determination as to the intent of the Energies Priorities Law upon any statement made at the October 29, 2003 proceeding.

[21] It may well be true, possibly self-evident, that if one starts with the premise that a demonstrated need for additional baseload capacity must be satisfied by new facilities located at the OCPP site, the logical choice would be additional coal-fired equipment given the existing coal-fired facilities at that location and potential for economies of scale. Sec. 196.491(3)(d)(3 and Wis. Admin. Code PSC sec. 111.53(1)(e), however, require that the analysis begin with not less than two realistic, alternative locations and that was done in this case.

It appears the Commission begins with a policy decision that the need for baseload power requires that the fuel must be high-sulfur coal. That may be a perfectly reasonable choice but the factual analysis to support that choice does not appear within the Order. The Order, in its determination as policy that only high-sulfur coal is an appropriate primary energy source, does not demonstrate compliance with the legislative mandate set forth at secs. 1.12 and 196.025, Wis. Stats. and must be remanded to the Commission for further proceedings. It is the order of the court that the Order shall be remanded to give to the Commission the opportunity to determine as fact, pursuant to sec. 196.025(1), Wis. Stats., the cost-effectiveness, technical feasibility and environmental impact of high sulfur coal in comparison to natural gas as a potential source for the future energy needs to be met.

2. Lack of Consideration of Oil and Low-Sulfur Coal as Potential Fuels

There is simply no basis whatsoever, for the court to infer that the Commission considered in any degree two of the higher priority fuels, oil and low sulfur coal. In rendering the Order without completing the required analysis, the Commission has acted upon an interpretation of law which is directly contrary to the plain meaning of sec. 196.025(4), Wis. Stats. and no deference to that interpretation is appropriate, State ex rel. Parker v. Sullivan, supra, 184 Wis.2d at p. 669. It is the order of the court that the Order shall be remanded to give to the Commission the opportunity to determine, as required by sec. 196.025(1), Wis. Stats., the cost-effectiveness, technical feasibility and environmental impact of oil and low-sulfur coal as potential sources for the future energy needs determined by the Commission to exist.

It is entirely possible that the required consideration will result in the conclusion that neither oil nor low sulfur coal would be both feasible, cost-effective or environmentally appropriate but the Order reflects no consideration, whatsoever, as to either. The Order is therefore vacated and the matter remanded to the Commission to undertake an examination, pursuant to sec. 196.025, Wis. Stats., as to whether either oil or low sulfur coal would be feasible, cost-effective and environmentally sound.

F. Approval of Expansion Capacity

The PSC concludes that CPCN is not demonstrated as to a third new generation facility that the applicant proposed to build, a 600 MW Integrated Gasification Combined Cycle (IGCC) unit and therefore the Order refuses authority to construct that unit, Order, p. 26. The Commission does, however, approve a total construction budget in a total amount which contemplated building "common systems" for 3000 MW capacity rather than the 2400 MW approved capacity at the OCPP site.[22] The Order indicates that this extra capacity would add an additional approved construction cost of "approximately 20 million", Order, p. 32.

The record reflects that the added capacity is in a cooling water structure which will extend from the site into Lake Michigan and also coal handling facilities. [23] The rationale offered is the possibility that there will be a future need to provide the full 3000 MW capacity and it will be far less expensive to include larger structures for that possibility as part of the current project. Further, the suggestion is offered that

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[22] The existing capacity at the OCPP site is 1200 MW. WEPCO sought CPCN authority to expand that site by an additional 1800 MW but the Commission only permitted expansion of an additional 1200 MW for a total site capacity of 2400 MW rather than the 3000 MW total capacity initially requested.

[23] R-157, Kenneth J. Detmer, Transcript, V. 14, pp. 4535 & 4640.

"approximately $20 million" is a negligible amount, "lost in the maze" in a $2.2 Billion dollar project. On the other hand, what is being done is that ratepayers are being assigned a construction cost for public utility facilities for which public convenience and necessity has not been determined, indeed has been expressly refused.

The argument offered in favor of enlarging the facility carries an immediate suggestion of prudent foresight and reasonableness. There is, however, another aspect of the problem. Preparation for yet another expansion of what is already the most expensive power plant in Wisconsin is very meaningful step toward selecting OCPP as the site for construction of future utility expansion. It does not completely control future site selection but it is likely to influence it. It does not preclude wholesale competition but, again, it is likely to confer advantage upon the owner of the OCPP facility.

The applicable statute is quite clear, there is to be no construction of any generating facility until there has been the issuance of a CPCN, sec. 196.491(3)(a) 1, Wis. Stats. There is no suggestion that the Commission has ever before interpreted its authority to include the power to permit partial construction of a facility for which CPCN has not been determined, let alone a facility as to which CPCN has been expressly denied by Commission order. It is clear that the PSC Order contemplates an extension of the Commission's authority in a manner which is directly contrary to the plain meaning of the applicable statute. This is an interpretation which should properly be reviewed on a de novo basis and, upon that review, it is the determination of the court that the Order, to the extent it approves ratepayer payment for construction

elements not necessary to operate a 2400 MW facility, is hereby vacated and the Order remanded for modification by the Commission to eliminate such approval.

G. Issuance of CPCN Prior to Obtaining Regulatory Approvals

The PSC issues the Order approving CPCN as to the construction of the two new 630 MW generating facilities while expressly acknowledging that necessary government permits had not been issued. The Order notes expressly that there were then water-related DNR permits which had not been issued, Order, p. 53, 54, and the following appears as a finding of fact,

> Requiring that ERGS-SCPC 1 LLC commence construction within 12 months after it receives all necessary government permits and approvals is reasonable, so the generating plant will satisfy the reasonable needs of the public for electric energy in a timely manner.
>
> Finding of Fact no. 15, in part, Order, p. 6

Wisconsin law provides,

> The commission may not issue a certificate of public convenience and necessity under this subsection until the department has issued all permits and approvals identified in the listing specified in par. (a)3.a. that are required prior to construction.
>
> Sec. 196.491(3)(e) Wis. Stats., in part.

The Commission's Order candidly describes the water-related permits that had not been issued as of the date of the Order.[24] Argument submitted by the PSC explains the administrative advantage of deferring to DNR wherein presumably superior expertise regarding water quality may be found. The Commission makes no attempt to respond to the problem posed by the express provisions of sec. 196.491(3)(d) 3. Wis.

[24] As noted earlier, air quality permits are treated entirely differently from water-related permits. The legislature has expressly decided that the PSC may not hold up issuance of CPCN based upon any concern that potential air pollution may not meet standards imposed by Chapter 285, enforced by the DNR, sec. 196.491(3)(d) 3, Wis. Stats.

Stats., above, and in argument suggests that what was done has been in this proceeding is a standard practice of the Commission.[25]

It is instructive to refer to the decision of RURAL v. PSC, 239 Wis.2d 660, 679, 619 N.W.2d 888 (2000), in which the court did consider a related matter. RURAL arose from a non-statutory legislative enactment, Section 96 of 1997 Wisconsin Act 204, which created a brief opportunity for particular utilities to seek CPCN approval as to a narrowly defined class of generation plants. Approval or rejection was to be determined by the PSC in a notably short, 90 day period. In the RURAL case, as in this one, the PSC issued a CPCN approval subject to a requirement that the applicant thereafter obtain DNR regulatory permits. An opponent to the application objected, arguing that the PSC could not issue a conditional CPCN. The PSC responded suggesting that the general authority of sec. 196.395, Wis. Stats.,[26] conferred the needed power to issue a conditional CPCN. The supreme court, in upholding the issuance of the conditional CPCN, noted that the Commission could do so because the CPCN was being approved pursuant to the non-statutory authority, not pursuant to the normal process set out in sec. 196.419, Wis. Stats.[27] The court suggested that if sec.

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[25] Hearing transcript, October 4, 2004, p. 34, ll. 3-13.

[26] Sec. 196.395, Wis. Stats., provides,

> The commission may issue an order calling for a test of actual results under requirements prescribed by the order, during which test period the commission may retain jurisdiction of the subject matter. The commission may issue conditional, temporary, emergency and supplemental orders. If an order is issued upon certain stated conditions, any party acting upon any part of the order shall be deemed to have accepted and waived all objections to any condition contained in the order.

[27] The CPCN in RURAL, supra, was issued pursuant to the authority of the non-statutory enactment, not pursuant to sec. 196.491, Wis. Stats.

196.491, Wis. Stats. had been the basis for the CPCN, then 196.491(3)(e), Wis. Stats., would control over sec. 196.395, Wis. Stats., and would not permit the Commission to issue a conditional CPCN.[28]

Here, the CPCN was issued pursuant to the authority given to the PSC by sec. 196.491, Wis. Stats. That statute plainly states that the Commission shall not do what is being done here, issue the CPCN before the regulatory permits have been obtained, sec. 196.491(3)(e), Wis. Stats. Potentially, this is a matter of substantial consequence. The Commission in its Order notes the possibility that the planned draw of 1.4 billion gallons of Lake Michigan water daily[29] is not approved, cost of the proposal will escalate by some $200 million and may even preclude project viability, Order, p. 54. The approval stated in the Order was issued in clear violation of sec. 196.491(3)(e), Wis. Stats. It is the Order of this court that the PSC Order is hereby vacated and the matter remanded to the Commission to permit the applicant to demonstrate that the required regulatory permits have been obtained.

H. Adequacy of the Final EIS

The Wisconsin Environmental Protection Act (WEPA) requires state agencies to take a "hard look" at the environmental consequences of a proposed new facility, Wis. Environmental Decade, v. PSC, 98 Wis.2d 682, 690, 298 N.W.2d 205 (Ct. App. 1980). The law provides that all state agencies shall include in every major action, a detailed statement, substantially following the guidelines of the National Environmental Protection Act, 42 U.S.C. sec. 4331 (NEPA), describing,

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[28] RURAL, 239 Wis.2d at p. 698-700, paras. 58-61.

[29] Order, p. 9; Final EIS, V. 1, p. 200, R. 119.

1. The environmental impact of the proposed action;
2. Any adverse environmental effects which cannot be avoided should the proposal be implemented;
3. Alternatives to the proposed action;
4. The relationship between local short-term uses of the human environment and the maintenance and enhancement of long-term productivity;
5. Any irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be implemented; and
6. Such statement shall also contain details of the beneficial aspects of the proposed project, both short term and long term, and the economic advantages and disadvantages of the proposal.

Sec. 1.11(2)(c), Wis. Stats. in part.

Moreover, the PSC has adopted an administrative rule to assure compliance with WEPA, Wis. Admin. Code, sec. PSC 4.10(1).

Petitioners argue that the EIS prepared in this proceeding does not meet the standard of the law. The EIS in this matter is comprised of a 446 page draft document, R. 77, together with a significantly larger final document, R. 119. The criticism of the EIS document includes the suggestion that alternatives were not adequately examined and the absence of information about necessary transmission facilities. These are matters which arguably could be considered in an EIS but, as noted above, for purpose of this proceeding, both issues are resolved based upon statutes specifically applicable to the Commission's process. As to a lack of quantified health care costs, as well as potential impact upon natural resources, local communities and transportation, these are matters which are within the range of matters committed by the legislature to the Commission. The interpretations of law adopted by the Commission to the effect that the draft and final EIS documents represent an adequate examination of environmental issues are not shown to be legal error.

I. Least Cost Alternative.

Petitioner Calpine is a wholesale producer of electric power that seeks to provide to WEPCO, using its own generating facilities, the power that the WEPCO claims will be needed. Calpine argues that it can provide the needed power at less cost and suggests the PSC has committed legal error by not selecting their 'least cost' proposal. Calpine argues that Wisconsin law requires the commission to select whichever proposal can be shown to result in the lowest cost to consumers. Calpine looks to the following provision as authority for that concept,

> the commission shall approve an application ... for a certificate of public convenience and necessity only if the commission determines all of the following:
>
> > 3. The design and location ... is in the public interest considering *alternative sources of supply*, alternative locations or routes, individual hardships, engineering, *economic*, safety, reliability and environmental factors ..."
>
> Sec. 196.491(3)(d), Wis. Stats., in part, emphasis added.

Calpine looks to the term, "alternative sources of supply", in conjunction with the term, "economic", to find a clear legal duty, incumbent upon the commission, to select whatever alternative proposal offers the least cost of operation. Calpine looks also to a prior commission decision which does offer language describing the successful proposal as being the one which appeared to offer the needed power at the "least cost".[30]

Calpine's least cost argument goes well beyond the requirement that there be a fair comparison between fuel sources. Returning briefly to the requirements of the

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[30] Application of Wisconsin Public Service Corporation For Authority To Increase Electric Generating Capacity (Stage One, Competition Among Alternative Suppliers), Docket No. 6690-CE-156, December 22, 1994, p. 6;

Wisconsin Energy Priority Law, sec. 1.12(5)(a), Wis. Stats, requires that the Commission consider alternative energy sources with the requirement that a selected source meet three separate requirements; cost effectiveness, technical feasibility and no unacceptable environmental impact. The Calpine least cost theory would look only to cost effectiveness and ignore the remaining two criteria.

The Calpine least cost argument embraces a factual element; the suggestion that the AGEAS computer model actually selected natural gas as the preferred fuel or would have done so if proper data entry had been made. The comparisons of cost, timing, equipment and fuel presented to the Commission are very complex and do not offer an obvious alternative which may be readily identified as the least cost option. What is asserted as the least cost alternative appears to be a plan of using Calpine capacity, in combination with some future WEC facility expansion so as to defer significantly the date at which the WEC expansion will be needed, R.119, Final EIS, pp. 72 and 73.[31] As with the earlier discussion of criticism of the AGEAS program, however, the reality here is that the court does not possess any expertise, let alone that of the Commission regarding the proper use of the computation and comparison of the complex elements cost and timing. Suffice it to say that this is an area where great deference should be given to Commission.

As a question of law, the PSC is obligated to consider and to balance numerous elements of cost, environmental impact and technical feasibility. The Commission argues that the applicable law requires that it consider a myriad of factors, cost being a

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[31] Calpine refers also to the testimony of Commission employee Randal Pilo, who described a Calpine proposal as the lower cost alternative but appears to be based upon what is described as a "snapshot for one year', that being 2007, R.167, V. 18, transcript V. 11, p. 3900, l. 3.

primary factor but not an exclusive factor. This is clearly an area in which the PSC has been assigned significant jurisdiction and discretion by the legislature. Petitioner Calpine does not demonstrate that the Commission has acted contrary to applicable law.

J. Wholesale Power Competition.

Calpine asserts that in approving the WEC application to build the two SCPC plants, the Commission has failed to take into account the harm that will be visited upon competition in the wholesale power market. Wisconsin law requires that the Commission not issue approval until it has determined that,

> The proposed facility will not have a material adverse impact upon on competition in the relevant wholesale electric service market.
>
> Sec. 196.491(3)(d) 7, Wis. Stats.

The Commission did render the following determination of fact,

> The two SCPC units will not have a material adverse impact on competition in the Wisconsin Upper Michigan (WUMS) wholesale electric service market.
>
> Finding of Fact, no. 9, Order, p. 5

The determination of impact upon competition is a matter which has been committed by the legislature to the Commission. The petitioners express disagreement with the conclusions reached by the Commission but they do not demonstrate a basis upon which this court could properly do other than have give great deference to the determinations and interpretations of the Commission in this area.

K. City of Oak Creek Mitigation Payment Agreement

WEC and petitioner City of Oak Creek reached an agreement whereby WEC will pay to the city annual mitigation payments of $1.5 million for SCPC 1 and $750,000 for SCPC 2. The PSC Order reviews that agreement and considers as well a significant modification in the formula by which shared revenue payments form the state to the city are now to be computed. Prior to the enactment of 2003 Wis. Act 31, shared revenue was based upon the net book value of a power plant and thus the initial shared revenue amount derived upon the commencement of generation, capped at a maximum of $750,000 annually, declined thereafter as the net book value declined through depreciation. 2003 Wis. Act 31, enacted July 15, 2003, and applicable to plants that begin operation after December 31, 2003, provides that shared revenue is to be based upon MW capacity and other factors which may not decline with time. The PSC calculates that the new shared revenue formula will produce revenue to the city of $1.6 million for SCPC 1, an amount that will rise to $3.2 million when SCPC 2 begins operation. The PSC notes that the new shared revenue amounts, when paid to the city upon completion and operation of the new facilities, will exceed the payment called for by the agreement between the city and WEC and the Commission therefore includes a provision in the Order which requires that the payments called for by the agreement are to be offset by shared revenue payments made to the city. Thus the PSC order permits mitigation payments to the city pursuant to the agreement but provides that payments are to be reduced by shared revenue received which presumably will eliminate all payment pursuant to the agreement at a future point. The City of Oak Creek petitions the court seeking review of that portion of the Order.

The parties agree that the agreement between the City of Oak Creek and WEC was submitted to the PSC before June 10, 2003 and involves a "mitigation payment" within the meaning of sec. 196.20(7), Wis. Stats., as amended by 2003 Wisconsin Act 33. The parties further agree that the treatment of the agreement by the PSC is to be governed by section 196.20, Wis. Stats., as amended by 2003 Wisconsin Act 89, Section 33, effective December 18, 2003, which enacted the following provision,

> (7)(a) In this subsection, "mitigation payment" means, as approved by the commission, an unrestricted or recurring monetary payment to a local unit of government in which an electric generating facility is located to mitigate the impact of the electric generating facility on the local unit of government. "Mitigation payment" does not include payments made or in-kind contributions for restricted purposes to directly address health or safety impacts of the electric generating facility on the local unit of government.
>
> (b) Except as provided in par. (c), an electric public utility may not recover in rates any of the following:
>
> 1. The cost of mitigation payments paid by the utility.
>
> 2. The cost of mitigation payments paid by the owner or operator of an electric generating facility that the owner or operator recovers from the utility by selling electricity to the utility, by leasing the facility to the utility, or by any agreement between the owner or operator of the electric generating facility and the public utility.
>
> (c) The commission shall only approve a mitigation payment agreement that is received by the commission before June 10, 2003,
> and, if the commission finds the agreement to be reasonable, shall not subsequently modify the agreement.
>
> Sec. 196.20(7), Wis. Stats., as created by 2003 Wisconsin Act 89, Section 33.

The petitioner city reads subsection (c) above to give to the PSC only two choices, to approve or to reject a mitigation payment agreement as submitted. The city submits that what the PSC Order did was first to modify the agreement and thereafter to

approve the modified agreement. The city asserts that sec. 196.20(7)(c), Wis. Stats. expressly precludes that modification. The PSC, by contrast, submits that subsection (c), above permits the modification of a submitted agreement at the point of initial approval but precludes modification thereafter.

The language chosen by the legislature in this instance is uncommonly plain and direct. It deals with "a mitigation payment agreement that is received by the commission" and confers authority to do one of two things, approve or reject that agreement. The modified agreement is not the agreement that the Commission received. An administrative agency may exercise only such authority as has been expressly conferred or necessarily implied. Here the clarity of the legislation is such that it cannot be read to imply the power that the Commission seeks to exercise, the authority to modify "a mitigation payment that is received by the commission." The court concludes, as a matter of law pursuant to sec. 227.57(8), Wis. Stats, that the portion of the PSC Order which modifies the mitigation agreement to require that future shared revenue is an act beyond the jurisdiction of the PSC. The court orders that, upon remand, the PSC re-consider the mitigation agreement and either approve or reject the agreement as submitted.

V. Summary and Order

On November 15, 2002, the Public Service Commission determined that an application submitted by Wisconsin Energy Corporation to construct the largest power plant in the history of the state at the Oak Creek Power Plant site met the legal requirements to be a "complete" application thereby beginning starting a process before the Commission in which the application was required to be resolved within no more

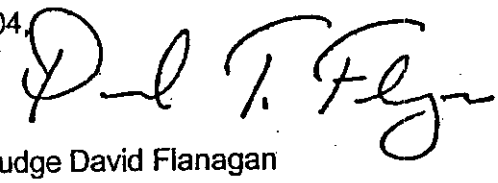
than 360 days. It is the conclusion of this court that the Wisconsin Energy Corporation application, as of November 15, 2002, does not meet the legal requirements in that it does not propose at least two alternative sites for the new plant, it does not present the required regulatory approvals and it does not include agreements for the use of the substantial transmission line facilities that inevitably must be constructed as an integral part of this project. It was therefore legal error to commence the approval process based upon that incomplete application and the resulting Order is hereby vacated and the matter remanded to the Commission to permit the applicant to submit a legally sufficient application.

On November 10, 2003, the Public Service Commission issued a Order modifying the proposed new Oak Creek facility and approving the application as modified. It is the conclusion of this court that the Order does not reflect adherence to the Wisconsin Energy Priorities Law nor does it include required cost and design information about substantial new power transmission lines that will be needed in order for the proposed new plant to operate. Moreover, the Order approves funding for construction intended to permit future expansion of the Oak Creek Power Plant site to accommodate new generation facilities that the Commission has determined there to be no present need to build and the approval order has been issued despite the fact that required regulatory approvals for the proposed new plants have not been obtained. For these reasons, the Order is hereby vacated and the matter remanded to the Commission for further proceedings consistent with the foregoing rulings.

Finally, the Order modified and thereafter approved an agreement whereby the City of Oak Creek agreed to accept from Wisconsin Energies Corporation, certain

annual payments to mitigate the cost to the city of the new facilities. It is the conclusion of the court that the applicable law required that the Commission either approve or reject the proposed agreement as submitted to the Commission. The modification of the agreement is therefore vacated and the matter is remanded to the Commission for further proceedings.

By the court this 29th day of November, 2004.



Judge David Flanagan

STATE OF WISCONSIN	CIRCUIT COURT BRANCH	DANE COUNTY

CITY OF OAK CREEK,

Petitioner,

Case No. 03-CV-9939

v.

Classification Code: 30607

PUBLIC SERVICE COMMISSION OF WISCONSIN,

Respondent.

CALPINE CORPORATION,

Petitioner,

Case No. 03-CV-3731

v.

Classification Code: 30607

WISCONSIN PUBLIC SERVICE
COMMISSION AND WISCONSIN
DEPARTMENT OF NATURAL RESOURCES,

Respondents.

CLEAN WISCONSIN, INC.
(f/k/a Wisconsin's Environmental
Decade Institute, Inc.)
AND S.C. JOHNSON & SON, INC.,

Petitioners,

Case No. 03-CV-3478

v.

Classification Code: 30607

WISCONSIN PUBLIC SERVICE
COMMISSION AND WISCONSIN
DEPARTMENT OF NATURAL RESOURCES,

Respondents.

TOWN OF CALEDONIA,

Petitioner,

Case No. 03-CV-2084

v.

Classification Code: 30607

WISCONSIN PUBLIC SERVICE
COMMISSION AND WISCONSIN
DEPARTMENT OF NATURAL RESOURCES,

Respondents.

RECORD LIST OF RESPONDENTS
PUBLIC SERVICE COMMISSION OF WISCONSIN AND
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

1. Cover letter to Lynda Dorr of the Public Service Commission by Larry Salustro of Wisconsin Energy Corporation with the Application of Wisconsin Energy Corporation Companies for Certificates of Public Convenience and Necessity and Other Related Authorizations and Approvals, dated January 31, 2002. (Volumes 1-3)

2. Cover letter to Richard Grigg, Gerald Abood and Wisconsin Electric Power Company by Freddi L. Greenburg of Midwest Independent Power Suppliers regarding a Trust Agreement, dated February 1, 2002.

3. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with Notice of Proceeding, Assessment of Costs and Prehearing Conference dated February 21, 2002.

4. *Confidential Material No. 19291 subsequently made public:* Archeological and cultural information about Elm Road site.

5. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Michael Vickerman of Renew Wisconsin and request for Full/Interested Party Intervention dated March 5, 2002.

6. Minutes and Informal Instructions of the Open Meeting of Wednesday, March 6, 2002.

7. Cover letter to David Whitcomb of the Public Service Commission of Wisconsin by Warren Day of Wisconsin Federation of Cooperatives requesting full party status, dated March 6, 2002.

8. Motion to Dismiss ERGS Application for Lack of Jurisdiction and Memorandum in support of Motion filed by Robert H. Owen, Jr., dated March 5, 2002.

9. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Catherine J. Furay with Midwest Independent Power Suppliers Inc.'s NFP for full party status, dated March 7, 2002.

10. Cover letter to Roman Draba of Wisconsin Electric Power Company by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request No. 19270, dated April 5, 2002.

11. Cover letter to Jeffery Knitter of Wisconsin Electric Power Company by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request Nos. 19997 and 20000, dated April 5, 2002.

12. Power The Future Supplement 1, dated April 5, 2003..

13. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with an Order issued by the Public Service Commission, dated April 11, 2002.

14. Cover letter to Douglas Wetgers of Wisconsin Electric Power Company by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request No. 19268, dated April 15, 2002.

15. Cover letter to David Lee of Wisconsin Electric Power Company by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request No. 19275, dated April 15, 2002.

16. Cover letter to David Lee of Wisconsin Electric Power Company by David C. Whitcomb of the Public Service Commission with the confidentiality determination for Confidentiality Request No. 19291, dated April 16, 2002.

17. Cover letter to Tim Jones of the Public Service Commission of Wisconsin by Roman A. Draba of WE Energies regarding changes to the original lease for Elm Road, dated April 17, 2002.

18. Public Service Commission Order dated April 19, 2002.

19. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin dated April 25, 2002, setting out the phases of the original Order dated April 19, 2002.

20. Cover letter to Timothy Berrigan of Mirant Americas Development, Inc. by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request No. 23580, dated May 7, 2002.

21. Cover letter to Gregory Kelly of PG&E National Energy Group by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request No. 19518, dated May 7, 2002.

22. Cover letter to Al Mihm of Wisconsin Electric Power Company by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request No. 19294, dated May 9, 2002.

23. Final Tentative Service List, dated May 17, 2002.

24. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with the transcript of the May 6, 2002, second prehearing conference, dated May 21, 2002.

25. Cover letter to Peter Gardon by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request No. 23037, dated May 21, 2002.

26. Cover letter to Service List by David Whitcomb of the Public Service Commission of Wisconsin with filing deadline for Replies to Exception, dated June 3, 2002.

27. Power The Future Supplement 2, dated June 3, 2003.

28. Cover letter to Gordon Grant of the Public Service Commission of Wisconsin by Michael A. Dodge along with the City of Oak Creek's application for intervenor compensation, dated June 6, 2002.

29. Cover letter to Timothy Jones of the Public Service Commission of Wisconsin by Mark A. Osten regarding deficiencies in the submittals of applications, dated June 20, 2002.

30. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Carl A. Sinderbrand and the Notice of Additional Appearance on behalf of S.C. Johnson & Son, Inc., dated June 20, 2002.

31. Cover letter to Mark Osten of RMT by Timothy Jones of the Public Service Commission of Wisconsin regarding RMT's review of the Certificate of Public Convenience and Necessity application, dated June 27, 2002.

32. Cover letter to Timothy Jones of the Public Service Commission of Wisconsin by Lauren Hambrook of the Department of Natural Resources regarding its review of the environmental aspects of the Wisconsin Electric Power the Future – Elm Road CPCN Application and June 3 Supplemental Submittal, dated June 27, 2002.

33. Cover letter to Lynda Dorr and Timothy Jones of the Public Service Commission of Wisconsin by Carl Sinderbrand with comments of S.C. Johnson & Son, Inc., with respect to completeness of CPCN application, dated July 1, 2002.

34. Cover letter to Larry Salustro of Wisconsin Energy Corporation by Robert Norcross of the Public Service Commission of Wisconsin finding application incomplete, dated July 3, 2002.

35. Cover letter to Carl Sinderbrand by Timothy Jones of the Public Service Commission of Wisconsin attaching the completeness determination letter, dated July 3, 2002.

36. Cover letter to Randy Vanaartsen of Wisconsin Electric Power Company by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request No. 23715, dated July 18, 2002.

37. Cover letter to Randy Vanaartsen of Wisconsin Electric Power Company by David C. Whitcomb of the Public Service Commission of Wisconsin with the confidentiality determination for Confidentiality Request No. 23716, dated July 18, 2002.

38. Cover letter to Larry Salustro of Wisconsin Energy Corporation by Robert Norcross of the Public Service Commission of Wisconsin stating incompleteness of application, dated August 14, 2002.

39. Cover letter to Raj Vakharia of the Wisconsin Department of Natural Resources by Terry Coughlin of WE Energies with additional information for application, dated August 26, 2002.

40. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with a Public Service Commission Order, dated September 3, 2002.

41. Power the Future Supplement 3, dated September 6, 2002.

42. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by William H. Wilson, Jr. with Motion to Intervene on behalf of LS Power Associates, L.P., dated September 13, 2002.

43. Cover letter to Lynda Dorr and Timothy Jones of the Public Service Commission of Wisconsin by Carl Sinderbrand with S.C. Johnson & Son, Inc.'s comments on the completeness of the CPCN application as amended in Supplement 3, dated September 26, 2002.

44. Cover letter to Jeffery Kitsembel of the Public Service Commission of Wisconsin by Mark A. Osten and David F. Seitz of RMT with a list of deficiencies of the CPCN application, dated September 27, 2002.

45. Cover letter to Lynda Dorr and Timothy Jones of the Public Service Commission of Wisconsin by Frank Jablonski on behalf of the Town of Caledonia regarding matters for consideration for incompleteness, dated September 27, 2002.

46. Cover letter to Larry Salustro of Wisconsin Energy Corporation by Robert Norcross of the Public Service Commission of Wisconsin regarding completeness of application needed before hearing, dated October 7, 2002.

47. Power The Future Supplement 4, dated October 22, 2002.

48. Cover letter to Lynda Dorr and Jeffery Kitsembel of the Public Service Commission of Wisconsin by Carl Sinderbrand with S.C. Johnson & Son, Inc.'s comments on the completeness of the CPCN application as amended in Supplement 4, dated November 6, 2002.

49. Cover letter to Jeffery Kitsembel of the Public Service Commission of Wisconsin by Mark A. Osten and David F. Seitz of RMT on behalf of the City of Oak Creek with concerns about PTF's Supplement 4, dated November 27, 2002.

50. Cover letter to residents and land owners by Jeffrey Kitsembel of the Public Service Commission of Wisconsin describing the Elm Road Generating Station, dated January 13, 2003.

51. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Carl Sinderbrand with a Petition for Interim Determination, dated January 14, 2003.

52. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin setting deadline to respond to S.C. Johnson & Son, Inc.'s and Wisconsin's Environmental Decade requests to review completeness, dated January 22, 2003.

53. Oak Creek Power Plant and Proposed Elm Road Station's Cooling Water Intake and Lake Monitoring Study from WE Energies, dated February 2003.

54. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Dennis M. Grzezinski on behalf of the Sierra Club asking the Public Service Commission to determine application incomplete, dated February 7, 2003.

55. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Larry Martin with Applicants' Comments on Petition of S. C. Johnson & Son, Inc., and WI Environmental Decade, Inc. for Review of Interim Determination, dated February 11, 2003.

56. Cover letter to Lynda Dorr and David C. Whitcomb of the Public Service Commission of Wisconsin by Susan Greenfield, Chairman of Town of Caledonia Town Board supporting petition filed by S.C. Johnson and Son, Inc., dated February 11, 2003.

57. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Daniel P. Gustafson on behalf of MG&E with its comments on the Petition for Review of Interim Determination, dated February 12, 2003.

58. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Michael A. Dodge on behalf of the City of Oak Creek with its Response in Support of Petition for Review, dated February 12, 2003.

59. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Elizabeth Hartman of Wisconsin Public Power, Inc. with its comments on the Petition for Review

of Interim Determination filed by S.C. Johnson & Son, Inc. and Wisconsin's Environmental Decade, Inc., dated February 12, 2003.

60. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Carl A. Sinderbrand on behalf of S.C. Johnson & Son, Inc., with additional information pertinent to the Petition for Review of Interim Determination, dated February 14, 2003.

61. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with a Notice of Prehearing Conference, dated February 20, 2003.

62. Memo to the Commission from the Public Service Commission of Wisconsin Electric Division, dated February 21, 2003.

63. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Peter L. Gardon on behalf of Calpine Corporation with a request to remove the first two pages of their February 19, 2003, proposal as an alternative the coal plants in oak Creek identified by WEPCO as part of the PTF-2 proceeding to not be confidential material, dated February 24, 2003.

64. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Steve Bulik on behalf of the Citizens for Responsible Power with its request for intervenor compensation, dated February 26, 2003.

65. Cover letter to the Service List by Jeffrey Kitsembel of the Public Service Commission of Wisconsin with the Coastal Analysis, Sediment Transport and Regional Impacts – Elm Road Generating Station and the Cooling Water Intake and Lake Monitoring studies, dated February 27, 2003.

66. Cover letter to David C. Whitcomb of the Public Service Commission by Mark W. Luberda on Behalf of the Town of Caledonia stating it intends to remain a full party, dated March 3, 2003.

67. Cover letter to Larry Salustro of Wisconsin Energy Corporation by Robert Norcross of the Public Service Commission of Wisconsin stating incompleteness of the application of Wisconsin Energy Corporation, dated March 4, 2003.

68. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Steven J. Books asking to be a full party to identify issues at the March 7, 2003, Prehearing Conference, dated March 4, 2003.

69. Motion to Intervene of LS Power Associates by William H. Wilson, Jr., dated March 5, 2003.

70. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Craig Oliver, Sr., requesting full party status, dated March 11, 2003.

71. Cover letter to David C. Whitcomb of the Public Service Commission by David Poklinkoski of Local Union No. 2304 stating it is unable to participate fully, dated March 20, 2003.

72. Cover letter to Lynda Dorr and Gordon Grant of the Public Service Commission of Wisconsin by Eric Uram on behalf of Sierra Club's Southeast Gateway Group with its request for Intervenor Compensation, dated March 24, 2003

73. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Pamela McGillivray on behalf of Wisconsin Environmental Decade's with its Application for Intervenor Compensation, dated March 24, 2003.

74. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with transcripts of the March 7, 2003, Prehearing Conference and laying out a prefiling schedule for written testimony, dated April 11, 2003.

75. Memorandum to the Commission from the Public Service Commission of Wisconsin Electric Division regarding requests for Intervenor Compensation, dated April 16, 2003.

76. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with the Order Denying Petition to Review Interim Determination, dated April 17, 2003.

77. Draft Environmental Impact Statement, Elm Road Generating Station (Volumes 1 and 2) of the Public Service Commission of Wisconsin and the Wisconsin Department of Natural Resources, dated April 2003.

78. Minutes and Informal Instructions of the Open Meeting of May 1, 2003.

79. Cover letter to Craig Oliver, Sr. by David C. Whitcomb of the Public Service Commission of Wisconsin adding Craig Oliver, Sr., to the Service List, dated May 7, 2003.

80. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Pamela McGillivray with Clean Wisconsin's Motion for Reconsideration of the Commission's Decision Denying in Part Clean Wisconsin's Phase 2 Application for Intervenor Compensation, dated May 9, 2003.

81. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with the May 16, 2003, Order, dated May 15, 2003.

82. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by John Casey with Applicants' Objection to Scope of S.C. Johnson & Son, Inc.'s 2nd and 3rd set of Data Requests, dated June 4, 2003.

83. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Robert L. Kufrin of Oak Creek with a Development Agreement, dated June 4, 2003.

84. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with Administrative Law Judge's Scheduling Order, dated June 6, 2003.

85. Cover letter to Jeff Kitsembel of the Public Service Commission of Wisconsin by Robert Kufrin of Oak Creek with Comments on the Draft Environmental Impact Statement, dated June 10, 2003.

86. Cover letter to David C. Whitcomb of the Public Service Commission by Larry Martin with objections to Phase II, dated June 11, 2003.

87. Cover letter to Jeffery Kitsembel of the Public Service Commission of Wisconsin by Susan Greenfield of the Town of Caledonia with its comments on the Draft Environmental Impact Statement, dated June 11, 2003.

88. Cover letter to Jeffery Kitsembel of the Public Service Commission of Wisconsin from the Wisconsin Legislature with comments on the Draft Environmental Impact Statement, dated June 11, 2003.

89. Cover letter to Jeffery Kitsembel of the Public Service Commission of Wisconsin by James Childress of Gasification Technologies Council with comments on the Draft Environmental Impact Statement, dated June 11, 2003.

90. Cover letter to Raj Vakharia of the Wisconsin Department of Natural Resources by Terry Coughlin of WE Energies with an Air Quality Assessment, dated June 11, 2003.

91. Official Filing in response to Administrative Law Judge David Whitcomb's new Rescheduling Order by Dan L. Sanford of American Transmission Company stating no objections, dated June 12, 2003.

92. Official filing from Carl A. Sinderbrand on behalf of S.C. Johnson & Son, Inc. with no objections to rescheduling order, but an objection to location of the technical hearing location, dated June 12, 2003.

93. Cover letter to Jeffery Kitsembel of the Public Service Commission of Wisconsin of Christopher D. Young on behalf of ANR Pipeline with comments to correct a false impression in the Draft Environmental Impact Statement, dated June 12, 2003.

94. Comments of the Citizens' Utility Board on the Draft Environmental Impact Statement, submitted by George Edgar, dated June 12, 2003.

95. Cover letter to Jeffery Kitsembel of the Public Service Commission of Wisconsin by John Thompson on behalf of the Clean Air Task Force with comments on the Draft Environmental Impact Statement, dated June 12, 2003.

96. Comments of S.C. Johnson & Son, Inc. on the Draft Environmental Impact Statement for the Elm Road Generating Station, dated June 12, 2003.

97. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Michael Stuart on behalf of Wisconsin Public Power with comments on the Draft Environmental Impact Statement, dated June 13, 2003.

98. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Peter L. Gardon on behalf of Calpine Corporation with comments on the Draft Environmental Impact Statement, dated June 13, 2003.

99. Comments of David Jenkins of Wisconsin Electric Cooperative Association on the Draft Environmental Impact Statement, dated June 13, 2003.

100. Comments of the Lake Michigan Federation on the Draft Environmental Impact Statement, dated June 13, 2003.

101. Cover letter to Jeffery Kitsembel of the Public Service Commission of Wisconsin by R.A. Draba of WE Energies with comments on the Draft Environmental Impact Statement, dated June 13, 2003.

102. Cover letter to Jeffery Kitsembel of the Public Service Commission of Wisconsin by Pamela McGillivray on behalf of Clean Wisconsin with their comments on the Draft Environmental Impact Statement, dated June 13, 2003.

103. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with Rescheduling Order, dated June 17, 2003.

104. Memorandum to the Commission from the Public Service Commission of Wisconsin Electric Division with a suggested minute denying Citizen's for Responsible Power to reconsider portions of its decision petition, dated June 18, 2003.

105. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Peter L. Gardon on behalf of Calpine Corporation with certain correspondence, Confidential Revised Proposal, confidentiality request form and affidavit, dated June 20, 2003.

106. Cover Letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with the Final Order, dated June 27, 2003.

107. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with the Final Order, dated July 2, 2003.

108. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Robert Owen with a Notice of Motion to Dismiss (Strike) ERGS3 IGCC Portion of Elm Road Generating Station Application, dated July 3, 2003.

109. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with a Notice of Scheduling Conference, dated July 16, 2003.

110. Cover letter to the Public Service Commission of Wisconsin by Robert Owen with a Brief of Robert H. Owen, Jr. in Support of Motion to Dismiss (Strike) ERGS3 IGCC Portion of Elm Road Generating Station Application, dated July 17, 2003.

111. Cover letter to Lynda Dorr and Gordon Grant of the Public Service Commission of Wisconsin by Eric Uram on behalf of Sierra Club's Southeast Gateway Group with its request for Intervenor Compensation, dated July 24, 2003.

112. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Larry Martin on behalf of Wisconsin Energy Corporation, in response to Robert Owens's Motion, dated July 22, 2003.

113. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with a Rescheduling Order, dated July 23, 2003.

114. Public Service Commission of Wisconsin Notice of Hearing, dated July 25, 2003.

115. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Carl Sinderbrand with a Motion to Compel Response to Data Requests and for Expedited Response and Decision, dated July 29, 2003.

116. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Robert H. Owen, Jr., with a Motion to Dismiss (Strike) ERGS 1 and 2 Portions and Entirety of Elm Road Generating Station Application and Brief of Robert H. Owen, Jr., in Support of Motion to Dismiss ERGS Application, dated July 31, 2003.

117. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with an Order by the Commission, dated July 31, 2003.

118. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by John Casey with Applicants' responses to the S.C. Johnson data requests identified by Mr. Sinderbrand in the Motion to Compel, dated July 31, 2003.

119. Final Environmental Impact Statement, Elm Road Generating Station, Volumes 1 to 3, of the Public Service Commission of Wisconsin and the Wisconsin Department of Natural Resources. (NB: Introduced at Public Service Commission of Wisconsin hearings as Exhibit 274.)

120. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by John Casey in response to S.C. Johnson & Son, Inc.'s Motion to Compel, dated August 1, 2003.

121. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Larry Martin with Applicants' Response to Robert Owen's Motion to Dismiss, dated August 7, 2003.

122. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with the Order on the Motion to Dismiss, dated August 13, 2003.

123. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Larry Martin clarifying an Exhibit, dated August 18, 2003.

124. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by Larry Martin regarding availability of witnesses, dated August 19, 2003.

125. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with a Scheduling Order for Submission of Written Testimony by members of the Public, dated August 19, 2003.

126. Minutes and Informal Instructions of the Open Meeting of Wednesday, August 20, 2003.

127. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Tony Hemming of ChevronTexaco with a Motion for Leave to Intervene out of Time of ChevronTexaco Worldwide Power and Gasification, Inc., and the Direct Testimony of Alma I. Rodarte, PhD, on Behalf of ChevronTexaco Worldwide Power and Gasification, Inc. on the Draft Environmental Impact Statement, dated August 26, 2003.

128. Cover letter to David C. Whitcomb of the Public Service Commission of Wisconsin by David Ludwig of the Public Service Commission of Wisconsin with the Commission staff's response to the Motion of ChevronTexaco, dated August 29, 2003.

129. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by John Raihala with the Notice of Appearance on behalf of ChevronTexaco Worldwide Power and Gasification, Inc., dated August 29, 2003.

130. Cover letter to Heidi Hopkins of Wisconsin Department of Natural Resources by David M. Lee of WE Energies with proof of publications, dated September 5, 2003.

131. Order of the Administrative Law Judge ordering Transcript Volume 3 (pp. 839-860) and Volume 4 (pp. 861-872; 912-913), dated September 5, 2003.

132. Order of the Administrative Law Judge ordering Transcript Volume 6 (pp. 1381-1496) and Volume 8 (pp. 1890-1918) confidential, dated September 9, 2003.

133. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with the July 22, 2003, Scheduling Conference transcript, dated September 9, 2003.

134. Order of the Administrative Law Judge ordering Transcript Volume 11 (pp. 2803-2924; 3132; 3423-3465) confidential, dated September 11, 2003.

135. Order of the Administrative Law Judge ordering Transcript Volume 15 (pp. 4544-4571; 4653-4679) confidential, dated September 15, 2003.

136. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with the transcript of the September 12, 2003, hearing and setting out a briefing schedule, dated September 16, 2003.

137. Cover letter to the Public Service Commission of Wisconsin of June Ihlenfeldt requesting intervenorship, dated September 19, 2003.

138. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with Senator Stepp's August 26, 2003, letter to Chairperson Bridge, dated September 22, 2003.

139. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with the list of appearances from September 17 through 19, 2003, hearings, dated September 24, 2003.

140. Cover letter to the Service List by David C. Whitcomb of the Public Service Commission of Wisconsin with the September 11, 2003, letter from Edward J. Zore, President and Chief Executive Officer of Northwest Mutual to Chairperson Bridge, dated September 29, 2003.

141. Cover letter to June Ihlenfeldt by David C. Whitcomb of the Public Service Commission of Wisconsin responding to her September 19, 2003, letter, dated September 30, 2003.

142. Cover letter of Robert Owen in response to September 29, 2003, letter of David C. Whitcomb of the Public Service Commission of Wisconsin, dated October 3, 2003.

143. Cover letter of Pamela McGillivray with Clean Wisconsin's Supplemental Application for Intervenor Compensation for Phase II, dated October 6, 2003.

144. Cover letter of John A. Casey in response to Robert Owen's October 3, 2003, letter, dated October 7, 2003.

145. Cover letter of Steven Bulik on behalf of Citizens for Responsible Power requesting supplemental Intervenor Compensation funds, dated October 20, 2003.

146. Cover letter of June Ihlenfeldt withdrawing her petition, dated October 20, 2003.

147. Cover letter of David C. Whitcomb of the Public Service Commission of Wisconsin with inventory of Public Testimony, dated October 23, 2003.

148. Cover letter by Robert Owen with a Request to Supplement Truncated Wis. Stat. §§ 1.11 and 1.12 Analysis to Apply to All Prospective Co-owners of ERGS 1 and ERGS 2, dated November 6, 2003.

149. Minutes and Informal Instruction of the Open Meeting of November 10, 2003.

150. Public Service Commission of Wisconsin's Final Order, dated November 10, 2003.

151. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Larry J. Martin with his response to Mr. Owen's Request to Supplement Truncated Wis. Stat. §§ 1.11 and 1.12 Analyses to Apply to All Prospective Co-owners of ERGS 1 and ERGS 2, dated November 11, 2003.

152. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Elizabeth Hartman with her response to Mr. Owen's Request to Supplement Truncated Wis. Stat. §§ 1.11 and 1.12 Analyses to Apply to All Prospective Co-owners of ERGS 1 and ERGS 2, dated November 14, 2003.

153. Cover letter to Lynda Dorr of the Public Service Commission of Wisconsin by Daniel Gustafson with his response to Mr. Owen's Request to Supplement Truncated Wis. Stat. §§ 1.11 and 1.12 Analyses to Apply to All Prospective Co-owners of ERGS 1 and ERGS 2, dated November 17, 2003.

154. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with an Order, dated November 19, 2003.

155. Minutes and Informal Instructions of the Open Meeting of November 21, 2003.

156. Cover letter to the Service List by Lynda Dorr of the Public Service Commission of Wisconsin with an Order, dated December 1, 2003.

157. Public Transcripts, Volumes 1, 2, 4, 5, 7, 9, 10, 12-14, 16-21.

158. Public Exhibits 1 through 302. Not including any confidential filings and Final Environmental Impact Statement. The Final Environmental Impact Statement is listed separately as Record Item 117.

159. Confidential Transcripts, Volumes 3, 6, 8, 11, 15.

160. Confidential Exhibits Nos. 43, 91, 93, 94, 95, 97, 110, 111, 177, 201c, 202c, 267, 269, 270, 272.

Oak Creek

WISCONSIN PUBLIC SERVICE COMMISSION

2003 JUN -5 P 1:37

RECEIVED

CITY ADMINISTRATOR

June 4, 2003

Ms. Linda L. Dorr
Secretary to the Commission
Public Service Commission of Wisconsin
610 North Whitney Way
P.O.B. 7854
Madison, WI 53707-7854

Dear Ms. Dorr:

On March 31, 2003, the City of Oak Creek and We Energies entered into a development agreement regarding the construction of the Elm Road Generating Station Docket No. 05-CE-130. The Public Service Commission had previously received a copy and referenced the agreement in the Draft Environmental Impact Statement on page 28 and 29, which was released on April 21, 2003. On page xxii of the DEIS the staff explained that the agreement had been approved and discussed the community mitigation payments including a footnote reference.

A copy of the agreement is again attached for inclusion as part of the application process. We are filing 30 copies with this letter.

Sincerely,

Robert L. Kufrin.

City Administrator

8640 S. HOWELL AVE.
OAK CREEK, WI 53154
TEL (414) 768-6504
FAX (414) 768-9587

WISCONSIN PUBLIC SERVICE COMMISSION

AGREEMENT

THIS AGREEMENT is made and effective as of the 2 day of April, 2003, by and between the **City of Oak Creek** (the "City") and **Wisconsin Energy Corporation**, ("WEC"), on behalf of its subsidiaries, Wisconsin Electric Power Company ("Wisconsin Electric"), W.E. Power, LLC ("We Power"), WISPARK LLC ("WISPARK"), and Wisconsin Gas Company ("Wisconsin Gas") (collectively referred to as the "Subsidiaries").

RECEIVED

WITNESSETH:

WHEREAS, WEC or one of the Subsidiaries is the current owner and operator of coal-based electric generating facilities located in the City.

WHEREAS, WEC desires, as a part of its "Power the Future" project for increasing electric generating facilities, to create three coal burning new electric generating facilities at the site of existing facilities in the City.

WHEREAS, it is anticipated that the construction and operation of the new facilities may have certain effects on the City.

WHEREAS, in order to mitigate any such effects on the City, WEC and the City desire to enter into this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, WEC, for itself and the Subsidiaries, and the City agree as follows:

1. AGREEMENT CONCERNING AIR QUALITY ISSUES.

   A. Purpose. The purpose of this paragraph 1 is to ensure that effective upon the date of this Agreement, the total actual annual air emissions from Oak Creek Units 5-8 ("Existing Facilities") and Elm Road Units 1-3 ("New Facilities") will not result in a net increase of the total actual annual air emissions as compared with the baseline condition. The parties recognize that the air pollution requirements established and implemented by the Wisconsin Department of Natural Resources "DNR" are designed to protect public health and welfare and that this Agreement is in furtherance of and not in conflict with those state requirements.

   B. Baseline Emission Level. For the purpose of establishing that there will be no net increase in total actual annual air emissions, WEC has used calendar year 2000 as the baseline condition, and determined that the baseline emission level from the facility is 38,400 tons per year ("Baseline Emission Level"). The Baseline Emission Level includes the actual annual air emissions in calendar year 2000 of sulfur dioxide ("SO_2"), nitrogen oxides ("NO_X"), particulate matter ("PM"), mercury ("Hg"), volatile organic compounds ("VOC"), hydrochloric acid ("HCl"), hydrofluoric acid ("HF"), and sulfuric acid ("H_2SO_4").

C. Measure of Compliance. WEC agrees that the total actual annual air emissions from the stacks of the Existing Facilities and New Facilities will not exceed the Baseline Emission Level. Compliance with the Baseline Emission Level will be measured on a rolling 12-month basis so that in each 12-month period the emissions shall not exceed the Baseline Emission Level.

D. Implementation and Enforcement.

1. WEC agrees that it will use all reasonable efforts to obtain enforceable limitations in the construction and operation air pollution control permit or equivalent order (state or federal) which includes emission limitations that will ensure that the total actual annual emissions from the Existing Facilities and New Facilities will not exceed the Baseline Emission Level ("Enforceable Permit Condition").

2. In the event for any reason the Department of Natural Resources or the U.S. Environmental Protection Agency does not include in the construction and operation air pollution control permit or equivalent order (state or federal) emission limitations that will ensure that the total actual emissions from the Existing Facilities and New Facilities will not exceed the Baseline Emission Level, the parties to this Agreement shall meet and agree to a local enforcement mechanism the validity and enforceability of which WEC agrees not to contest in any way.

E. Air Monitoring.

1. Elm Road Monitoring Site. WEC or its contractor agrees to install, maintain and operate an air monitoring station at a location to be mutually agreed upon between WEC and the City within 1200 feet of the intersection of Elm Road and the Chicago and Northwestern Railroad line to monitor for particulate matter measured as Total Suspended Particulates ("TSP"), PM_{10} and $PM_{2.5}$ consistent with appropriate state and/or federal ambient air quality monitoring requirements except that the monitoring shall occur on a daily basis. Meteorological data including wind speed, wind direction and temperature shall also be collected at this location. The air monitors at this location shall be operational as soon as practicable, but no later than 150 days after the date of this Agreement and shall continue for a period of no less than two years after commencement of construction of the first of any of the New Facilities approved by the PSC. If after two years following

commencement of construction of the first of any of the New Facilities no exceedences of state or national ambient air quality standards attributable to any WEC operations are detected, the frequency of the monitoring can be reduced to a sampling frequency of once every three days for each of the above air pollutants. Monitoring shall continue thereafter unless the provisions of Paragraph E.4 apply.

2. Carrollton Monitoring Site. WEC or its contractor agrees to install, maintain and operate air monitoring station at Carrollton Elementary School (8965 South Carrollton Drive) to monitor for SO_2 and NO_X consistent with appropriate state and/or federal ambient air quality monitoring requirements. Meteorological data including wind speed, wind direction and temperature shall also be collected at this location. The monitoring shall occur on a frequency consistent with state and/or federal ambient air quality monitoring requirements. The monitoring at this location shall be operational within 150 days of the granting of the CPCN for any of the New Facilities. Monitoring shall continue thereafter unless the provisions of Paragraph E.4 apply.

3. Data Reporting. The air emission and meteorological data from both of the monitoring sites under this paragraph shall be reported to the City after completion of QA/QC checks and shall be summarized in a quarterly report submitted to the City and DNR within 45 days after the end of the quarter. In addition to the Quarterly Report, the data shall also be available at the new Education and Visitors Center and City Hall as soon as practicable after the completion of QA/QC checks. It is anticipated that normal reporting time for PM_{10}, $PM_{2.5}$, SO_2, and NO_x will be the first business day within 24 hours after completion of the QA/QC checks, but, in any event, no later than 4 days after the sample date. TSP results will be furnished within 30 days after completion of QA/QC checks.

4. Exceptions to Monitoring Requirements. The monitors shall continue to be operated and maintained until (a) all of the New Facilities authorized by PSC Docket No. 05-CE-130 have been built and have been in operation for a period of not less than five years, (b) the emission data indicates that the emissions and ambient air quality are within state and/or national ambient air quality standards, all applicable permit limits and the Baseline Emission Level of this Agreement for three consecutive years, and (c) the concentration of air pollutants are at or less than the maximum concentrations modeled as part of WEC air modeling calculations submitted with the air pollution control permit

applications for the New Facilities for three consecutive years. If the requirements of this sub-paragraph are satisfied, paragraph E will no longer apply. If none of the New Facilities sought in PSC Docket No. 05-CE-130 has been approved by the PSC for construction in Oak Creek, or if WEC does not proceed with construction of the New Facilities, then the requirements of paragraph E will no longer apply.

2. REDEVELOPMENT OF PROPERTY.

A. Upon the signing of this Agreement and irrespective of whether WEC receives a CPCN from the PSC in docket #05-CE-130 for construction of any New Facilities, pursuant to Sec. 196.491(3), Wis. Stats., WEC shall at its sole cost and expense: (a) complete a Market Study; (b) complete an Environmental Site Conditions Analysis; and (c) develop a Land Use Plan for certain parcels within the City of Oak Creek, which parcels shall be selected by mutual Agreement of the Director of Community Development and WEC. The Environmental Analysis, Market Study and Land Use Plan shall be completed within twelve months of the signing of this Agreement, and shared with the Director of Community Development as soon as they are completed. In the event WEC does not proceed to develop, under paragraph 2B, the parcels studied, then thirty copies of the Environmental Analysis, Market Study and Land Use Plan together with all supporting documents shall be provided to the City of Oak Creek. Notwithstanding anything to the contrary contained herein, WEC's obligations to provide the analysis, study, and plan under this paragraph 2A are contingent upon WEC obtaining all necessary consents and/or access from the owner(s) of the proposed property.

B. For each of the first two New Facilities for which WEC receives a CPCN from the PSC in docket #05-CE-130, WEC shall be required to invest 10 million dollars, within ten years of the date of the granting of the CPCN by the PSC for each unit, to construct improvements of a type WEC deems appropriate on parcels within the City of Oak Creek, which WEC selects. WEC shall use its best efforts to invest such funds in as expeditious a manner as is reasonably prudent. For purposes of this Agreement, improvements include the following:

1. Demolition of existing structures.
2. Environmental remediation to the level necessary to construct and occupy the planned building(s), facility(s) and/or uses, in accordance with Wisconsin environmental statutes and Wisconsin Administrative Code Chapters NR 700 – NR 754 requirements and any federal environmental laws, regulations and guidance.
3. Construction of improvements, including buildings and structures.

4. Installation of public improvements, including, but not limited to sanitary sewer, water main, storm water facilities, streets, including curb and gutter, street lights, landscaping and other amenities all of which shall be as defined under the Oak Creek Municipal Code.
5. Marketing of properties until initial occupancy.
6. Other improvements proposed by WEC and agreeable to the City.
7. Acquiring all parcels necessary to undertake the aforementioned improvements.

3. PAYMENT OF MITIGATION COSTS. During the term (including any applicable extensions) of that certain Facility Lease (the "Facility Lease") between Elm Road Generating Station LLC and Wisconsin Electric for each unit of the New Facility (the "Lease Term"), We Power shall support, and shall use its best efforts to have approved, an annual mitigation payment to the City in the amount of $1.5 million for the first unit (Elm Road Unit 1), $750,000 for the second unit (Elm Road Unit 2), and $250,000 for the third unit (Elm Road Unit 3), respectively (a "Mitigation Payment"). If, and to the extent, approved by the PSCW, Mitigation Payments will be made on a calendar year basis. The first Mitigation Payment for each unit shall be made thirty days after commencement of construction (commencement of construction shall mean the start of earth moving or excavation at the site) of a unit. Thereafter, Mitigation Payments shall be paid in one annual payment on June 30th each year during the Lease Term. Mitigation Payments for partial calendar years during the Lease Term (including the year of the first Mitigation Payment) shall be prorated on a per-diem basis. The obligation to pay Mitigation Payments is independent of the receipt of shared revenue funds from the State of Wisconsin and of any future changes in state law pertaining to utility taxation. Notwithstanding anything to the contrary contained herein, in no event will WEC or any of the Subsidiaries have any obligation under this paragraph 3 in the event that (i) the PSCW determines that the payments described in this Section 3 may not be properly included in the rent payments under the Facility Lease, or (ii) a unit of the New Facility permanently ceases operation after start-up and is decommissioned.

4. NO THIRD PARTY BENEFICIARIES. None of the provisions of this Agreement is intended for the benefit of any person except the parties hereto and their respective successors and permitted assigns. No interest on behalf of any third-party beneficiary is created by this Agreement.

5. REIMBURSEMENT OF CITY EXPENSES. WEC agrees to reimburse the City for its reasonable out-of-pocket expenses incurred by the City in participating in all matters relating to the application for and approval of the New Facilities by the PSCW. The expenses to be reimbursed include the City's out-of-pocket expenses for attorneys and technical consultants. The expenses to be reimbursed will be

determined based on a budget to be prepared by the City, with a cap established above which WEC and the City will share expenses on an equal basis.

6. CITY APPROVALS. WEC, through the Subsidiaries, and the City agree to cooperate in good faith on all matters involving review and approval of the New Facilities by the City and any agencies or instrumentalities thereof. Without limitation, WEC's Subsidiaries will continue to work through the City's Planning and Conditional Use Permit processes to resolve issues raised by the City pertaining to the New Facility. The parties intend that the resolution of all such issues shall be presented to the PSCW as part of its certification process and included as a condition of the Certificate of Public Convenience and Necessity ("CPCN").

7. CITY SUPPORT. Upon execution of this Agreement, the City agrees to use its best efforts to support the construction of the New Facilities before the PSCW and other applicable regulatory or governmental bodies. Subject to the requirements of this paragraph 7, nothing in this Agreement shall be construed as an agreement by the City to grant City approvals, which shall remain subject to the Planning and Conditional Use Permit processes noted above.

8. COMPROMISE OF CITY CLAIMS. WEC and the City acknowledge and agree that the construction and operation of the New Facility, and other activities related thereto as described in the applications before the PSCW for CPCN approval, are anticipated to have a substantial effect on the City (the "Effects"). Without limitation, the Effects might include safety concerns, noise, or the need for additional fire, police and emergency medical service. WEC and the City agree that the obligations undertaken by WEC in this Agreement are designed to mitigate the Effects, and the City agrees not to sue WEC nor any of its Subsidiaries for the Effects except as set forth herein. Nothing in this Agreement shall be construed to preclude the City from taking any action, including the filing of legal actions, to enforce provisions of its ordinances, permits or approvals, or the provisions of this Agreement related to the New Facility; provided, however, that such actions shall not prevent the continued use or operation of the New Facility in accordance with paragraph 1 and all other state permits.

9. DEFAULT PROVISIONS. A party shall be in default under this Agreement if it fails to perform any of its obligations as set forth herein, and such failure continues for a period of sixty (60) days after the defaulting party's receipt of written notice of such failure from the non-defaulting party. In the event of such default, the non-defaulting party shall be entitled to exercise any or all available rights and remedies at law or in equity.

10. ASSIGNMENT. Neither party may assign its interest under this Agreement without the prior written consent of the other party hereto, which consent will not be unreasonably withheld or delayed.

11. NOTICES. All notices permitted or required by this Agreement shall be given in writing and shall be considered given upon receipt if hand delivered to the party or person intended, or upon facsimile transmission to the fax numbers set forth herein, or one business day after deposit with a nationally recognized overnight commercial courier service, air bill prepaid, or forty-eight (48) hours after deposit in the United States mail, postage prepaid, by certified mail, return receipt requested, addressed by name and address to the party or person intended as follows:

To WEC:	Wisconsin Energy Corporation 231 West Michigan Street Milwaukee, WI 53203 Attn: Larry Salustro, Esq. Fax No.: (414) 221-2140
To the City:	City of Oak Creek 8640 S. Howell Avenue Oak Creek, WI 53154 Attn: Robert Kufrin Fax: 414-768-6596

12. GOVERNING LAW. This Agreement concerns real property located in the State of Wisconsin, and shall be interpreted and construed according to the laws of the State of Wisconsin.

13. SEVERABILITY OF PROVISIONS. If any of the terms or conditions contained herein shall be declared to be invalid or unenforceable by the PSC in a court of competent jurisdiction, then the remaining provisions and conditions of this Agreement, or the application of such to persons or circumstances other than those to which it is declared invalid or unenforceable, shall not be affected thereby and shall remain in full force and effect and shall be valid and enforceable to the full extent permitted by law, except that as to any such provisions or conditions declared invalid or unenforceable, the parties agree to negotiate a comparable substitute provision.

14. CAPTIONS. The captions in this Agreement are inserted only as matters of convenience and for reference and in no way define or limit the scope or intent of the various provisions, terms or conditions hereof.

15. BINDING EFFECT. The terms and conditions of this Agreement shall be binding upon and benefit the parties hereto and their respective successors and assigns.

16. ENTIRE AGREEMENT. This Agreement may be modified, amended or terminated only by written instrument signed by both parties.

17. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which will be deemed an original.

18. ATTORNEYS' AND CONSULTANTS' FEES. In the event of litigation arising out of this Agreement, the prevailing party shall be entitled to court costs, out-of-pocket expenses and reasonable attorneys' and consultants' fees from the unsuccessful party.

19. REPRESENTATIONS AS TO AUTHORITY. Each party to this Agreement represents and warrants as follows:

    (a) It is duly organized, validly existing and in good standing under the laws of the state of its incorporation and has the power and authority to consummate the transactions contemplated by this Agreement.

    (b) All proceedings necessary for it to consummate the transactions contemplated by this Agreement have been duly taken in accordance with law.

    (c) The persons executing this Agreement on behalf of it have been duly authorized to execute this Agreement.

20. FAX SIGNATURES. The parties agree that fax signatures shall be binding on the parties hereto.

21. EFFECTIVENESS OF PROVISIONS. Except as specified in this paragraph 21, this Agreement is not effective until, and only so long as, the PSCW issues the CPCN for the New Facilities in the City, except that paragraphs 5, 18, and 21 are effective even if the New Facilities are not approved and survive this Agreement. Paragraphs 1B, 6, and 7 are effective immediately upon approval of the Agreement by WEC and the City, but continue in effect only if one or more New Facilities are approved by the PSCW within Oak Creek and WEC proceeds with the project.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

WISCONSIN ENERGY CORPORATION

By: _____
Print Name: LARRY SALUSTRO
Title: General Counsel, WEC

CITY OF OAK CREEK

By: _____
Print Name: DALE J. RICHARDS
Title: MAYOR

By: _____
Print Name: BEVERLY A. BURETTA
Title: CITY CLERK

N:\DOCS\02718\05371\MSR3875.DOC

OFFICE OF THE CITY CLERK

Oak Creek, Wisconsin

June 10, 2003

I hereby certify that the attached is a true and correct copy of Ordinance 2251 passed and adopted by the Common Council of the City of Oak Creek at a regular meeting held on the 3rd day of June, 2003.

City Clerk

ORDINANCE NO. 2251

By: Ald. Charles Koehler

AN ORDINANCE TO APPROVE AND AUTHORIZE THE ISSUANCE OF A CONDITIONAL USE PERMIT FOR POWER GENERATION, TRANSMISSSION AND DISTRIBUTION FOR THE PROPERTIES AT 4801 E. ELM ROAD ET. AL.

(4th Aldermanic District)

WHEREAS, the Wisconsin Energy Corporation has applied for a Conditional Use Permit for power generation, transmission and distribution for the properties at 4401, 4415, 4420, 4500, 4501, 4650, 4750, 4800 and 4801 E. Elm Road; 4285, 4299, 4431, 4451, 4503, 4513, 4541 and 4541R E. Oakwood Road; 10700, 10760, 10920, 11002, 11050 and 11050R S. Chicago Road.; and

WHEREAS, this portion of the property is more precisely described as follows:

"AREA A" - Being part of the Northwest 1/4 and the Northeast Fractional 1/4 of Section 36, Town 5 North, Range 22 East and the Northwest Fractional 1/4 of Section 31, Town 5 North, Range 23 East, City of Oak Creek, Milwaukee County, Wisconsin, bounded and describes as follows:

Commencing at the Northwest corner of the aforesaid Northeast Fractional 1/4 of Section 36; thence N89°49'27'E along the North line of said Northeast Fractional 1/4 of Section 36, 2199.57 feet to a point on the East line of East Oakwood Road as delineated by the aforesaid City of Oak Creek, said point also being a meander corner on said North line and the point of beginning; thence N89°49'27"E along the North line of the aforesaid Northeast Fractional 1/4 of Section 36, 255.1 feet more or less to the Ordinary High Water Mark (OHWM) of the Westerly boundary of Lake Michigan as delineated by the Wisconsin Department of natural Resources in March of 2002; thence Southeasterly along said OHWM, 3213.1 feet more or less to the South line of the aforesaid Northwest Fractional 1/4 of Section 31; thence S89°11'23"W along said South line, 857.7 feet more or less to a point on the East line of East Elm Road as delineated by the aforesaid City of Oak Creek, said point also being a meander corner on the South line of the aforesaid Northwest Fraction 1/4 of Section 31; thence S89°11'23"W along said South line, 702.85 feet to the Southeast corner of the aforesaid Northeast Fractional 1/4 of Section 36; thence S89°44'16"W along the South line of the said Northeast Fractional 1/4 Section 36, 2389.50 feet to a point on the Easterly line of the Chicago and North Western Transportation Company right-of-way; thence N21°17'33"W along said Easterly line, 2803.75 feet to an iron pipe found and a point on the South line of the aforesaid East Oakwood Road; thence N89°49'19"E along said South line, 194.06 feet to the Westerly line of Lot 1, Certified Survey Map (C.S.M.) No. 5261; thence S21°17'33"E along said Westerly line, 911.31 feet to an iron rod found; thence N89°46'47"E along the South line of said Lot 1, 366.42 feet to a iron rod found; thence N00°40'16"W along the East line of said Lot 1 and the West line of Lot 2, C.S.M. No. 88, 822.89 feet to a point on the South line of the aforesaid East Oakwood Road, said point also being the Northwest corner of Lot 2, Certified Survey Map No. 88; thence N89°49'27"E along said South line, 528.00 feet to an iron pipe found; thence N00°40'16"W along said South line, 27.00 feet; thence N89°49'27"E along said South line, 1539.27 feet to a point on the aforesaid East line of East Oakwood Road; thence N00°10'33"W along said East line, 33.00 feet to the point of beginning, expecting the Southerly 33 feet West of the meander corner dedicated for road

purposes, together with that part of the aforesaid Northeast Fractional 1/4 Section 36 and that part of the aforesaid Northwest Fractional 1/4 of Section 31 lying East of the aforesaid meander lines and West of the Westerly boundary of Lake Michigan. Containing 193.8592 acres (8,444,507 Sq. Ft.) more or less of land. Subject to riparian rights, covenants, conditions, restrictions and easements of record.

"AREA B" - Being part of the Southeast 1/4 Section 36, Town 5, Range 22 East and the Southwest Fractional 1/4 of Section 31, Town 5 North, Range 23 East, City of Oak Creek, Milwaukee County, Wisconsin, bounded and described as follows:

Beginning at the Northeast corner of the aforesaid Southeast 1/4 of Section 36; thence N89°11'23"E along the North line of the aforesaid Southwest Fractional 1/4 of Section 31, 702.85 feet to a meander corner on said North line; thence N89°11'23"E along the North line of the aforesaid Southwest Fractional 1/4 of Section 31, 857.7 feet more or less to the Ordinary High Water Mark (OHWM) of the Westerly boundary of Lake Michigan as delineated by the Wisconsin Department of Natural Resources in March of 2002; thence Southeasterly along said OHWM, 4539.9 feet more or less to the South line of the aforesaid Southwest Fractional 1/4 of Section 31; thence S89°12'43"W along said South line, 679.7 feet more or less to a meaner corner on the South line of the aforesaid Southeast Fractional 1/4 of Section 31; thence S89°12'43"W along said South line, 1655.56 feet to the Southeast corner of the aforesaid Southeast 1/4 of Section 36; thence S 89°13'29"W along the South line of said Southeast 1/4, 1346.79 feet to the Easterly line of the Chicago and North Western Transportation Company right-of-way; thence N21°17'33"W along said Easterly line, 750.00 feet; thence continuing along said Easterly line, N51°17'33"W, 100 feet; thence continuing along said Easterly line, N51°17'33"W, 2009.95 feet to a point on the North line of the aforesaid Southeast 1/4 of Section 36; thence N89°44'16"E along said North line, 2389.50 feet to the point of beginning, excepting the Northerly 33 feet West of the meander corner dedicated for road purposes, together with that part of the aforesaid Southwest Fractional 1/4 of Section 31 lying East of the aforesaid meander line and West of the Westerly boundary of Lake Michigan. Containing 241.3945 acres (10,515,143 Sq. Ft.) more or less of land. Subject to riparian rights, covenants, conditions, restrictions and easements of record.

"AREA K" – Being part of the Southeast 1/4 and the Southwest 1/4 of Section 36, Town 5 North, Range 22 East, City of Oak Creek, Milwaukee County, Wisconsin, bounded and described as follows:

Commencing at the Northwest corner of the aforesaid Southeast 1/4 of Section 36; thence S00°42'13"E along the West line of said Southeast 1/4 of Section 36, 24.75 feet to a point on the North line of East Elm Road, said point also being the point of beginning; thence continuing on said West line of the Southeast 1/4 of Section 36 and said North line of East Elm Road, S00°42'13"E, 8.25 feet; thence continuing on said North line, N89°44'16"E, 143.35 feet to a point on the Westerly line of the Chicago and North Western Transportation Company right-of-way; thence S21°17'33"E along said Westerly line, 2793.51 feet to a point on the South line of said Southeast 1/4 of Section 36; thence S89°13'29"W along said South line, 1125.71 feet to the Southwest corner of said Southeast 1/4 of Section 36; thence S89°39'50"W along the South line of the aforesaid Southwest 1/4 of Section 36, 22.27 feet to the Northwest corner of the Northeast 1/4 of Section 1, Town 4 North, Range 22 East, Town of Caledonia, Racine County, Wisconsin; thence continuing S89°39'50"W along said South line, 2049.83 feet to a point on the Easterly line of South Chicago Road (S.T.H. "32"), said Easterly line is 33.0 feet Easterly of (as measured at right angles to) the reference line described in Document No. 6669080; thence N44°36'55"W

along said Easterly line, 25.21 feet; thence continuing along said Easterly line and the arc of a curve to the right, 529.07 feet, radius of 1730.06 feet and a chord bearing N35°51'16"W, 527.01 feet; thence N89°39'50"E along South line of lands conveyed by Deed recorded on Reel 4709 of Deeds at Image 0663, 322.71 feet; thence N00°42'13"W along the East line of said Deed, 356.82 feet; thence S89°39'50"W along the North line of said Deed, 295.10 feet; thence N00°20'10"W along the East line of Certified Survey Map (C.S.M.) No. 1173, 134.00 feet; thence S89°39'50"W along the North line of said C.S.M. No 1173, 116.77 feet; thence N00°20'10"W, 25.00 feet; thence S89°39'50"W, 20.00 feet; thence S00°20'10"E, 25.00 feet; thence S89°39'50"W along the North line of said C.S.M. No. 1173, 49.65 feet to a point on the aforesaid Easterly line of South Chicago Road (S.T.H. "32"); thence Northwesterly along said Easterly line and the arc of a curve to the right, 289.09 feet, radius of 1730.06 feet and a chord bearing N05°08'04" W, 288.75 feet; thence N89°40'13"E along the South line of lands conveyed by Deed recorded on Reel 3975 of Deeds, at Image 1278, 403.69 feet; thence N01°27'03"E along the East line of said Deed, 100.05 feet; thence S89°40'13"W along the North line of said Deed, 189.75 feet; thence N06°26'53"E along the East line of lands conveyed by Deed recorded in Volume 118 of Deeds at page 607, 204.93 feet; thence S89°40'13"W along the North line of said Deed, 214.50 feet to a point on the aforesaid Easterly line of South Chicago Road; thence Northeasterly along said easterly line and the arc of a curve to the right, 142.66 feet, radius of 1730.06 feet and a chord bearing N12°07'05"E, 142.62 feet; thence continuing along said Easterly line, N14°28'49"E, 367.90 feet; thence continuing along said Easterly line and the arc of a curve to the left, 611.60 feet, radius of 3307.05 feet and a chord bearing N09°10'56"E, 610.73 feet to a point on the South line of East Elm Road; thence N89°40'36"E along said South line, 726.76 feet; thence S00°42'24"E along the West line of lands conveyed by Deed in Reel 630 of Deeds at image 1338-1339, 363.00 feet; thence N89°40'36"E along the South line of said Deed, 900.00 feet; thence N00°42'24"W along the East line of said Deed, 363.00 feet to a point on the aforesaid South line of East Elm Road; thence N89°40'36"E along said South line, 684.93 feet to the point of beginning. Containing 171.5600 acres (7,473,155 Sq. Ft.) more or less of land. Subject to covenants, conditions, restrictions and easements of record.

WHEREAS, the Plan Commission reviewed the application and recommended that the Conditional Use Permit be authorized and issued; and

WHEREAS, the Common Council held a public hearing on said application on June 3, 2003, at which time all interested parties appeared and were heard; and

WHEREAS, the Plan Commission had recommended that the application for issuance of the Conditional Use Permit be approved and authorized subject, however, to the imposition of certain conditions and restrictions upon the construction, location and operation of this Conditional Use and which conditions and restrictions are incorporated by reference into the Conditional Use Permit; and

WHEREAS, following said public hearing and with a recommendation from the Plan Commission, the Common Council is of the opinion that the best interests of the City would be served if the Conditional Use Permit was approved and authorized for the lands hereinabove described, subject, however, to the imposition of certain conditions and restrictions on the design, construction, location and operation of the Conditional Use.

NOW, THEREFORE, the Common Council of the City of Oak Creek does hereby ordain as follows:

SECTION 1: To promote the general welfare, public safety and general planning within the City of Oak Creek, the Building Commissioner is hereby authorized to a issue a Conditional Use Permit for power generation, transmission and distribution facilities in the M-1 Manufacturing District, which shall include the aforementioned conditions and restrictions.

SECTION 2: The Conditional Use is subject to the aforementioned conditions and restrictions on the design, location, construction and operation of the M-1 Conditional Use for power generation, transmission and distribution.

SECTION 3: All ordinances or parts of ordinances and Zoning District Maps made a part of Chapter 17 of the Municipal Code of the City of Oak Creek in conflict herewith are hereby repealed.

SECTION 4: The several sections of this ordinance are declared to be severable. If any section shall be declared, by a decision of a court of competent jurisdiction, to be invalid, such decision shall not affect the validity of other provisions of this ordinance.

SECTION 5: The approval and authorization of the issuance of a Conditional Use Permit for power generation, transmission and distribution shall take place contemporaneously with the enactment of this ordinance and shall take effect immediately upon its passage and publication.

Passed and adopted this 3 day of June, 2003.

/s/ Elizabeth J. Kopplin
President, Common Council

Approved this 4 day of June, 2003

/s/ Richard R. Bolender
Mayor

ATTEST:

/s/ Beverly A. Buretta
City Clerk

VOTE: Ayes 6 Noes 0

City of Oak Creek - Conditional Use Permit ("CUP")

Conditions and Restrictions

Owner: Wisconsin Energy Corporation
Property Address: 4801 Elm Road
Tax Key Number: 965-9999 et al.
Conditional Use: Power generation, transmission, distribution, and usual and customary accessory uses

Approved by Plan Commission: May 13, 2003
Approved by Common Council: June 3, 2003[1]

1. OWNER AND LEGAL DESCRIPTION OF PROPERTY

A. The Owner of the property and applicant for this conditional use permit is Wisconsin Energy Corporation or its subsidiaries (the "Owner").

B. The legal description of the property subject to this conditional use permit is as follows (the "Property")

Area "A"

Being part of the Northwest 1/4 and the Northeast Fractional 1/4 of Section 36, Town 5 North, Range 22 East and the Northwest Fractional 1/4 of Section 31, Town 5 North, Range 23 East, City of Oak Creek, Milwaukee County, Wisconsin, bounded and describes as follows:

Commencing at the Northwest corner of the aforesaid Northeast Fractional 1/4 of Section 36; thence N89°49'27'E along the North line of said Northeast Fractional 1/4 of Section 36, 2199.57 feet to a point on the East line of East Oakwood Road as delineated by the aforesaid City of Oak Creek, said point also being a meander corner on said North line and the point of beginning; thence N89°49'27"E along the North line of the aforesaid Northeast Fractional 1/4 of Section 36, 255.1 feet more or less to the Ordinary High Water Mark (OHWM) of the Westerly boundary of Lake Michigan as delineated by the Wisconsin Department of natural Resources in March of 2002; thence Southeasterly along said OHWM, 3213.1 feet more or less to the South line of the aforesaid Northwest Fractional 1/4 of Section 31; thence S89°11'23"W along said South line, 857.7 feet more or less to a point on the East line of East Elm Road as delineated by the aforesaid City of Oak Creek, said point also being a meander corner on the South line of the aforesaid Northwest Fraction 1/4 of Section 31; thence S89°11'23"W along said South line, 702.85 feet to the Southeast corner of the aforesaid Northeast Fractional 1/4 of Section 36; thence S89°44'16"W along the South line of the said Northeast Fractional 1/4 Section 36, 2389.50 feet to a point on the Easterly line of the Chicago and North Western Transportation Company right-of-way; thence N21°17'33"W along said Easterly line, 2803.75 feet to an iron pipe found and a point on the South line of the aforesaid East Oakwood Road; thence N89°49'19"E along said South line, 194.06 feet to the Westerly line of Lot 1, Certified Survey Map (C.S.M.) No. 5261; thence S21°17'33"E along said Westerly line, 911.31 feet to an iron rod found; thence N89°46'47"E along the South line of said Lot 1, 366.42 feet to a iron rod found; thence N00°40'16"W along the East line of said Lot 1 and the West line of Lot 2, C.S.M. No. 88, 822.89 feet to a point on the South line of the aforesaid East Oakwood Road, said point also being the Northwest corner of Lot 2, Certified Survey Map No. 88; thence N89°49'27"E along said South line, 528.00 feet to an iron pipe found; thence N00°40'16"W along said South line, 27.00 feet; thence N89°49'27"E along said South line, 1539.27 feet to a point on the aforesaid East line of East Oakwood Road; thence N00°10'33"W along said East line, 33.00 feet to the point of beginning, expecting the Southerly 33 feet West of the meander corner dedicated for road purposes, together with that part of the aforesaid Northeast Fractional 1/4 Section 36 and that part of the aforesaid Northwest

[1] City of Oak Creek, Ordinance No. 2251

Fractional 1/4 of Section 31 lying East of the aforesaid meander lines and West of the Westerly boundary of Lake Michigan. Containing 193.8592 acres (8,444,507 Sq. Ft.) more or less of land. Subject to riparian rights, covenants, conditions, restrictions and easements of record.

Area "B"

Being part of the Southeast 1/4 Section 36, Town 5, Range 22 East and the Southwest Fractional 1/4 of Section 31, Town 5 North, Range 23 East, City of Oak Creek, Milwaukee County, Wisconsin, bounded and described as follows:

Beginning at the Northeast corner of the aforesaid Southeast 1/4 of Section 36; thence N89°11'23"E along the North line of the aforesaid Southwest Fractional 1/4 of Section 31, 702.85 feet to a meander corner on said North line; thence N89°11'23"E along the North line of the aforesaid Southwest Fractional 1/4 of Section 31, 857.7 feet more or less to the Ordinary High Water Mark (OHWM) of the Westerly boundary of Lake Michigan as delineated by the Wisconsin Department of Natural Resources in March of 2002; thence Southeasterly along said OHWM, 4539.9 feet more or less to the South line of the aforesaid Southwest Fractional 1/4 of Section 31; thence S89°12'43"W along said South line, 679.7 feet more or less to a meaner corner on the South line of the aforesaid Southeast Fractional 1/4 of Section 31; thence S89°12'43"W along said South line, 1655.56 feet to the Southeast corner of the aforesaid Southeast 1/4 of Section 36; thence S89°13'29"W along the South line of said Southeast 1/4, 1346.79 feet to the Easterly line of the Chicago and North Western Transportation Company right-of-way; thence N21°17'33"W along said Easterly line, 750.00 feet; thence continuing along said Easterly line, N21°17'33"W, 100 feet; thence continuing along said Easterly line, N21°17'33"W, 2009.95 feet to a point on the North line of the aforesaid Southeast 1/4 of Section 36; thence N89°44'16"E along said North line, 2389.50 feet to the point of beginning, excepting the Northerly 33 feet West of the meander corner dedicated for road purposes, together with that part of the aforesaid Southwest Fractional 1/4 of Section 31 lying East of the aforesaid meander line and West of the Westerly boundary of Lake Michigan. Containing 241.3945 acres (10,515,143 Sq. Ft.) more or less of land. Subject to riparian rights, covenants, conditions, restrictions and easements of record.

Area "K"

Being part of the Southeast 1/4 and the Southwest 1/4 of Section 36, Town 5 North, Range 22 East, City of Oak Creek, Milwaukee County, Wisconsin, bounded and described as follows:

Commencing at the Northwest corner of the aforesaid Southeast 1/4 of Section 36; thence S00°42'13"E along the West line of said Southeast 1/4 of Section 36, 24.75 feet to a point on the North line of East Elm Road, said point also being the point of beginning; thence continuing on said West line of the Southeast 1/4 of Section 36 and said North line of East Elm Road, S00°42'13"E, 8.25 feet; thence continuing on said North line, N89°44'16"E, 143.35 feet to a point on the Westerly line of the Chicago and North Western Transportation Company right-of-way; thence S21°17'33"E along said Westerly line, 2793.51 feet to a point on the South line of said Southeast 1/4 of Section 36; thence S89°13'29"W along said South line, 1125.71 feet to the Southwest corner of said Southeast 1/4 of Section 36; thence S89°39'50"W along the South line of the aforesaid Southwest 1/4 of Section 36, 22.27 feet to the Northwest corner of the Northeast 1/4 of Section 1, Town 4 North, Range 22 East, Town of Caledonia, Racine County, Wisconsin; thence continuing S89°39'50"W along said South line, 2049.83 feet to a point on the Easterly line of South Chicago Road (S.T.H. "32"), said Easterly line is 33.0 feet Easterly of (as measured at right angles to) the reference line described in Document No. 6669080; thence N44°36'55"W along said Easterly line, 25.21 feet; thence continuing along said Easterly line and the arc of a curve to the right, 529.07 feet, radius of 1730.06 feet and a chord bearing N35°51'16"W, 527.01 feet; thence N89°39'50"E along South line of lands conveyed by Deed recorded on Reel 4709 of Deeds

at Image 0663, 322.71 feet; thence N00°42'13"W along the East line of said Deed, 356.82 feet; thence S89°39'50"W along the North line of said Deed, 295.10 feet; thence N00°20'10"W along the East line of Certified Survey Map (C.S.M.) No. 1173, 134.00 feet; thence S89°39'50"W along the North line of said C.S.M. No 1173, 116.77 feet; thence N00°20'10"W, 25.00 feet; thence S89°39'50"W, 20.00 feet; thence S00°20'10"E, 25.00 feet; thence S89°39'50"W along the North line of said C.S.M. No. 1173, 49.65 feet to a point on the aforesaid Easterly line of South Chicago Road (S.T.H. "32"); thence Northwesterly along said Easterly line and the arc of a curve to the right, 289.09 feet, radius of 1730.06 feet and a chord bearing N05°08'04" W, 288.75 feet; thence N89°40'13"E along the South line of lands conveyed by Deed recorded on Reel 3975 of Deeds, at Image 1278, 403.69 feet; thence N01°27'03"E along the East line of said Deed, 100.05 feet; thence S89°40'13"W along the North line of said Deed, 189.75 feet; thence N06°26'53"E along the East line of lands conveyed by Deed recorded in Volume 118 of Deeds at page 607, 204.93 feet; thence S89°40'13"W along the North line of said Deed, 214.50 feet to a point on the aforesaid Easterly line of South Chicago Road; thence Northeasterly along said easterly line and the arc of a curve to the right, 142.66 feet, radius of 1730.06 feet and a chord bearing N12°07'05"E, 142.62 feet; thence continuing along said Easterly line, N14°28'49"E, 367.90 feet; thence continuing along said Easterly line and the arc of a curve to the left, 611.60 feet, radius of 3307.05 feet and a chord bearing N09°10'56"E, 610.73 feet to a point on the South line of East Elm Road; thence N89°40'36"E along said South line, 726.76 feet; thence S00°42'24"E along the West line of lands conveyed by Deed in Reel 630 of Deeds at image 1338-1339, 363.00 feet; thence N89°40'36"E along the South line of said Deed, 900.00 feet; thence N00°42'24"W along the East line of said Deed, 363.00 feet to a point on the aforesaid South line of East Elm Road; thence N89°40'36"E along said South line, 684.93 feet to the point of beginning. Containing 171.5600 acres (7,473,155 Sq. Ft.) more or less of land. Subject to covenants, conditions, restrictions and easements of record.

C. A Property survey, sealed by a professional surveyor registered in the state of Wisconsin, shall be provided to the City by the Owner by January 1, 2004.

2. DEFINITIONS

A. "Commencement of Construction (COC)" is defined in Wis. Stats. s. 196.49(1)(b).
B. "Commercial Operation Date (COD)" is defined as the day that an electric generating unit begins commercial operation as defined by the Public Service Commission.
C. "Elm Road Generating Station (ERGS)" is defined as the two (2) supercritical pulverized coal electric generating units and one (1) integrated gasification combined-cycle electric generating unit proposed in the Owner's application to the Public Service Commission assigned Docket No. 05-CE-130.
D. "Oak Creek Power Plant (OCPP)" is defined as the five (5) existing (as of May 2003) electric generating units owned by Owner affiliate Wisconsin Electric Power Company, located in the City of Oak Creek.

3. GENERAL PLANS AND EASEMENTS

A. The following plans for the area affected by the conditional use shall be submitted to or approved by the City as outlined below. The plans and their contents are as follows:

1) An Initial Property Development and Construction Laydown Plan Sheet shall be submitted to the City for ERGS Units 1 and 2 at least 2 months prior to COC of ERGS Units 1 and 2 and for EGRS Unit 3 at least 2 months prior to COC of ERGS Unit 3. The plan shall include at least the following:
   a) scale of 1 inch = 200 feet covering the entire Property
   b) toe of slope positions and heights of screening berms
   c) property lines, setbacks, and easements
   d) electric, water, sewer, telephone, and other utility line easements and corridors

e) footprints, heights, and square footage of structures
f) material storage areas
g) construction trailers
h) driveways with traffic flow arrows
i) parking areas
j) vegetative cover areas
k) paved areas
l) fencing heights and type
m) lighting positions and directions in accordance with Section 17.0808 of the Municipal Code at:
   i) roadways
   ii) construction storage/laydown areas
   iii) Property entrance points
n) note requiring that all lighting be directed away from the Oakview #3 and Barton Oaks Subdivisions
o) security facilities
p) fire water supply line and hydrant locations
q) land and water loading and unloading berths

2) A Final Property Development Plan Sheet shall be submitted to the City for ERGS Units 1 and 2 at least 6 months prior to COD of either ERGS Units 1 or 2, and at least 6 months prior to COD of ERGS Unit 3. The plan shall include at least the following:
   a) scale of 1 inch = 200 feet covering the entire Property
   b) 5-foot topographic contours showing final grading
   c) property lines, setbacks, and easements
   d) electric, water, sewer, telephone, and other utility line easements and corridors
   e) footprints, heights, and square footage of structures
   f) material storage areas
   g) driveways with traffic flow arrows
   h) parking areas
   i) vegetative cover areas
   j) drainage ditches, retention basins, detention basins, wetlands, and surface water flow arrows
   k) paved areas
   l) fencing heights and type
   m) lighting positions and directions in accordance with Section 17.0808 of the Municipal Code at:
      i) roadways
      ii) entrance points
   n) a note requiring that all lighting be directed away from the Oakview #3 and Barton Oaks Subdivisions
   o) security facilities
   p) fire water supply line and hydrant locations
   q) land and water loading and unloading berths
   r) location of signage fronting Oakwood Road, Elm Road, and Highway 32

3) An Initial Landscaping Plan covering the area between the Construction Setback Line A and the boundary of the Property nearest to the Oakview #3 or Barton Oaks Subdivisions depicted on Exhibit A attached hereto shall be submitted to the City prior to COC of ERGS Units 1 and 2 for approval by the Plan Commission. Failure of the Plan Commission to approve this plan shall not prohibit or otherwise inhibit construction on the Property. A Final Landscaping Plan, covering the same area shall be submitted to the City within 30 months after COC of ERGS Units 1 and 2 for approval by the Plan Commission. The plans of any portion of the Oak Creek South Ash Landfill or the Oak Creek North Ash Landfill may also be subject to approval of the Department of Natural Resources and shall include at least the following:
   a) plan sheet that includes the following:
      i) scale of 1 inch = 200 feet covering the entire Property

ii) 5-foot topographic contours showing grading
iii) property lines
iv) driveways with traffic flow arrows
v) parking areas
vi) vegetative cover areas
vii) drainage ditches, retention basins, detention basins, wetlands, and surface water flow arrows
viii) paved areas
ix) fencing heights and type
x) wetlands and greenspace
xi) groundcover
xii) berms
xiii) storage areas

b) number, initial size, mature size and types of plantings and seeding
c) landscape maintenance plan
d) signage, driveway, and planting details
e) schedule of landscaping activities which shall include plans to complete the screening vegetation along the following areas within 18 months of COC.
   i) north-facing slope of the Oak Creek South Ash Landfill along Elm Road from Hwy 32 east to the railroad tracks
   ii) west-facing slope of the Oak Creek South Ash Landfill along Hwy 32 from Elm Road south to County Line Road
   iii) any berm(s) to be located from the northeast corner of the Oak Creek South Ash Landfill to Elm Road near the Elm Road/railroad track intersection
   iv) any berm(s) to be located east of the railroad tracks and north of the Proposed Main Access Road as labeled on Exhibit A

4) A Plan for the Visitor's Center building and surrounding grounds shall be submitted to the City at least 3 months prior to start of construction of the Visitor Center, for approval by the Plan Commission. The plan shall include at least the following:
   a) architectural elevations
   b) building floor plans and elevations
   c) materials of construction
   d) public access plan to the Lake Michigan water front in compliance with Section 17.0328 of the Municipal Code including:
      i) lakefront access
      ii) preservation areas
      iii) recreational trails
      iv) fishing pier
   e) parking requirements in accordance with Section 17.0403 of the Municipal Code
   f) driveway approaches in compliance with all the standards set forth in Chapter 6 of the Oak Creek Municipal Code
   g) parking areas shall be lighted in accordance with Section 17.0808 of the Municipal Code
   h) landscaping in accordance with Sections 17.1010 of the Municipal Code

5) An Initial Grading, Drainage and Stormwater Management Plan shall be submitted to the City at least 2 months prior to the COC. The drainage and stormwater portion of the plan shall meet the intent of Sec.s 13.100 through 13.114 of the Municipal Code, except as authorized by the City Engineer. The Plan Commission shall approve the initial grading portion of the plan. Failure of the Plan Commission to approve this portion of the plan shall not prohibit or otherwise inhibit construction on the Property. A Final Grading, Drainage and Stormwater Management Plan shall be submitted to the City within 6 months of COD. The drainage and stormwater portion of the plan shall meet the intent of Sec.s 13.100 through 13.114 of the Municipal Code, except as authorized by the City Engineer. The Plan Commission shall approve the final grading portion of the plan. Nothing herein shall be construed to require the Owner to do anything inconsistent with any state or federal regulation. The plans shall

include at least the following:

a) plan sheet that includes the following:
   i) scale of 1 inch = 200 feet covering the entire Property
   ii) 5-foot topographic contours showing final grading
   iii) property lines, setbacks, and easements
   iv) electric, water, sewer, telephone, and other utility line easements and corridors
   v) footprints, heights, and square footage of structures
   vi) material storage areas
   vii) driveways with traffic flow arrows
   viii) parking areas
   ix) vegetative cover areas
   x) drainage ditches, retention basins, detention basins, wetlands, and surface water flow arrows
   xi) paved areas
   xii) wetlands and greenspace
   xiii) storm sewers
   xiv) detention/retention basins, if needed
b) grading schedule
c) plan for slope texturing along the following areas:
   i) north-facing slope of the Oak Creek South Ash Landfill along Elm Road from Hwy 32 east to the railroad tracks
   ii) west-facing slope of the Oak Creek South Ash Landfill along Hwy 32 from Elm Road south to County Line Road
   v) any berm(s) to be located from the northeast corner of the Oak Creek South Ash Landfill to Elm Road near the Elm Road/railroad track intersection
   vi) any berm(s) to be located east of the railroad tracks and north of the Proposed Main Access Road as labeled on Exhibit A
d) a Lakefront Shoreline and Bluff Stabilization Plan in compliance with Section 17.0328 of the Municipal Code shall be submitted to the City at least 2 months prior to COC for Plan Commission approval.
e) proper drainage shall be maintained with no standing water except at retention/detention basins and wetlands.

6) A Fire Protection and Emergency Management Plan for the Property for the Construction Period shall be submitted to the City for ERGS Units 1 and 2 at least 2 months prior to COC of ERGS Unit 1 and for ERGS Unit 3 at least 2 months prior to COC of ERGS Unit 3.

7) A Fire Protection and Emergency Management Plan for the Property for the Operations Period shall be submitted to the City for ERGS Units 1 and 2 at least 6 months prior to the COD for ERGS Units 1 and 2 and for ERGS Unit 3 at least 6 months prior to the COD for ERGS Unit 3.

B. If required by the City, public easements for telephone, sanitary sewer, storm sewer and watermain shall be granted by the Owner. Said easements shall be maintained free and clear of any buildings, structures, trees or accessory outdoor appurtenances. Shrubbery type plantings shall be permitted provided there is access to each of the aforementioned systems and their appurtenances.

4. CONSTRUCTION

A. Until all of the berms in this area have been constructed, construction excavation, earthmoving, grading, and landscaping activities north and west of the Construction Setback Line A depicted on Exhibit A, between the Construction Setback Line A and the boundary of the Property nearest to the Oakview #3 or Barton Oaks Subdivisions, shall be permitted on Saturday from September 1 through May 31 from 6:30 a.m. to 5:00 p.m., and throughout the year Monday through Friday from 6:30 a.m. to 7:00 p.m.. Until all of the berms in this area have been constructed, construction activities to the east and south of Construction Setback Line A shall be permitted anytime except from 3:30 a.m. on Sunday to 6:30 a.m.

on Monday. .

B. After the berms identified in Condition 4.A. are constructed, no construction excavation, earthmoving, grading, or equipment laydown activities shall occur north and west of the Construction Setback Line B depicted on Exhibit A, between Construction Setback Line B and the boundary of the Property nearest to the Oakview #3 or Barton Oaks Subdivisions. Construction activities to the east and south of Construction Setback Line B shall be permitted anytime.

C. Construction shifts for ERGS shall not begin between 7:01 a.m. and 8:30 a.m. and 3:31 p.m. and 5:00 p.m.

D. No idling of earth-moving equipment shall be allowed for periods of more than 15 minutes north and west of the Construction Setback Line A depicted on Exhibit A, between the Construction Setback Line A and the boundary of the Property nearest to the Oakview #3 or Barton Oaks Subdivisions.

E. All construction related parking shall be located on the Property.

F. The Owner or Owner's representative and the Owner's construction contractors shall meet with the Police Chief prior to COC to discuss construction security plans and procedures.

G. During construction activities, dust management shall be conducted in accordance with the applicable state law and regulations.

H. In addition to the construction mitigation measures listed above, the following additional measures shall be undertaken:
   1) In order to minimize construction dust, construction roads will be paved where practical. Wet dust suppression will be used on roads when weather conditions permit. A wheel cleaning method will be provided for construction vehicles. Vehicle material covers will be used where practical and appropriate vehicle speeds will be established.
   2) Construction noise mitigation measures will be accomplished through a muffler inspection program for all heavy construction vehicles. If there is a non-compliance with the noise requirements, a supplemental muffler program will be used if feasible to further reduce noise levels from some construction vehicles.

5. GRADING, BUILDING, AND SETBACKS

A. Except for general maintenance, landscaping, wetland mitigation, or construction of access roads, transmission lines, underground utilities, and utility tie-ins, no construction activities shall occur in the following areas also depicted on Exhibit A attached hereto:

   1) from the south Elm Road right-of-way, 400 feet south beginning at Highway 32 on the west and ending at the railroad tracks on the east, except for grading of the soil berm to be located from the northeast corner of the Oak Creek South Ash Landfill to a point near the Elm Road/railroad track intersection,

   2) from the east Highway 32 right-of-way, 300 feet east beginning at Elm Road on the north and ending at County Line Road on the south, and

   3) from the south Oakwood Road right-of-way, 500 feet south beginning at the railroad tracks on the west and ending at Lake Michigan on the east.

B. Any soil berm along Highway 32 between County Line Road and Elm Road shall have a final elevation no higher that 775 feet mean sea level. During the ERGS construction period, the height of this berm may extend to no greater than 790 feet mean sea level. If the berm is extended higher than elevation 775

feet mean sea level, the Owner will be allowed one year following written notice by the City, to lower the berm to the final elevation of 775 feet mean sea level. The general location of this berm is depicted on Exhibit A attached herein. Construction of any berm in this area shall begin at COC and be completed no later than 12 months after the COC.

C. Any soil berm along Elm Road between Highway 32 and the railroad tracks shall have a final elevation no higher than 775 feet mean sea level. During the ERGS construction period, the height of this berm may extend to no greater than 790 feet mean sea level. If the berm is extended higher than elevation 775 feet mean sea level, the Owner will be allowed one year following written notice by the City, to lower the berm to the final elevation of 775 feet mean sea level. The general location of this berm is depicted on Exhibit A attached herein. Construction of any berm in this area shall begin at COC and be completed no later than 12 months after the COC.

D. Unless disallowed by the Public Service Commission, the Department of Natural Resources or Office of Commissioner of the Railroad, a screening berm(s) shall be placed east of the railroad tracks and north of the Proposed Main Access Road, as depicted on Exhibit A, such that they form a horizontally continuous barrier between the ERGS plant construction area and the Oakview #3 or Barton Oaks subdivisions. The berm(s) shall have a final elevation of at least 730 feet mean sea level but no greater than 740 feet mean sea level. During the ERGS construction period, the height of this berm may extend to no greater than 750 feet mean sea level. If the berm is extended higher than elevation 740 feet mean sea level, the Owner will be allowed one year following written notice by the City, to lower the berm to the final elevation of 740 feet mean sea level. Construction of this berm(s) shall begin at COC and be completed no later than 12 months after the COC.

E. A soil berm shall be placed from the northeast corner of the Oak Creek South Ash Landfill to a point near the Elm Road/railroad track intersection, as depicted on Exhibit A. The berm shall have a final elevation of at least elevation 730 feet mean level but no greater than 740 feet mean sea level. During the ERGS construction period, the height of this berm may extend to no greater than 750 feet mean sea level. If the berm is extended higher than elevation 740 feet mean sea level, the Owner will be allowed one year following written notice by the City, to lower the berm to the final elevation of 740 feet mean sea level. along its entire length. Construction of this berm shall begin at COC and be completed no later than 12 months after the COC.

F. Sideslopes of perimeter soil berms facing Elm Road, Highway 32, Oakwood Road, and the Oakwood #3/Barton Oaks subdivisions shall be contoured showing variable elevations and vegetated with a slope no steeper than 3 horizontal to 1 vertical.

G. No excavated soils that are contaminated, other than those approved by the Department of Natural Resources, shall be placed between the Construction Setback Line A (depicted on Exhibit A) and the Property lines nearest to the Oakview #3 or Barton Oaks subdivisions.

6. MAINTENANCE AND OPERATION

A. Solid waste collection and recycling shall be the responsibility of the Owner.

B. Outdoor storage shall not be within the setbacks outlined in the Grading, Building, and Setbacks Section.

C. During operations, dust management shall be conducted in accordance with the Department of Natural Resources Construction and Operations air permit requirements.

7. SIGNS

A. All signs visible from public roads shall conform to the provisions of Sec. 17.0706 of the Municipal Code.

B. No signage shall be allowed on the stacks.

8. WATER SUPPLY

A. For City water supply requirements up to 1,000 gpm nominal for the Property, the owner will connect to the Owner's existing 12-inch water main on the Property.

B. For City water supply requirements in excess of 1,000 gpm nominal, the Owner shall be responsible for the cost to provide water main service to the Property, as mutually determined and agreed upon by the Owner, City Engineer, and Water and Sewer Utility, in accordance with the City's "Master Plan for Water Supply Service."

9. SANITARY SEWER

A. For up to 200 gpm nominal of wastewater discharge to the City sanitary sewer mains from the Property, the Owner will connect to the Owner's existing 12-inch sanitary sewer discharge main on the Property.

B. For wastewater discharge in excess of 200 gpm nominal, the Owner shall be responsible for the cost to provide the sanitary sewer service to the Property, as mutually determined and agreed upon by the Owner, City Engineer, and Water and Sewer Utility, in accordance with the City's "Master Plan for Water Sanitary Sewer Service."

C. The Owner agrees that any wastewater or surface waters discharged from the Property shall not have a deleterious effect on the City's sanitary sewer system or surface waters.

10. TRAFFIC, ROADWAYS, AND ACCESS

A. The Owner shall repave Oakwood Road from Highway 32 to a terminating cul de sac, consistent with the City Design Manual. After a portion of Oakwood Road is vacated by the City, the Owner shall be responsible for the physical removal of the vacated portion of Oakwood Road , or its reconstruction as a private road. The Owner will not object to such vacation. The Owner shall dedicate any additional right-of-way needed for the cul de sac. All work shall be completed prior to the opening of the Visitor's Center.

B. The City shall design and construct a connector road from the new terminus of Elm Road to its closest frontage road, consistent with the City Design Manual. The Owner shall dedicate any additional right-of-way needed for the connector road.

C. The Owner shall construct a secondary access road off of Oakwood Road which shall connect to an existing roadway within the Property which ultimately connects to Highway 32. The Owner agrees to complete construction of this access road within 24 months of COC, or the opening of the Visitor's Center, whichever is first. Thereafter, the City shall commence vacation proceedings for a portion of Elm Road. Upon vacation of a portion of Elm Road the Owner shall be responsible for physical removal of any vacated portion of Elm Road. All physical removal of any vacated portion of Elm Road shall be completed within 2 months of commencement of its removal. The Owner will not object to such vacation. Unless disallowed by the Public Service Commission, the Department of Natural Resources or Office of Commissioner of the Railroad, the Owner will complete construction of the proposed main access road railroad crossing as shown on Exhibit A within 12 months of vacating Elm Road.

D. All construction worker and delivery vehicle access to the Property shall be directly off of Highway 32 on to the Property.

E. Within 12 months of the COC, the primary access point to the Property for operations personnel shall be directly from Highway 32.

F. In the event of an emergency that prohibits access from Highway 32, all traffic essential to the operations shall have the capability to access the Property from Oakwood Road.

G. Visitor Center access shall be from Oakwood Road. Access to the Property for the construction of the Visitor Center and its access road may be from Oakwood Road.

H. The Owner shall conduct a traffic study for Highway 32 from County Line Road to Highway 100 and be responsible for the installation of traffic control signals and turning lanes if recommended by the study, subject to approval by Department of Transportation provided that the applicable governmental entity acquires any land required for such turning lanes. The Owner shall reimburse the City for any and all costs incurred in acquiring any land required for such turning lanes.

11. NOISE DURING OPERATIONS

A. During operations, when no construction activities occur, noise levels shall be determined at specified locations using specified protocols as defined below. The monitoring locations, limits, monitoring and compliance protocols, reporting protocols, and non-compliance penalty are as follows.

1) Noise monitoring stations consisting of continuous noise monitoring devices and recorders shall be installed by the Owner by the COD of the last approved ERGS Unit and maintained by the Owner during the operational life of the ERGS to monitor noise emissions from the Property. The monitoring stations shall be installed at the locations described below and depicted on Exhibit A hereto attached and as agreed to by the City and the Owner. The monitoring stations shall be accessible to the Owner and City for purposes of data recording, quality assurance, quality control, and verification of results. The data collected shall include the 10 minute L_{eq}, and the 1 hour L_{eq}, L_{max}, L_1, L_{10}, L_{50}, and L_{90} for dbA and dbC, plus a full system calibration signal. All data shall be transmitted electronically to the Owner at the end of each day in a format agreed to by the City and the Owner. The Owner shall provide the City electronic access to the data on a real-time basis, in a format agreed to by the City and Owner. All costs to procure, install, and maintain the monitoring station shall be paid by the Owner. The continuous noise monitoring devices are not for assessing compliance.

Station Location	Description
1	East of Haas Park and north of Elm Road
2	Approximately half way between ERGS Unit 1 and 2 and monitoring location No. 1.

2) The noise emissions associated with operations activity on the Property, measured at monitoring location No. 1, must be less than or equal to the following dBA and dBC values.

dBA Limit (10 min.L_{eq})	dBC Limit (10 min.L_{eq})
50	60

3) Noise measurements shall be made in accordance with the methodology in the latest version of the American National Standards Institute (ANSI) S12.9/Part 1 and Part 3. The measurements shall be a 10 minute time-weighted average of dBA and dBC readings, exclusive of intrusive events, and shall be verified by both the City and Owner. The Owner shall be in compliance with the CUP if the measurements at location No. 1 do not exceed the limits designated above. The Owner shall be considered out of compliance with the CUP if the Owner or City records an exceedance of any limit (manual measurement required) and the Owner has been notified of an exceedance of any limit by the City and fails to restore the condition to a level below the compliance limit within 5 days thereafter. The 5 days is considered a grace period for the Owner to restore the condition to a level below the compliance limit. Noise emissions from safety/relief valves and during start-up shall be excluded from the noise compliance requirements.

4) Noise levels are to be measured by an engineer, technician, or acoustical consultant qualified by experience or training.

5) The noise measuring instrumentation shall comply with ANSI S1.4, ANSI S1.43, and ANSI S1.40. The noise level meter shall be a "Type 1 Precision" model.

6) If the Owner is considered out of compliance with the CUP, a fine of $1,000 per day shall be imposed against the Owner. The penalty shall begin on the first day after the City notifies the Owner that the compliance limit was not met.

12. NOISE DURING CONSTRUCTION

A. Noise levels during the construction of ERGS will be determined at a specified location using specified protocols as defined below. Noise limits are set for all ERGS construction activities on the Property. The monitoring location, limits, monitoring and compliance protocols, reporting protocols, and non-compliance penalties are as follows.

1) A noise monitoring station consisting of continuous noise monitoring device and recorder shall be installed by the Owner by the COC and maintained by the Owner during the period of construction of ERGS to monitor noise emissions from the Property. The monitoring station shall be installed at the location described below and depicted on Exhibit A hereto attached and as agreed to by the City and the Owner. The monitoring station shall be accessible to the City for purposes of data recording, quality assurance, quality control, and verification of results. The data collected shall include the 1 hour L_{eq}, L_{max}, L_1, L_{10}, L_{50}, and L_{90} for dbA, plus a full system calibration signal. All data shall be transmitted electronically to the Owner at the end of each day in a format agreed to by the City and the Owner. The Owner shall provide the City electronic access to the data on a real-time basis, in a format agreed to by the City and Owner. For the first 12 months after COC, the Owner shall submit monthly reports interpreting the noise monitoring data to the City. Thereafter, the Owner shall submit quarterly reports interpreting the noise monitoring data to the City. All costs to procure, install, and maintain the monitoring station shall be paid by the Owner.

Station Location	Description
1	East of Haas Park and north of Elm Road

2) To be in compliance with the CUP, the noise emissions associated with construction activity on the Property, measured at monitoring station No. 1, must be less than or equal to the following dBA value at the specified times.

a) Until completion of construction of the berms between the Construction Setback Line A and the boundary of the Property nearest to the Oakview #3 or Barton Oaks Subdivisions:

Monday – Friday

Hours	dBA Limit (1 Hour L_{50})
6:30 AM to 7:00 PM	None
7:00 PM to Midnight	63
Midnight to 6:30 AM	63

Saturday (September 1 through May 31)

Hours	dBA Limit (1 Hour L_{50})
6:30 AM to 5:00 PM	None
5:00 PM to Midnight	63
Midnight to 6:30 AM	63

Saturday (June 1 through August 31)

Hours	dBA Limit (1 Hour L_{50})
Anytime	63

Sunday

Hours	dBA Limit (1 Hour L_{50})
Anytime	63

b) After completion of construction of the berms between the Construction Setback Line A and the boundary of the Property nearest to the Oakview #3 or Barton Oaks Subdivisions, but prior to substantial completion of the excavation, earthmoving, and grading activities:

Monday – Friday

Hours	dBA Limit (1 Hour L_{50})
6:30 AM to 7:00 PM	75
7:00 PM to Midnight	63
Midnight to 6:30 AM	63

Saturday

Hours	dBA Limit (1 Hour L_{50})
6:30 AM to 5:00 PM	75
5:00 PM to Midnight	63
Midnight to 6:30 AM	63

Sunday

Hours	dBA Limit (1 Hour L_{50})
Anytime	63

c) After substantial completion of the excavation, earthmoving, and grading activities:

Monday – Friday

Hours	dBA Limit (1 Hour L_{50})
6:30 AM to 7:00 PM	75
7:00 PM to Midnight	55
Midnight to 6:30 AM	55

Saturday

Hours	dBA Limit (1 Hour L_{50})
6:30 AM to 5:00 PM	63
5:00 PM to Midnight	55
Midnight to 6:30 AM	55

Sunday

Hours	dBA Limit (1 Hour L_{50})
6:30 AM to 5:00 PM	63
5:00 PM to Midnight	55
Midnight to 6:30 AM	55

3) Noise measurements shall be made in accordance with the methodology in the latest version of the American National Standards Institute (ANSI) S12.9/Part 1 and Part 3. The measurements shall be a 1 hour L_{50} dBA readings, exclusive of intrusive events. The Owner shall be in compliance with the CUP if the measurements at location No. 1 do not exceed the limits designated above. The Owner shall be considered out of compliance with the CUP if the Owner or City records an exceedance of noise emissions from construction activity on the Property of any limit outlined above which has been substantiated by the City or a citizen complaint related to the exceedance, and the Owner fails to restore the condition to a level below the compliance limit, within 5 days thereafter. The 5 days is considered a grace period for the Owner to restore the condition to a level below the compliance limit. Noise emissions from pile-driving, blasting, and other similar activities shall be excluded from the noise compliance requirements provided the Owner notifies the City and residents of the Barton Oaks and Oakview #3 subdivisions in writing at least 7 days prior to such activity.

4) Noise levels are to be measured automatically at the monitoring station. The monitoring station is to be maintained by an engineer, technician, or acoustical consultant qualified by experience or training.

5) The noise measuring instrumentation shall comply with ANSI S1.4, ANSI S1.43, and ANSI S1.40. The noise level meter shall be a "Type 1 Precision" model.

6) If the Owner is considered out of compliance with the CUP, a fine of $1,000 per day shall be imposed against the Owner. The penalty shall begin on the first day after the City notifies the Owner that the compliance limit was not met.

13. MISCELLANEOUS

A. The approval and execution of this permit shall confirm acceptance of the terms and conditions hereof by the Owner, and this permit, when recorded, shall run with said Property until revoked by the City, or terminated by mutual agreement of the City and the Owner, and their subsidiaries, related entities, successors and assigns.

B. As to ERGS, the Owner shall be responsible for, and indemnify the City against all claims, damages and costs associated with toxic, hazardous, flammable or combustible materials stored, kept upon or coming to or from the Property, and for the removal, confinement, neutralizing clean-up or remediation of such materials by persons, firms, agencies, departments, or companies specializing in such materials.

C. The Owner shall provide the City with a written report from a qualified expert of the impact of barge traffic on recreational uses of Lake Michigan. The Owner agrees to cooperate with the governing agency to mitigate any impact caused by such barge traffic.

D. Except as required by the Federal Aviation Administration, all lighting on the site during construction and operations activities shall be directed away from the Oakview #3 and Barton Oaks subdivisions.

E. The Owner shall be responsible for implementation of any plans included herein according to schedules that may be approved by the City.

14. INSPECTIONS AND PERMIT FEES

A. City inspections will be conducted in accordance with state and local law. The Owner will reimburse the City for any out-of-pocket expenses related to any required and authorized inspections to the extent that the City has jurisdiction to conduct such inspections. The City will consider utilizing the Owner's inspection reports in lieu of hiring an independent inspector.

15. PERMITTED USES

A. Power generation, transmission, and distribution

B. Usual and customary accessory uses to the above listed permitted uses including, the Visitor's Center, coal ash disposal facilities, and air and noise monitoring equipment and facilities.

16. TIME OF COMPLIANCE

A. The Owner shall begin installing or constructing the elements required in these conditions and restrictions for the conditional uses, upon receipt of the Certificate of Public Convenience and Necessity required by the Public Service Commission, the air and Chapter 30 Permits required by the Department of Natural Resources, and approvals required by the Owner for ERGS. This conditional use approval shall expire within 6 months after decommissioning of the last operating power generating unit on the Property.

17. COAL STORAGE AND HANDLING FACILITIES

A. If approved by the Public Service Commission and permitted by the Department of Natural Resources, all coal storage and handling facilities shall be located within the rail spur loop, approximately 2,000 feet southeast of the intersection of Elm Road and the railroad tracks in order to mitigate potential impacts to the residents of the Oakview #3 and Barton Oaks subdivisions.

18. OTHER REGULATIONS

A. Compliance with all other applicable State and Federal regulations not heretofore stated or referenced, is mandatory.

B. City and Owner agree that this CUP shall be, to the extent applicable under Wisconsin law, subject to the superintending authority of the State. Nothing herein shall preclude the City from challenging the State's authority.

19. CHANGES

A. Any substantial change to a condition or requirement outlined in this Conditional Use Permit, including but not limited to noise limits, must be presented to the Director of Community Development and the City Engineer for review. If the Director of Community Development or the City Engineer considers the change significant to the health and welfare of the City, the change must be approved by the Plan Commission. If the Director of Community Development and the City Engineer consider a change to be insignificant to the health and welfare of the City, they may approve the change.

B. The City and Owner reserve their rights to modify this agreement if any changes are made to the ERGS development plan by the Owner or a regulatory agency.

20. NOTIFICATIONS

A. Any notifications or notices related to this CUP by the City shall be directed to the Owner's local affairs representative, ERGS plant manager, and OCPP plant manager, or their designees. Any notifications or notices related to this CUP by the Owner shall be directed to the City's Director of Community Development.

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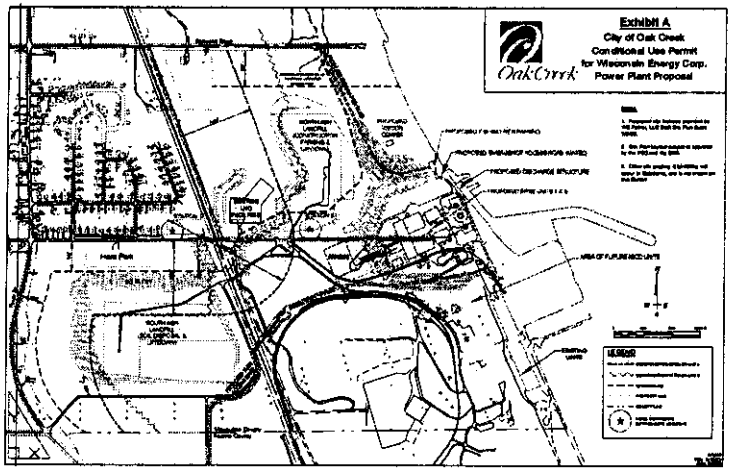
Exhibit A
City of Oak Creek
Conditional Use Permit
for Wisconsin Energy Corp.
Power Plant Proposal
Oak Creek
LEGEND