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

[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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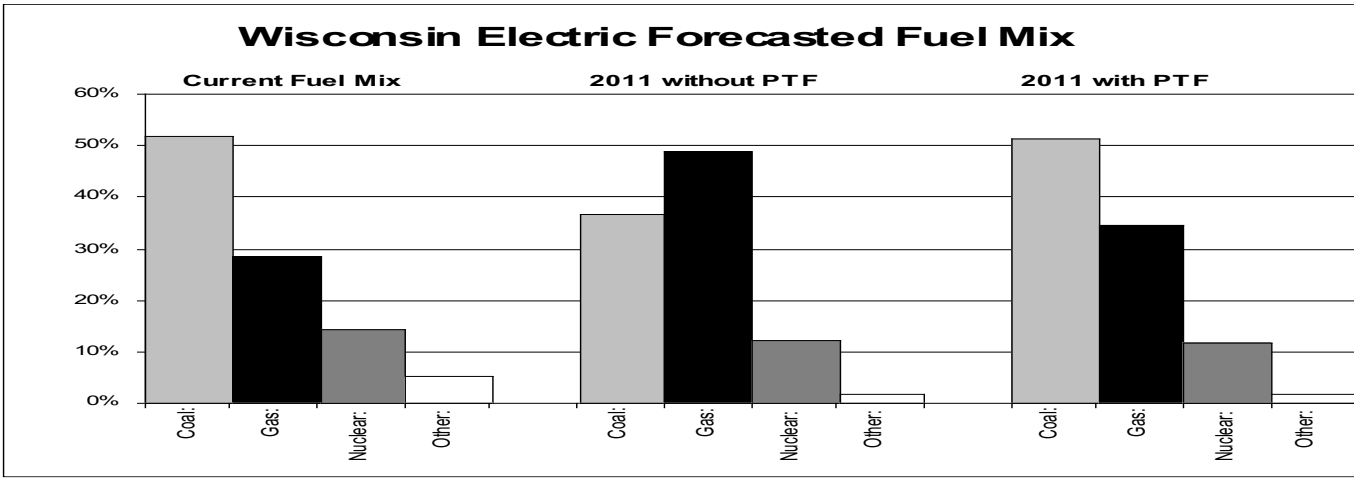
[17] It is expected that 100 MW of capacity from each of the three proposed coal-based units will be used by other Wisconsin energy providers, some of which may be investors in those units.

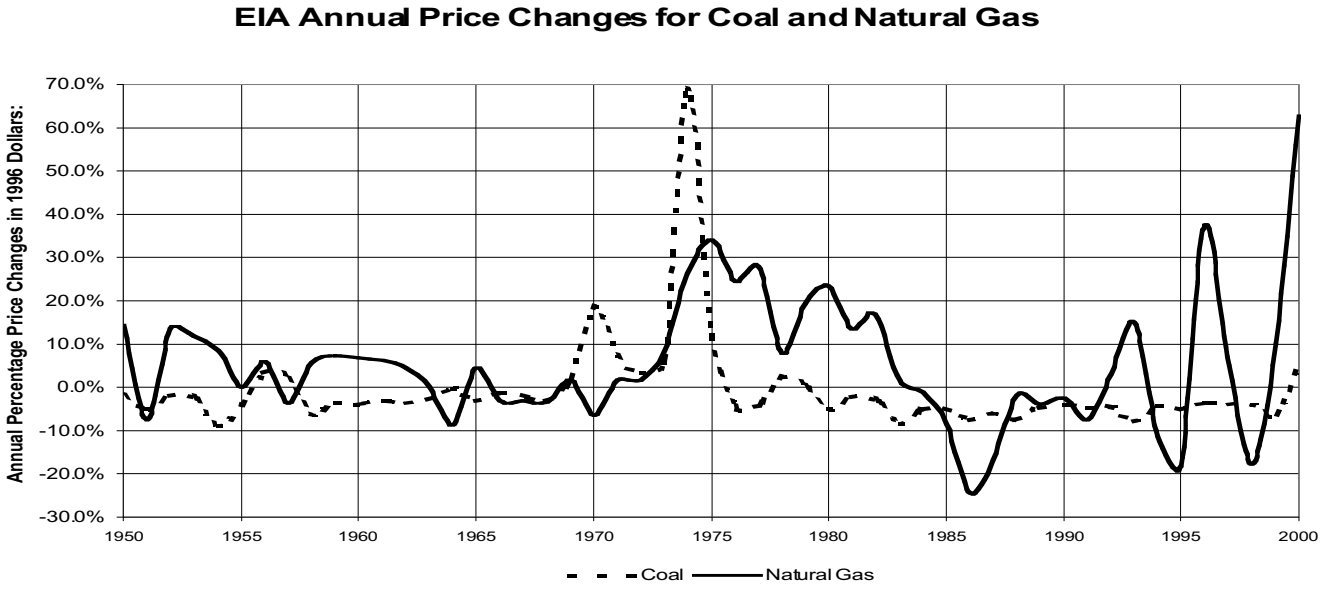
[18] "EGEAS" stands for "Electric Generation Expansion Analysis System." EGEAS is a computer program that is used to find the most economical means of meeting projected system loads by comparing the various options available. The inputs into the EGEAS model include forecasts of required energy and capacity, 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.

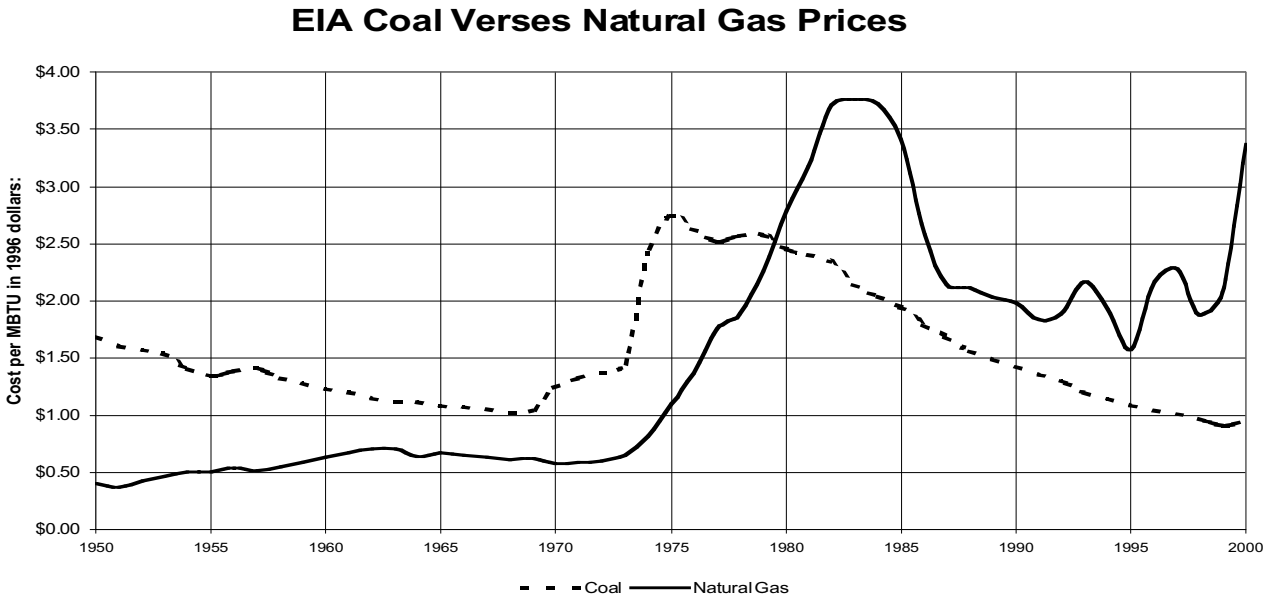
In addition, as the following diagram indicates,[20] without PTF the share of WE generation fueled by natural gas will rise significantly.



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.

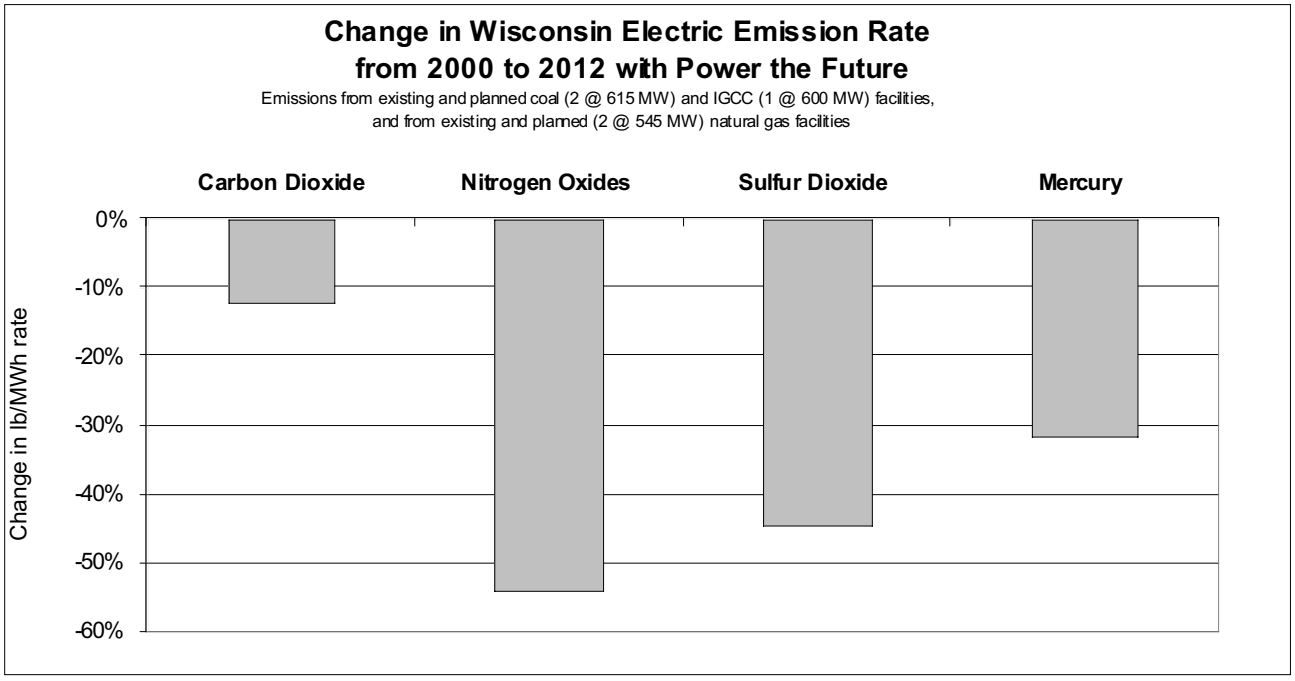
The most salient environmental characteristics of PTF are these:

- 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

[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 in addition to 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

[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

[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.

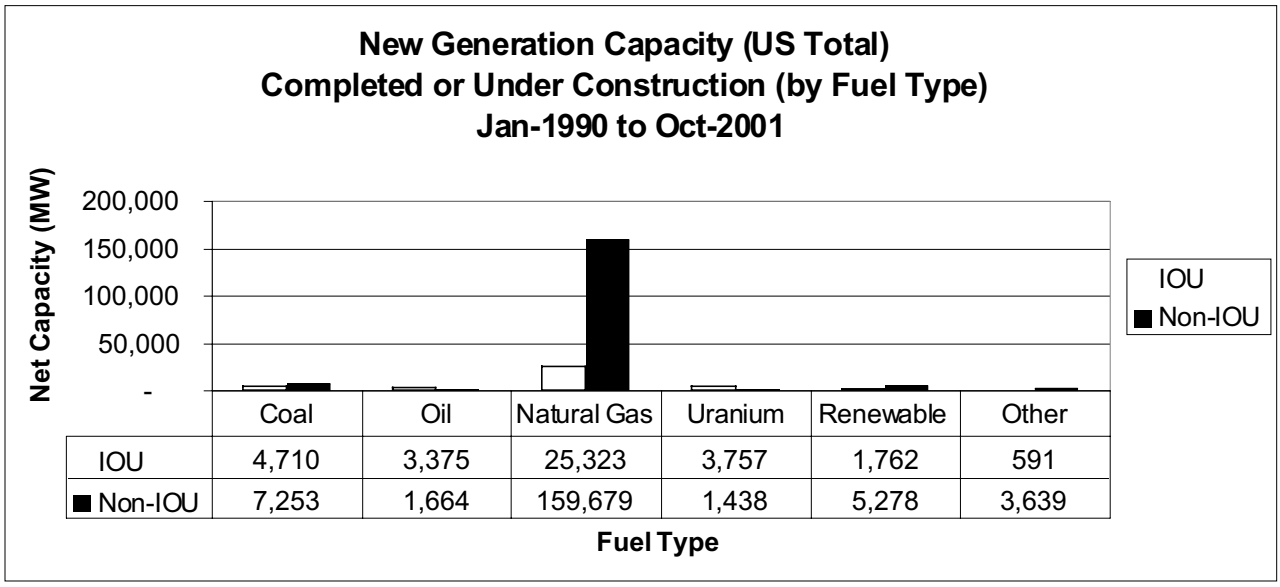
The Legislature and Governor have paved the way for PTF to use a "leased generation" structure to finance and build new power plants. 2001 Act 9 legislatively validates the leased generation approach while not replacing other approaches such as building within the utility itself, building utility-affiliated "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

[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.

[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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