

**APPLICATION FOR CERTIFICATE OF NEED**

**LAKEFIELD WIND PROJECT**

**Jackson County, Minnesota**

**DOCKET NO. \_\_\_\_\_**

**September 2, 2009**

**Applicant: Lakefield Wind Project, LLC**

**PUBLIC VERSION**

**TRADE SECRET DATA EXCISED**

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PUBLIC UTILITIES COMMISSION**

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Commissioner

**In the Matter of the Application of  
Lakefield Wind Project, LLC  
for a Certificate of Need**

**Docket No.** \_\_\_\_\_

**SUMMARY OF FILING**

Lakefield Wind Project, LLC (“LWP”)<sup>1</sup> files herewith an Application for a Certificate of Need (“CON”) pursuant to Minnesota Rules 7849.0200. LWP seeks to construct and operate a Large Energy Facility, as defined in Minnesota Statutes §§ 216B.2421, subd. 2 and 216B.243 (the “Lakefield Wind Project” or the “Project”).<sup>2</sup> LWP respectfully requests that the Public Utilities Commission approve its CON Application for up to a 201 MW Large Wind Energy Conversion System (“LWECS”), which will be located in Jackson County, Minnesota, and will allow LWP to provide energy and capacity to Indianapolis Power & Light (“IPL”), to help meet IPL’s, as well as society’s, renewable energy objectives and energy needs.<sup>3</sup> The proposed in-service date for the LWECS is no later than December 31, 2010. Denying this CON Application would deny LWP the opportunity to provide clean, low-cost energy to IPL, who would in turn be denied the opportunity to provide such energy to its customers, as well as the opportunity to

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<sup>1</sup> enXco Development Corporation is the sole member of LWP.

<sup>2</sup> The Project is a Large Wind Energy Conversion System as defined by Minnesota Statutes § 216F.01 (2006).

<sup>3</sup> LWP and IPL executed a Power Purchase Agreement (“PPA”) on June 22, 2009, by which IPL agreed to purchase 100% of the electricity produced by the Project.

fulfill its strategy to diversify its current generation assets with zero emission generation technology so as to mitigate the risk of possible regulation of greenhouse gas (“GHG”) emissions.

Petition to the  
Minnesota Public Utilities Commission  
For a Certificate of Need  
for the Lakefield Wind Project

Docket No. \_\_\_\_\_

September 2, 2009

## Trade Secret Justification

The proper treatment of confidential documents is governed by the Commission's September 1, 1999 revised Procedures for Handling Trade Secret and Privileged Data" ("Commission Procedures"). Those procedures provide that data that meets the definition of a "trade secret" under Minn. Stat. § 13.37 will be protected from disclosure. Commission Procedures at ¶¶ 1-2.

Trade Secret data is defined as data:

(1) that was supplied by the affected individual organization, (2) that is the subject of efforts by the individual or organization that are reasonable under the circumstances to maintain its secrecy, and (3) that derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.

The following is Applicant's description and justification for the classification and redactions:

### 1) Costs Incurred By the Applicant

Details of the costs incurred by the Applicant in constructing, operating, and maintaining the Project are Trade Secret Protected Information because the Applicant does not want to reveal these confidential details. The cost data is confidential and commercially sensitive information from which the Applicant and its competitors may derive economic value. The cost data has independent economic value to the Applicant from not being generally known or accessible by others who would obtain economic value from its use or disclosure. Trade Secret Protected Information is designated in **bold** and can be found on pages 28 to 29 of the Application.

As a result, the Applicant believes that the Trade Secret designations in the Certificate of Need Application fully satisfy the Commission Procedures.

**Application for Certificate of Need  
Lakefield Wind Project LLC  
Jackson County, Minnesota**

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Exhibit A	American Wind Energy Association, <i>Wind Project Database</i>
Exhibit B	American Wind Energy Association, <i>Annual Industry Rankings Demonstrate Continued Growth of Wind Energy in the United States</i>
Exhibit C	Northwest Economic Associates, <i>Assessing the Economic Development Impacts of Windpower</i>
Exhibit D	List of current members of the Midwestern Governors Association

- Exhibit E Windustry – Wind Easement Work Group, *Wind Energy Easements and Leases: Compensation Packages*
- Exhibit F Farm Industry News, *Wind Power Your Future*
- Exhibit G Minnesota Department of Commerce, *2004 Energy Policy and Conservation Report*
- Exhibit H Innovative Power Systems, *Commercial Power List*
- Exhibit I CNET News.com, *Full steam ahead for Nevada solar project*
- Exhibit J Green Institute, *Renewing Rock-Tenn: A Biomass Fuels Assessment for Rock-Tenn's St. Paul Recycled Paper Mill*
- Exhibit K Project Vicinity Map
- Exhibit L Project Location Map
- Exhibit M Preliminary Site Layout Map

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**Table 1: LEGF Certificate of Need Rule Cross-References**

Minnesota Rule	Required Information	Location in the Application	Exemption Requested
<b>7849.0120</b>	Criteria - Probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to Applicant, customers, people of MN and neighboring states	2.0	See specific subpart
A 1	Accuracy of the Applicant's forecast	2.2.1, 4.0	Yes
A 2	Effects of the Applicant's existing or expected conservation programs and state and federal conservation programs	6.0	No
A 3	Effects of promotional practices on energy demand	2.3.2	Yes
A 4	Ability of current and planned facilities, not requiring certificates of need, to meet future demand	2.2.1	No
A 5	Effect of proposed facility in making efficient use of resources	2.2.3	No
<b>7849.0120</b>	Criteria - A more reasonable and prudent alternative has not been demonstrated	2.0	See specific subpart
B 1	Appropriate size, type and timing compared to reasonable alternatives	2.2.2, 3.0	No
B 2	Cost of the facility and its energy compared to reasonable alternatives	2.2.2, 3.2.3	No
B 3	Effects of the facility on natural and socioeconomic environments compared to the effects of reasonable alternative	2.2.3, 2.3, 3.0	No
B 4	Expected reliability compared to reasonable alternatives	2.2.2, 3.0	No
<b>7849.0120</b>	Criteria - Project will provide benefits to society	2.0	See specific subpart
C 1	Relationship of the proposed facility, or suitable modification to overall state energy needs	2.2.3	No
C 2	Effects of the facility on natural and socioeconomic environments compared to the effects of not building	2.2.3	No
C 3	Effects of the facility or suitable modification in inducing future development	2.2.3, 2.3.3	No

<b>Minnesota Rule</b>	<b>Required Information</b>	<b>Location in the Application</b>	<b>Exemption Requested</b>
C 4	Social beneficial uses of the output of the facility, or suitable modification including its uses to protect or enhance environmental quality	2.2.3, 2.3.1	No
D	Proposed facility or suitable modification will not fail to comply with relevant policies, rules and regulations of other state, federal, local government agencies	2.2.1, 2.2.4, 3.7.4	No
<b>7849.0210</b>	Filing Fees and Payment Schedule	1.1.2	No
<b>7849.0240</b>	Need Summary and Additional Considerations	2.0	See specific subpart
Subpart 1	Need Summary - Summary of major factors justifying need for the facility	2.0, 2.1, 2.2	No
Subpart 2 A	Additional Considerations - Socially beneficial uses of the output of the facility, including to protect or enhance environmental quality	2.2.3, 2.3.1	No
B	Additional Considerations - Promotional activities that may given rise to the demand for the facility	2.3.2	Yes
C	Additional Considerations - Effects of facility in inducing future developments	2.3.3	No
<b>7849.0250</b>	Description of Proposed LEGF and Alternatives	3.0	See specific subpart
A 1	Description - Nominal generating capability and effects of economies of scale on the facility size and timing	3.1.1	No
A 2	Description - Anticipated operating cycle and annual capacity factor	3.1.2	No
A 3	Description - Type of fuel, reason for selection, projection of availability over life of the facility, and alternative fuels	3.1.3	No
A 4	Description - Anticipated heat rate of the facility	3.1.4	No
A 5	Description - Anticipated areas where facility will be located	3.1.5	No
B 1	Discussion of Alternatives - Purchased power	3.2.2.1	Yes
B 2	Discussion of Alternatives - Increased efficiency of existing facilities including transmission lines	3.2.2.2	Yes
B 3	Discussion of Alternatives - New transmission lines	3.2.2.3	Yes

<b>Minnesota Rule</b>	<b>Required Information</b>	<b>Location in the Application</b>	<b>Exemption Requested</b>
B 4	Discussion of Alternatives - New generating facilities of a different size and energy source	3.2	Yes
B 5	Discussion of Alternatives - Reasonable combinations of alternatives	3.2.3	No
C	Proposed Facility and Alternatives	3.3	Yes
C 1	Discuss - Capacity cost in current dollars/kilowatt	3.3.1	Yes
C 2	Discuss - Service life	3.3.2	Yes
C 3	Discuss - Estimated average annual availability	3.3.3	Yes
C 4	Discuss - Fuel costs in current dollars/kilowatt hour	3.3.4	Yes
C 5	Discuss - Variable operating and maintenance costs in current dollars/kilowatt hour	3.3.5	Yes
C 6	Discuss - Total cost in current dollars/kilowatt hour	3.3.6	Yes
C 7	Estimate - Effect on rates system wide and in MN	3.3.7	Yes
C 8	Efficiency - Expressed for a generating facility as the estimated heat rate	3.3.8	Yes
C 9	Major Assumptions - For providing information relating to Items 1-8, including projected escalation rates for fuel costs, operating and maintenance costs as well as projected capacity factors	3.3	Yes
D	Map Showing Applicant's System	3.6	Yes
E	Other Information - Relevant information about the proposed facility and alternatives necessary to determine need	Chapter 3 generally	Yes
<b>7849.0270</b>	Peak Demand and Electrical Consumption Forecast	4.0	Yes
Subpart 1	Scope - Application shall contain pertinent data concerning peak demand and annual electrical consumption within the Applicant's service area and system	4.1	Yes
Subpart 2	Content of Forecast	4.2	Yes
Subpart 3	Forecast Methodology	4.3	Yes
Subpart 4	Database for Forecasts	4.4	Yes

<b>Minnesota Rule</b>	<b>Required Information</b>	<b>Location in the Application</b>	<b>Exemption Requested</b>
Subpart 5	Assumptions and Special Information	4.5	Yes
Subpart 6	Coordination of Forecast with Other Systems	4.6	Yes
<b>7849.0280</b>	System Capacity	5.0	Yes
<b>7849.0290</b>	Conservation Programs	6.0	Yes
<b>7849.0300</b>	Consequences of Delay - Discuss anticipated consequences if proposed facility is delayed	7.0	Yes
<b>7849.0310</b>	Environmental Information - Provide environmental data in response to part 7849.0250, Item C or 7849.0260, Item C and information as requested in part 7849.320 to 7849.0340	3.4	No
<b>7849.0320</b>	Generating Facilities	3.4	No
A	The estimated range of land requirements, including water storage, cooling systems and solid waste storage	3.4.1	No
B	Estimated vehicular, rail and barge traffic generated by construction and operation of the LEGF	3.4.2	No
C	Fossil-Fueled Facilities – Fuel	3.4.3.1	No
D	Fossil-Fueled Facilities – Emissions	3.4.3.2	No
E	Water Use for Alternate Cooling Systems	3.4.4	No
F	Potential sources and types of discharges to water	3.4.5	No
G	Radioactive Releases	3.4.6	No
H	Potential types and quantities of solid wastes in tons/year	3.4.7	No
I	Potential sources and types of audible noise generated	3.4.8	No
J	Estimated work force required for construction and operation	3.4.9	No
K	Minimum number and size of transmission facilities required to provide a reliable outlet	3.4.10	No
<b>7849.0330</b>	Transmission Facilities	3.5	Yes
<b>7849.0340</b>	Alternative of No Facility	3.2.2.4	Yes

## **1.0 Introduction and Executive Summary**

Lakefield Wind Project, LLC (“LWP” or “Applicant”) respectfully submits this Application for a Certificate of Need (“CON”) to the Minnesota Public Utilities Commission (the “Commission”), pursuant to and in accordance with Minnesota Statutes § 216B.243 and Minnesota Rules Chapter 7849. LWP respectfully requests that the Commission issue a CON for the Lakefield Wind Project (the “Project”), a “large energy facility,” as defined by Minnesota Statutes § 216B.2421, subd. 2 (2006).<sup>4</sup>

### **1.1 Introduction**

LWP will own, construct, and operate the Project. The Project will have a nameplate capacity of up to 201 megawatts (“MW”) and consist of up to 134 1.5 MW wind turbine generators. The net annual energy production from the Project, assuming aggregated losses of 16%, is estimated at approximately 759 gigawatt hours (“GWh”). The Project will require, among others, the following types of civil works: improvements of existing roads to the development site; construction of access roads adjacent to the wind turbine strings to allow construction and continued servicing of the wind turbines; clearing and grading for wind turbine foundation installations; plowing or trenching underground cabling for connecting the individual wind turbines; installation of a short on-site transmission line for connecting the Project substation and the Lakefield Junction Station; clearing and grading for pad-mounted transformers and other installations; and installation of site fencing and security.

The Project will be located in central Jackson County, near the town of Lakefield, in portions of Heron Lake, Belmont, Des Moines, and Hunter townships, and approximately 25 miles east of Worthington, Minnesota. LWP has designated approximately 50.5 square miles as

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<sup>4</sup> The project is also a Large Wind Energy Conversion System (“LWECS”), as defined in Minnesota Statutes § 216F.01 (2006).

the Project area. Interstate 90 bisects the southern portion of the project. The city of Lakefield is on the western boundary of the project. The boundary extends 1 mile west of Route 86, and CSAH 16 bisects the project

LWP will oversee the engineering, procurement, and construction of the Project, and will perform various aspects of the work itself or through the use of highly qualified contractors. LWP, or one of its affiliates, also intends to provide operations & maintenance (“O&M”) service to the Project. The anticipated life of the Project is to be a minimum of 20 years.

Consistent with state and federal objectives, LWP is committed to optimizing the wind resources for the Project. All decisions with respect to equipment selection, site layout, and spacing have been made to ensure the most efficient use of land and wind resources. LWP has and will continue to evaluate the site to optimize wind resources, transmission interconnection opportunities, and economic factors, while avoiding and minimizing impacts to environmental resources.

As an independent power producer, LWP will sell the power generated by the Project to Indianapolis Power & Light (“IPL”), who is in need of renewable energy. Specifically, the Project is designed to provide electric energy IPL can purchase to satisfy its strategy to diversify its current generation assets with zero emission generation technology so as to mitigate the risk of possible future regulation of greenhouse gas (“GHG”) emissions. The Project expects to be in service by December 31, 2010, to ensure it is eligible to receive the federal Production Tax Credit (“PTC”).

enXco Development Corporation (“enXco”), the sole member of LWP, has developed and retained an ownership position in three LWECS in the State of Minnesota. These are the 85.5 MW Chanarambie Wind Project, the 205.5 MW Fenton Wind Project, and the 105 MW

Wapsipinicon North Wind Project. In these cases, enXco performed complete development, engineering, procurement, construction, and financing of the projects. enXco continues to operate and maintain the Chanarambie Project, the Wapsipinicon North Wind Project, and the Fenton Wind Project.

enXco has a long history of project development in Minnesota. enXco was involved in the development and construction of three 1.98 MW projects, the first of which, the Chandler Hills Project, came online in 1999 and was followed by the Moulton and Champepadan Wind Projects in 2001. enXco was also involved in the financing and construction of the 12 MW Viking Project, which came online in 2003. enXco provides O&M services to all four of these projects.

#### **1.1.1 Project Contacts**

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#### **1.1.2 Filing Fees and Payment Schedule (Minn. R. 7849.0210)**

The total fee for the CON Application and the schedule for payments are shown in Table 2. The fee determination for the Project is based on a capacity of up to 201 MW, per the requirements of Minnesota Rules 7849.0210, subp. 1. The payment schedule is based on Minnesota Rules 7849.0210, subp. 2.

**Table 2: Fee Calculation**

<b>Fee Calculation</b>	<b>Amount</b>
Fee Calculation Equation	\$10,000 + \$50/MW
Due with CON Application	\$5,012.50
Due 45 days after Application submittal date	\$5,012.50
Due 90 days after Application submittal date	\$5,012.50
Due 135 days after Application submittal date	\$5,012.50
Total Calculated Fee	\$20,050.00

### **1.1.3 Exemption and Variance Requests**

Minnesota Rules Chapter 7849 sets forth the data an applicant must provide in a CON Application. An applicant may be exempted from providing certain information if the applicant requests an exemption in a writing that shows that the data requirement is either unnecessary to determine the need for the proposed facility or may be satisfied by submitting another document. Minn. R. 7849.0200, subp. 6.

On September 2, 2009, LWP submitted a Request for Exemption from Certain Data Filing Requirements and Request for Variance of Time Period for Filing Exemption Request (“Exemption and Variance Request”). In its Exemption and Variance Request, LWP respectfully requested that the Commission: (1) grant it exemptions, pursuant to Minnesota Rules 7849.0200, subp. 6, from certain CON data requirements that are not necessary to determine the need for an independent power production facility, or a renewable energy facility designed to satisfy the renewable energy requirements set forth by Minnesota law; and (2) grant it a variance, pursuant to Minnesota Rules 7829.3200, subp. 1, from the requirement that its request for exemptions be filed 45 days prior to filing the Application for a CON, as set forth in Minnesota Rules 7849.0200, subp. 6.

As detailed in the Exemption and Variance Request, the exemptions that LWP requests should be granted because the required data is not applicable to a wind generation project proposed by an independent power producer. Moreover, such information is not reasonably available to LWP and is unnecessary to determine the need for the proposed Project. Likewise, LWP's request for a variance should be granted because enforcing the 45-day waiting period would impose an excessive burden on LWP, granting the variance will not adversely effect the public interest, and granting the variance will not conflict with standards imposed by law.

Where appropriate in this Application, LWP will reference specific exemption requests discussed in its Exemption and Variance Request.

## **1.2 Wind Power Development in Minnesota**

Minnesota is a national leader in the development of wind-powered electrical generation. As of June 27, 2009, Minnesota had 1,804.91 MW of installed wind capacity, and a wind energy potential of 75,000 MW.<sup>5</sup>

Through recent legislation, the Minnesota Legislature has encouraged the development of renewable energy, such as wind power. In 2001, the Minnesota Legislature enacted its own renewable energy standards. Beginning in 2005, the Minnesota renewable energy objectives required electric utilities to have one percent of their "total retail electric sales"<sup>6</sup> come from eligible renewable resources, and seven percent of the electric utility's total retail electric sales to

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<sup>5</sup> American Wind Energy Association, *Wind Project Database*, <http://www.awea.org/projects/projects.aspx?s=Minnesota> (June 27, 2009). See Exhibit A.

<sup>6</sup> Pursuant to Minnesota Statutes § 216B.1691, subd. 1(2)(b), "total retail electric sales" is defined as "the kilowatt-hours of electricity sold in a year by an electric utility to retail customers of the electric utility or to a distribution utility for distribution to the retail customers of the distribution utility."

retail customers in Minnesota by 2010 is required to be generated by eligible energy technologies.<sup>7</sup>

In 2007, the Minnesota renewable energy standards were amended to require utilities to provide twenty-five percent of their total retail electric sales from eligible resources by 2025, i.e., the “25 by ‘25” requirement.<sup>8</sup> The Legislature has also established a requirement that all utilities provide customers with the option to select a renewable-based product for their energy needs.<sup>9</sup>

To date, Indiana has not adopted a specific renewable energy requirement. However, all Indiana Investor Owned Utilities, including IPL, have voluntarily added renewable energy to their portfolios. IPL has previously entered into a 20-year Power Purchase Agreement (“PPA”) for the purchase of 106 MW of wind energy in Benton County, Indiana. If the Lakefield Wind Project receives regulatory approval and is constructed, IPL will be at a 7% Renewable Portfolio Standard (“RPS”) equivalent based upon 2008 retail energy sales. Legislation has been introduced the last few years to provide for an Indiana state RPS. Although it has not passed, interest continues to grow. Similar language is expected to be introduced again in 2010. IPL has been generally supportive of both RPS legislation in Indiana and the proposed federal RES and expects that either a state or federal mandate effecting IPL will be in place by 2010. Due to these activities, as well as consumers’ increasing desire to use energy from renewable sources, the demand for wind power development in the entire Midwest has grown rapidly and is likely to continue to grow in the future.

LWP and enXco intend to be major contributors to the development of renewable energy resources in Minnesota, and to assist electric utilities throughout the Midwest in meeting their

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<sup>7</sup> Minn. Stat. § 216B.1691 (2006).

<sup>8</sup> Minn. Stat. § 216B.1691, subd. 2a (as amended by 2007 Minn. Laws, Ch. 3, Sec. 1).

<sup>9</sup> Minn. Stat. § 216B.169, subd. 2 (2006).

“green energy” requirements. LWP’s proposed Project is specifically designed to provide electricity generated by a resource that will count toward satisfying IPL’s strategy to diversify its current generation assets with zero emission generation technology so as to mitigate the risk of possible future regulation of GHG emissions.

## **2.0 Need Summary (Minn. R. 7849.0120 and 7849.0240)**

### **2.1 Certificate of Need Criteria (Minn. R. 7849.0120)**

The Commission has established criteria to assess the need for a large electric generating facility in Minnesota Rules 7849.0120. The Commission must grant a CON to an applicant upon determining that:

- A. The probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states (Minn. R. 7849.0120(A));
- B. A more reasonable and prudent alternative to the proposed facility has not been demonstrated (Minn. R. 7849.0120(B));
- C. The proposed facility will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health (Minn. R. 7849.0120(C)); and
- D. The design, construction and operation of the proposed facility will comply with relevant policies, rules, and regulations of other state and federal agencies and local governments (Minn. R. 7849.0120(D)).

### **2.2 The Lakefield Wind Project Satisfies the Four-Part Need Test (Minn. R. 7849.0120)**

The Lakefield Wind Project satisfies all four of the Commission's criteria for granting certification of the Project.

### **2.2.1 The Probable Result of Denial of LWP's Application Would Be an Adverse Effect on the Adequacy, Reliability, and Efficiency of the Regional Energy Supply**

The Lakefield Wind Project will provide up to 201 MW of nameplate capacity to meet the electricity needs of the greater Midwest. The Project's output will be used and sold by IPL. Denying this Application would result in the loss of a significant amount of electricity needed to satisfy this regional demand, and would deny IPL the opportunity to purchase clean, low-cost energy that will count toward satisfying IPL's strategy to diversify its current generation assets with zero emission generation technology so as to mitigate the risk of possible future regulation of GHG emissions. This 201 MW project will compliment IPL's existing commitments to renewable energy and allow it to further its strategy concerning the reduction of GHG emissions.

### **2.2.2 No More Reasonable and Prudent Alternative to the Lakefield Wind Project has Been Demonstrated**

As discussed further in Section 3.0 below, the Lakefield Wind Project is the best alternative for meeting renewable energy needs. Given that the Project is designed to provide energy that will be purchased by IPL to aid in its strategy to diversify its current generation assets with zero emission generation technology so as to mitigate the risk of possible future regulation of GHG emissions, non-renewable generation sources are not an alternative to the Project. With respect to other renewable energy forms, the Project's location is particularly well-suited for a wind energy conversion system. The Project can use the existing Lakefield Substation. Also, the Project will minimally disturb the current use of the Project site. Other renewable energy generation sources are not appropriate for the site, are more costly, are less reliable, would more greatly impact current land use, and could not generate the landowner support that the proposed Project has garnered.

### **2.2.3 The Lakefield Wind Project Will Benefit Society in a Manner Compatible with the Natural and Socioeconomic Environments**

The energy produced by the Project will provide significant, numerous, and varied societal benefits. The Project will provide regional electricity consumers with affordable, clean, renewable energy that will help meet energy demands and renewable objectives. It will produce enough energy to meet the energy needs for approximately 53,600 average households.<sup>10</sup> The local economy will benefit from the landowner lease payments for turbine siting, production taxes, income from jobs created, and local spending.

Any potential negative impacts to socioeconomic resources will be minor to non-existent. The primary employment opportunities in the County revolve around agriculture and manufacturing in Jackson, Minnesota. The Project will not disturb the manufacturing in any way. Project construction will not negatively impact any other major industries within the Project area. There is no indication that any minority or low-income population is concentrated in any one area of the Project, or that the wind turbines will be placed in an area occupied primarily by any minority group. There is no indication of any contemplated new residential construction on the site.

LWP respectfully submits that construction of the Project will benefit materially the economy of Jackson County. The Project is expected to bring between ten to twelve full time jobs to the local community. Wages and salaries paid to these employees in Jackson County will contribute to the total personal income of the region. At least part of the wages paid to temporary and permanent Project workers will be circulated and recirculated within the counties

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<sup>10</sup> According to the American Wind Energy Association, a 1.5 MW wind turbine operating in a good wind resource area can be expected to generate over 4 million kWh per year, which is enough energy to supply 400 average homes. *See* Press Release, American Wind Energy Association, “Annual Industry Rankings Demonstrate Continued Growth of Wind Energy in the United States,” (Mar. 15, 2006) at [http://www.awea.org/news/Annual\\_Industry\\_Rankings\\_Continued\\_Growth\\_031506.html](http://www.awea.org/news/Annual_Industry_Rankings_Continued_Growth_031506.html). *See* Exhibit B.

and the state. Expenditures made by LWP for equipment, fuel, operating supplies, and other products and services will benefit businesses in the counties and the state.

Long-term benefits to the county's tax base as a result of the construction and operation of the Project will contribute to improving the local economy. For instance, the Project will pay a Wind Energy Production Tax to the local units of government of \$0.0012 per kWh of electricity produced, resulting in an estimated annual Wind Energy Production Tax in the range of approximately \$900,000.

The development of wind energy has been and will continue to be important in diversifying and strengthening the economic base of southern Minnesota. Northwest Economic Associates prepared a report, "Assessing the Economic Development Impacts of Wind Power," that includes a case study of the Lake Benton I Wind Project in Lincoln County, Minnesota. The study concluded in part that the annual revenue received by households in each of the wind project areas studied was a significant source of household income and had a significant total effect on the local economies.<sup>11</sup>

In addition to strengthening local economies, one of the greatest attributes of wind energy is its minimal impact on the environment. The Project will not release carbon dioxide, sulfur dioxide, nitrogen oxides, mercury, or particulate matter. It will not require water for power generation and will not discharge wastewater containing any heat or chemicals during operation. It will produce energy without the extraction, processing, transportation, or combustion of fossil fuels. The Project will permanently impact less than two percent of the total acreage within the Project's boundaries, and will be sited so as to minimize the impact on the environment.

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<sup>11</sup> See Northwest Economic Associates, "Assessing the Economic Development Impacts of Windpower" p. 43 (Feb. 12, 2003). See Exhibit C.

If the Project was not built, there would be no physical impact to the environment in Jackson County. Additionally, a decision not to build the Project would not produce an increase in the tax base of those counties, an increase in the income stream of the residents and businesses in those counties, or an increase in the amount of low-cost, clean, reliable renewable energy available to local utilities and their customers. The Project will have minimal impact on the physical environment, while simultaneously providing significant benefits to society.

Overall, the Project will provide significant benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health.

## **2.2.4 The Project is Consistent with Federal, State, and Local Rules and Policies**

### **2.2.4.1 The Project is Consistent with Minnesota Energy Policy**

The Project's objective will provide a significant amount of efficient, renewable energy, which is consistent with Minnesota's, and the Midwest's, policy to increase renewable energy use. Wind, as a renewable energy, is a favored energy source under the CON Statute.<sup>12</sup> Moreover, IPL has adopted its own internal strategy aimed at increasing its renewable energy use in an effort to reduce GHG.

The Project is consistent with the express legislative preference for renewable energy, and wind in particular, as an efficient energy source. The Project also minimizes "negative

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<sup>12</sup> See Minn. Stat. § 216B.243, subd. 3a (2006) ("The commission may not issue a certificate of need under this section for a large energy facility that generates electric power by means of a nonrenewable energy source, or that transmits electric power generated by means of a nonrenewable energy source, unless the applicant for the certificate has demonstrated to the commission's satisfaction that it has explored the possibility of generating power by means of renewable energy sources and has demonstrated that the alternative selected is less expensive (including environmental costs) than power generated by a renewable energy source. For purposes of this subdivision, 'renewable energy source' includes hydro, *wind*, solar, and geothermal energy and the use of trees or other vegetation as fuel.") (Emphasis added.)

environmental, social, and economic burdens imposed by the specific energy sources” when compared to fossil-fueled alternatives.<sup>13</sup>

The Minnesota Legislature has previously passed two mandates requiring Minnesota utilities operating a nuclear-powered electric generating plant within the State to support increased installation of wind power. Minnesota Statutes § 216B.2423, subd. 1 (2006), required utilities operating a nuclear-powered electric generating plant in Minnesota to purchase or install up to 825 MW of wind power by 2002. Minnesota Statutes § 116C.779, subd. 2 (2006), requires utilities operating a nuclear-powered electric generating plant to annually transfer funds to a renewable development account until 2018. Until January 1, 2018, up to \$10,900,000 of the amount transferred annually is to go to renewable energy production incentives and \$9,400,000 (over eighty percent) of that amount is to be used specifically for wind energy incentives.

Further support for the premise that the Project is consistent with State energy policy can be found in the favorable tax treatment that wind energy facilities receive. The Legislature has exempted all real and personal property of wind energy conversion systems from property taxes.<sup>14</sup> Wind energy conversion systems, as well as the materials used to manufacture, install, construct, repair, or replace wind systems, are also exempt from State sales tax.<sup>15</sup>

The Project’s anticipated utilization of existing high voltage transmission lines is consistent with the State’s commitment to non-proliferation of transmission corridors.<sup>16</sup>

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<sup>13</sup> *See id.*

<sup>14</sup> Minn. Stat. § 272.02, subd. 22 (2006).

<sup>15</sup> Minn. Stat. § 297A.68, subd. 12 (2006).

<sup>16</sup> *See People for Env'tl. Enlightenment and Responsibility (PEER), Inc. v. Minn. Env'tl. Quality Council*, 266 N.W.2d 858 (Minn. 1978).

## **2.2.4.2 The Project is Consistent with Federal Energy Policy**

### **2.2.4.2.1 Tax Incentives**

The Project also conforms to federal energy policy. The federal government has spent a significant amount of money in the last 20 years to develop renewable energy resources. One such direct method is the PTC,<sup>17</sup> which was recently extended until the end of 2012.<sup>18</sup> The PTC is available for the first 10 years of the renewable energy plant's operating life, and is currently \$0.021/kWh. The PTC allows wind energy generation costs to be even more competitive with traditional fossil fuel technologies.

The Internal Revenue Service, under the Modified Accelerated Cost Recovery System ("MACRS"), has allowed businesses to recover investments in solar, wind, and geothermal property through depreciation deductions.<sup>19</sup> For solar, wind, and geothermal property placed in service after 1986, the current MACRS property class is five years. This allows companies utilizing renewable energy investments to recover costs before PTC benefits run out.

### **2.2.4.2.2 Regional and National Support for a "25 by '25" Initiative**

The "25 by '25" initiative has found support outside of Minnesota. In addition to U.S. Senators and Representatives leading a national "25 by '25" campaign, the Midwestern Governors Association, which includes Indiana, passed a Policy Resolution last year endorsing the "25 by '25" initiative.<sup>20</sup>

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<sup>17</sup> See 26 U.S.C. § 45 (2006).

<sup>18</sup> See American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5 (2009).

<sup>19</sup> See 26 U.S.C. § 168 (2005).

<sup>20</sup> Current members of the Midwestern Governors Association include the governors of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, North Dakota, Ohio, South Dakota, and Wisconsin. See Exhibit D.

### **2.2.4.3 The Project Complies with Federal, State, and Local Environmental Regulations**

The Project will meet or exceed the requirements of all federal, state, and local environmental laws and regulations. Table 5 in Section 3.8.4 provides a list of approvals the Project may need to obtain from governmental entities to demonstrate full compliance. LWP is committed to obtaining all necessary environmental and other approvals required under federal, state, and local requirements.

## **2.3 Project Relationship to Socioeconomic Considerations (Minn. R. 7849.0240)**

### **2.3.1 Socially Beneficial Uses of Energy Output**

Energy produced by the Project will provide significant, numerous, and varied societal benefits. Providing a large amount of renewable energy with minimal environmental impact is just the beginning. Regional and national security and energy reliability can be enhanced through the development of diversified generation resources such as wind.

The Project will also provide a supplementary source of income for the rural landowners and farmers on whose land the Project will be sited. The landowners in the Project footprint who host turbines will receive annual lease payments for each turbine sited on their property. Large-scale wind energy operations usually pay between \$3,000 and \$5,000 per turbine each year to lease wind rights from farmers that own the land on which the turbines are sited.<sup>21</sup>

Because only a portion of the land is used for turbine siting, access roads, and transformers, farming operations can continue largely undisturbed. While the Project will be sited over an area spanning approximately 19,000 acres of land, only an estimated 75 acres will be permanently removed from agricultural use over the life of the Project.

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<sup>21</sup> See Windustry - Wind Easement Work Group, "Wind Energy Easements and Leases: Compensation Packages," p. 3 (Sept. 2005). See Exhibit E.

### **2.3.2 Promotional Activities Giving Rise to Demand**

LWP has requested an exemption from Minnesota Rules 7849.0240, subp. 2(B), which requires each large electric generating facility (“LEGF”) CON Application to contain “an explanation of the relationship of the proposed facility to . . . promotional activities that may have given rise to the demand for the facility.”<sup>22</sup> LWP has not engaged in promotional activities which could have given rise to the need for the electricity to be generated by the proposed Project. Thus, such information is non-existent and, as the Commission has previously determined, an exemption is appropriate.<sup>23</sup>

### **2.3.3 Effects of Facility in Inducing Future Development**

The Project is not expected to directly affect development in Jackson County. This is not to say, however, that additional wind energy infrastructure in the Project area will not provide significant benefits to the local economy and local landowners. Landowners in the Project area will benefit from annual lease payments. Additional wind energy infrastructure will also increase the local property tax base in the counties and municipalities in which the Project is sited. The Trimont Wind Farm I Project, a project approximately half the size, is projected to collectively provide the Jackson and Martin Counties with \$350,000 to \$400,000 in production tax revenues annually.<sup>24</sup> The Lakefield Wind Project is projected to provide Jackson County with \$770,000 in production tax reserves annually.

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<sup>22</sup> See Exemption and Variance Request, at p. 5.

<sup>23</sup> See *In the Matter of the Application of Rapids Power LLC for a Certificate of Need for its Grand Rapids Cogeneration Project*, Docket No. IP-4/CN-01-1306, Order Granting Exemptions from Filing Requirements, dated Oct. 9, 2001 (“Rapids Power Exemption Order”), at p. 7; *In the Matter of the Application of Elm Creek Wind, LLC, for a Certificate of Need for a Large Energy Facility, the Elm Creek Wind Project in Jackson and Martin Counties*, Docket No. IP6631/CN-07-789, Order Granting Exemptions from Filing Requirements, dated August 1, 2007.

<sup>24</sup> Farm Industry News, “Wind Power Your Future,” [http://farmindustrynews.com/mag/farming\\_wind\\_power\\_future](http://farmindustrynews.com/mag/farming_wind_power_future) (Dec. 1, 2006). See Exhibit F.

The Project will also provide significant income opportunities for local residents not affiliated with project ownership. The Project is expected to generate ten to twelve permanent O&M positions. In addition, the Project has already created consulting, management, and environmental work.

### **3.0 Description of Project and Alternatives (Minn. R. 7849.0250)**

#### **3.1 Proposed Project (Minn. R. 7849.0250(A))**

The Project will consist of an array of wind turbines, transformers, access roads, up to two meteorological towers, a project substation with a small control house, and an O&M facility. LWP may purchase existing buildings in the City of Lakefield. The turbines will be interconnected by electric power collection cable within the wind farm. In addition, the wind farm facilities will include approximately .25 miles of 345 kV transmission line that delivers the electricity to the Lakefield Substation. The layout will also take into account the planned locations of the 134 wind turbines for both setback and operational efficiency considerations. Provided with this Application are Exhibit K (Project Vicinity Map), Exhibit L (Project Location Map), and Exhibit M (Preliminary Site Layout Map).<sup>25</sup> As shown by the maps provided in Exhibits K-M, the wind turbines will be sited on land within Jackson County, with the Project's transmission facilities connecting to the Lakefield Substation.

Each wind turbine will be accessible via all-weather gravel roads approximately 16 feet in width providing access to the turbines via public roads. The Applicant estimates that approximately 35 miles of gravel access roads will be constructed, depending on the final turbine layout and landowner input.

The Project includes a computer-controlled communications system that permits automatic, independent operation, and remote supervision, thus allowing the simultaneous control of the wind turbines. The Applicant or one of enXco's affiliates will be responsible for the O&M of the Project. The Applicant will maintain a computer program and database for tracking each wind turbine's operational history.

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<sup>25</sup> Exhibit L shows the preliminary turbine locations for 201 MW layout of 1.5MW turbines and is subject to change during the preconstruction surveys and micrositing.

With respect to turbines, the Applicant is proposing to use up to 134 1.5 MW wind turbines with a hub height of 80 meters and a rotor diameter of 77 meters.

The free-standing, tubular towers will sit atop a robust foundation designed for the specific soil conditions at the individual turbine site. Due to the wide spacing of the turbines, a thorough investigation of the soil strengths and characteristics will be performed at each turbine site for optimization of the foundation designs for the Project. Each turbine can be controlled from a control panel inside the nacelle or from the bottom of the turbine. The nacelle is a fiberglass shell enclosure with sound-insulating foam applied to the inside. The nacelle functions as a housing to protect the mechanical and electrical equipment from the outside environment. Each turbine is equipped with a wind speed and direction sensor that communicates to the turbine's control system to signal when sufficient winds are present for operation. The turbines feature variable-speed control and independent blade pitch to assure aerodynamic efficiency.

The electricity generated by each turbine is stepped up by a pad-mounted transformer at the base of each turbine to power collection line voltage of 34.5 kV. The electricity is collected by a system of underground or overhead power collection lines within the Project area. Direct burial collector cables will be plowed or trenched under the ground to a nominal depth of 36 to 48 inches. All collector cables are currently planned to be installed underground; however, should conditions arise that would require the use of overhead lines, such lines will be sited so as to minimize the impact to the landowner.

The Project will require the installation of a 345/34.5 kV project substation which will consist generally of two 345/34.5 kV transformers and associated switching and protection equipment, as well as metering equipment and a small control house. Power from the turbines

will be collected at this substation and transmitted to the point of delivery, the Lakefield Substation via approximately .25 miles of overhead 345 kV transmission line. The interconnection details will be determined as a result of studies and agreements with the Midwest Independent Transmission System Operator (“Midwest ISO”).

### **3.1.1 Nominal Generating Capability and Effect of Economies of Scale**

Each turbine will have a net nominal rating of 1.5 MW. Larger wind projects, such as the Project, can realize economies of scale by spreading out the relatively fixed transaction, operation, and maintenance costs over the entire project, resulting in decreased costs per kWh of electricity produced.

### **3.1.2 Anticipated Operating Cycle and Annual Capacity Factor**

The net annual energy production from the Project, assuming various losses aggregating to roughly 16%, is estimated at approximately 759 GWh.

### **3.1.3 Fuel**

The wind turbines will be powered by the wind.<sup>26</sup>

### **3.1.4 Anticipated Heat Rate**

Heat rates are not applicable to a wind project.

### **3.1.5 Facility Location**

The Project will be located in central Jackson County, near the town of Lakefield, in portions of Heron Lake, Belmont, Des Moines, and Hunter townships, approximately 25 miles east of Worthington, Minnesota. LWP has designated approximately 50.5 square miles as the Project area. The town of Lakefield is adjacent to the Project site to the West. The Project’s

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<sup>26</sup> Minnesota Rules 7849.0250(A)(3) also requests information projecting the availability of the proposed Project’s fuel source and alternative fuels. The Commission has determined that these data requirements are inapplicable to a wind facility. See *In the Matter of the Application of High Prairie Wind Farm II, LLC for a Certificate of Need for a Large Energy Facility*, Docket No. PT-6556/CN-06-1428, Order, dated Dec. 11, 2006.

boundary includes approximately 32,000 acres, and LWP currently has site control over approximately 19,000 of these acres. The area of direct land use will be approximately 70 acres for the turbines and gravel access roads, depending on the final layout and landowner input on road design, plus up to five acres for the new project substation. LWP intends to convert an existing building within the city limits of the town of Lakefield, Minnesota, or construct a new O&M building on an approximately five acre parcel inside the Project boundary.

The Project area is rural with an agricultural-based economy. The Project site was selected based on its excellent wind resources, its close proximity to available transmission infrastructure and substation, and landowners' interest in participating in the Project.

### **3.2 Availability of Alternatives (Minn. R. 7849.0250(B))**

#### **3.2.1 Objectives Used to Evaluate Alternatives**

The overall objective in this alternatives analysis is to determine whether there are other energy sources that can satisfy the need identified. As noted above, LWP intends to develop a generation source that will aid IPL in satisfying the nation-wide renewable energy need. Therefore, non-renewable energy sources have been excluded from this alternatives analysis.<sup>27</sup> The criteria used in the analysis include: (i) is the energy source cost-effective; (ii) is the energy source commercially proven and reliable for the electrical generation output needed; and (iii) is the energy source appropriate for the site selected.

Developing and operating generating sources that are cost-effective and using proven technology is particularly important to an independent energy producer, like LWP. LWP does not have access to ratepayer funds that could provide a resource for retirement of capital

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<sup>27</sup> Minnesota Rules 7849.0250(B)(4) requires an applicant to discuss the availability of new generating facilities of a different size or using a different energy source as an alternative to the proposed facility. LWP has requested a partial exemption from this data requirement, i.e., proposing to discuss as alternatives only renewable energy sources that would satisfy the REO. *See* Exemption and Variance Request, at p. 6.

investments. In addition, as a seller of electricity on the wholesale market, LWP must keep its prices—and, thus, its costs—low enough to remain competitive. For these reasons, LWP must exercise diligence in deciding where and when to pursue opportunities for capital investment in new power-generating facilities.

Commercial feasibility and reliability with respect to the generation output needed are important considerations in selling the generated power to wholesale customers. Without a guaranty of long-term reliability and cost-effectiveness, it is difficult or impossible to convince customers that an unproven technology should be selected for purchase.

### **3.2.2 Alternatives Considered**

#### **3.2.2.1 Purchased Power Alternative**

LWP is an independent power producer and does not purchase power. Instead, LWP sells power to utilities, in this case IPL. As such, this data requirement is not applicable and an exemption has been requested.<sup>28</sup>

#### **3.2.2.2 Alternative of Performing Upgrades to Existing Resources**

LWP has no existing facilities in Minnesota for which it might seek improved operating efficiency. As such, this data requirement is not applicable and an exemption has been requested.<sup>29</sup>

#### **3.2.2.3 New Transmission Alternative**

LWP plans to construct a 345 kV transmission line from the Project to the point of interconnection. The construction of this line is being permitted through the local permit process in Jackson County. Any required network upgrades will be the responsibility of the utility(s) that own the transmission system. IPL is a member of MISO and will serve as the Market Participant

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<sup>28</sup> See Exemption and Variance Request, at pp. 5-6.

<sup>29</sup> See *id.*

and arrange for sale of the power into the MISO system at the point of interconnection (Lakefield Junction Substation). As is the case within the entire MISO system, IPL will receive the Locational Marginal Price (“LMP”) for this sale. It is IPL’s intention to net the LMP revenue received against the payments made to LWP under the PPA.

#### **3.2.2.4 No Facility Alternative**

LWP has requested an exemption from Minnesota Rules 7849.0340, which requires an applicant to submit data for the alternative of “no facility,” including a discussion of the impact of this alternative on the applicant’s generation and transmission facilities, system, and operations.<sup>30</sup> The Rule also requires an analysis “of equipment and measures that may be used to reduce the environmental impact of the alternative of no facility.” Minn. R. 7849.0340(C).

LWP does not have a “system,” nor does it have other generation and transmission facilities in Minnesota. As such, the requirements of Minnesota Rules 7849.0340 are not applicable to LWP’s Project and are not necessary to determine need for the facility. Instead, LWP proposes to submit data reasonably available to it regarding the impact on the wholesale market of the “no facility” alternative.

Given that the proposed Project is designed to increase the amount of energy available for use by energy consumers in the Midwest, in furtherance of IPL’s renewable energy strategy, not building the facility is not an alternative. Not building the facility would result in no increase in renewable energy and, in turn, no opportunity for IPL to purchase the Project’s output to satisfy its internal, as well as the entire Nation’s, strategy towards increasing the production of renewable energy. Such an outcome is contrary to LWP’s objective for the Project, and will not satisfy the state and regional need for renewable energy.

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<sup>30</sup> See *id.* at pp. 9-10.

### 3.2.2.5 Solar Power

The cost and reliability of solar power do not compare favorably with the generating capacity proposed in this Application. As noted in the Department of Commerce (“DOC”) 2004 Quad Report, “Solar electric systems are not currently cost-effective for utility applications or strict cost-effective requirements.”<sup>31</sup> Currently, the largest solar-powered electric system in Minnesota is a 72 kW system, which provides significantly less output than the 201 MW system proposed.<sup>32</sup> For these reasons, solar power is not an alternative to the Project.

Solar thermal electric generation facilities are being constructed, but such facilities require a combination of oil and sunlight, provide less output than the proposed system (a Nevada project, the third largest in the world, will be 64 MW), work best in warm and dry locations (e.g., Nevada), and have high costs (approximately \$250 million to construct the Nevada project).<sup>33</sup> Thus, solar thermal electric generation is likewise not an alternative to the Project.

### 3.2.2.6 Hydropower

Hydropower is also not an alternative to the Project. As of 2004, Minnesota had 195 MW of hydroelectric generation, with the largest system generating 75 MW.<sup>34</sup> In 1996, the U.S. Department of Energy reported that Minnesota’s potential for increasing hydroelectric generation was limited to an additional 137 MW dispersed over 40 sites in Minnesota.<sup>35</sup> Thus, a single site

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<sup>31</sup> See MN DOC, *2004 Energy Policy and Conservation Report* (the “2004 Quad Report”) at p. 28. See Exhibit G.

<sup>32</sup> Innovative Power Systems, *Commercial Project List*, <http://www.ips-solar.com/ProjectList.html> (July 24, 2009). See Exhibit H.

<sup>33</sup> See CNET News.com, “Full steam ahead for Nevada solar project,” [http://news.com.com/2102-11392\\_3-6166113.html?tag=st.util.print](http://news.com.com/2102-11392_3-6166113.html?tag=st.util.print) (Mar. 20, 2007). See Exhibit I.

<sup>34</sup> See Exhibit G at p. 28.

<sup>35</sup> *Id.*

would be unable to produce the same output as the currently proposed system, and developing multiple sites would significantly increase generation costs as compared to the Project.

In addition, hydroelectric generation requires a large, dependable water supply. The lack of such a water supply in Jackson County also precludes this alternative.

### **3.2.2.7 Biomass**

A biomass plant is not an alternative to the Project. Biomass generally requires large amounts of waste products, such as waste logging, manufacturing, or trimming residues,<sup>36</sup> which are not readily available in many parts of the State, including Jackson County. In addition, biomass electric generation facilities generally have outputs that are much smaller than the proposed Project.<sup>37</sup> The environmental impacts of such a facility would also be greater, due to both the facility itself and the machinery and equipment needed to gather and transport the biomass fuel.

### **3.2.2.8 Alternative of Emerging Technologies**

Few renewable emerging power generation technologies have been developed, and LWP believes that the current approaches are not sufficiently mature to either provide the output needed or to be cost-effective.

#### **3.2.2.8.1 Pumped Storage**

The site in Jackson County is not suited to a pumped storage application due to the need to store large amounts of water in an elevated reservoir. Accordingly, this technology is not an alternative to the Project.

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<sup>36</sup> See Green Institute, “Renewing Rock-Tenn: A Biomass Fuels Assessment for Rock-Tenn’s St. Paul Recycled Paper Mill” (March 2007). See Exhibit J.

<sup>37</sup> See Exhibit G at p. 27.

### **3.2.2.8.2 Compressed Air**

Highly specialized geological sites are needed to make use of compressed air technology. Such sites are scarce in Minnesota, and those that do exist are not located in the vicinity of the site. This technology is not yet commercially proven; accordingly, it is not an alternative to the Project.

### **3.2.2.8.3 Superconducting Magnets**

This technology, which makes use of coils that can store electric energy, is not yet commercially proven. Accordingly, this technology is not an alternative to the Project.

### **3.2.2.9 Combinations**

No combination of the aforementioned alternatives would be appropriate because, as compared to the proposed Project, they would not enable LWP to more efficiently or cost-effectively produce electric output to be purchased by IPL to satisfy its renewable energy needs.

## **3.2.3 Economic Comparison**

### **3.2.3.1 Alternatives Summary**

Table 3 summarizes the conclusions reached regarding alternatives to the Project. The results of the analysis indicate that there are no alternatives to the proposed Project. Thus, an economic comparison of the proposed Project to alternatives is not required.

**Table 3: Project Alternatives Comparison**

<b>Alternatives Considered</b>	<b>Applicable to Lakefield Wind Project</b>	<b>Meets Project Objectives/Meets Site Criteria</b>	<b>Considered in Further Economic Screening</b>
Purchased Power	N/A	N/A	N/A
Upgrades to Existing Resources	N/A	N/A	N/A
New Transmission	N/A	N/A	N/A
No Facility	No	No	No
Solar Power	No	No	No
Hydropower	No	No	No
Biomass	No	No	No
Emerging Technologies	No	No	No

In conclusion, the Project is the best alternative for meeting the Midwest's, and the United States', renewable energy goals. All other potential alternatives reviewed by LWP, including the no-build alternative and the alternative of using renewable resources or emerging technologies, fall short in one or more categories.

### **3.3 Discussion of Proposed Facility and Alternatives (Minn. R. 7849.0250(C))**

LWP has requested a partial exemption from Minnesota Rules 7849.0250(C)(1)-(9), which requires a discussion of various details regarding both the proposed facility and each of the alternatives discussed in response to Minnesota Rules 7849.0250(B).<sup>38</sup> Because LWP has requested a partial exemption from the data requirements in Minnesota Rules 7849.0250(B), i.e., limiting its discussion to only those alternatives that satisfy renewable energy goals, LWP also proposes to limit its response to this data requirement to only those renewable alternatives discussed in response to Minnesota Rules 7849.0250(B)(4) that could provide electric power at

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<sup>38</sup> See Exemption and Variance Request, at pp. 5-6.

the asserted level of need.<sup>39</sup> As discussed above, no such alternatives exist. Therefore, only information regarding the proposed facility is applicable.

### **3.3.1 Capacity Cost in Dollars per Kilowatt**

Wind energy projects do not have a cost attributable to capacity and thus costs for wind energy facilities are typically not expressed in terms of capacity costs. The Project will deliver energy to IPL on an as-generated basis and will receive payment only for energy generated. The Applicant has estimated the cost for a large mid-continent wind farm to be approximately [TRADE SECRET BEGINS]

[TRADE SECRET ENDS], pending final interconnection costs. The largest component in the total cost of the Project will be the wind turbines; however, infrastructure costs for access road construction and electrical collection systems also are factors.

### **3.3.2 Service Life**

A service life of 20 years has been assumed in order to estimate annualized capital costs. With proper maintenance, service, and replacement of parts, the expected life of the Project is 20 years. The Applicant is confident that its maintenance program will result in excellent longevity for the Project.

### **3.3.3 Estimated Average Annual Availability**

The Applicant estimates that the Project will be available at least 97% of the year, which is consistent with industry standards.

### **3.3.4 Fuel Costs**

The Project will be fueled by the wind, which is free. The easements for the wind rights on the land where the turbines are located will require annual lease payments. Nominal

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<sup>39</sup> See *id.* at p. 6.

purchases of electricity will be necessary to run the Project, with the Applicant ultimately selling the Project's net output.

### **3.3.5 Variable O&M Costs**

Variable maintenance costs will likely be approximately [TRADE SECRET BEGINS] [TRADE SECRET ENDS]. An advantage of wind energy facilities is that they typically do not require going offline for maintenance. Individual turbines can be serviced while the rest of the facility continues to deliver energy.

### **3.3.6 Total Cost**

The Applicant has estimated capital costs to be approximately [TRADE SECRET BEGINS] [TRADE SECRET ENDS]. This estimate assumes typical wind farm design, construction, and operational data for a 20-year estimated service life. The actual price for which the Applicant will sell the energy will be [TRADE SECRET BEGINS] [TRADE SECRET ENDS].

### **3.3.7 Estimate of Facility's or Alternative's Effect on Rates**

Minnesota Rules 7849.0250(C)(7) requires an applicant to estimate its proposed Project's "effect on rates systemwide and in Minnesota, assuming a test year beginning with the proposed in-service date." LWP has requested an exemption from this requirement because it does not have a "system" as defined by the Rules and is not a regulated utility with regulated rates for the power it plans to generate.<sup>40</sup> As such, the data are neither available to LWP nor necessary to determine need for its proposed Project. Instead, LWP proposes to submit data on the Project's impact on State or regional wholesale prices.

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<sup>40</sup> See Exemption and Variance Request, at p. 6.

The Project's energy production will be modest in comparison to the annual energy consumption in the Midwest. Moreover, LWP has already entered into a PPA with IPL concerning the power expected to be produced by the Project. The Project's output will be purchased by IPL as a partial replacement for generation sources with more volatile pricing, such as natural gas. Thus, the Project could ultimately play a role in stabilizing or lowering rates.

### **3.3.8 Efficiency**

Because no fuel is burned in the production of energy at the Project, the Applicant submits that this information requirement is not applicable.

### **3.3.9 Environmental Information for Proposed Project and Alternatives (Minn. R. 7849.0310)**

An environmental review is currently being conducted by LWP. Included below is a summary of some of the impacts to key resources found within the Project area, including visual resources, land use, and wildlife. Additional environmental information is provided in Section 3.5, below, and in the Site Permit Application.

### **3.3.10 Impacts to Visual Resources**

The wind turbine arrays will be prominent features in the landscape. By design, these structures are placed in open areas of higher elevations. Some mitigative measures can be implemented to somewhat limit visual impacts. However, there is no way to make these structures unnoticeable. The degree to which the visual impacts are considered adverse is subjective, and can be expected to vary depending, for example, on how often the viewer sees the turbines.

### **3.3.11 Impacts to Land Use**

The Project area includes a total of approximately 32,000 acres of land, and LWP currently has site control over approximately 19,000 of these acres. Of these acres, less than two

percent will be permanently converted from natural vegetation or agricultural field to sites for wind turbines, access roads, and transformer pads. Up to five acres of land will be converted for the 1.5 MW turbines and up to 65 acres of land will be converted for the access roads. Up to an additional five acres of land will be used for the substation. LWP intends to convert an existing building within the city limits of the town of Jackson, Minnesota, or construct a new O&M building on approximately five acre parcel inside the Project boundary. The existing land use will continue on the remainder of the land.

### **3.3.12 Impacts to Wildlife**

Birds and bats occasionally collide with wind turbines. Studies conducted on Buffalo Ridge in Minnesota indicate that the mortality associated with such collisions is inconsequential from a population standpoint. Turbines may result in reduced use of habitat by grassland bird species within 100 meters (328 feet) of a turbine. Likewise, the permanent conversion of approximately 75 acres of the Project will reduce available habitat that some of the wildlife use for nesting, forage, or cover. However, the impact of the Project on wildlife is expected to be minimal.

## **3.4 Facility Information for Proposed Project and Alternatives Involving Construction of a LEGF (Minn. R. 7849.0320)**

### **3.4.1 Land Requirements**

The Project is located on land that is zoned for agricultural use. The Project will remove a total of 75 acres from agricultural use. No relocation of people or businesses will be necessary for the Project.

It is expected that the land requirements for the Project are consistent with the requirements for alternative projects of a similar size. Typical wind farms require approximately

one-half acre per turbine for the turbine pad, transformer, access road and associated infrastructure.

#### **3.4.1.1 Land requirements for water storage**

The Project will not require any land for water storage.

#### **3.4.1.2 Land requirements for cooling system**

The Project will not require any land for a cooling system.

#### **3.4.1.3 Land requirements for solid waste storage**

The Project will require minimal space in the O&M facility for the storage of used oil and other lubricants, as well as for spare parts and tools.

### **3.4.2 Traffic**

In general, the existing roadway infrastructure in and around the Project area is characterized by county and township roads that generally follow section lines. Various county state aid highways (“CSAH”), county roads, and township roads provide access to the proposed site. Access to the Project area also includes two-lane paved and gravel roads. In the agricultural areas, many landowners use private, single-lane farm roads and driveways on their property.

There is one Interstate Highway within the Project area. Interstate 90 bisects the Southern portion of the Project area. Information from Mn/DOT for 2008 indicates that the Average Daily Traffic (“ADT”) for I-90 within the study area is 7,600 vehicles. TH86 also bisects the western portion of the Project area, the ADT for TH86 between I-90 and Lakefield is 2,800 vehicles. CSAH 16 and CSAH 14 are within the Project area. ADT for CSAH 16 within the Project area is 135 to 180 vehicles per day, and for CSAH 14 is 890 vehicles.

Constructing the Project will require approximately 35 miles of gravel access roads, depending on the final design. Construction traffic will use the existing county and state

roadway system to access the Project area and deliver construction materials and personnel. During the peak of construction it is anticipated that there will be an additional 275 vehicle trips per day. Since the current traffic levels on the roadways in the Project area are well below roadway capacities, construction traffic will be perceptible but similar to seasonal variations in traffic such as autumn harvest. Construction is not anticipated to result in adverse traffic impacts. O&M activities will not noticeably increase traffic in the Project area.

No rail or barge traffic is anticipated in connection with the Project.

### **3.4.3 Information Pertaining to Fossil-Fueled Facilities**

#### **3.4.3.1 Fuel**

The Project is not a fossil-fueled facility. The Project will be “fueled” by wind.

#### **3.4.3.2 Emissions**

The Project is not a fossil-fueled facility and will not release any emissions from the power generation process.

### **3.4.4 Water Usage for Alternate Cooling Systems**

Wind power plants do not utilize cooling systems. Water requirements are therefore minimal and limited to potable water needs for Project personnel. A well will be installed near the O&M building in accordance with applicable regulations.

### **3.4.5 Water Discharges**

No wastewater discharges will occur as a result of the construction or operation of the Project except for domestic-type sewage discharges of Project personnel. Temporary sanitary facilities will be provided during construction, and the O&M building will be connected to the municipal sewer system of Lakefield, Minnesota in accordance with applicable regulations.

### **3.4.6 Radioactive Releases**

The Project will not produce any radioactive releases.

### 3.4.7 Solid Waste

The only solid wastes generated during the operation of the Project will be domestic wastes and used lubricants and other maintenance materials. These wastes and their disposition are summarized in Table 4.

**Table 4: Wastes Generated by Project**

Waste	Solid/ Liquid	Description	Generation Rate	Disposition Method
Oil/Grease	L/S	Hydraulic fluid, lubrication oil, grease	<20 barrels/yr	Used oil recycler, incinerator
Maintenance Materials	S	Oil and greasy rags, materials packaging, cleaning residues, fluorescent light bulbs	<2 tons/yr	Solid waste landfill or, as necessary, hazardous waste treatment/disposal facility

### 3.4.8 Noise

Background noise levels in the Project area are typical of those in rural settings, where existing nighttime noise levels are commonly in 25 to 35 dBA range. The dBA scale is A-weighted decibels based on the range of human hearing. Low to mid-30 dBA are relatively low background levels and are generally representative of the site. Higher levels exist near roads and other areas of human activity. The windy conditions in this region tend to increase ambient noise levels compared to other rural areas.

The wind turbines to be used within the Project site are warranted to generate a maximum apparent sound power level no greater than 106 decibels immediately adjacent to the turbine. The decibels decrease as the receptor moves further away from the turbine. The turbines are expected to generate less than 50 decibels at approximately 1,000 feet. The sound a turbine makes can be described as a “whoosh” sound when the rotors are moving. On a windy day, the

sound of the turbines is generally masked by the sound of the wind. The Minnesota Pollution Control Agency (“MPCA”) has noise level standards for residential and industrial uses between 50-65 decibels.

The Project’s turbines’ sound levels were converted to sound pressure levels and compared to the MPCA Daytime and Nighttime L10 and L50 Limits for residential receptors (NAC-1) as stated in Minnesota Rules 7030.0040.

The Nighttime L50 limit of 50 dBA is the most stringent limit. Previous modeling of project layouts using the 1.5 MW turbine have indicated that maintaining a setback of 1,000 feet from occupied residences will allow the project to comply with the MPCA sound requirements. The final layout will be subject to sound modeling to ensure compliance with MPCA standards.

Impacts to nearby residents and other potentially affected parties in terms of noise will be taken into consideration as part of the siting of the turbines. The Applicant is currently planning the project with minimum setbacks to occupied residences of 1,000 feet.

### **3.4.9 Work Force for Construction and Operation**

Construction of the Project is expected to commence on or about May 1, 2010 and be completed by December 31, 2010. Ten to twelve permanent positions will likely be created to operate the Project.

LWP will be lead entity for the construction management of the Project. The primary civil, erection, and electrical contractors will use, where possible, the services of local contractors to assist in the construction of the Project.

The Applicant will augment its O&M staff as needed with appropriate contractors to service and maintain the Project. The operations phase of the Project will be staffed with six to eight full time site technicians, a Wind Power Plant Supervisor, and additional staff as appropriate.

### **3.4.10 Number and Size of Transmission Facilities**

The electricity generated by each turbine is stepped up by a pad-mounted transformer at the base of each turbine to power collection line voltage of 34.5 kV. The electricity is collected by a system of underground or overhead power collection lines within the Project area. Power collection lines will be buried in trenches or may be constructed as overhead lines on private property or public right-of-way. Typically, this infrastructure is run adjacent to the Project access roads, between turbine strings, and along private easements.

The collection system delivers power to the Project substation where the voltage will be stepped up from 34.5 kV to 345 kV. Approximately .25 miles of overhead 345 kV transmission line will be installed to deliver power from the Project substation to the Lakefield Substation, the point of delivery to the utility customer. The interconnection details will be determined as a result of studies and agreements with Midwest (“ISO”). Access to transmission facilities beyond interconnection will be arranged by the utility or utilities purchasing the Project’s energy output, and will depend on the buyer and the ultimate destination for the energy output.

### **3.5 Facility Information for Alternatives Involving Construction of a LHVTL (Minn. R. 7849.0330)**

LWP has requested an exemption from Minnesota Rules 7849.0330, which requires the applicant to provide certain data for each alternative that would involve construction of a large high voltage transmission line (“LHVTL”).<sup>41</sup> LWP is planning to construct a 345 kV transmission line from the Project to the point of interconnection. Access to transmission facilities beyond interconnection will be arranged by the utility or utilities purchasing the Project’s energy output, and will depend on the buyer and the ultimate destination for the energy output. Thus, except for the 345 kV transmission line necessary for interconnection, it is

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<sup>41</sup> See Exemption and Variance Request, at p. 9.

anticipated that the electricity generated will be transmitted via facilities owned and operated by others. Given that LWP's proposed Project does not require LWP to construct a LHVTL, alternatives that require construction of an LHVTL would not be alternatives to the Project. For these reasons, Minnesota Rules 7849.0330 is not applicable.

LWP is currently working with Midwest ISO with respect to interconnection for the Project. At this time, LWP does not anticipate that any additional transmission facilities will be required. Collection and feeder lines will be utilized to interconnect the Project. As noted above, access to transmission facilities beyond interconnection will be arranged by the utility or utilities purchasing the Project's energy output.

### **3.6 Map of System (Minn. R. 7849.0250(D))**

LWP has requested an exemption from Minnesota Rules 7849.0250(D), which requires the applicant to include a map showing the applicant's system.<sup>42</sup> LWP, as an independent power producer, does not have a "system." The information requested is not available to LWP or relevant to the determination of need for its proposed Project. Instead, maps showing the Project vicinity, Project location, and the Project's preliminary turbine site layout are attached as Exhibits K, L, and M.

### **3.7 Other Filings and Permits**

#### **3.7.1 Exemption Request**

LWP has applied for an exemption from several of the informational requirements of Minnesota Rules Chapter 7849. LWP has also requested a variance from Minnesota Rule 7849.0200, subp. 6, which requires that 45 days elapse between filing an exemption request and

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<sup>42</sup> See *id.* at p. 7.

filing a CON Application. The exemption and variance requests are discussed in LWP's Exemption and Variance Request, filed on March 18, 2008.

### 3.7.2 Environmental Report

Pursuant to Minnesota Rules 4410.7010 to 4410.7070, the DOC is required to prepare an Environmental Report for any large energy facility for which a CON must be obtained. LWP anticipates that the DOC will be able to rely on the environmental review of the Project conducted pursuant to the LWECS Site Permit Application for this CON Application.

### 3.7.3 Site Permit

LWP is currently working on its Site Permit Application for a LWECS, as required by Minnesota Statutes § 216F.04 (2006). Upon its completion, it will be submitted to the MPUC.

### 3.7.4 Other Project Permits

Project permits and approvals that may be necessary to complete the Project are listed in Table 5. LWP will obtain these approvals, as necessary, prior to Project construction.

**Table 5: Project Permits and Approvals**

Agency	Permit/Approval	Authority	Description
<b>Federal Permits</b>			
Federal Aviation Administration (FAA)	Notice of Proposed Construction of Alteration/Determination of No Hazard	14 CFR Ch. I Subchapter E Part 77	Establishes standards for determining obstructions and sets requirements for notice to FAA for proposed construction. FAA determines whether proposed construction poses an aviation hazard.
US Fish and Wildlife Services	Consultation and Review of the Proposed Project regarding Federally Threatened and Endangered Species	Endangered Species Act of 1973	The Act requires all projects that are in areas designated to be habitat for endangered species to be reviewed by FWS.
US Army Corps of Engineers	Section 404 Permit	Clean Water Act	Required for activities that involve dredging or filling wetlands and waters of the U.S.
Federal Energy Regulatory Commission (FERC)	Exempt Wholesale Generator Status	1992 Energy Policy Act	Self-Certification of exempt wholesale generator requires filing with FERC.
FERC	Market-Based Rate Authorization	Section 205 of the Federal Power Act	Requires approval of market-based rates upon commissioning of wind facility.

Agency	Permit/Approval	Authority	Description
<b>State of Minnesota Permits</b>			
MPUC	LEGF Certificate of Need	Minn. R. Ch. 7849	For wind turbines and transmission interconnection (as associated facility).
	LWECS Site Permit	Minn. R. Ch. 4401	For wind turbines—meet threshold for LWECS requiring permit.
MN State Historic Preservation Office	Cultural and Historic Resources Review	National Historic Preservation Act; Historic Sites Act (Minn. Stat. §§ 138.661-138.669); Field Archaeology Act (Minn. Stat. §§138.31-138.42); Private Cemeteries Act (Minn. Stat., Ch. 307)	Cultural Resources Review and State and National Register of Historic Sites Review.
MN Pollution Control Agency	401 Certification	Clean Water Act	When a federal permit is required (i.e., Section 404 Permit with the Corps of Engineers) a State Water Quality Certification/Waiver is needed.
	NPDES Stormwater Permit for Construction	Clean Water Act	Program designed to reduce the amount of sediment and pollution entering surface and groundwater during and after construction projects.
	Small Quantity Generator	Minn. R. ch. 7045	Hazardous Waste rules regarding storage and disposal of turbine lubricating oil.
MN Dept. of Natural Resources	Consultation and Review of the Proposed Project regarding State Threatened and Endangered Species	Minn. Stat. § 84.0895	Establishes Guidelines for the protection of Threatened and Endangered species in the State of Minnesota.
	Public Water Works	Minn. Stat. § 103G.005	Applies to activities conducted below the Ordinary High Water Level of public waters and public waters wetlands.
	License to Cross Public Lands and Waters	Minn. Stat. § 84.415	Required for utilities passing over, under, or across state lands and public waters.
MN Dept. of Health	Water Well Permit	MN Well Code (Minn. Stat. § 103I); Safe Drinking Water Act	Ensures development and protection of groundwater in an ordinary, healthful, and reasonable manner.
	Plumbing Plan Review	Minn. R. 4715.3130	Ensures healthy and safe plumbing installation.
MN Board of Water and Soil Resources	Wetland Conservation Act Approval	Minn. Stat. §§ 103G.222-103G.2373; Minn. R. ch. 8420	Requires proposed impacts to wetlands be avoided and minimized.

Agency	Permit/Approval	Authority	Description
MN Dept. of Transportation	Utility Access Permit	Minn. Stat. § 161.45	Regulates utility construction impacts to State roads or right-of-ways.
	Highway Access Permit	Minn. Stat. ch. 505	Permits access to State roads.
	Oversize and Overweight Permit	Minn. Stat. § 169.862	Permits oversized and overweight loads to travel on State roads.
<b>Local Permits</b>			
Jackson County	Conditional Use Permit	County Ordinance	Permit to install substation and transmission line.
	Individual Septic Tank Systems (ISTS) Permit	County Ordinance	Permits connection to existing or approval of on-site sewage and water (for O&M building).
	Driveway Permit		Permits construction of driveways to building sites and farmland.
	Utility Permit	Rules and Regulations of Board of County Commissioners for Utilities on County Highways	Permits utility construction and relocation on county highway right of way.
	Moving Permit		Permits oversized loads on county roads.
	Sign Permit		Permits erection or maintenance of signs.
Town of Lakefield	Driveway permits	Township board	Permits construction of driveways to building sites and farmland.
	Building Permit	Town Council	Permits the construction of new structures.

#### **4.0 Peak Demand and Annual Consumption Forecast (Minn. R. 7849.0270)**

LWP has requested an exemption from Minnesota Rules 7849.0270, which requires the applicant to provide “data concerning peak demand and annual electrical consumption within the applicant’s service area and system.”<sup>43</sup> LWP does not have a “service area” or “system” and, as such, the requested data are inapplicable. Moreover, LWP will sell power generated by the Project to IPL. IPL is in the process of revising its Integrated Resource Plan which will be completed by the end of 2009. Although subject to minor changes, the current load and energy forecast for IPL retail sales is:

Year	Retail Sales (MWH)	Estimated Peak Demand (MW)
2010	14,407	3,113
2011	14,667	3,180
2012	15,014	3,263

IPL’s all-time record peak demand was 3,139 MW recorded on August 8, 2007.

#### **4.1 Annual Electrical Consumption in Minnesota Service Area and System**

LWP has requested an exemption from this data requirement.

#### **4.2 Forecast Data**

LWP has requested an exemption from this data requirement.

#### **4.3 Forecast Methodology**

LWP has requested an exemption from this data requirement.

#### **4.4 Forecast Database**

LWP has requested an exemption from this data requirement.

#### **4.5 Assumptions and Special Information**

LWP has requested an exemption from this data requirement.

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<sup>43</sup> See Exemption and Variance Request, at p. 7.

#### **4.6 Coordination of Forecasts**

LWP has requested an exemption from this data requirement.

## **5.0 System Capacity (Minn. R. 7849.0280)**

LWP has requested an exemption from Minnesota Rules 7849.0280, which requires a CON applicant to “describe the ability of its existing system to meet the demand for electrical energy forecast in response to Minnesota Rules 7849.0270, and the extent to which the proposed facility will increase this capability.”<sup>44</sup> LWP does not have a “system” as defined by the Rules and, thus, this data requirement is inapplicable. LWP proposes to submit regional demand, consumption, and capacity data from credible sources to demonstrate the need for the independently produced renewable energy that will be generated by the Project. Such information is provided in Section 2.2.1 of this Application.

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<sup>44</sup> *See id.* at p. 8.

## 6.0 Conservation Programs (Minn. R. 7849.0290)

LWP has requested an exemption from Minnesota Rules 7849.0290, which requires an applicant to describe its energy and conservation plans, including load management, and the effect of conservation in reducing the applicant's need for new generation and transmission facilities.<sup>45</sup>

The Commission has previously determined that this Rule is “designed to ensure that regulated utilities, providing essential services to captive customers, give conservation the same careful consideration they give to new generation in planning to meet the future needs of their service areas.”<sup>46</sup> Different considerations apply in the wholesale context and thus the requirements of Minnesota Rules 7849.0290 are “essentially unhelpful” to the Commission's determination.<sup>47</sup> Since LWP is not a regulated utility this requirement is inapplicable.

IPL has been implementing Demand-Side Management (“DSM”) programs since 1994. IPL also offers an array of demand response programs that include interruptible, load curtailment, self-generation and air conditioning load management. IPL plans to further engage in this activity in 2010 and Phase I of their proposed DSM plan is awaiting approval from the Indiana Utility Regulatory Commission. The proposed multi-year plan contains a comprehensive set of traditional DSM programs for residential and commercial customers. IPL has also proposed a Phase II plan for Advanced DSM which will include Advanced Meter Infrastructure and Home Area Network technology to support a future request for time-of-use rates for residential customers.

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<sup>45</sup> *See id.*

<sup>46</sup> Rapids Power Exemption Order, at p. 6.

<sup>47</sup> *Id.*

## **7.0 Consequences of Delay (Minn. R. 7849.0300)**

LWP has requested an exemption from Minnesota Rules 7849.0300, which requires the applicant to discuss the “anticipated consequences to its system, neighboring systems, and the power pool should the proposed facility be delayed one, two, and three years, or postponed indefinitely.”<sup>48</sup> LWP is not a utility and has no “system” as defined by the Rules. Thus, this data requirement is inapplicable to LWP and is unnecessary to determine the need for the proposed Project. Instead, LWP proposes to submit data on the consequences of delay to its potential customers and the region.

In order to qualify for the PTC, the Project must be on-line by December 31, 2012. If the Project is delayed, construction of the Project might not be completed by the December 31, 2012 deadline and the Project would not be eligible for the PTC. Not receiving the PTC would, in turn, require LWP to increase the price it charges IPL. This price increase may ultimately impact the rates IPL charges its customers or results in the Project not being built.

In addition, any delay in constructing the Project would result in a lost opportunity for IPL to purchase local, clean, cost-effective renewable energy. If the Project is delayed, IPL would need to purchase power and renewable energy to join in the nationwide movement of increased use of renewable energy, at a potential higher cost to its customers. Delaying the Project could also negatively impact IPL’s ability to satisfy IPL’s internal strategy towards diversifying its overall resource portfolio to both reduce emissions of GHG and to foster an efficient mix of resources. Moreover, LWP believes that it would be imprudent to delay the Project, because national and international growth in the wind energy industry has increased, and likely will continue to increase, costs associated with (a) raw materials (steel, copper, concrete,

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<sup>48</sup> See Exemption and Variance Request, at pp. 8-9.

and other materials); (b) transportation; (c) wind facility sites; (d) turbine and ancillary equipment; (e) large cranes; and (f) balance of plant construction.

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