



85 7th Place East, Suite 500, St. Paul, MN 55101-2198
main: 651.296.4026 tty: 651.296.2860 fax: 651.297.7891
www.commerce.state.mn.us

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**COMMENTS AND RECOMMENDATIONS OF THE
MINNESOTA OFFICE OF ENERGY SECURITY
ENERGY FACILITY PERMITTING STAFF**

DOCKET NO. IP6603/WS-08-1449

Meeting Date: September 2, 2009.....Agenda Item # _____

Company: Lakeswind Wind Power Partners, LLC/Project Resources Corporation

Docket No. **PUC Docket Number: IP 6603/WS-08-1449**

**In the Matter of the Lakeswind Wind Power Partners, LLC Application
for a Large Wind Energy Conversion System (LWECS) Site Permit for
the Lakeswind Wind Power Plant in Becker, Clay and Ottertail Counties.**

Issue(s): Should the Commission grant the request for a contested case hearing on the
Lakeswind Wind Power Plant Project?

Should Lakeswind Wind Power Partners, LLC, be granted a site permit to
construct a Large Wind Energy Conversion System and Associated Facilities
in Becker, Clay and Otter Tail counties?

DOC EFP Staff: Larry B. Hartman.....651-296-5089

Relevant Documents

Site Permit Application for Lakeswind Wind Power Plant January 21, 2009

The enclosed materials are work papers of the Office of Energy Security (OES) Energy Facility Permitting (EFP) Staff. They are intended for use by the Public Utilities Commission and are based on information already in the record unless otherwise noted. This document can be made available in alternative formats; i.e., large print or audio tape by calling (651) 201-2202 (Voice) or 1-800-627-3529 (TTY relay service).

Documents Attached:

1. Lakeswind Wind Power Plant Site Map
2. Wind Schematic
3. Proposed Findings of Fact and Conclusions
4. OES EFP Staff Exhibit List
5. Proposed Site Permit

(Note: see eDockets (08-1449) or the PUC Facilities Permitting website for additional documents: <http://energyfacilities.puc.state.mn.us/Docket.html?Id=19892>.

Statement of the Issue

Should the Public Utilities Commission (Commission):

- A. Grant the request for a contested case hearing on the Lakeswind Wind Power Plant Project?
- B. Grant a site permit to construct a 60 MW Large Wind Energy Conversion System and Associated Facilities in Becker, Clay and Otter Tail counties?

Introduction and Background

Project Resources Corporation acting on behalf of Lakeswind Wind Power Partners, LLC, applied for a site permit to the Commission on January 21, 2009, to develop the proposed 60-Megawatt Lakeswind Wind Power Plant located in Becker, Clay and Otter Tail counties. The Lakeswind Wind Power Plant project is scheduled for construction in 2010 with an expected in-service date of December 31, 2010.

Project Location

The proposed Lakeswind Wind Power Plant site is located in southwestern Becker County, southeastern Clay County and northwestern Otter Tail County as shown on the accompanying map. See Attachment 1. The Project Site as now proposed is located in four townships: Parke: Sections 19, 20, 24, 25, 26, 29, 30 and 32 through 36; Tansem: Sections 1 through 5 and 8 through 30 all in Clay County; Cormorant: Sections 19, 29, 30, 31 and 32 in Becker County; and Scrambler: Sections 5,6 and 19 through 21 in Otter Tail County. The Project boundary originally encompassed approximately 22,000 acres. As of the date of its application, the Applicant indicated that it had obtained lease and easement agreements with most of the landowners within the site.

On April 20, PRC submitted a letter amending its proposed site permit boundary to include approximately another 2,500 acres of land on the east and north side of the proposed site as shown on the accompanying map, which now includes a portion of section 24 in Parke Township in Clay County; portions of sections 19, 29, 30, 31 and 32 in Cormorant Township in Becker County and a portion of section 5 in Scrambler Township in Otter Tail County. Nearly all of the land added to the amended site boundary is land owned by Aggregate Industries.

The proposed site, now approximately 22,500 acres in size, is comprised primarily of agricultural lands (crops and pasture), gravel operations, wetlands, lakes and scattered woodlots, wildlife management areas, waterfowl production areas, and a state scientific and natural area.

Site terrain is undulating to rolling in nature and is without long vistas due to the nature of the topography. The Lakeswind Wind Project will temporarily disrupt up to 120 acres of agricultural lands for roads and turbines during the construction phase. The Project will permanently displace up to 20 acres of agricultural land within the site. The Applicant has easements or options on the land necessary within the site to build the project. Land rights will encompass the proposed wind farm and all associated facilities, including but not limited to wind and buffer easements, wind turbines, access roads, electrical collection system, project substation and feeder lines.

Lakeswind Wind Power Plant Description

The Lakeswind Wind Power Plant Project as proposed may use up to 40 GE 1.5 megawatt wind turbines or similar model. The turbines will be mounted on 80-meter (262 feet) high freestanding tubular steel towers. The blades on the wind turbines are 38.5 meters (126 feet) long. The rotor diameter is 77 meters (253 feet). The electrical collector system will consist of underground 34.5 kV collection and feeder lines. The electrical system and feeder lines will be located along public roads when possible. Turbine selection has not been finalized. Other turbine models under consideration include Siemens 2.3MW, GE 2.5MW and Vestas 3.0MW, among others. If that is the case the rotor diameter may be up to 90 feet larger, with towers up to 100 meters (328 feet). If for example a 3.0 MW turbine were to be used, there would be 20 turbines rather than 40 because the Project is designed for 60 Megawatts, not more.

Other project components include: all-weather class 5 access roads of gravel or similar materials, pad-mounted step-up transformers, concrete and steel tower foundations, an underground supervisory control and data acquisition system, up to two permanent reference meteorological towers, and a project substation (location undetermined within the site). The Project may also include an operations and maintenance building, but not necessarily on-site. The O&M building will be permitted by the appropriate governmental unit.

Power from the Project substation will be delivered to the Tamarac Substation owned by Great River Energy and located in the northeast portion of section 28 in Scrambler Township in Otter Tail County. The voltage of the transmission line between the Project substation and the Tamarac Substation (41.6 to 115 kV) remains undetermined, depending on factors not associated with the Commission's site permit review requirements. The transmission line between the Project substation and the Tamarac Substation may be permitted by the local unit of government, depending on voltage.

Regulatory Process and Procedures

A site permit from the PUC is required to construct a Large Wind Energy Conversion System (LWECS), which is any combination of wind turbines and associated facilities with the capacity to generate five megawatts or more of electricity. This requirement became law in 1995 Minnesota Statute Chapter 216F. The rules to implement the permitting requirement for LWECS are in Minnesota Rules Chapter 7836. In accordance with Minnesota Rule 7836.0500 Subp.2., a site permit may not be issued until the certificate of need or other commitment requirement has been satisfied.

When Lakeswind Wind Power Partners, LLC, submitted its site permit application (January 21, 2009), it indicated that it was exempt from the Certificate of Need (CON) requirement of Minnesota Statutes 216B.243 because it is a C-BED wind project. Lakeswind believed that at the time its application was filed, it qualified for the exemption allowed under Minnesota Statute Section 216B.243, subd. 8 (7) because the project was:

“...a large energy facility that (i) generates electricity from wind energy conversion systems, (ii) will serve retail customers in Minnesota, (iii) is specifically intended to be used to meet the renewable energy objective under section 216B.1691 or addresses a resource need identified in a current commission-approved or commission-reviewed resource plan under section 216B.2422, and (iv) derives at least ten percent of the total nameplate capacity of the proposed project from one or more C-BED projects...”

The Minnesota Office of Energy Security issued C-BED approval for Lakeswind on November 21, 2008. The project received the resolution of support from Clay County on July 21, 2009, and from Becker and Otter Tail counties on November 25, 2008. Lakeswind is exclusively negotiating with Minnesota utilities and intends to sell the power to Minnesota utilities to assist them in meeting their renewable obligations under the renewable energy objective. (note: Proposed Site Permit language in III. J. 4. specifically recognizes this intention.)

The Subd. 8 (7) of Minnesota Statutes 216B.243 was eliminated during the 2009 legislative session and the new law took effect on May 19, 2009. However, Lakeswind believes that the project was in compliance with the statutory requirements that were in force at that time the site permit application was filed and that its exemption from the CON requirement is still applicable.

Site Permit Application, Preliminary Determination and Draft Site Permit

On January 21, 2009, the PUC received the site permit application submitted by Project Resources Corporation (PRC), on behalf of Lakeswind Wind Power Partners, LLC, for the Lakeswind Wind Power Plant. On February 12, 2009, the PUC considered acceptance of the Site Permit application and made a preliminary determination to issue a draft site permit. On February 17, 2009, an Order accepted the application and issued a draft site permit. Upon acceptance of the application OES EFP staff initiated the review and notice requirements of Minnesota Rules Chapter 7836.

Public Participation Process

The rules provide opportunities for the public to participate in deliberations on the LWECs site permit application. The public was advised of the submission of the site permit application after the application was accepted. The OES EFP staff held a public information meeting in Barnesville on April 29, 2009, to provide the public with an overview of the permitting process for LWECs and the draft site permit, and to receive comments on the site permit application and the draft site permit. The meeting also provided the public with an opportunity to provide EFP staff and the applicant with comments about the permitting process and permit issues. About 125 to 140 people attended the public meeting.

OES staff provided an overview of the requirements of the permitting process and the conditions in the draft site permit and responded to questions about the permitting process and conditions in the draft site permit. Representatives of the applicant were available to describe the project and

answer questions. Numerous comments and questions were asked covering a broad spectrum of topics relating to wind energy. These included many positions, statements and comments in support of the project, and two or three persons expressing concerns or issues that they felt remained unanswered or wanted more information on, including health related issues, noise, property values, impacts on natural resource features, taxes, visual impacts, stray-voltage, setbacks and impacts on wildlife.

Public Comments

Approximately 28 written comments, some with attachments were received by the close of the comment period on May 20, 2009. All of the written comments received, written responses to some of the comments by PRC on June 2, 2009, and other relevant documents have been eFiled (08-1449). Comments were received from individuals, two state agencies and the applicant.

Comments included a request for a contested case hearing and a moratorium on wind development, and expressions of concern about health impacts and natural resource impacts as they relate to habitat, prairie chicken leks, wildlife surveys and biodiversity issues. Four citizens submitted multiple comments. Several categories of comments were evident:

- Approximately 18 of the written comments were in support of the project
- Three of the written comments suggested wind power was too expensive
- Five comments thought turbines negatively altered the landscape and one's ability to enjoy nature
- Three comments thought turbines had an impact on property values.

Per Anderson, Moorhead, Minnesota, sent a letter dated May 4, 2009, accompanied by several attachments, to the Commission requesting both a contested case hearing and a moratorium "where citizens ask questions and receive information from representatives of Project Resources Corporation (PRC), the Minnesota Department of Natural Resources (MnDNR) and the U.S Fish and Wildlife Service (USFS) regarding the site permit application presented to the PUC..." Mr. Anderson also requested that PRC provide "a revised turbine siting plan with an opportunity to submit written comment to the PUC." See Exhibit 13.

Mr. Anderson's stated "purpose of the hearing would be consideration of information relevant to a final approval of the draft site permit, including relevant information omitted from the application submitted to the PUC..." Mr. Anderson questioned whether the PUC acted upon a recommendation from OES EFP staff that he believes "omitted information relevant to state norms for LWECS silting."

Mr. Anderson's letter of May 4, 2009, also posed several questions and they are as follows:

- Does the PUC continue to regulate and act upon LWECS applications using Minnesota Noise Standards?
- Does the PUC declare a moratorium on approval of site permits until health questions have been answered decisively?
- Does the PUC interim, stringent and precautionary noise standards to ensure that endangerment of human health is avoided or greatly diminished while research seeks definitive answers to current questions?

Mr. Anderson's May 4, 2009, letter in closing stated: "This request for moratorium, notice and public hearing under conditions outlined above is a request for responsible public deliberation about new and consequential matters regarding state approval of LWECS and the protection of public health in Minnesota."

Mr. Anderson's letter was accompanied by six attachments. These attachments also expressed his concern about: 1) PRC's amendment of the site permit application without providing additional information on turbine locations; 2) whether the project is buildable as proposed; 3) the need for additional information from MnDNR and USFWS; 4) MnDNR's recommendation to consider project alternatives that would avoid direct impacts to ecologically significant areas, impacts on prairie remnants by a one-half mile avoidance, wetlands and grassland easements, and prairie chicken leks.

Mr. Anderson also requested that the Minnesota Department of Health investigate health issues associated with wind turbines.

In an electronically filed comment Valerie LeClair, on May 20, 2009, expressed concerns about the Lakeswind Wind Power Plant because of the potential for decreased property values, noise, effectiveness, impact on wildlife and quality of life issues. See Exhibit 14.

Dwight Mickelson, on May 20, 2009, commented that the "Lakes Wind Project is entirely inappropriate for this part of Clay. If you were looking for one of the most environmentally diverse and picturesque parts of Clay County...this is it." Mr. Mickelson also commented that growing families, retired people and hobby farmers, especially in the region of Parke Township to the north of the Lakeswind Project will not receive compensation and that the open flats of Clay County would be more appropriate. See Exhibit 14.

Kari Miles (March 28 and 30, 2009), commented about the potential impact of health effects on farmers and that farmers weren't told of the potential impacts, liability issues, noise, flashing lights, ice throws, property values and quality of life issues. Ms. Miles also commented that putting them in an industrial site is more appropriate. See Exhibit 14.

Mr. Paul and Kay Ornberg submitted two sets of comments (March 30 and May 19, 2009), and raised several general questions about the project, wind rights, placement of overhead electric lines associated with the project, placement of additional communication towers, lease restrictions, and payment of taxes. Mr. Ornberg also expressed concerns about not knowing the location of the turbines, access roads, size of the turbines, visual and shadow flicker impacts, costs, liability issues, fire, how the review process works and health related issues. See Exhibit 14.

Numerous individuals submitted comments in support of the Lakeswind Project prior to May 20, 2009. Persons indicating support for the project include: Cliff and Linda Bang, John Bergseid (two comments), Wendell and Marine Blatchford, Larry and Diane Blomster, Linda and Ron Ekre, Lisa Gibb, Barb Grunewald, David and Doris Hanson, Marvin Hanson, Lindley Jacobson, Armand and Nonie Swenson, Rod Schultz, Eldon and Margie Raknerud, Raymond Lottie, Jay Roste, and Roger Minch. See Exhibit 13 and 14. A representative sample of the comments in support of the Lakeswind Project is provided below:

- I feel the towers are aesthetically pleasing to look at and in no way devalue the lands. Most of the people I have talked to feel the same way and we should not let a single person or small minority dictate what goes on in the county.
- We are one hundred percent in favor of this project. As a nation we are past due at pursuing alternate forms of energy. We are concerned about our dependency on foreign sources of energy, not only for ourselves, but for our children and grandchildren. We view this project as a progressive step to safeguard energy sources for future generations.
- We wish to go on record approving this project for Clay County. We are landowners in the project area and feel it is time to pursue alternative forms of energy for our community. We feel Project Resources has presented a project worth of our consideration and fully support them in this endeavor.
- Why wouldn't anybody want wind power? If they don't want to see the wind turbines they should stay in town & fight the water.
- We have read and heard both sides of this issues and think this is a wonderful opportunity for this area to help in the issues of energy and fuel in our country. Our land was cut out of the project permit due to NIMBY activities.... Though we are very disappointed by our own loss, we very much support any neighbors that can be blessed after spending all of their lives on the land.
- There is no credible evidence that wind turbines cause any health issues. 99% of the people in the project area want it to go through. Minnesota has always been at the forefront in renewable energy and clean energy. This project is needed to displace carbon emissions that coal power plant emit. I can't think of one thing that should hold the project from moving forward. This project would create taxes for state and local government.
- Some of my Clay County neighbors have raised objections to this project, claiming among other things, the ruination of lovely vistas, potential health issues and noise pollution. While respecting the views of my neighbors, I would make the following points: 1. There is no doubt that wind towers alter the landscape within the project area. 400-foot towers are certain to be noticed. But I have always felt that I own the land to which I have title and not the view around it. If I want to control my view, I had better build in the woods or buy more land. 2. I don't know for sure if the so-called windmill "flicker" will impact human health, but I am skeptical. Even so, a windmill's shadow will move with the sun, so it would seem to me that it would a transitory phenomenon for any particular resident and visible only on sunny days. 3. My residence is just a quarter mile from Clay County Highway 10, and everyday I must contend with the noise of gravel trucks going to and from pits that lie to my east. I would rather these trucks did not bother my country peace, but I understand they represent commerce in my county, and they are allowing fellow landowners to make returns on their land. Commerce and investment returns are still good things in my book. Windmills are like gravel trucks to me. They will make some noise when turning, but at much lower decibel levels than those trucks. And they will allow me and my fellow landowners to make returns from our land. ...I wish we could all just plant more current bushes to satisfy our power needs. But realistically we have to find alternatives that satisfy the requirements of today's laws. Production of energy from wind just makes a lot of sense for this breezy part of our state at this particular time."
- Here we have an opportunity to not only harness a valuable power source, but an economic development opportunity that comes to us with no expenditure of time, effort, economic development resources or tax incentives. Just the reverse. The project

will bring jobs, tax revenue and make us proud we are blessed with a way to assist providing our country with secure energy needs. The tradition in Clay Co. has been to let landowners use their land for productive and legal developments. Wind turbines are much less disruptive, than say, gravel mining and hauling activities. And, the citizens of this area have shown strong support for wind turbines. The City of Moorhead has constructed two of them on the NE edge of the city. I have not heard one complaint about those turbines, built practically within the city. Most people I mention them to do not even know they are there. PRC is not relying on eminent domain to complete it project, instead using voluntary contracts with landowners who should be given credit to know what is best for their own land, given the fact that but for visual impacts, it is they who will endure all of the burdens of the project. Minnesota, like its neighbors, North Dakota and Iowa have gone far down the road to embrace large-scale wind energy projects. This is the right path, and given the scale of the projects in Pipestone and Lincoln Counties, any serious problems with these developments would be well known and addressed already. So I urge the MN. PUC to approve the application of PRC for the Lakeswind project without a contested case hearing or further delay. This is not the time to reargue settled issues of tax and public policy.”

State Agency Comments

The Minnesota Department of Transportation, District 4 Detroit Lakes/Morris office in a comment letter dated May 19, 2009, noted that there are no scheduled projects in the immediate area but may plan an expedited project due to hydraulic concerns. Mn/DOT commented that if work is required within Mn/DOT right-of-way for the placement of structures, materials, or access to adjacent properties that this should be coordinated through its Property Management/Right of Way permits office.

The Minnesota Department of Natural Resources in a May 15, 2009, letter commented that: 1) The proposed project area contains an abundance of rare and significant natural resource features; and 2) DNR is concerned with potential impacts created by the proposed project on rare and high-quality plant and animal communities, as well as effects on publicly-owned recreational lands within and adjacent to the project site.

DNR recommended a site visit between the applicant and DNR to identify the location of these resources, identify proper locations for turbine placement, and develop appropriate methodology for a pre-construction biological survey and a prairie management plan. The resources identified include features identified in the associated Minnesota County Biological Survey (MCBS) Sites of Biodiversity and Native Plant Communities. Other features identified include the Blanket Flower Prairie Scientific and Natural Area and native prairie remnants.

The DNR letter also expressed concern with potential impacts to the grassland birds that depend on prairie habitat, and noted that grassland birds, including greater prairie-chickens, are deterred from nesting in otherwise appropriate habitat by the presence of tall structures in the vicinity and recommended a minimum of five rotor diameter setback from prairie remnants to minimize this potential effect. The DNR also suggested that no turbine be located in the NE1/4 of Sect. 17 of Tansem Township, between two waterbodies because it may impact waterbirds moving between those water bodies.

OES EFP Staff Comments and Analysis

EFP staff has reviewed all of the written comments and other information introduced into the record of this proceeding. The public comments received are summarized above. The following EFP staff comments and analysis address: 1) the request to the Commission for a contested case hearing; and 2) other concerns or comments.

Request for Contested Case

The first item addressed is Mr. Anderson's request for a contested case hearing. See comments provided by Mr. Anderson, as summarized above (*Public Comments*). Also, see Exhibit 13. Minnesota Rule 7836.0900, Subp. 5. (B) states "The Commission shall order a contested case hearing if the commission finds that the person requesting the contested case hearing has raised a material issue of fact and that holding a hearing would aid the PUC in making a final determination on the permit application."

Thus, two issues the Commission must consider are: 1) have the person's who submitted the written comments "raised a material issue of fact" and; 2) would a contested hearing aid the PUC in making a final determination on the permit application?

In support of his position, Mr. Anderson states that the request for a contested case hearing is necessary for:

- A) "responsible public deliberation about new and consequential matters regarding state approval of LWECs and the protection of public health in Minnesota."
- B) the purpose of providing an opportunity "where citizens ask questions and receive information from representatives of Project Resources Corporation, the MNDNR and the U.S. Fish and Wildlife Service regarding the site permit application presented to the PUC."
- C) "Considerations of information relevant to a final approval of the draft site permit, including relevant information omitted from the application submitted to the PUC..."

OES staff, after careful review of Mr. Anderson's request, has concluded that no material issue of fact has been raised by Mr. Anderson. Therefore, there is no need for a contested case hearing.

Mr. Anderson's, first item (A) regarding "responsible public deliberation about new and consequential matters regarding state approval of LWECs and the protection of public health in Minnesota," fails to raise a material issue of fact based on the following analysis.

In February 2009, the Minnesota Department of Health (MDH) received a request from OES for a "white paper" evaluating possible health effects associated with low frequency vibrations and sound arising from large wind energy conversion systems. The OES noted that there was a request for a contested case hearing before the Minnesota Public Utilities Commission on the proposed Bent Tree Wind Project in Freeborn County in southeastern Minnesota. The Commission denied that request for a contested case hearing, in part because an informal hearing

was going to be held on the certificate of need required for that project, and the hearing would afford interested citizens an opportunity to enter additional information into the record regarding possible health effects associated with low frequency noise.

Mr. Anderson also wrote to the MDH Commissioner to ask for an evaluation of health issues related to exposure to low frequency sound energy generated by wind turbines. In requesting the “white paper,” the OES stated that a white paper would have more general application and usefulness in guiding decision-making for future wind projects than a contested case hearing on a particular project. The OES EFP staff position on that has remains the same. In March 2009, the MDH agreed to evaluate health impacts from wind turbine noise and low frequency vibrations. The Commissioner replied to Mr. Anderson, affirming that MDH would perform the requested review.

On May 22, 2009, the MDH released a white paper titled “Public Health Impacts of Wind Turbines.” This report was posted on the PUC’s web site at:
<http://energyfacilities.puc.state.mn.us/documents/Public%20Health%20Impacts%20of%20Wind%20Turbines,%205.22.09%20Revised.pdf>

Subsequent to release of the MDH “white paper” Mr. Anderson posed several questions to the MDH.

In a letter to Mr. and Ms. Anderson, (See Exhibit 17) dated August 13, 2009, MDH Commissioner, Sanne Magnan, M.D., Ph.D, responded to specific questions posed by Mr. Anderson as follows:

Are current standards in Minnesota safe? Regulatory standards protect health and safety, but whether for air, water or noise, regulators do not set “bright line” standards without also considering cost, technical difficulties, possible benefit and alternatives. No regulatory standard offers absolute safety. The Minnesota Department of Health can evaluate health impacts, but it is the purview of regulatory agencies to weigh these impacts against alternative and possible benefits.

Are the proponents of wind turbine syndrome mistaken? As noted in the “White Paper,” the evidence for wind turbine syndrome, a constellation of symptoms postulated as mediated by the vestibular system, is scant. Further, as also noted, there is evidence that the symptoms do not occur in the absence of perceived noise and vibration. The reported symptoms may or may not be caused by “discordant” stimulation of the vestibular system.

Does more study of adverse effects need to be undertaken? More study may answer questions about the actual prevalence of unpleasant symptoms and adverse effect under various conditions such as distance to wind turbines and distribution of economic benefit. However, there is at present enough information to determine the need for better assessment of wind turbine noise, especially at low frequencies. Such assessments will likely be

beneficial for minimizing impacts when projects are sited and designed. Also, even without further research, there is evidence that community acceptance of projects, including agreement about compensation of within project areas, will result in fewer complaints. Therefore, more research would be useful, but the need will have to be balanced against other research needs.

Are there grounds to change the state's siting standards immediately for the sake of precaution? Minnesota requires that large energy facilities, such as the one in Clay County, be permitted by the Public Utilities Commission (PUC). Before permitting, the PUC must determine whether the project is needed and must consider alternatives. There must be an environmental study. The process is public and there is opportunity for comment at each stage. These requirements ensure accountability and public health protection.

Mr. Anderson's second and third items (A and B), and supporting comments, do not identify any "materials issues of fact." Mr. Anderson's comments merely focus on process issues to get additional facts or opinions from federal and state agencies and the applicant, in the belief that this additional information is necessary for the Commission to make a decision on the site permit.

By way of background information, Minnesota Rules, Chapter 7836 provide a review process for large wind energy conversion system (LWECS). See Attachment 2. To briefly summarize this process, an applicant submits a LWECS site application, which OES EFP staff reviews for completeness. If the application does not contain the necessary information required by rule, the applicant is asked to provide the additional information. Assuming the application contains the required information; OES EFP staff will prepare comments and recommendations for Commission consideration, which address application acceptance and whether a draft site permit may be issued.

Commission acceptance of an application and issuance of a draft site permit allow EFP staff to initiate the LWECS review process, which includes:

- 1) published notice in local newspapers and the EQB Monitor;
- 2) distribution of the accepted application and draft site permit, and opportunity for federal, state and local units of government, as well as affected landowners, to comment on the application and draft site permit in writing or at a public information meeting;
- 3) a public information meeting in the area to provide an overview of the permitting process and an opportunity for the applicant to explain its proposed project and opportunity for the public to ask questions of the EFP staff or the applicant;
- 4) a deadline for submitting comments is included in the notice, which includes the option of requesting contested case hearing;
- 5) EFP staff review of the record, then preparation of documents for Commission consideration in acting on the site permit application; and

- 6) issuance of a site permit is issued by the Commission that identifies site permit boundaries in which the turbines and associated facilities will be located and conditions for turbine placement to mitigate impacts.

The LWECS site permit contains a number mitigation measures, setback requirements, preconstruction survey requirements, site layout restrictions and other numerous requirements that provide for environmental protection and public health and safety. In addition to the site permit, the Permittee must obtain a number of other permits from federal, state and local units of governments after the site permit issues. Those permits are identified in the site permit application. Typically, the LWECS site permit does not specify individual turbine locations, because of numerous other details that must be planned and coordinated, including with downstream permitting authorities and landowners. At the pre-construction meeting or prior to the Permittee must demonstrate compliance with the conditions in the site permit for setbacks and site layout restrictions. The site permit also establishes the parameters for project design and implementation. If for example, turbines or associated facilities are located in prairie, a native prairie mitigation plan is required. Environmental monitoring or studies may also be implemented or required if warranted, based on results of post-permit issuance detailed site evaluations of potential turbine locations.

In summary, there are numerous site permit requirements that protect natural resource features as well as public health and safety. Minnesota has close to two thousand megawatts of operating wind energy facilities in place. Prior to July of 2005 those facilities were permitted by the Minnesota Environmental Quality Board. Since July 2005, LWECS have been permitted by the Minnesota Public Utilities Commission. Many of the permit conditions in this proposed site permit have been LWECS site permit conditions since 1995. In the past 14 years, wind farm participants in Minnesota have not filed any public health or safety concerns with the EQB or the PUC, the responsible governmental unit; nor have comprehensive avian and bat studies demonstrated significant fatality or mortality impacts.

Therefore, based on information in the record, OES does not believe that a material issue of fact has been raised by Mr. Anderson and does not believe that a contested case hearing would aid the Commission in making a final determination in this matter.

Other Concerns and Comments

Other public comments or concerns expressed by the Andersons, Dwight Mickelson, Kari Miles and the Ornbergs are addressed by specific setbacks from the property they own (See Site Permit (III.M.2) and elsewhere throughout the site permit. Some of their concerns, such as FAA lighting requirements, are set by the federal government. With respect to one of Mr. Ornberg's concern, PRC will carry liability insurance. Concerns were also expressed about not knowing where the turbines will be located. Simply put, the turbines and associated facilities will be placed on the properties of persons who have leased their wind rights to the PRC for the proposed Lakeswind Wind Power Plant. Additionally, the proposed site permit, as have other site permits, imposes numerous, but reasonable standards and requirements on the Permittee.

Many of MnDNR's concerns are addressed in the proposed findings and through site permit conditions and setback requirements. See Findings 48 through 52, 65, 66 and site permit conditions III.B.9, III.C.1, C.4, C.5, C.6 and III.D.1.

Federal and state agencies are provided copies of applications for a variety of projects and asked by responsible governmental units to comment on them within a specific time frame. In the case of LWECS site permit applications, reviewing agencies also receive the “draft site permit,” containing numerous permit conditions, setback requirements and other requirements a permittee is obligated to comply with. These agencies often take the time and opportunity to submit written comments that identify issues or conditions that are of concern to them that are entered into the record, along with remedial actions or steps designed to lessen the impact of the project.

It is the opinion of OES EFP staff that there are some unresolved issues between PRC, MNDNR and USFWS; however, those issues can be best resolved by the applicant and the permitting agencies with respect to their jurisdiction in this matter. Site design is an iterative process. A continuing dialogue between the applicant/permittee and the permitting agencies typically resolves those issues and those results can be reflected in the permits issued by those agencies within the context of their jurisdictional authority.

When a “permit” is obtained from the PUC, a permittee in nearly all circumstances must obtain permits from other federal, state and local units of government, who also have their own permit requirements, prior to initiating project construction. This is the case for the Lakeswind Project.

Energy facility project design is an iterative process and not finalized until all factors have been considered. As PRC stated in its application “It is important to emphasize that the depicted locations of these facilities, including but not limited to the wind turbines and access roads, are likely to change subsequent to further site study and planning activities by the applicant.” Exhibit 1, page 1. This practice is common, and certainly not out of the ordinary, with respect to large infrastructure projects.

The OES EFP staff believes the record in this matter is sufficiently robust to allow the Commission to make a decision on the permit application. OES EFP also believes the proposed site permit provides sufficient measures to provide necessary guidance and overview regarding project design, construction, restoration, monitoring and operation of the proposed Lakeswind Wind Power Plant.

Standard for Permit Issuance

Essentially the test for issuing a site permit for a Large Wind Energy Conversion System is to determine whether a project is compatible with environmental preservation, sustainable development, and the efficient use of resources. Minnesota Statutes Chapter 216F. The wind statutes incorporate certain portions of the Power Plant Siting Act, including the environmental considerations. Minnesota Rule 7849.5900. Also, the law allows the PUC to place conditions in LWECS permits. Minnesota Statutes 216F.04 (d).

Based on the record of this proceeding, DOC EFP staff concludes that the Lakeswind Wind Power Plant meets the procedural requirements and the criteria and standards for issuance of a site permit identified in Minnesota Statutes and Rules. The site permit application has been reviewed pursuant to the requirement of Minnesota Rules Chapter 7836 (Wind Siting Rules).

OES EFP staff has prepared for Commission consideration proposed Findings of Fact, Conclusions and Order, an Exhibit List and a proposed Site Permit for the 60-Megawatt Lakeswind Wind Power Plant. The site criteria addressed in the Findings of Fact (such as human

settlement, noise, community benefits, and surface water) track the factors described in the PUC’s rules for other types of power plants that are pertinent to wind projects. The conditions in this proposed Site Permit are essentially the same as those conditions included in other LWECS site permits issued by the Environmental Quality Board and the Commission. See Attachment 5 in the Commissioner’s packet.

A number of issues were identified during the course of this proceeding and they were summarized above in “*Public Comments*” and discussed in “*OES EFP Staff Comments and Analysis.*”

Proposed Findings of Fact

The proposed Findings (see Attachment 3 in the Commissioner’s packet) address the procedural aspects the process followed, describe the project, and address the environmental and other considerations of the project. The proposed Findings of Fact reflect some findings that were also made for other LWECS projects. The following outline identifies the categories of the Findings of Fact.

<u>Category</u>	<u>Findings</u>
Background and Procedure	1 – 12
Written Comments	13
The Permittee	14
Project Description	15 – 22
Site Location and Characteristics	23 – 28
Wind Resource Considerations	29 – 31
Land Rights and Easement Agreements	32 – 33
Site Criteria	34 – 79
Site Permit Conditions	81 – 83

Exhibit List

OES EFP staff has prepared an exhibit list of the written comments and other documents that are part of the record in this permit proceeding; it is included as Attachment 4 in Commissioner’s packet. OES EFP staff will provide copies on request and copies will be available for review at the PUC meeting.

Proposed Site Permit

The OES EFP Staff has prepared a site permit for the Commission’s consideration. Staff has made administrative changes to the draft site permit. See Attachment 5 in the Commissioner’s packet.

Commission Decision Options

A. Contested Case Hearing Request

1. Deny the request for a contested case hearing.
2. Grant the request for a contested case hearing; if the request is granted the Commission must determine the scope of the contested case proceeding or have an Administrative Law Judge from the Office of Administrative Hearings determine the scope of the proceeding.
3. Make some other decision deemed more appropriate.

B. Lakeswind Wind Power Plant Findings of Fact and Conclusions

1. Adopt the attached Findings of Fact, Conclusions of Law and Order and issue the attached site permit to Lakeswind Wind Power Partners, LLC, for the 60 MW Lakeswind Wind Power in Becker, Clay and Otter Tail Counties. The site permit issued by the PUC authorizes Lakeswind Wind Power Partners, LLC, to construct and operate the large wind energy conversion system and associated facilities in accordance with the conditions contained in the site permit, in compliance with Minnesota Statute 216F.04 and with Minnesota Rules Chapter 7836.
2. Amend the Findings of Fact and Conclusions of Law and the site permit as deemed appropriate.
3. Deny the site permit.
4. Make some other decision deemed more appropriate.

DOC EFP Staff Recommendation: The staff recommends Options A.1. and B.1.