



BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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

DOCKET NO. E282/WS-09-178

Meeting Date: September 10, 2009.....Agenda Item # ____

Company: **New Ulm Public Utilities Commission (NUPUC)**

Docket No. **E282/WS-09-178**

In the Matter of the New Ulm Public Utilities Commission Application for a Large Wind Energy Conversion System (LWECS) Site Permit for the New Ulm Wind Project in Nicollet County.

Issue(s): Should the Public Utilities Commission (Commission) issue a draft LWECS site permit for public comment?

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Relevant Documents

Letter dated July 30, 2009, from City of New Ulm Responding to issues raised at Commission meeting on June 11, 2009 August 17, 2009
Order of Commission Accepting Site Permit Application of NUPUC..... June 26, 2009

The enclosed materials are the work papers of the Office of Energy Security (OES) Energy Facility Permitting Staff (EFP). 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. Proposed Site Map
2. NUPUC Application for Utility Permit on County Road Right-of-Way May 12, 2009
3. Proposed Site Permit

See eDocket filings (09-178) at <https://www.edockets.state.mn.us/EFiling/search.jsp>, or the PUC website at: <http://energyfacilities.puc.state.mn.us/Docket.html?Id=20053> for project related documents.

Statement of the Issues

Should the Commission make a determination to issue a draft LWECS site permit for distribution and public comment?

Introduction and Background

On June 11, 2009, the Commission accepted the site permit application of the New Ulm Public Utilities Commission in an Order dated June 26, 2009 (see Relevant Documents). Subsequent to the Order, public notice was issued on July 10, 2009, seeking comments from governmental units and interested persons on New Ulm's LWECS site permit application. The deadline for submitting comments was July 31, 2009. Approximately 27 public comments were received that expressed numerous concerns and questions with regard to the application submitted by NUPUC.

The Order dated June 26, 2009, accepted the Site Permit Application for a LWECS, with the conditions that NUPUC provide the Commissions and OES EFP staff with additional information as requested, authorized appointment of a public advisor and found that a Certificate of Need is not required. Additionally, the Order included three other requirements, identified as paragraphs 4, 5 and 6, which read as follows:

4. Directed the applicant to provide a supplement to its application explaining its decisions to do the proposed project rather than to purchase renewable-generated power;
5. Clarified that in accepting the application as complete, the Commission is not approving the public purpose and has questions to resolve regarding the public purpose; and
6. Requested that OES report on the issue of whether the applicant has an alternative source of renewable energy.

With respect to Order requirement # 4, NUPUC submitted a supplement dated July 30, 2009. NUPUC also submitted a letter clarifying the size of the project. Order requirement # 6 is discussed in the OES EFP Staff Comment and Analysis section of this document.

Project Location

The proposed NUPUC Project is located in Lafayette Township in western Nicollet County in south central Minnesota approximately five miles north of the city of New Ulm and west of Highway 15. The proposed Project site includes all or portions of the following Sections: 17, 18, 19 and 20. See Attachment 1 in the Commissioner's packet. The Project boundary currently encompasses approximately 550 acres, which may be large enough to accommodate the proposed project given the required setbacks in the Commission's General Wind Permitting Standards. As of the date of this application, the Applicant had obtained lease and easement agreements with landowners for approximately 237 acres, which is approximately half the acreage necessary to comply with the setback requirements.

Project Description

The Project for which a permit is being requested includes the following associated facilities:

1. A wind turbine layout consisting of up to five, 1.65 MW Vestas V82 wind turbine generators, permanent meteorological tower;
2. Gravel access roads;
3. Electrical collection system;
4. Project substation;
5. One permanent meteorological tower; and
6. Operations and maintenance building.

While awaiting the results of a system planning analysis study from the Midwest Independent System Operator (MISO) NUPUC has developed other possible transmission options. One of them is an option set forth in an application to the Nicollet County Highway Department for a 34.5 kV overhead transmission line alternative that bypasses the need for MISO authorization. From the Project substation, NUPUC proposes to build a 34.5 kV transmission line to the Fort Ridgely Substation, located approximately four miles south of the proposed Project site. From that point NUPUC proposes to under build the proposed 34.5 kV line on an existing 69 kV line that proceeds south across the Minnesota River into a NUPUC owned substation within the municipal boundary of New Ulm and then step it down from 34.5 to 13.2 kV for distribution to customers in the New Ulm area. See Attachment 2 in the Commissioner's packet.

An Operations and Maintenance building is also required and is proposed to be located next to the project substation. The O&M building, project substation and any associated transmission line will be addressed by a separate permitting authority.

The Applicant's goal is to complete the construction of the Project and achieve commercial operation prior to December 31, 2010.

Regulatory Process and Procedures

A site permit from the Commission is required to construct a Large Wind Energy Conversion System, 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. The Minnesota Wind Siting Act is found at Minnesota Statutes Chapter 216F. The rules to implement the permitting requirements for LWECS are in Minnesota Rules Chapter 7836.

Certificate of Need

A Certificate of Need (CN) from the Commission is not required because the Project is less than 50 MW in size. See Relevant Documents (Commission Order dated June 26, 2009).

Site Permit Application and Acceptance

On May 5, 2009, New Ulm Public Utilities Commission filed a LWECS Site Permit Application with the Commission. The Commission accepted the application as complete and authorized OES EFP staff to appoint a public advisor for the project at its June 11, 2009, meeting and issued its Order June 26, 2009.

Summary of Public Comments

A Notice of Application Acceptance was issued on July 10, 2009. The applicant distributed the NUPUC Site Permit Application and Notice of Application Acceptance to local, state and federal governmental agencies and to landowners. Notice was also published in local newspapers. Public comments were accepted through July 31, 2009.

Approximately 27 written comments, some with supplements or attachments were received by the close of the comment period on July 31, 2009. All of the written comments received have been eFiled (09-179). Comments were received from 19 individuals, 2 state agencies, Nicollet County, 3 Nicollet County Commissioners, and 2 comments from the applicant, in direct response to requirement 4 in the Commission Order of June 26, 2009

Seven categories of comments were evident:

- Approximately 13 of the written comments suggested putting the project elsewhere.
- Seven comments raised concerns about health impacts on both humans and animals.
- Seven comments suggested that NUPUC does not need to meet the REO objective of Minn. Stat. 216B.1691.
- Six comments addressed possible interconnection issues with MISO and Xcel.
- 14 comments expressed concern about the use of eminent domain to obtain easements.
- 12 comments expressed their opinions about NUPUC's practices
- 17 comments expressed opinions or concerns about additional items, including comments on roads, project size, the request of the NUPUC for a variance from state setbacks, stormwater permit, drainage repair, the stricter requirements of Nicollet County's wind ordinance for small wind energy conversion systems (SWECS), impact on farming operations, aerial application practices, and crossing of drainage ditches.

The two comment letter from state agencies, the Minnesota Pollution Control Agency and Minnesota Department of Transportation, did not raise or identify any issues.

Preliminary Determination on Draft Site Permit

Minnesota Rule 7836.0800 states that: "Within 45 days after acceptance of the application by the PUC, the PUC shall make a preliminary determination whether a permit may be issued or should be denied. If the preliminary determination is to issue a permit, the PUC shall prepare a draft site permit for the project. The draft site permit must identify the permittee, the proposed LWECS, and proposed permit conditions."

Issuing a draft site permit does not authorize a person to construct a LWECS. The Commission may change, amend or modify the draft site permit in any respect before final issuance or may deny the site permit at a later date.

Public Participation Process

If the Commission makes a preliminary determination that the draft site permit may be issued, the OES EFP staff will implement the public participation process identified in Minnesota Rule 7836.0900. The public will be notified that a draft site permit has been issued, a public comment period will be established, and a public information meeting will be held near the project location. OES EFP staff will work with the public, local governmental units, and state agencies to identify issues, impacts and potential mitigation measures prior to bringing this matter back to the Commission for a final permit decision.

Minnesota Rule 7836.0900, Subpart 5, provides the opportunity for any person to request that a contested case hearing be held on the proposed LWECS project. The request must be filed within the time period established for submitting comments on the draft site permit and must include the issues to be addressed in a contested case hearing and the reasons a hearing is required to resolve these issues.

OES EFP Staff Comment and Analysis

EFP Staff has reviewed the written comments and other information introduced into the record of this proceeding. The following EFP staff comments and analysis address: 1) project need and renewable energy objectives; 2) land acquisition and eminent domain; 3) site permit content (general conditions and more specifically, New Ulm's request for a variance from the setback requirements); 4) permit issuance; and 5) other requirement of June 26, 2009 Order (specifically # 6).

Project Need and Renewable Energy Objectives

While there were numerous concerns expressed about project need, the fact is that the New Ulm Wind Project as proposed is not large enough to meet the requirements for a Certificate of Need (CON). The Order of June 26, 2009, also determined that a CON is not required. See relevant documents.

NUPUC in its response letter (July 30, 2009), to the Order, dated June 26, 2009, acknowledges that it is not obligated to comply with requirements energy objectives of Minn. Stat. 216B.1691; but also stated "the NUPUC deems it to be socially and environmentally responsible to include a significant element of renewable energy resources in its power offerings."

Land Acquisition and Eminent Domain

Many of the comments received suggested that the New Ulm proposed site should be located elsewhere and that site acquisition by eminent domain was not appropriate for the New Ulm Wind Project.

The development of Minnesota's wind resources began in the early 1990s, primarily in southwestern Minnesota on Buffalo Ridge. Typically, wind developers, like the many developers of natural gas plants, are categorized as independent power producers (IPP). It is arguable, under Minnesota law, whether IPP's have eminent domain powers. Numerous IPP's in Minnesota have successfully developed wind farms and natural gas plants that have been

authorized by the Commission, without invoking or even attempting to assert that they have eminent domain powers. Historically, when a wind developer proposes a site in Minnesota or elsewhere, they have only built on lands where they have acquired the wind rights through voluntary agreements (easements) from landowners, which may range from only several to hundreds of landowners, depending on the size of the project being proposed. If a developer is unable to sign a landowner, they will configure the project in such a way to include only landowners who want to participate with the assurance they will also receive a portion of the revenue stream generated by the sale of energy to a utility.

If a landowner chooses not to participate by assigning their wind rights to a developer and chooses to develop their own project, they are free to do that by maintaining their wind rights assuming their land holdings are of sufficient size to provide for the buffer setback requirements of site permits issued by the Commission or local authority, if applicable. In this situation developers abide by the buffer setback for non participating landowners within a site. This leads to in-efficient wind resource allocation, but eliminates potential future problems, regarding setback requirements for all parties.

Since 1995, wind developers in Minnesota, which also includes several electric utilities, have installed nearly 2000 megawatts of capacity. All of these facilities have been installed through voluntary easement agreements between the developer and participating landowners. OES EFP staff is not aware of one instance in Minnesota, or elsewhere, where eminent domain has been used to acquire the wind and land rights necessary to build a wind farm.

The fact that NUPUC may have the power of eminent domain and attempt to use it could have severe adverse consequences on future wind development in Minnesota for IPP's, electric utilities and other wind developers. Those entities who continue to develop LWECs in Minnesota to meet state mandated renewable energy objectives may have to address additional concerns raised by the public about eminent domain, or find that the public is less willing to participate in project, thus making it more difficult for developers.

Draft Site Permit Content

Public Health and Safety. With regard to health and safety concerns, OES EFP staff believes that representative site permit conditions adequately protect public health and safety. However, health and safety concerns are monitored, as are other natural resource related issues. As necessary, site permit conditions may be modified accordingly based on information in the record of decision.

Wind Access Buffer and Associated Setbacks. In its response dated July 30, 2009, NUPUC not only recounted its decision-making process in undertaking the New Ulm wind project, but also requested a variance from the Commission's general wind permit standards. In particular, NUPUC requested a waiver of the wind access buffer setback of "5 rotor diameters (RD) from all boundaries of [a] developer's site control area (wind and land rights) on the predominant wind axis...and 3 rotor diameters (RD) on the secondary wind axis" (Wind Turbine Setback Conditions, Order Establishing General Wind Permit Standards, Docket No. E,G-999/M-07-1102). NUPUC notes that the wind access buffer setbacks are designed to protect wind rights and future development options. NUPUC argues that for the New Ulm wind project there is no need for such protection because (1) the surrounding topography makes adjacent land parcels ill-suited for future wind development, a statement OES EFP staff takes some issue with, and (2) local property owners are opposed to wind development.

EFP staff believes that a waiver of wind access buffer setbacks for the project is not appropriate for at least four reasons. First, a waiver based on the perceived interests of local property owners presents an unmanageable standard for the Commission. That is, if a waiver is granted for this project, how will future projects be distinguished? What are the perceived interests of local landowners? Are their interests congruent? Will they change over time? In contrast to NUPUC's contention concerning local landowners, several citizen commenters suggested that they were not opposed to wind development on their property, but rather development being forced upon them (see, e.g., letter of Jeffrey Franta dated July 22, 2009).

Second, a waiver of wind access buffer setbacks does not protect possible future wind development. What is not technologically and economically feasible now may be in the future. Large scale wind power itself was not feasible some 20 years ago. Land that might be considered marginal for wind development now could be considered preferable in the future. Property owners who balk at current costs for wind development may be able to afford such development as costs decrease or advances in turbine technology facilitate development in less robust wind resource areas. Additionally, EFP staff has visited the project site, and nearby parcels, though somewhat lower in elevation, are not ill-suited for wind development.

Third, a waiver of wind buffer setbacks is not compatible with the state's interest in siting large wind energy conversion systems in a manner "compatible with environmental preservation, sustainable development, and the efficient use of resources" (Minn. Stat. § 216F.03). It may be efficient to site wind projects to take advantage of the state's best wind resources; however, it is not sustainable to do so by waiving the rights which make such development possible. Upholding wind rights ensures the orderly and sustainable development of wind resources and provides wind developers, of all sizes and types, certainty in their planning.

Fourth, a waiver of wind buffer setbacks could place the Commission in the position of determining whether the wind rights of all landowners are equal, i.e., rights such that no landowner may take, without compensation, the wind rights of another. In the Order establishing general permit standards, specifically on wind access buffer setbacks several points were affirmed by the Commission: 1) with respect to the five by three buffer setback it states "This buffer setback has been shown to protect wind rights and future development options of adjacent landowners." 2) The Order also noted that: "The wind access buffer setback is an external setback from lands and wind rights outside of an applicant's site control, to protect the wind and property rights of persons outside the permitted project boundary who are not participating in the project." 3) "... the Commission finds no rationale in statute or rule to treat one person's wind rights differently from another's."

Draft Site Permit Issuance

Minnesota Rule 7836.0800 requires that, after acceptance of an LWECs site permit application,

"the Commission shall make a preliminary determination whether a permit should be issued or denied. If the preliminary determination is to issue a permit, the Commission shall prepare a draft site permit for the project."

The rule does not provide criteria or guidance for making a preliminary determination. However, the experience and practice of OES EFP staff and the Commission does provide guidance. A determination to issue a draft site permit would not be appropriate if: (1) the applicant has not provided requested information following application acceptance, (2) the

project has not progressed to a point where it appears that all the basic conditions could be met, or (3) conditions set by the Commission for issuance of a draft site permit have not been met. The first criteria is not an issue for the New Ulm project, and the third criteria has apparently been met by NUPUC's submission to the Commission dated July 30, 2009 (order requirement #4) and by OES EFP analysis in this document (order requirement #5). However, OES staff believes the second criterion has not been met – specifically, the New Ulm project does not have site control (wind rights) within the project boundary such that a final permit could be issued.

The Commission has not issued a draft site permit, nor has OES EFP staff recommended issuance of a draft site permit, where the applicant does not have sufficient site control or specifically state they intend to get control within the project boundary such that a project of the size proposed can be located within the boundary and meet all Commission setback standards. With respect to the New Ulm project, NUPUC appears to have site control for approximately half the acreage necessary to meet setback requirements (237 acres out of 550 acres in the project).

It appears that NUPUC is suggesting that it can gain site control through the use of eminent domain, and thus there is no effective site control bar for issuance of a draft site permit. NUPUC notes that if it cannot obtain a waiver of Commission setbacks and cannot secure wind easement rights through negotiation, it will “exercise its powers of eminent domain to secure such rights” (NUPUC letter to the Commission, dated July 30, 2009, page 9). Eminent domain with respect to wind project is discussed elsewhere in this document. If the Commission believes that NUPUC has the power of eminent domain, then it may find that there is no site control bar for issuance of a draft site permit. If the Commission finds that NUPUC does not have the power of eminent domain, or that such power is uncertain, then it may find that there is a bar to draft site permit issuance.

Minnesota Rule 7836.8000 requires the Commission to make a preliminary determination on whether a permit should be issued or denied. That is, issuance of a draft site permit looks forward to issuance of a final permit (“a permit”). If there is question about whether a final permit can issue, there is question about whether a draft permit can issue.

Order Requirement 6

Order Requirement 6 requested that OES report on the issue of whether the applicant has an alternative source of renewable energy. OES EFP staff identified two alternatives that may have the potential to address many of issues raised in the public comments.

Purchase Power from Sibley Wind. On September 23, 2008, a Commission Order issued a LWECS site permit for the 20 MW Sibley Wind Project in Sibley County, approximately one to three miles west and south of the city of Winthrop and approximately seven miles due north of the proposed New Ulm site.

The Sibley Wind Project has a generation interconnection agreement (GIA), but no PPA at this time; however, they are currently negotiating with Xcel Energy. One of the barriers is a significant system cost to upgrade a 23 mile long 69 kV transmission line to the Crystal Lake Substation.

OES EFP staff conversations with Wayne Hess, the current developer of the Sibley Wind Project, indicated that capacity from the 20 MW Sibley Project is available. It is also possible that the Sibley Wind Project or a portion of it could be sold; but that decision will not be made for several months. However, action to sell output from the Sibley Wind Project might require additional MISO study which could take several years, which may make sale of a portion of the project to New Ulm a non-viable alternative, but one that should be explored in greater detail. Xcel Energy also has an existing 69 kV transmission line that extends from the Winthrop area down to the Fort Ridgely Substation on the north side of New Ulm. It is the understanding of OES EFP staff that New Ulm has made an interconnection request to use this facility, but the results of the MISO study are not available at this time. If access were granted, it may be possible to connect from the Sibley Project area, rather than the New Ulm site.

Co-locate with Sibley Wind Project. Mr. Hesse indicated that when the Sibley Project was proposed all of the farmers who wanted to participate, were not able to because of the small size of the project. Consequently, there are landowners in close proximity to the Sibley Project who may be interested making their wind rights available to New Ulm for its proposed project. New Ulm could still use the five Vestas V82 wind turbines on wind rights adjacent to the Sibley Wind Project if they are available. Information from New Ulm's site permit application indicates that the wind resource at the two project sites is very similar. The wind resource data from the Sibley site indicates an average annual hub height wind speed of approximately 8.3 m/s (18.6 mph) at 80 meters (262 feet), whereas wind speed at the NUPUC is slightly less or about the same as the longer term data obtained from the Sibley site. See NUPUC Application, pages 3 and 4. The existing Sibley met tower is about 7 miles north of the existing NUPUC MET tower.

With this option, New Ulm would build the 34.5 kV line they have already proposed as a option for its New Ulm Project, relocate the project substation within easements that could be acquired in Sibley County and then extend its proposed 34.5 northward another seven or so miles to serve as an outlet from the immediate vicinity of the Sibley Project. The incremental per mile cost of a 34.5 kV transmission line may be in the neighborhood of up to 120,000 dollars per mile. See Attachment 2 in Commissioner's packet for NUPUC Utility Permit on County Road Right-of-Way, for description of the 34.5 kV line as proposed from the NUPUC proposed site to the City of New Ulm.

If New Ulm's MISO interconnection is granted for Xcel's 69 kV transmission line that is also near the Sibley site, it may be possible for NUPUC to connect there, rather than at the NUPUC site about seven miles due south.

OES EFP staff believes there may several advantages to the possibility of co-locating the Sibley and New Ulm Project that should be examined in greater detail. First, it may lead to more orderly development by consolidating two projects into one area where landowners are amenable to additional wind turbines and wind resource development. Second, the Projects could possibly share one permanent 80 meter meteorological tower, which could cost approximately \$100,000; they could also possibly share one operations and maintenance building resulting in a more efficient operation for both parties, cross-training of maintenance workers and support staff and sharing of equipment costs. Third, it would remove turbines from an area where they are not wanted and re-locate them to an area where community acceptance would be higher.

Draft Site Permit Decision

OES EFP staff used the information in the application, public comments received, and experience with other LWECS projects as a guide in putting together a draft site permit. See Attachment 3 in the Commissioner's packet. The OES EFP proposed draft site permit does not provide for a variance from the Commission's wind access buffer setbacks.

The Commission is now being asked to make a preliminary determination whether a draft site permit may be issued for the project or should be denied, pursuant to Minnesota Rules 7836.0800, Subpart 1.

If the Commission chooses to issue a draft site permit, OES EFP staff has prepared a draft site permit identifying the permittee, the proposed LWECS, and proposed project as now proposed. Commission approval of a draft site permit will allow for distribution of the draft site permit and initiation of the public review process, which includes a formal public comment period.

Based on analysis contained in these comments and recommendations, OES staff concludes:

- 1) A Certificate of Need is not required for the New Ulm wind project, and New Ulm is not pursuing the project to comply with requirements energy objectives of Minn. Stat. 216B.1691;
- 2) It is uncertain whether NUPUC, if granted an LWCES site permit, would have the power of eminent domain for the project. OES EFP staff is not aware of one instance in Minnesota, or elsewhere, where eminent domain has been used to acquire the wind and land rights necessary to build a wind farm. OES EFP staff believes that if NUPUC does have the power of eminent domain and attempts to use it for the project, such use could have severe adverse consequences on future wind development in Minnesota.
- 3) The draft site permit prepared by OES EFP staff addresses the concerns raised by commenter's, but does not provide for NUPUC's requested waiver of wind access buffer setbacks. OES EFP staff believes it is not appropriate to grant such a waiver for this project.
- 4) NUPUC does not have site control (wind rights) within the project boundary such that a final permit, consistent with Commission setbacks, could be issued.
- 5) The requirements of the Commission's Order dated June 26, 2009 (requirements 4, 5, and 6) have been met by NUPUC's supplemental submission date July 30, 2009, and OES EFP discussion in this document. However, OES EFP staff believes that the options discussed for requirement #6 (those options related to the Sibley Wind Project) should be further investigated prior to any additional Commission action.

Commission Decision Options

A. Preliminary Determination to issue a Draft Site Permit

1. Make a preliminary determination that a draft site permit may be issued.
2. Make a preliminary determination that the draft site permit should be denied.
3. Make another decision deemed more appropriate.

B. Approve the proposed Draft Site Permit for distribution and public comment

1. Approve the proposed Draft Site Permit for the New Ulm Wind Project for distribution and public comment. Authorize EFP staff to implement the public participation process found in Minnesota Rules 7836.0900.
2. Amend or modify the proposed draft site permit for the New Ulm Wind Project for distribution and public comment. Authorize EFP staff to implement the public participation process found in Minnesota Rules 7836.0900.
3. Make another decision deemed more appropriate.

OES EFP Staff Recommendation: Staff recommends option A.2.