

Staff Briefing Papers

Meeting Date August 9, 2018 Agenda Item *1


Company Lake Benton Power Partners II, LLC

Docket No. **IP-6903/WS-18-179**
IP-6903/WS-13-205

In the Matter of the Application of Lake Benton Power Partners II, LLC for a Site Permit for the 100.2 MW Lake Benton II Wind Repowering Project and Associated Facilities in Pipestone County, Minnesota

- Issues
1. **Should the Commission accept the site permit application as substantially complete?**
 2. **Should the Commission require a decommissioning plan for the existing Lake Benton II wind project?**
 3. **Should the site permit application continue to be processed as a repowering permit amendment?**
 4. **Should the Commission issue a draft site permit for the project?**

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 Relevant Documents	Date
Site Permit Application (20 parts)	May 3, 2018
DOC EERA Comments	June 25, 2018
DOC EERA Preliminary Draft Site Permit	August 1, 2018

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Attached Documents:

The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission (PUC) and are based upon information already in the record unless noted otherwise.

I. Statement of the Issues

Should the Commission accept the site permit application as substantially complete?

Should the Commission require a decommissioning plan for the existing Lake Benton II wind project?

Should the site permit application continue to be processed as a repowering permit amendment?

Should the Commission issue a draft site permit for the project?

II. Overview on repowering

1) Process

- a) On October 16, 2017 staff from PUC and the Department of Commerce (EERA) gave a presentation to the Commission during a planning meeting about wind farm repowering projects in Minnesota. The presentation outlined a process and a timeline for both partial and full repowering of existing wind farms.
- b) Under that process, the EERA would provide recommendations on Application completeness and process, followed by a public meeting, and comment period, particularly for the public and state agencies, and then the EERA would provide a recommendation on the permit amendment. Lastly a Commission agenda meeting would be held and a final decision made. As envisioned, the entire repowering application review process was designed to take up to 105 days from the time of the application until the Commission decision
- c) To date, there have been two partial repowering wind projects approved by the Commission: Trimont Wind (13-258) and Lake Benton I (13-294). Both of these projects involved retrofitting the existing turbines to increase their output and efficiency without fully replacing the towers or changing their locations. While varying significantly in scope and scale of the proposed modifications, the retrofit for both projects consisted in replacing the turbine blades with bigger blades (which resulted in increased rotor diameter), replacing the gearboxes, and generators within the turbine nacelles, and replacing the electronic controls.¹ Everything else remained the same, including turbine towers, foundations, underground electrical collection system outside of the substation.

¹ Lake Benton I proposed new blades with a length extension of 2 meters, while the Trimont project proposed blade extensions of 4 meters.

2) Guidance in Lake Benton I Order (13-294)

- a) The Commission found that partial repowering of Lake Benton I fulfilled the purpose of the LWECS site permitting process by rebuilding on a previously impacted site, preserving the existing compatible land uses of agriculture and energy production, and utilizing and improving upon facilities that the Commission had determined make efficient use of resources. The Commission recognized the substantial benefits of repowering existing wind projects while also affirming the need for robust and thorough review process for repowering applications.
- b) The Commission also waved the wind access buffer standard and the internal spacing standard for a number of turbines, to allow Lake Benton I to achieve repowering for all of its turbines without relocating any of them.²
- c) The Commission required Lake Benton I to hire a qualified third party environmental consultant to conduct one full year of avian and bat fatality monitoring following commercial operation of the repowered project to assess the impacts of the project on wildlife.

3) Guidance in Trimont Order (13-258)

- a) The Commission found that partial repowering of Trimont Wind I fulfilled the purpose of the LWECS site permitting process by rebuilding on a previously impacted site, preserving the existing compatible land uses of agriculture and energy production, and utilizing and improving upon facilities that the Commission had determined make efficient use of resources. The Commission recognized the substantial benefits of repowering existing wind projects while also affirming the need for a robust and thorough review process for repowering applications.
- b) Regarding the wind access buffer standard, the Commission agreed with the EERA that it is reasonable to grant a waiver of the wind access buffer standard for the applicable turbines listed in Section 4.1 of the amended site permit, because the facts and circumstances in this case may result in greater protection of the wind rights of adjacent landowners.
- c) The Commission agreed with the Minnesota Department of Natural Resources (MDNR) and the EERA that it is important to promote consistency among LWECS site permits issued to new and repowered projects. The Commission required the standard language for turbine feathering be included in the Applicant's amended site permit to reduce wildlife fatalities and ensure consistent treatment of wind projects.³
- d) The Commission also required the Applicant to use a third-party consultant to conduct a full year of avian and bat fatality monitoring following commercial operation of the repowered project.

² These standards are based on a rotor diameter distance and therefore, increasing the rotor diameter, increased setback requirements.

³ The Trimont Order included additional requirements regarding noise modeling and monitoring requirements which are not outlined here as they were specific to the issues in the Trimont docket.

III. Background

Lake Benton Power Partners II, LLC (Lake Benton Wind II or Applicant) plans to develop a 100.2 megawatt (MW) LWECS in Pipestone County at the site of the existing Lake Benton II wind facility. The Lake Benton Wind II (Project) is located in southwestern Minnesota, southwest of the city of Ruthton and north of the city of Holland, Minnesota. The project is a full repowering of an existing wind facility consisting of 137 wind turbines, overhead and underground collection lines, access roads, four Point of Interconnection (POI) collector substations, ancillary equipment, and an operations and maintenance (O&M) facility that was originally permitted on May 21, 1998. The new repowering project would include 44 turbines (48 proposed turbine locations are included in the Project layout to allow for 4 alternative turbine locations) of two types: 39 GE 2.3 MW wind turbines and 5 GE 2.1 MW wind turbines for a total project capacity of 100.2 MW.

Lake Benton II, LLC is an indirect, wholly-owned subsidiary of NextEra Energy Resources, LLC (NEER). The Applicant will develop and construct the proposed repowered Lake Benton II Project, which is a build and transfer project, and, accordingly, the Site Permit will be transferred to Northern States Power Company (NSP) on the commercial operation date.

The estimated size of the Project Area is 25,597 acres (approximately 40.0 square miles) of mostly agricultural land, of which 9,600 acres are currently leased for the 137-turbine project design, representing approximately 37.5% of the land within the Project boundary. The Applicant continues to engage with landowners and expects to have sufficient land control to support this 100.2 MW Project.

The applicant intends to interconnect the project with Xcel Energy's system at the three or four existing POI collector substations, currently used by the Lake Benton Wind Project.

IV. Procedural History

On May 21, 1998, both Northern States Power and Lake Benton Power Partners II, LLC (co-permittee) were granted a site permit.

On May 3, 2018, Lake Benton II filed a site permit application for the project.

On June 25, 2018, the EERA filed comments on the application.

On July 26, 2018 Lake Benton II filed a more detailed decommissioning plan for the existing project.

On August 1, 2018 the EERA filed a proposed draft site permit for the Commission's consideration.

V. Statutes and Rules

Large Wind Energy Conversion System. The proposed project is defined as an LWECs under Minn. Stat. § 216F.01, subd. 2, because it has a combined nameplate capacity of 5 megawatts or more.

Site Permit. Under Minn. Stat. § 216F.04, no person may construct an LWECs without the issuance of a site permit by the Commission.

Minn. Rules 7854.1300, Subp. 2. **Permit amendment.** The commission may amend a site permit for an LWECs at any time if the commission has good cause to do so.

VI. Parties' Comments

EERA

In their June 25, 2018 comments, the EERA provided an analysis of the application from a “full repowering” perspective. The existing project operating on this site is decommissioned, prior to building the new project. The EERA concluded that the review process for this application should be as a Permit Amendment and that the Lake Benton II repowering application should and does include the same information that would be required for a new wind site permit application.⁴

EERA staff stated that the Commission has authority to amend a Site Permit at any time if it has good cause.⁵

EERA staff concluded that the application is complete. The Department found that filing requirements discussed among Commission and EERA staff have been met and recommended that the Application be reviewed under the “Review Process for Repowering” mentioned above, beginning with noticing and holding a public information meeting and followed by the other steps.

Public Comments

No notice soliciting public comments on the repowering project has yet been issued.

VII. Staff Analysis

A. Application Completeness

Under the accepted repowering process, applicants for a full or partial repowering must file with the Commission a site permit amendment application containing the same information required for a new LWECs site permit application. This ensures that the site permit

⁴ Minnesota Rule 7854.0500

⁵ Minnesota Rule 7854.1300 Subp.2

amendment application will contain updated environmental information, as well as surveys and modeling required for new site permit application. Essentially staff reviews the completeness of the proposed amendment and determines whether it includes information necessary to understand the full impacts and proposed mitigation of the proposal at hand. The EERA's LWECS Guidance document provides a useful outline of information that should be considered.⁶ Standard application guidance requirements include applicant background information, certificate of need compliance, compliance with other state policies, proposed site maps, wind characteristics, discussion of wind rights, project design including associated facilities, environmental impacts, project construction and operation, cost, schedule, energy projections, restoration and a modest amount of information regarding the plan for the eventual decommissioning of the project.

However, staff believes the guidance document is not an exhaustive list of what information might be necessary for evaluating a repowering amendment application. Additional information may be required beyond that of a typical new site permit application. There are separate and additional impacts associated with the existing facility. In particular, the impacts of decommissioning of the existing site that will take place. This is the main reason staff has brought the Lake Benton II repowering proposal to the Commission.

Staff has reviewed the site permit application and the comments received in this matter. Staff generally agrees with the recommendation of the EERA that the permit amendment application substantially meets the content requirements for LWECS, but also notes the particular aspects of this project differ when compared to a typical greenfield-wind energy project. Lake Benton II is a repowering project which is being proposed to be developed in the same footprint of an existing operating wind farm: Lake Benton II Power Partners. Because the existing project will need to be decommissioned and removed completely from the site prior to the start of construction of the proposed Project, Commission staff contends that the Applicant will need to submit a full decommissioning plan for the existing wind farm, prior to or in conjunction with the new repowering project being considered for approval. Staff believes this should be a filing requirement for all repowering applications. The proposed Project will be located in a "brown" field and as a result, decommissioning of the existing project and consideration for approval of the new project needs to be looked at in combination, as opposed to separately. The results of the closing and removing the old wind farm will affect the timeline and ultimately the construction of the new wind farm.

Staff recommends that the Commission find the application to be complete upon receiving an acceptable decommissioning plan for the existing Lake Benton II Wind Farm.

B. Procedural Treatment

This application is planned to be processed as an amendment to an existing wind farm site permit under the process that was introduced last year during a Commission planning meeting

⁶ Application Guidance for Site Permitting of Large Wind Energy Conversion Systems in Minnesota (August 2010). https://mn.gov/commerce/energyfacilities/documents/LWECS_APP_Guide_AUG2010.pdf

“Review Process for Repowering.” If the Commission wishes to deviate from this process, or require modified amendment process requirements, staff believes it would be appropriate for the Commission to articulate those wishes at this time.

If the Commission confirms that the application should be deemed complete upon the receipt of a decommissioning plan, staff will follow the expedited repowering review process, and will proceed immediately with a public meeting notification, etc.⁷

C. LWECS Site Permit Template

Because the permit amendment application was being brought to the Commission to consider the requirement of a detailed decommissioning plan, staff requested the EERA develop and propose a draft permit for the project. On August 1, 2018, EERA filed a draft site permit into the record. Staff believes the draft site permit can, in place of the site permit template, provide interested persons an opportunity to review permit language, so that they can develop additional language and/or special conditions applicable to the proposed project as early in the review process as possible. Having a draft site permit will allow for greater discussion and will provide a foundation to build on during the meeting process. Staff recommends the Commission approve and issue the draft site permit as proposed by the EERA.

D. Additional Administrative Matters

Staff recommends the Commission approve the following administrative items in its order to further facilitate the review process:

- Delegate administrative authority, including timing issues, to the Executive Secretary.
- Provide the name, telephone number, and email address of the Commission’s public advisor who will facilitate citizen participation in the process: Charley Bruce, (651) 201-2251, publicadvisor.puc@state.mn.us
- Request that the Department continue to study the issues and indicate during the hearing process through testimony or comment its position on the reasonableness of granting a site permit.
- Require the applicant to facilitate in every reasonable way the continued examination of the issues requested by the Department and Commission staff.
- Require the applicant to place a print or electronic copy of the site permit application in the government center or public library located closest to the proposed project site.

⁷ Staff notes that Lake Benton II filed a more detailed decommissioning plan for the existing project on Friday, July 26, 2018.

- Direct the applicant to work with Commission staff and the EERA to arrange for publication of the notice of meeting in newspapers of general circulation at least ten days prior to the meeting, that such notice be in the form of visible display ads and that proof of publication be obtained from the newspapers selected.
- Direct that all noticing requirements in these matters provided for under Minnesota Statutes chapter 216F and Minnesota Rules chapter 7854 include delivery to all affected landowners. An affected landowner is any landowner or designee that is within or adjacent to the proposed LWECs site boundary.

VIII. Decision Options

A. Application Completeness

1. Accept the site permit amendment application as substantially complete.
2. Reject the site permit amendment application and indicate the specific deficiencies.
3. Take some other action deemed more appropriate.

B. Decommissioning Plan

1. Require the Applicant to submit a detailed decommissioning plan for its existing Lake Benton II Wind Farm.
2. Decline to require a decommissioning plan at this time.

C. Procedural Treatment

1. Confirm that the proposed repowering project should be processed as a proposed permit amendment.
2. Take some other action deemed more appropriate.

D. Draft Site Permit

1. Issue a draft site permit at this time.
2. Decline to issue a draft site permit.

E. Administrative Responsibilities

1. Adopt the additional administrative matters identified above.

2. Decline to adopt the additional administrative matters identified above.

Staff Recommendation: A 1, B 1, C 1, D 1, E 1