

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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Chair
Commissioner
Commissioner
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Commissioner

In the Matter of the Site Permit Issued to Big
Blue Wind Farm, LLC for the 36 MW Big
Blue Wind Farm in Faribault County

ISSUE DATE: March 8, 2018

DOCKET NO. IP-6851/WS-10-1238

ORDER REQUIRING WIND TURBINE
NOISE STUDY BY AN APPROVED
CONSULTANT AND THE
DEVELOPMENT, DISTRIBUTION,
AND USE OF REVISED COMPLAINT
PROCEDURES

PROCEDURAL HISTORY

I. This Proceeding

On August 17, 2011, the Commission issued an order granting a Large Wind Energy Conversion System (LWECS) site permit to Big Blue Wind Farm, LLC (Big Blue or Applicant) to operate the 36 megawatt (MW) Big Blue Wind Farm in Faribault County. The project became commercially operational on December 15, 2012.

Exergy Development Group (Exergy), an Oregon company, was the original developer of the project and filed the site permit application on behalf of Big Blue. As a result of a default by Exergy related to the construction and debt-financing of the wind farm, Big Blue is now owned and operated by the Fagen family of Granite Falls, Minnesota.¹

Big Blue has received written communications from residents in the project area regarding noise issues since the turbines were installed. The complaints focus on two intermittent types of turbine noise—1) a noise described as a “clicketyclack”, and 2) a jet engine noise that occurred when the turbines were curtailed to half speed during high winds.

In August 2017, Dan Moore, a resident in the Big Blue project area, and a participating landowner (Complainant), filed a formal complaint with the Commission alleging site permit violations from atypical mechanical, audible noise of nearby turbines.

On February 8, 2018, the Commission met to consider the matter.

¹ See, November 7, 2012, informational filing of Big Blue Wind Farm.

II. Background

Due in part to the default of Exergy, and subsequent shift in ownership of the Big Blue Wind Farm project, early documentary evidence surrounding compliance with the terms of the Big Blue site permit is not available. The following is a brief synopsis of events based on the relevant information that can be gleaned from the early record, and the docket filings from the time of the formal complaint in August 2017 onward.

Following issuance of the site permit, Big Blue submitted a proposed noise protocol on December 6, 2012, to satisfy the requirements of Condition 6.6 (Noise) of the site permit. The EERA held a pre-operational compliance meeting with the Applicant on December 14, 2012. The EERA kept minutes of the meeting, but did not e-file them. The record therefore does not reflect that the Department recommended approval of Big Blue's proposed noise protocol at that time. And the proposed noise protocol was not approved by the Commission.

Shortly after the turbines commenced operation, noise problems were reported to the Company. The monthly complaint reports submitted by Applicant in some years indicated that corrective action regarding noise issues had occurred, and the issues had been remediated. Big Blue conducted further testing within the project boundaries in 2016 and 2017.

In February 2017, Complainant met with Big Blue about the turbine noise issues he asserted had been ongoing for several years and were not resolved.

On April 4, 2017, Big Blue filed a noise complaint compliance filing reporting the Complainant's concerns regarding noise. On May 7, 2017, Big Blue filed a letter indicating that work to identify and resolve the noise issues was ongoing.

On June 29, 2017, Commission staff issued an information request to Big Blue regarding ongoing noise complaints. On July 11, 2017, Big Blue filed its response to the information requests.

In August 2017, the Commission initiated an official review of Complainant's 2017 noise complaint.²

On August 15, 2017, Big Blue filed an update regarding noise complaints and remediation work conducted in conjunction with Gamesa/Siemens in May 2017, in an attempt to resolve certain noise issues.

Also on August 15, Complainant filed a letter summarizing the noise issues he had raised regarding the Big Blue Wind Farm. In the fall of 2017, Complainant filed numerous additional

² The Commission review was initiated following the Commission Procedure for Unresolved Complaints (Section H) of the Commission Complaint Handling Procedures for Large Wind Energy Conversion Systems, as set forth in the Big Blue Site Permit.

complaints regarding other alleged site permit violations.³

On November 1, 2017, the Department of Commerce Energy Environmental Review and Analysis unit (the EERA) filed a compliance review of the Big Blue Wind Farm, summarizing the work conducted at the facility to address noise issues, and recommending additional steps following submittal and approval of a noise monitoring protocol.

Complainant then filed additional comments on the noise protocol, asserting that the noise complaints had not yet been resolved.

On December 12, 2017, Big Blue filed comments responding to the EERA's information requests and iterating the recent steps the wind farm has taken to address the noise concerns at issue.

On January 10, 2018, the Commission requested information from Big Blue addressing why it should not be considered to be in violation of site permit condition 6.6 (Noise).

On January 18, 2018, Big Blue filed a response to the information request, agreeing that the June/July 2017 noise monitoring report conducted did not satisfy the need to file a proposed noise study protocol for the project for Commission approval. In January, Big Blue also filed a proposed Noise Study Protocol for the Big Blue Wind Farm project.

On January 25, 2018, the EERA filed comments on the matter, noting areas of clarification and recommending next steps.

FINDINGS AND CONCLUSIONS

I. Summary of Commission Actions

The Commission will require Big Blue to hire an approved third party consultant to conduct or develop noise modeling, noise protocols, and noise monitoring of the G-97 wind turbine, including for periods of turbine curtailment. The Commission will also require Big Blue to use revised complaint procedures, to be developed by Commission staff, for the Big Blue project. Finally, the Commission will require Big Blue to mail notice of the revised complaint procedures to affected landowners and local governmental units, and to submit an affidavit attesting to such mailing.

II. The EERA's Comments

On November 1, 2017, the EERA filed a compliance review, summarizing the work conducted in 2017 regarding Complainant's noise complaints at the Big Blue Wind Farm. The compliance review stated that after conducting turbine tests and consulting with Big Blue about potential causes of the noise problems (the clicking and jet engine noise), Big Blue provided the EERA

³ Those allegations are not addressed in this order. Should they become pertinent or if facts arise that indicate potential material violations of the site permit, Commission staff will bring them to the Commission's attention.

and the Commission with a schedule for the wind farm's planned remediation work.

In the compliance review, the EERA stated that the results of noise monitoring testing Big Blue conducted in June to early July 2017 did not comply with Section 6.6 of the Site Permit, as no noise protocol had yet been approved by the Commission following the Site Permit's issuance.⁴ However, the EERA reviewed the information submitted, and concluded that noise standards found in Minn. R. Chapter 7030 appeared to have been exceeded, and that an "on/off" monitoring campaign would be required to properly isolate the wind turbine noise from total measured sound. The EERA did not address the numerous other site permit violations alleged by Complainant.

The EERA did not recommend any further corrective action to specifically address the Complainant's concerns with the clicking or jet engine noise. Instead, the EERA recommended that Big Blue be required to take the following steps:

- a contractor should be selected to perform the necessary noise study;
- the selected contractor's qualifications should be submitted for review and approval by the EERA and Commission staff;
- the contractor should prepare and the permittee should submit a proposed protocol for noise monitoring consistent with Appendix A of the LWECs Noise Study Protocol and Report for EERA and Commission review and approval;
- the protocol should include a monitoring site on Complainant's property, and monitoring should be conducted following Commission approval of a noise protocol;
- if noise exceedances are identified that are attributable to Big Blue Wind Farm turbines, corrective action should be tailored to specific turbines or time periods that are found to be problematic based on the results of the monitoring.

In January 2018, the EERA made further recommendations about the detail needed to adequately complete its recommended "on/off" study.

III. Final Positions of the Parties

A. Complainant

At the Commission hearing, the Complainant argued that the absence of necessary initial data in the site permit application amounted to a false statement in the site permit application because the necessary data in support of the application was not only not produced, but apparently does not exist. Complainant requested that the site permit for the Big Blue Wind Project be suspended or revoked, stating that despite the multiple complaints made by him and neighboring land owners, the noise from the project is "just too loud."

⁴ Section 6.6 requires that

The Permittee shall submit a proposal to the Commission at least ten (10) working days prior to the pre-operation compliance meeting for the conduct of a post-construction noise study. Upon the approval of the Commission, the Permittee shall carry out the study . . . The Permittee shall submit the study within eighteen (18) months after commercial operation.

B. Big Blue

At the hearing, Big Blue stated that the Fagen family took over the project after Exergy went out of business in 2012, and relied on such information in the record as it had access to, believing it to be correct. Big Blue emphasized that it had no knowledge or information regarding the accuracy and veracity of the information submitted in the application. While disputing the proffered facts relied upon by Complainant, by the end of the hearing Big Blue agreed with the EERA's recommendations for prospective actions in this matter. Big Blue stated that it is committed to finish an appropriate noise protocol for submission to the EERA and the Commission, complete all necessary monitoring, and meet the recommended project deadlines. Importantly, going forward, Big Blue committed to complete all required processes and testing to get the project right and maintain good relationships with its neighbors.

IV. Commission Action

The Commission finds that the necessary procedural and evidentiary thresholds that would justify suspending or revoking a site permit have not been met in this matter. Thus, the Commission will not suspend or revoke Big Blue's site permit at this time.

What is clear from the record in this matter, however, is that things did not proceed according to Commission process or rules in 2011, when the site permit was granted. And while impossible now to accurately reconstruct the record that was extant at that time, Big Blue now seeks to do whatever it takes to make the project right with regulators and neighboring landowners.

The Commission will accept the EERA's recommended course of action, but modify it as set forth in the Ordering paragraphs below. The Commission will order Big Blue to hire a qualified third party consultant, approved by the EERA and Commission staff, to conduct noise modeling, noise protocols, and noise monitoring of the Gamesa G-97 wind turbine sufficient to determine whether the Big Blue facility complies with the Minnesota Pollution Control Agency (MPCA) noise standards, Minn. R. ch. 7030, including during periods of turbine curtailment.

Further, the Commission will order Big Blue to use revised complaint procedures, to be developed by the Commission, for the Big Blue project.⁵ Finally, the Commission will require Big Blue to mail notice of the revised complaint procedures to affected landowners and local governmental units, and submit an affidavit attesting to such mailing.

ORDER

1. Big Blue shall submit the following information within the designated timelines:
 - A. noise modeling of the Gamesa G-97 wind turbines that indicates projected compliance with the MPCA noise standards within 30 days of this Order;

⁵ The Commission authorizes Commission staff to file revised complaint procedures for the Big Blue project.

- B. an on/off noise monitoring protocol within 60 days of this Order; and
 - C. a completed on/off noise monitoring study (monitoring and report), sufficient to determine whether the facility complies with the MPCA noise standards within 9 months of this Order.
2. The Commission delegates to the Executive Secretary the authority to approve filings relating to modeling, noise protocols, and monitoring/study results.
3. Modeling, protocols, or monitoring of the Gamesa G-97 wind turbine shall be completed by a third-party consultant as set forth below:
- A. Big Blue Wind Farm, LLC shall contract for work to be conducted by the third-party and the contractor shall be approved by EERA and Commission staff (the state agencies);
 - B. Any consultant's scope of work shall be approved by the state agencies; and
 - C. The consultant shall follow the approved scope of work and file its results with the state agencies directly.
4. Any noise monitoring conducted pursuant to this Order shall include information and reporting on noise related to periods of curtailment as set forth below:
- A. Big Blue shall file a summary with the Commission within 30 days of the order detailing the duration and occurrences of curtailment in 2017;
 - B. Noise monitoring shall also include monitoring during periods of curtailment, an assessment of the noise caused by curtailment conditions, and information sufficient to determine whether the Big Blue Wind Farm complies with the MPCA noise standard; and
 - C. Big Blue shall be required to curtail their turbines, if needed, in order to obtain valid monitoring results pertaining to curtailment-related noise.

5. The Commission authorizes the Executive Secretary to require Big Blue to mail notice of the revised complaint procedures to affected landowners (defined as those within the project boundary and adjacent to it) and to local governmental units. Big Blue shall file an affidavit with the Commission within 30 days of the mailing.
6. This order shall become effective immediately.

BY ORDER OF THE COMMISSION



Daniel P. Wolf
Executive Secretary

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