

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange	Chair
Dan Lipschultz	Commissioner
Matthew Schuerger	Commissioner
Katie J. Sieben	Commissioner
John A. Tuma	Commissioner

In the Matter of the Site Permit Issued to the Wisconsin Power and Light Company for the Bent Tree Project in Freeborn County, Minnesota

ISSUE DATE: March 23, 2018

DOCKET NO. ET-6657/WS-08-573

ORDER TO SHOW CAUSE,  
REQUIRING FURTHER REVIEW BY  
THE DEPARTMENT OF COMMERCE,  
AND CONTINUING CURTAILMENT

**PROCEDURAL HISTORY**

On October 20, 2009, the Commission issued a large wind energy conversion system (LWECS) site permit to Wisconsin Power and Light (WPL) for the approximately 200-megawatt first phase of the Bent Tree wind project (the Project), located in Freeborn County, Minnesota. The Project commenced commercial operation in February 2011.

On August 24, 2016, the Commission issued an order requiring noise monitoring and a noise study at the Project site.

During the period of September 2016 through February 2018, Bernie and Cheryl Hagen, landowners within the Project area, filed approximately 20 letters regarding health effects that they claim are caused by the Project. David Langrud, another landowner within the Project area, filed 5 letters during that time, two in conjunction with the Hagens.

On September 28, 2017, EERA filed a post-construction noise assessment report for the Project (Phase 1 Report) identifying 16 hours of non-compliance with Minnesota Pollution Control Agency (MPCA) ambient noise standards during the two-week monitoring period.

On October 11, 2017, WPL filed a letter disputing the analysis in the Phase 1 Report and arguing that the Project remains in compliance with noise requirements.

On February 7, 2018, EERA filed a Phase 2 post-construction noise assessment report (Phase 2 Report) concluding that certain Project turbines are a significant contributor to exceedances of MPCA ambient noise standards at certain wind speeds.

On February 8, 2018, WPL filed a letter informing the Commission that it would respond to the Phase 2 Report at a later date and would immediately curtail three turbines identified in the Phase 2 Report.

On February 16, 2018, David Langrud and Bernie and Cheryl Hagen (the Landowners) filed a letter sent to WPL requesting a meeting regarding noise violations at the Project site.

On February 19, 2018, the Landowners filed a Motion for Order to Show Cause and for Hearing, requesting that the Commission issue an Order to Show Cause why the site permit for the Project should not be revoked, and requesting a contested-case hearing on the matter.

On February 22, 2018, WPL filed “preliminary comments” regarding the Phase 2 report, arguing that the Phase 2 Report does not support a conclusion that the Project violated MPCA noise standards.

On March 1, 2018, the Commission met to consider the matter.

## **FINDINGS AND CONCLUSIONS**

The Phase 1 Report on noise levels at the Project site identified 16 hours of non-compliance with MPCA ambient noise standards during the monitoring period. According to EERA’s Guidance for LWECS Noise Study Protocol and Report, if noise exceedances are recorded at an LWECS site, the next step is to determine the increment of those exceedances that are caused by turbine noise.<sup>1</sup> The Phase 2 Report explains that to determine the noise exceedances attributable to the turbines, wind turbine sound was isolated from total measured sound through an “on/off” measurement protocol, and that this protocol revealed that Project turbines were a significant contributor to noise standard exceedances when wind speeds reach 11.5 meters/second (m/s). This order establishes the appropriate next steps for the parties now that the Phase 2 Report has identified that, under certain conditions, the Project’s wind turbines are a significant contributor to noise levels that exceed MPCA ambient noise standards at the Project site.

The Commission will require WPL to show cause why the Project site permit should not be suspended or revoked for noncompliance with the MPCA ambient noise standards contained in condition E.3 of the Project site permit. The Landowners argued that the Commission should refer the matter to the Office of Administrative Hearings for contested-case proceedings at this time, but the Commission believes that would be premature. WPL’s response to this Order to Show Cause, as well as EERA and Landowner comments on that response, can help the Commission define the parameters of a contested case if one is necessary.

As reported in its filing dated February 8, 2018, WPL has curtailed the turbines identified in the Phase 2 Report between the hours of 7:00 p.m. to 7:00 a.m. and when wind speeds exceed

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<sup>1</sup> EERA, GUIDANCE FOR LWECS NOISE STUDY PROTOCOL AND REPORT, Appendix A (October 8, 2012), <https://mn.gov/commerce/energyfacilities/documents/FINAL%20LWECS%20Guidance%20Noise%20Study%20Protocol%20OCT%208%202012.pdf>.

11.5 m/s in order to avoid any exceedances of MPCA ambient noise standards. The Commission will require WPL to continue to curtail Project turbines numbered 362, 132, and 397 as outlined in its filing dated February 8, 2018,<sup>2</sup> until authorized by the Commission to terminate curtailment.

The Commission will require EERA to review options for full Project site noise monitoring and file preliminary options with the Commission no later than April 30, 2018. This will allow for full Project site noise monitoring to begin promptly if the Commission deems it necessary.

The Commission will request that EERA evaluate the WPL interim curtailment provisions as outlined in WPL's filing dated February 8, 2018. By March 31, 2018, the Commission requests that EERA file with the Commission a compliance filing regarding whether the interim curtailment provisions are sufficient to ensure compliance with the MPCA ambient noise standards in light of the noise exceedances identified at the Project site.

The parties indicated at the hearing that they plan to meet to discuss the alleged noise violations at the Project site, and WPL and the Landowners have apparently already been working to find a mutually agreeable time to meet. The Commission will require WPL to meet with EERA and the Landowners no later than April 30, 2018, to continue discussing these issues.

## **ORDER**

1. No later than April 30, 2018, WPL shall show cause why the Project site permit should not be suspended or revoked for noncompliance with the MPCA ambient noise standards contained in condition E.3 of the Project site permit.
2. WPL shall continue to curtail Project turbines numbered 362, 132, and 397 as outlined in its filing dated February 8, 2018, until authorized by the Commission to terminate curtailment.
3. By April 30, 2018, the Commission requests that EERA review options for full Project site noise monitoring and file preliminary options with the Commission.
4. By March 31, 2018, the Commission requests that EERA evaluate the WPL interim curtailment provisions as outlined in WPL's filing dated February 8, 2018, and that EERA file with the Commission a compliance filing regarding whether the interim curtailment provisions are sufficient to ensure compliance with the MPCA ambient noise standards in light of the noise findings in the Phase 2 Report.

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<sup>2</sup> WPL also discussed the interim curtailment measures in its filing dated February 22, 2018.

5. No later than April 30, 2018, WPL shall meet with EERA, David Langrud, and Bernie and Cheryl Hagen to continue discussing the issues outlined in this order.
6. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Daniel P. Wolf  
Executive Secretary



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