

Staff Briefing Papers

Meeting Date May 17, 2018 Agenda Item 7**

Company Wisconsin Power and Light Company

Docket No. **ET6657/WS-08-573**

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

Issues 1. What action should the Commission take in light of the Confidential
Settlement Agreements filed on April 19, 2018?

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Relevant Documents

Date

Commission – Order Issuing Site Permit	October 20, 2009
Commission – Order Requiring Noise Monitoring, Noise Study, and Further Study	August 24, 2016
Commission – Order Revising Noise Monitoring Requirements	April 12, 2017
Commission – Order to Show Cause, Requiring Further Review by the DOC, and Continuing Curtailment	March 23, 2018
WPL – Letter: Notice of Confidential Settlement Agreements (2 parts)	April 19, 2018
DOC EERA – Comments and Recommendations	May 1, 2018

I. Statement of the Issues

What action should the Commission take on the Confidential Settlement Agreements filed on April 19, 2018?

II. Background

Since 2010 WPL has submitted, in compliance with site permit conditions, monthly complaint reports to the Commission documenting local area residents' allegations of site permit violations.

On March 14, 2011, the Commission approved WPL's Operational Sound Level Survey Test Protocol (Noise Monitoring Protocol) for Phase I of the Bent Tree Wind Project in Freeborn County pursuant to site permit condition III.F.2. In April 2011, WPL conducted sound monitoring at locations within the project area and two locations offsite in accordance with the approved noise monitoring protocol for the Bent Tree project.

In the fall of 2015 and early 2016, three landowners provided noise-related complaints regarding the Bent Tree project: Gwenneth Regehr, and Cheryl and Bernie Hagen (the Complainants).

On August 24, 2016, following the initiation of the Commission's complaint process and receipt of position statements from the parties, the Commission ordered WPL to conduct additional noise monitoring at the residences of the complainants¹ for a period of 14-days or more.² The monitoring was conducted by a noise consultant selected by Commission and EERA staff. While complaints by residents were largely claims relating to low frequency noise, the audible noise anomalies in previous monitoring studies combined with the complaints were deemed sufficient to require further noise monitoring to ensure compliance with the MPCA noise standard.³

On September 28, 2017, the EERA filed the results of the additional noise monitoring required by the Commission's August 24 Order. The additional monitoring indicated there were potential exceedances of the MPCA noise standard for the residences in question during the monitoring period, which could be due to the wind turbines. As the EERA's Noise Monitoring Guide requires, EERA recommended that Phase 2 monitoring be conducted to determine the increment of noise contributed by certain wind turbines.

¹ Following the issuance of this order, Ms. Regehr moved from her residence and the Commission amended its order to no longer require monitoring at her home.

² As is the typical practice, the initial round of noise monitoring was general project site noise monitoring (total noise at the project area), referred to as Phase I monitoring. If exceedance of the MPCA noise standard is encountered during Phase I monitoring, then Phase 2 Monitoring is required, which involves monitoring during times of wind turbine operation and again during times when the wind turbines are turned off (on/off monitoring). This enables the calculation of the contribution a wind turbine noise to the total ambient noise at the same receptor.

³ On September 14, 2016, the Complainants, in conjunction with other persons, filed comments noting the Commission's August 24 Order did not address the Complainants main complaint relating to low frequency noise (sometimes referred to as "infrasound"). The letter requested the Commission not to pursue "audible" noise testing but to instead conduct detailed low-frequency noise testing, which would better address their complaints.

On October 10, 2017, WPL responded that it did not believe the Phase I monitoring indicated Bent Tree was in violation of the MPCA noise standard, arguing there were anomalies in the monitoring data that could be explained on grounds other than the grounds identified by the consultant. Although it did not agree additional noise testing was necessary, WPL agreed to proceed with the Phase 2 monitoring.

On February 8, 2018, the EERA filed the completed on/off noise monitoring report (Phase 2 Report) which indicated the noise levels at the project site may not comply with Site Permit Condition E.3, which incorporates the MPCA noise standard rule (Minn. Rule 7030.0020) by reference. The Phase 2 Report indicated the wind turbines were causing exceedances of the MPCA noise standard at the residences monitored.

On February 14, 2018, WPL filed a letter with the Commission indicating that it had modified the operations of three turbines consistent with the findings of the Phase 2 Report to prevent any alleged exceedance of the night time noise standard. WPL did not concede that any of the Phase 2 Report's data, methods, or conclusions were accurate, however, indicating it intended to file more detailed and responsive comments by February 22, 2018.

On February 20, 2018, the Complainants jointly filed a motion for the Commission to issue a show cause order for curtailment of the Bent Tree turbines near the complainant homes and refer the matter to the Office of Administrative Hearings for a contested case proceeding.

On February 22, 2018, WPL provided its preliminary assessment of the Phase 2 Report. WPL asserted the Phase 2 Report does not show that the Bent Tree Wind Project has exceeded any noise limitations at either of the residences in question and challenged the accuracy of the report in several respects.⁴ WPL confirmed it had, for the interim, curtailed two turbines near the Hagen property and the one turbine near the Langrud property from 7pm to 7am during the weather conditions outlined in the Phase 2 Report.

On March 23, 2018, the Commission issued its Order to Show Cause, Requiring Further Review by the Department of Commerce, and Continuing Curtailment (Show Cause and Curtailment Order). The Commission required continued curtailment of the turbines in question, required WPL to show cause by April 30, 2018 why the site permit should not be suspended or revoked among other provisions.

On April 19, 2018, WPL and the complainants each filed Confidential Settlement Agreements agreeing to terms for the sale of the complainant's properties to WPL, which included execution

⁴ WPL first claimed the extrapolation method used, and the data it was based on, were flawed. Second, WPL argued the Phase 2 Report conflicts with the requirements of the MPCA noise standards because the data used to determine the noise level at the receptors was not measured but extrapolated. Third, WPL argued that the noise study: "did not include any recording of sources of sound [...] at levels below 60 dBA. In effect, there is no recording of sound and there is no other basis to determine whether exceedances at sound levels below 60 dBA were the result of any significant contribution by Bent Tree turbines or other noise sources." WPL noted there were other issues beyond these three, which it intended to raise in subsequent comments.

of easements on the property and release of WPL from all claims against WPL. The agreement outlined terms by which the agreements would be executed, which include contingencies relating to the Commission making certain findings that release WPL from the turbine curtailment of the Commission's March 23 Show Cause and Curtailment Order, and provide that WPL need not conduct any further noise monitoring stemming from the Phase 1 and Phase 2 reports.

On May 1, 2018, comments on the Confidential Settlement Agreements were received from the DOC EERA which indicated it did not oppose the request to dismiss the complaints, the request to terminate curtailments, nor the condition that further noise monitoring not be required based upon the Phase 1 and Phase 2 DNV-GL Noise Report.

III. Comments on the Settlement Agreements

The Commission issued a notice of comment period to state agencies on April 24, 2018. Comments were submitted only by the DOC EERA staff on May 1, 2018. DOC EERA comments are attached to this briefing paper.

IV. Staff Discussion

Staff generally is agreement with the DOC EERA, and does not object to the requests made by WPL, the Hagens, and the Langruds for dismissal of the complaints pursuant to the Commission's complaint process because the basis for the required turbine curtailment and noise monitoring near these homes is resolved. However, as DOC EERA noted (and as the WPL filings seem to contemplate), these limited actions would in no way limit the Commission from investigating further complaints or issues regarding the project.

The finality of the Confidential Settlements is conditioned on having specific findings made by the Commission. Specifically, findings as set forth in Sections 1-5 of the agreements. However, some of the language and conditions are not matters under the Commission's control and therefore cannot be made by the Commission. The proposed findings are set forth in the WPL-Hagen settlement as follows (and the Langrud language is similar):

In light of the foregoing, the Hagens and WPL jointly agree, stipulate and recommend that the Commission issue a written order adopting the terms and conditions set forth in Sections 1, 2, 3, 4, and 5, below:

1. Dismissal of the Motion and all Prior and Current Complaints. The Commission hereby determines that the Prior and Current Complaints are resolved within the meaning of WPL's Large Wind Energy Conversion System Permit for the Bent Tree Wind Project Phase I, Attachment 2 (Complaint Handling Procedures for Large Wind Energy Conversion Systems). The Motion and all Prior and Current Complaints are dismissed with prejudice.
2. Termination of Curtailments. The Curtailment of Turbine Nos. T132 and T397 T362 shall terminate on the date on which the Hagens transfer possession of the Hagens' Property to WPL, which shall occur no later than one hundred twenty (120) calendar days after closing on the purchase of the Hagens' Property by WPL. After such time, WPL may operate Turbine Nos. T132 and T397, without any curtailment imposed by the Commission as a result of the DNV-GL Sound Reports.
3. No Further Sound Monitoring. The Commission shall not require any further sound monitoring at any location pertaining to Bent Tree on the basis of the DNV-GL Sound Reports.
4. No Precedent. The Confidential Settlement Agreement reflects the unique facts of this case and is the result of negotiations between the Hagens and WPL, and the Confidential Settlement Agreement does not represent the position of either Party as to the appropriate application of the law or any binding or legal precedent related to Bent Tree or otherwise.
5. No Admission. The execution of this Confidential Settlement Agreement shall not be construed as an admission by any Party as to the validity or invalidity of any other Party's position with reference to the issues in this proceeding.
6. Closing Date. The Closing Date for the Confidential Settlement Agreement shall occur within (seven) 7 days of the date in which the Commission issues a written order with respect to this Notice of Confidential Settlement Agreement and Joint Recommendation and Request containing each and every term and condition in Sections 1 through 5, above, as determined by WPL in its sole discretion.
7. No Conditions or Modification. The Parties agree that, in the event that the Commission takes any action to reject or modify all or any part of this Joint Recommendation and Request, either Party may, in its sole discretion determine that

Staff proposes the Commission consider adopting the following findings, which the Commission can order and DOC EERA, WPL, and the complainants agree are appropriate in this matter):

1. The prior and current Langrud and Hagen complaints are deemed resolved under the terms of Wisconsin Power and Light's Site Permit for the Bent Tree Wind Project Phase I Project. At the request of the settling parties, the complainants' February 20, 2018 Motion and complaints in this matter are dismissed.

2. (a) The required curtailment of turbines T132 and T397 based on the DNV-GL Phase 1 and 2 Sound Reports shall terminate on the date on which the Hagen's transfer of possession of the Hagen's Property to WPL.

(b) The required curtailment of turbines T362 based on the DNV-GL Phase 1 and 2 Sound Reports shall terminate on the date on which the Langrund's transfer of possession of the Langrud's Property to WPL.
3. WPL will file with the Commission within 30 days of the transfer of possession of each property a compliance filing indicating the commencement of operations of the turbines associated with that property.
4. The Commission will not require any further sound monitoring at any location pertaining to Bent Tree on the basis of the DNV-GL Phase 1 or Phase 2 monitoring reports.

V. Decision Options

1. The prior and current Langrud and Hagen complaints are deemed resolved under the terms of Wisconsin Power and Light's Site Permit for the Bent Tree Wind Project Phase I Project. At the request of the settling parties, the complainants' February 20, 2018 Motion and complaints in this matter are dismissed.
2. (a) The required curtailment of turbines T132 and T397 based on the DNV-GL Phase 1 and 2 Sound Reports shall terminate on the date on which the Hagen's transfer of possession of the Hagen's Property to WPL.

(b) The required curtailment of turbines T362 based on the DNV-GL Phase 1 and 2 Sound Reports shall terminate on the date on which the Langrund's transfer of possession of the Langrund's Property to WPL.
3. WPL will file with the Commission within 30 days of the transfer of possession of each property a compliance filing indicating the commencement of operations of the turbines associated with that property.
4. The Commission will not require any further sound monitoring at any location pertaining to Bent Tree on the basis of the DNV-GL Phase 1 or Phase 2 monitoring reports.

Staff recommends the Commission adopt 1-4.

May 1, 2018

Mr. Daniel P. Wolf, Executive Secretary
Minnesota Public Utilities Commission
127 7th Place East, Suite 350
Saint Paul, MN 55101-2147

RE: Agency Comment on Confidential Settlement Agreement and Joint Recommendation and Request:
Bent Tree Wind Farm (Docket No. ET-6657/WS-08-573)

Dear Mr. Wolf:

On April 19, 2018, Wisconsin Power and Light (WPL) filed two Confidential Settlement Agreements along with Joint Recommendations and Requests.¹ On April 24, 2018, the Commission issued a notice of agency comment period² requesting input on (1) what action the Commission should take in response to the filings and (2) any other issues or concerns related to this matter. Department of Commerce Energy Environmental Review and Analysis (EERA) staff have reviewed WPL's filings and are providing the following comments on items 1-3 of the Joint Recommendation and Request as they relate to noise compliance.

(1) Dismissal of the Motion and all Prior and Current Complaints

EERA staff views the resolution of ongoing unresolved complaints about low frequency noise that gave rise to the Commission's August 24, 2016 order³ as a separate issue from the audible noise compliance issues that have emerged as a result of the Phase I and Phase II sound monitoring.^{4, 5} Per our February 8, 2018 submittal, EERA staff believes that with the completion of the "on/off" monitoring campaign WPL has fulfilled the requirements of the Commission's August 24, 2016 order to conduct monitoring consistent with current

¹ Wisconsin Power and Light. April 19, 2018. Notice of Confidential Settlement Agreement. eDockets No. [20184-142136-01](#), [20184-142136-02](#).

² Minnesota Public Utilities Commission. April 24, 2018. Notice of Comment Period. eDockets No. [20184-142270-01](#).

³ Minnesota Public Utilities Commission. August 24, 2016. *Order Requiring Noise Monitoring, Noise Study and Further Study*. eDockets No. [20168-124382-01](#).

⁴ Minnesota Department of Commerce EERA, Bent Tree Wind Farm Noise Monitoring – Post Construction Noise Assessment. eDockets No. [20179-135856-01](#).

⁵ Minnesota Department of Commerce EERA, February 8, 2018. Bent Tree Wind Farm Noise Monitoring – Phase 2 Monitoring Report. eDockets No. [20182-139880-01](#).

EERA guidance.⁶ EERA believes that completion of requirements in the August 24, 2016 order is sufficient to resolve these unresolved complaints. Therefore, we do not oppose this request to dismiss the complaints. EERA, however, sees resolution of audible noise compliance issues as a separate matter.

(2) Termination of Curtailments

EERA's understanding of the Minnesota Pollution Control Agency (MPCA) noise rules (Minn. R. 7030) and the condition in Section E3 of the Bent Tree site permit is that if the Langrud or Hagen properties were not occupied *and remained unoccupied* they would no longer be considered residential receptors. As a result, residential noise limits would not apply, and the noise levels measured would not exceed the applicable standard for a non-residential, agricultural area. It follows that the curtailment measures would no longer be necessary.

The language of the Joint Recommendation and Request, however, does not specifically address the possibility of future occupation of the Hagen or Langrud properties. If the Hagen or Langrud properties are returned to residential use, the residential noise limits will again apply. It is EERA staff's understanding that MPCA's noise standards are protective standards, similar to air quality standards. Therefore, new residents could not waive WPL's duty to meet noise standards even if they may be willing to live with violations of the standard in exchange for payment or through some other agreement. Therefore, the results of the Phase I and Phase II sound monitoring and the noise compliance issue would likely need to be reopened if the Hagen or Langrud properties were returned to residential use.

(3) No Further Sound Monitoring

We do not oppose this request; however, choosing not to do more noise monitoring now based on the Phase I and Phase II DNV-GL monitoring results does not prevent the Commission from following up on complaints from other residents in the project area in the future. As EERA staff noted in its April 30, 2018 comments and recommendations, the 2011 WPL sound monitoring report appears to be a reasonably complete evaluation of the wind turbine contribution to noise levels at the wind farm.⁷ The monitoring demonstrated that the wind farm's contribution at the selected receptors was below the noise levels identified in Minnesota Rules 7030 at least 95% of the time. The monitoring also revealed that at higher wind speeds the model had somewhat underestimated the actual wind turbine sound. Consistent with past practice, the Commission can continue to rely on the outcomes of the 2011 site characterization to inform decisions on further monitoring at specific receptors if new issues arise as operations continue.

Similarly, the Commission could order additional monitoring based on the 2011 report in the future, as it further defines what "compliance" with state noise standards means. As discussed in our April 30, 2018 comments and recommendations, complex underlying issues regarding compliance with state noise standards have arisen lately in this and other dockets. For example, as illustrated by the WPL "show cause" response filed yesterday,⁸ there is some uncertainty not only over how to define "compliance" with noise standards but also how to accurately monitor and evaluate the wind turbine's contribution to an exceedance.

⁶ *Id.*

⁷ Wisconsin Power and Light. June 21, 2011. Survey of Operational Sound Levels for the Bent Tree Wind Project. eDockets No. [20116-63863-01](#), [20116-63863-02](#).

⁸ Wisconsin Power and Light. April 30, 2018. Response to Show Cause. eDockets No. [20184-142555-01](#).

EERA Comment

WPL – Confidential Settlement Agreement and Joint Recommendation and Request

May 1, 2018

Sorting out regulatory "gray areas" regarding compliance with state noise standards is essential to addressing noise issues, complaint handling, and the type and scope of monitoring that might be helpful in the future at this and other LWECS sites.

EERA staff is available to answer any questions the Commission may have.

Sincerely,

/s/ Louise I Miltich

Louise Miltich

Environmental Review Manager

Energy Environmental Review and Analysis

cc: Bret Eknes, Commission Staff

Tricia DeBleeckere, Commission Staff

John Wachtler, EERA Director