

**BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

**Katie Sieben
Valerie Means
Matt Schuerger
Joseph Sullivan
John A. Tuma**

**Chair
Commissioner
Commissioner
Commissioner
Commissioner**

In the Matter of the Application of Freeborn
Wind Energy, LLC for a Large Wind Energy
Conversion System Site Permit for the 84
MW Freeborn Wind Farm in Freeborn County

PUC Docket No. IP6946/WS-17-410

SUE MADSON - PETITION FOR RECONSIDERATION

PETITION: OTHER PARTIES TO THE PROCEEDING SHALL FILE ANSWERS TO A PETITION FOR REHEARING, AMENDMENT, VACATION, RECONSIDERATION, OR REARGUMENT WITHIN TEN DAYS OF SERVICE OF THE PETITION. Minn. R. 7829.3000, Subp. 4.

Complainant and Movant Sue Madson brings this Motion for Reconsideration of the Public Utilities Commission's deliberation and decision at its July 7, 2022 agenda meeting and filing of the written Order of August 8, 2022 Accepting Post Construction Noise Monitoring Report and Compliance Review.

I. INTRODUCTION – RECONSIDERATION IS DUE

A Petition for Reconsideration must be brought within 20 days of the filing of the Final Order. Minn. Stat. §216B.27; Minn. R. 7829.3000. Ms. Madson is directly aggrieved and

affected by the Commission's decision, and has brought several Petitions/Motions and made numerous Complaints in this docket. Ms. Madson has hosted three noise monitoring testing periods on her property in response to her complaints and as a part of the post-construction noise monitoring permit condition.

Reconsideration is a remedy for errors of fact and law, where an Order is contrary to the evidence in the record. This matter is within the Commission's jurisdiction, and although the Commission would typically be presumed correct in its areas of expertise, the Commission and Commerce-EERA has limited expertise in noise modeling, monitoring, mitigation and abatement. *Reserve Mining Co. v. Herbst*, 256 N.W.2d 808, 824 (Minn. 1977). The Commission's experience reflects two cases of Commerce-EERA noise monitoring reports demonstrating noise exceedences and subsequent settlements between landowners and a wind project accepted by the Commission. Further Commission experience regarding noise is an ALJ recommendation that a project site permit application for Freeborn Wind, the project at issue, be denied because it had not been demonstrated that the project could comply with wind noise standards. The Commission's experience in this case was to grant the site permit prior to any demonstration that the project could comply – updated noise modeling was not provided until three (3) months after the permit was issued! The Commission's "expertise" should receive no deference. Any presumption of expertise does not hold in this case. *In re Excess Surplus Status of Blue Cross & Blue Shield of Minn.*, 624 N.W.2d 264, 278 (Minn. 2001).

This Petition for Reconsideration is a timely petition under the Commission's rules. Madson's request for reconsideration and amendment of this Order is based on the Commission's error in failing to inform the record and require Xcel Energy to release the previous wind noise monitoring performed at Ms. Madson's property; it's failure to order

continued mitigation of the noise of turbines 20 and 21 (since renumbered) by shutting down those turbines; and by failure to replicate noise studies prior to its decision, whether through filing and analysis of the June 22, 2021 – July 1, 2021 noise studies or through ordering, performing and analyzing new independent studies. Madson’s Petition and Motion is also based on disparate treatment of complaining landowners, including, but not limited to the two landowners in the Bent Tree project who were bought out of their homes and properties due to noise exceedences, and the ongoing noise issues at the Blazing Star wind project. Primary documentation on all of these concerns has been entered in the record by Ms. Madson.

No order of the commission shall become effective while an application for a rehearing or a rehearing is pending and until ten days after the application for a rehearing is either denied, expressly or by implication, or the commission has announced its final determination on rehearing. Minn. Stat. §216B.27, Subd. 3. In this case, because replication of the noise monitoring study was not entered into the record, either a prior Xcel Energy monitoring study or a second post-construction study, and because inferences related to Xcel Energy’s could be made regarding modeling assumptions used and a unilateral change in protocol at the time of noise monitoring, the record does not support the Order of the Commission.

II. MADSON’S REQUEST IS BASED ON FACTS, REASONABLE INFERENCES, AND EVIDENCE AVAILABLE BUT EXCLUDED BY THE COMMISSION.

Madson bases this request on facts and documentation provided by Xcel Energy, Commerce-EERA, and/or Madson in the Freeborn Wind record via eDockets:

- Madson’s multiple complaints regarding noise levels emanating from nearby turbines;
- Xcel Energy performed an informal 3 hour noise monitoring test at Madson’s home and sent results to Madson, who has provided them in this record several times (see e.g. January 22, 2022 Comment);

Location	Start/Duration	Data File	LAF10	LAF50	LAF90	L.Aeq	Comments
65 ft SE of house, 22 ft SW of barn.	0800 - 0900		54.9	52.6	50.6	53.2	Click-or-tap-here-to-enter-text.
"	0900 - 1000		55.3	52.4	50.2	53.2	Click-or-tap-here-to-enter-text.
"	1000 - 1050		56.2	53.0	50.8	53.9	Mostly full-hour
Click-or-tap-here							Click-or-tap-here-to-enter

- Xcel’s 22 day noise monitoring performed from June 22, 2021 to July 1, 2021;
- Xcel’s repeated promises orally and in writing to provide results to Madson, with written promises filed in eDockets;
- Xcel Energy’s failure to produce the results of the June 22 – July 1 2021 noise monitoring to Madson and/or the Commission;
- Madson’s repeated requests for this information, requests to both Xcel Energy and the Commission, neither of which produced that noise monitoring;
- Xcel Energy’s failure to produce the June 22 – July 1, 2021 noise monitoring results can and should be inferred to demonstrate noise exceedences;
- Xcel performed two noise monitoring testing studies at one landowner’s home in the Blazing Star wind project who like Madson had made multiple complaints of noise and, though delayed, subsequent eDocket filing and direct provision of both of the results to that landowner complaining of noise and initiated curtailments.
- Xcel Energy did not offer the level of curtailment provided to the landowner in Blazing Star, nor did it provide results of Complaint initiated noise monitoring, as it did for the landowner in Blazing Star; nor did it provide replication of the Complaint initiated noise monitoring, instead delaying until its “post-construction” noise monitoring despite ongoing noise issues and complaints;
- EERA noise monitoring reports for Bent Tree, Phase I and Phase II entered in the Bent Tree eDocket and entered by Madson in this docket;
- EERA claimed that noise monitoring protocol required replication, and its consultant performed Phase II Bent Tree noise monitoring, which was filed in Bent Tree eDocket prior to settlements, and later filed by Madson in this Freeborn docket;
- Freeborn post-construction noise monitoring was not replicated, and though the Commission mentioned replication in deliberation, the record reflects that neither Xcel Energy nor Commerce-EERA produced replicated noise monitoring study or report;

- Xcel Energy produced noise-monitoring study and utilized “binning,” which is not authorized in the permit’s condition requiring post-construction noise, Minn. R. 7030.0400, or noise guidance prior to November 18, 2022;
- Xcel Energy filed its “post-construction noise monitoring protocol” on November 18, 2022, which provided for use of “binning,” stating, “[T]his protocol updates the locations based on the as-built turbine array and includes a slight modification to the analysis methods to include both a turbine shutdown method and wind speed binning method, if any locations are found to be out of compliance.” Compliance Filing – Section 7.4, p. 1.
- The unilateral November 18, 2021 eFiled “Revised Noise Monitoring Protocol” was submitted at the same time that RGS was conducting Post-Construction Noise Monitoring, and which was changed and simultaneously used by RSG. Commission’s August 8, 2022 Order, p. 1, 2.
- The March 12, 2020 ([20203-161170-01](#)) post-construction noise monitoring methodology cited in the Commission’s August 8, 2022 Order did not include “binning” for demonstration of exceedences, but instead states simply on the final page:

Turbine-Only Noise Level Exceedance

If the Study determines that an exceedance of the Minnesota Pollution Control Agency Noise Standards has occurred, in that turbine-only noise levels in excess of 47 dBA one-hour L₅₀ have occurred at nearby receptors, Freeborn Wind shall work with the DOC to develop a plan to minimize and mitigate turbine-only noise impacts.

- This November, 2021 protocol change while performing noise monitoring begs the inference that it was necessary for Xcel to make a claim of compliance based on the November modeling.
- The post-construction noise monitoring was performed over only 13 days, which is 9 days less than the summer 2021 noise monitoring that Xcel Energy refuses to produce. Order, p. 3. This is NINE days less than the June 22 – July 1, 2021 noise monitoring performed at the Madson property.
- After this filing of materially revised protocol, there was no Comment period noticed, nor was there any review on the record by Commerce-EERA or the Commission following this November 18, 2022 filing.
- Use of “binning” confirms exceedences, as binning was proposed to be used where there were exceedences.
- Commerce-EERA’s April 1, 2022 filing ([20224-184386-01](#)) verified the exceedences of both Minn. R. 7030.0400 and the Permit’s Condition 6.2:

Based on our initial review of the study report, there were two, one - hour events that exceeded the state noise standard and violated site permit section 4.3.

1. Central Monitor Location - Shutdown # 9
 - i. Total sound level is 51 dBA, and turbine only contribution is 49 dBA
2. West Monitor Location - Shutdown # 37
 - i. Total sound level is 51 dBA, and turbine only contribution is 50 dBA

These exceedances also require additional action under site permit section 6.2, as the turbine only noise contribution in both situations was over 47 dBA. Out of an abundance of caution, and due to the lack of clarity provided by the Noise Monitoring Study Report, at this time EERA is recommending the full nightly curtailment of turbines T-11, T-13, and T-14, during nighttime hours (10 pm to 7 am).

- Commerce-EERA's May 2, 2022 filing ([20225-185479-01](#)) again verified the exceedances and the violation of Permit Condition 6.2 (p. 2):

Additionally, the Post-Construction Noise Monitoring Study noted a variance of 2 to 5 dBA between the pre-construction noise modeling and post-construction noise monitoring at the Freeborn Wind Project. Both the variance between the modeled and monitored noise levels, and the range of variance at the different monitoring locations were concerning as it indicates potential unreliability in the model predicted noise levels throughout the entire project area.

- Commerce-EERA, in its June 10, 2022 filing ([20226-186516-01](#)), accepted this unilateral and material change of protocol, without replication of noise monitoring, and concluded:

Based on our review of the Freeborn Wind Monitoring Study and the additional detailed data analysis conducted by Aercoustics, EERA has determined there are no exceedances of the Minnesota state noise standard, and no violation of Site Permit condition 4.3. As there are no exceedances of the State noise standard, the Project is not in violation of Site Permit special condition 6.2, which, based on a simple reading of the permit language, only apply to scenarios in which total noise levels are exceeded. Additionally, the variation between the pre-construction modeling of predicted noise levels and post-construction noise monitoring is within an acceptable range to validate the modeling predictions.

... and:

EERA recommends that no further nighttime curtailment of turbines T-11, T-13, and T-14 is necessary at this time, and full turbine operations can be resumed.

- The Commission's Order does not challenge Xcel Energy's RSG explanation that the modeling v. monitoring discrepancy "was primarily due to the modeling parameters that were used in the pre-construction study." Order, p. 5.

The highest measured turbine-only sound level at each monitor location were 2 to 5 dB greater than the modeled turbine-only sound levels. As discussed in Section 6.3, this is mostly due to the modeling parameters that were used in the Pre-Construction Study.

RSG's Freeborn Wind (Mn) Post-Construction Sound Monitoring, p. vi. That report FALSELY states that 0.5 ground factor was used in prior modeling:

Xcel Energy updated the model results (7/14/21) to reflect the as-built turbine locations. They used the same model parameters used in the Pre-Construction Study: G=0.5, receptor height of 1.5 meters, and +0 dB uncertainty factor.

Id., p. 1 (emphasis added)

In its Order, the Commission listed an assortment of some of the noise-related filings in this docket's record, but many others are in the record and apparently not considered. See Order, p. 1-2.

The Commission erred in multiple ways in its August 8, 2022 Order, and in some matters, repeating directly or indirectly building on material errors in prior Commission Orders.

- The Commission failed to address Madson's request for Xcel's June 22-July 1, 2021 noise monitoring information and failed to require filing of this information by Xcel.
- The Commission failed to order replication, and/or utilization of Xcel's June 22 – July 1, 2021 noise monitoring for comparison to the November post-construction noise monitoring.
- The Commission failed to require replication of the post-construction noise monitoring that, pre-binning, demonstrated noise exceedences.
- The Commission erred when it failed to directly address the discrepancies acknowledged by EERA between the pre-construction noise modeling based on flawed "noise parameters," and the post-construction noise monitoring.
- The Commission erred when it accepted the February 1, 2022 noise monitoring, performed in November, 2021, falsely claiming that noise modeling prior to Xcel's August 19, 2019 modeling earlier noise modeling had utilized a 0.5 ground (Order August 8, 2022).
- The Commission erred when it accept a noise report falsely claiming that the pre-construction noise assessment dated August 19, 2019 was prior to the issuance, when the initial Site Permit was issued December 19, 2018 ([201812-148595-01](#)), and the Amended Site Permit was issued by Order on May 10, 2019 ([20195-152849-01](#)), months BEFORE the August 19, 2019 Xcel site permit application, including updated noise modeling, was filed.

- The Commission erred when it failed to infer exceedences when Xcel Energy repeatedly refused to produce and eFile the June 22 – July 1, 2021 monitoring results after multiple assurances that it would provide those results to Madson.
- The Commission erred when it failed to infer exceedences when Xcel changed its post-construction protocol, simultaneous to monitoring, to include “binning” if exceedences demonstrated in monitoring.

It may be reasonably inferred that Xcel Energy’s November “post-construction noise monitoring” confirms Madson’s claim of excessive noise. It may be reasonably inferred that Xcel Energy’s noise monitoring protocol was changed, at the same time post-construction noise modeling was being performed, because the simultaneous noise monitoring was demonstrating exceedences. It may be inferred that but for the change in noise monitoring protocol, Xcel’s Freeborn Wind project is unable to comply with the MPCA’s industrial noise standards.

Over and over, the many complaints, the many filings, have demonstrated facts sufficient to warn the Commission that noise at Freeborn Wind required scrutiny. The inability of Freeborn Wind to meet the Minnesota noise standard of Minn. R. 7030.0400 and the permit’s Condition 6.2 was forecast in the gyrations of Freeborn Wind, Commerce, the MPCA, and the PUC in granting the initial Freeborn Wind site permit in December, 2019. The inability of Freeborn Wind to meet the noise standards was forecast in the ALJ’s Freeborn Wind Recommendation, and in multiple Madson and AFCL filings. The understated noise predicted in the noise modeling using a 0.5 ground factor was pointed out in multiple Madson and AFCL filings and the prior Madson/AFCL Motion, and use of 0.5 as a ground factor is notice that compliance was doubtful at best if modeling using the appropriate 0.0 ground attenuation factor. The Commission is well aware of the understatement of noise through use of the 0.5 ground factor. The initial 3 hour noise testing on Madson’s property was irrefutable warning of non-compliance that was provided to the Commission in a screenshot of an email from Xcel. Evidence of Xcel’s 180 degree turn

around after the June 22 – July 1, 2021 noise monitoring at Madson’s property, from repeatedly promising results of the 22 day noise study to repeated refusal to provide results, was provided to the Commission in affidavits. This 180 turn and refusal to provide noise monitoring results provides additional basis for the inference that Freeborn Wind is exceeding state noise standards.

The Commission should be interested, should be concerned about noise levels inflicted on residents in and near the Freeborn Wind footprint. Instead, in its Order of August 8, 2022, accepting the post-construction noise monitoring report, the Commission doubles down on its previous errors, inviting continued challenge as it dismisses the legitimate complaints and claims of residents who must live with this project that has encroached on their community. The Commission is the regulator. Failure to address these warnings is dereliction of duty – the Commission has a responsibility and obligation to act.

III. CONCLUSION – MADSON REQUESTS REVIEW OF PRIOR NOISE MONITORING, CORRECTION OF FALSE STATEMENTS IN REPORT, MITIGATION AND PERMIT CONDITION 6.2 DISCUSSIONS, AND NOISE MONITORING FOR ALL RECEPTOR LOCATIONS IN PROJECT.

Madson requests reconsideration of the Commission’s August 8, 2022 Order, and that the Order be amended:

- Order release and filing in eDockets by Xcel Energy of the May, 2021, 3 hour noise testing, and the June 22 – July 1, 2021 wind noise monitoring on Madson’s property; and
- Order corrections to errors in the post-construction noise monitoring report, including but not limited to false statements that the modeling prior to the August 19, 2019 noise modeling had used a 0.5 ground factor, and that the August 19, 2019, noise modeling was submitted prior to issuance of the Freeborn Permit (in December 2018 and amended May 10, 2019); and
- Order immediate mitigation through curtailment of turbines nearest Madson’s home; and
- Order Permit Condition 6.2 discussions of mitigation, specifically to include

Madson, not just Xcel Energy and Dept. of Commerce.

- Order post-construction noise monitoring at each receptor location within the project to determine post-construction noise levels and to compare post-construction noise levels to pre-construction modeled levels; and
- Such other relief and mitigation necessary to address noise exceedences throughout and adjacent to the Freeborn Wind project.

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