COMMERCE DEPARTMENT

April 20, 2018

Daniel Wolf Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101-2147

RE: EERA Comments and Recommendations Revised Turbine Layout and Final Decision on Site Permit Issuance Palmer's Creek Wind Project, Chippewa County, Minnesota Docket No. IP-6979/WS-17-265

Dear Mr. Wolf,

Attached are comments and recommendations of Department of Commerce, Energy Environmental Review and Analysis (EERA) staff in the above matter.

Palmer's Creek Wind Farm, LLC has submitted an application pursuant to Minnesota Rule 7854.0400 for a Site Permit for a 44.6 megawatt wind project in Chippewa County, Minnesota.

The initial filing was made on April 11, 2017

Michael Rutledge Fagan Engineering, LLC 501 West Highway 212 Granite Falls, MN 56241

These comments are based on EERA staff review of a revised turbine layout, amended documentation provided by the Applicant, and the project record to date. Staff is available to answer any questions the Commission may have.

Sincerely,

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Richard Davis EERA Staff

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COMMERCE DEPARTMENT

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS AND RECOMMENDATIONS OF MINNESOTA DEPARTMENT OF COMMERCE ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS STAFF

DOCKET NO. IP-6979/WS-17-265

Date: April 20, 2018

In the Matter of the Application of Palmer's Creek Wind Farm, LLC for a Large Wind Energy Conversion System (LWECS) Site Permit for the 44.6 MW Palmer's Creek Wind Project in Chippewa County, Minnesota.

Issue(s) Addressed:

- Whether the Commission should issue a Site Permit for the Palmer's Creek Wind Farm.
- Whether the Applicant's environmental review of proposed turbine layout amendments are adequate.
- Whether comments and concerns with respect to the Avian and Bat Protection Plan and operational phase fatality monitoring by the Minnesota Department of Natural Resources (MN DNR) have been addressed.

Additional documents and information can be found on the EERA website <u>https://mn.gov/commerce/energyfacilities/Docket.html?ld=34697</u> or on eDockets <u>https://www.edockets.state.mn.us/EFiling/search.jsp</u> (Year "17" and Number "265").

This document can be made available in alternative formats; i.e. large print or audio tape by calling (651)539-1530.

Introduction and Background

On April 11, 2017, Palmer's Creek Wind Farm, LLC (Applicant) applied to the Public Utilities Commission (Commission) for a Large Wind Energy Conversion System (LWECS) Site Permit for the Palmer's Creek Wind Farm (Project) in Chippewa County, Minnesota.¹

The initial public information meeting was held on June 26, 2017 and the Public Hearing on September 11, 2017. Separate public comment periods were held in conjunction with both the information meeting and hearing. Additionally, the Applicant has had continued communication with EERA staff, Commission staff, and MN DNR staff.

Turbine Placement Issue

The MN DNR has expressed ongoing concerns with the Applicant's originally proposed locations of turbines WTG-5, WTG-9, WTG-10, and WTG-12. They also have concerns regarding the anticipated high risk of the proposed Project to avian and bat species, and the Draft Site Permit (DSP) condition requiring operational phase fatality monitoring.² MN DNR recommended that turbines WTG-5, WTG-9, WTG-10, and WTG-12 be moved 200 to 300 feet farther away from the Minnesota River valley, and if the proposed turbine locations were not moved, the Project would be considered high risk to avian and bat species.³ EERA incorporated the high risk determination, given the proposed turbine locations, and required operational phase fatality monitoring into the preliminary DSP⁴, which the Commission approved and incorporated into the DSP.⁵

Subsequently, following the issuance of the Summary of Public Testimony, Findings of Fact, Conclusions of Law, and Recommendations (ALJ Report)⁶, the Applicant provided a revised Avian and Bat Protection Plan (ABPP), as directed by EERA staff, for review by MN DNR.⁷ In the MN DNR comments on the revised ABPP, they also took the opportunity to indicate that the Commission should carefully consider multi-agency concerns regarding whether the Commission should issue the Site Permit with the originally proposed locations of turbines WTG-5, WTG-9, WTG-10, and WTG-12.⁸ The MN DNR recommendation to "carefully consider" Site Permit issuance, however, was not within an open comment period, and it does not seem to reflect the same tone as comments previously submitted by MN DNR. EERA staff acknowledges that MN DNR had repeatedly recommended the Applicant consider moving turbines WTG-5, WTG-9, WTG-10, and WTG-12 to alternative locations. However, recommending relocation of turbines to reduce potential project risk, and recommending the Commission "carefully consider" Site Permit issuance if the turbines are

¹ Site Permit Application and associated Figures and Appendices, Palmer's Creek Wind Farm, Main Document of Site Permit Application, eDocket <u>#20174-130706-01</u>

² Summary of Public Testimony, Findings of Fact, Conclusions of Law, and Recommendation, OAH, November 8, 2017, eDocket # <u>201711-137239-01</u>

³ Comments on the Interim Acoustic Bat Report and Wildlife Monitoring Report, MN DNR, August 8, 2017, eDocket # <u>20178-134573-01</u>

⁴ Preliminary DSP, DOC-EERA, July 25, 2017, eDocket # <u>20177-134216-01</u>

⁵ Order Issuing DSP, PUC, August 23, 2017, eDocket # <u>20178-134955-01</u>

⁶ Summary of Public Testimony, Findings of Fact, Conclusions of Law, and Recommendation, OAH, November 8, 2017, eDocket # <u>201711-137239-01</u>

⁷ Revised ABPP, Palmer's Creek Wind Farm, January 12, 2018, eDocket # <u>20181-138853-01</u>

⁸ Letter in Response to the Revised ABPP, MN DNR, January 31, 2018, eDocket# 20181-139581-01

not relocated, are not the same thing. Especially, when the change in recommendations is coming at the end of the Site Permit process, and with no new substantial information or evidence that we know of.

Updated Analyses Required for Turbine Relocation

MN DNR's concerns led the Applicant to revise the turbine layout, and relocate turbines WTG-5, WTG-9, WTG-10, and WTG-12. Due to this change, EERA requested the Applicant provide, at a minimum, an addendum to the Site Permit Application, updated noise modeling, updated shadow flicker analysis, revised wildlife monitoring reports, and a revised ABPP. Table 1 below provides the revised Project documents the Applicant has submitted, which are relevant to the Commission's current decision regarding Site Permit issuance. The Applicant has also submitted additional documents that are necessary pre-construction filings. EERA will provide review and comment on the additional pre-construction documents at a later date, as is typical of the compliance review process of permitted wind energy facilities.

Filing Number	Description	eDocket Doc. ID	Filing Date
1	Site Permit Application Amendment	<u>20183-141419-01</u>	3-27-18
2	March 2018 Noise Analysis	20183-141420-01	3-27-18
3	Final Shadow Flicker Analysis	<u>20183-141421-01</u>	3-27-18
4	Microwave Beam Study	<u>20183-141422-01</u>	3-27-18
5	Wildlife Monitoring Report	<u>20183-141491-01</u>	3-28-18
6	Avian and Bat Protection Plan	20184-141656-01	4-4-18

Table 1. Revised Documents Filed by the Applicant

EERA Review and Analysis

EERA has reviewed the additional documents listed in Table 1. The Applicant's Site Permit Application Amendment addresses the majority of the resource areas, and potential resource impacts that may result due to the revision of the turbine layout as discussed previously.

The Amendment identifies several resource areas that are likely to experience "no change" when comparing the original turbine layout and the revised turbine layout; wind rights, socioeconomics, land-based economies, public services and infrastructure, public health

and safety, hazardous materials, soils and topography, groundwater resources, surfacewater and floodplain resources, wetlands, and vegetation.

The Amendment indicates shifting the four turbines further from the Minnesota River would reduce potential impacts to a number of resources; recreation and tourism, land use, wildlife, rare and unique natural resources, and cultural and archaeological resources.

EERA is providing additional analysis of four other issues noise, visual (shadow flicker), public services and infrastructure (microwave beam path interference), and wildlife (Wildlife Monitoring Study and ABPP)

Noise Modeling

The Applicant has conducted on-site ambient noise monitoring of the existing conditions, and noise modeling for both the original turbine layout and the revised turbine layout. Onsite ambient noise monitoring was conducted in January 2017, with three monitors deployed within the project area and one monitor deployed outside the project area. The onsite ambient noise monitoring identified existing hourly Leq during the day was 24.8-66.2 dBA and during the night was 22.3-63.2 dBA.⁹ Ambient noise monitoring indicates that Location M1 exceeded Minnesota Noise Standards during the night, Location M2 exceeded Minnesota Noise Standards during the night, Location M3 exceeded Minnesota Noise Standards during the night, Location M3 exceeded Minnesota Noise Standards during the night, Location M3 exceeded Minnesota Noise Standards during the night, Location M4 does not exceed the Minnesota Noise Standards.¹⁰

The Applicant's noise modeling of the original turbine layout indicated the highest predicted turbine generated noise level of 44.5 dBA would be experienced at modeling Receptor R36.¹¹ Modeling indicated that turbine generated noise level plus anticipated ambient noise levels could exceed the 50 dBA night time Minnesota Noise Standard when the ambient noise conditions are at or exceeding 50 dBA.¹² After revising the turbine layout the Applicant completed revised noise modeling.

Based on the revised noise modeling the highest predicted turbine generated noise level of 45.1 dBA is anticipated to be experienced at modeling Receptor R32,¹³ which is an increase of 0.8 dBA at Receptor R32 from the noise modeling completed for the original turbine layout. The increase at Receptor R32 is likely due to three turbines being placed within 2,335 feet of Receptor R32, the turbines in close proximity are WTG-3, WTG-7, and WTG-8.¹⁴ None of those turbines are being moved in the revised turbine layout, but the slight increase in the noise levels between the original noise study and the revised noise study are likely due to modeling scenario variability. The revised noise modeling indicated that turbine

⁹ Initial Filing, Appendix B – Noise Analysis, Palmer's Creek Wind Farm, April 11, 2017, eDocket # <u>20174-130706-03</u>

¹⁰ Initial Filing, Appendix B – Noise Analysis, Palmer's Creek Wind Farm, April 11, 2017, eDocket # 20174-130706-03

¹¹ Initial Filing, Appendix B – Noise Analysis, Palmer's Creek Wind Farm, April 11, 2017, eDocket # 20174-130706-03

¹² Initial Filing, Appendix B – Noise Analysis, Palmer's Creek Wind Farm, April 11, 2017, eDocket # 20174-130706-03

¹³ March 2018 Noise Analysis, Palmer's Creek Wind Farm, March 27, 2018, eDocket # 20183-141420-01

¹⁴ March 2018 Noise Analysis, Palmer's Creek Wind Farm, March 27, 2018, eDocket # 20183-141420-01

generated noise levels plus anticipated ambient noise levels are expected to exceed the Minnesota Noise Standard of 50 dBA at night time only when the ambient noise levels are at, or exceeding, 50 dBA, which is the same as the noise modeling for the original layout.¹⁵

Based on EERA's review and analysis of available data and modeling the revised turbine layout does not significantly change the potential noise impacts from those proposed in the original turbine layout.

Visual (Shadow Flicker)

Based on EERA's review the revised turbine layout also results in a change to the potential visual impacts from those proposed in the original turbine layout. The Applicant's updated shadow flicker analysis indicates the proposed relocation of turbines WTG-5, WTG-9, WTG-10, and WTG-12 is anticipated to increase the number of residences that will experience 30 or more hours of shadow flicker per year, as shown in Table 2.¹⁶ Modeling of the realistic case situation of shadow flicker for the revised turbine layout indicates that four individual residences will experience 30 or more hours of turbine induced shadow flicker¹⁷, in comparison to the original turbine layout which identified one residence that would experience 30 or more hours of turbine induced shadow flicker¹⁸.

	Original Tu	Irbine Layout ¹⁹	Revised Turbine Layout ²⁰		
	Worst Case	Realistic Case	Worst Case	Realistic Case	
# of Receptors					
Experiencing	39	39	39	39	
Shadow Flicker					
# of Receptors					
Experiencing 30 -	7	0	5	2	
40 hrs per year					
# of Receptors					
Experiencing 40 -	3	1	3	1	
50 hrs per year					
# of Receptors					
Experiencing >50	10	0	10	1	
hrs per year					

Table 2. Shadow Flicker Analysis Original Turbine Layout vs. Revised Turbine Layout

Turbine generated shadow flicker is not currently known to cause adverse health impacts, but the benchmark of 30 hours per year has been used by other regulatory bodies as it is thought to identify a level at which the residents may become annoyed by the turbine generated shadow flicker.

¹⁵ March 2018 Noise Analysis, Palmer's Creek Wind Farm, March 27, 2018, eDocket # 20183-141420-01

¹⁶ Final Shadow Flicker Report, Palmer's Creek Wind Farm, March 27, 2018, eDocket # 20183-141421-01

¹⁷ Final Shadow Flicker Report, Palmer's Creek Wind Farm, March 27, 2018, eDocket # 20183-141421-01

¹⁸ Initial Filing, Appendix D – Shadow Flicker, Palmer's Creek Wind Farm, April 11, 2017, eDocket # <u>20174-130706-05</u>

¹⁹ Initial Filing, Appendix D – Shadow Flicker, Palmer's Creek Wind Farm, April 11, 2017, eDocket # 20174-130706-05

²⁰ Final Shadow Flicker Report, Palmer's Creek Wind Farm, March 27, 2018, eDocket # 20183-141421-01

Therefore the DSP condition 7.2 specifies that shadow flicker produced by the turbines needs to be modeled, and the Permittee shall identify ways that avoidance, minimization, and mitigation to reduce the anticipated shadow flicker to be experienced by the residents.²¹

Public Services and Infrastructure (Microwave Beam Path Interference)

As part of the Site Permit Application the Applicant completed a Microwave Beam Path Study of the original turbine layout. In the original turbine layout no proposed turbine locations would interfere with any known microwave beam paths.²² The Applicant completed an updated Microwave Beam Path Study based on the revised turbine layout for the project, the study indicates the potential for turbine WTG-9, one of the four shifted turbines, to interfere with a known microwave beam path.²³

Based on EERA's review and analysis of available data the revised turbine layout does appear to change the potential microwave beam path interference from those proposed in the original turbine layout. The potential for interference appears to be limited to turbine WTG-9 in the revised turbine layout.

Wildlife (Wildlife Monitoring Report and Avian and Bat Protection Plan)

Wildlife Monitoring Report

After revising the turbine layout the Applicant updated and revised the Wildlife Monitoring Report for the Project. In making revisions to the Wildlife Monitoring Report the Applicant coordinated review with the MN DNR, and incorporated edits to the document based on MN DNR's recommendations. MN DNR indicated in their April 12, 2018 letter²⁴, their recommended modifications had been appropriately addressed in the most recently filed, March 28, 2018, Wildlife Monitoring Report.²⁵

Avian and Bat Protection Plan

The Applicant has been coordinating with the MN DNR on revisions to the ABPP taking the revised turbine layout into consideration. The most recent version of the ABPP was filed in eDockets by the Applicant on April 4, 2018.²⁶ At this time the Applicant and MN DNR have come to an agreement on the content of the most recent ABPP, with two notable exceptions.

The MN DNR has indicated that a third party consultant must conduct the operational phase fatality monitoring, and MN DNR does not believe that Fagan, Inc. staff can be considered third party in regards to the Palmer's Creek Wind Farm.²⁷ The Applicant has indicated to EERA that Fagen, Inc. is a capable third party consultant, and they will be completing the operational phase fatality monitoring. The findings in the ALJ Report provided clear detail with respect to the ownership structure of, and the owners of, the Applicant. The Applicant is wholly owned by Project Hawkeye, L.L.C., which is owned by four members of the Fagen

²¹ Order Issuing DSP, PUC, August 23, 2017, eDocket # 20178-134955-01

²² Initial Filing, Appendix E – Microwave Beam Study, Palmer's Creek Wind Farm, April 11, 2017, eDocket # 20174-130706-06

²³ Microwave Beam Study, Palmer's Creek Wind Farm, March 27, 2018, eDocket # <u>20183-141422-01</u>

²⁴ Comment Letter, MN DNR, April 12, 2018, eDocket # 20184-141918-01

²⁵ Wildlife Monitoring Report, Palmer's Creek Wind, March 28, 2018, eDocket # 20183-141491-01

²⁶ ABPP, Palmer's Creek Wind Farm, April 4, 2018, eDocket # <u>20184-141656-01</u>

²⁷ Comment Letter, MN DNR, April 12, 2018, eDocket # <u>20184-141918-01</u>

family.²⁸ Those same members of the Fagen family also own Fagen, Inc.²⁹ Mike Rutledge who is an employee of Fagen, Inc. is also listed as, and has signed as the authorized representative of the Applicant.³⁰

The second recommendation MN DNR has made, with which the Applicant does not agree, is the use of cleared search plots during operational phase fatality monitoring. MN DNR has indicated that keeping the monitoring search plots clear of vegetation should increase search efficiency during monitoring, which will ultimately provide more accurate fatality estimates for the Project.³¹ The Applicant has indicated to EERA that they would rather not clear the monitoring plots as the practice adds additional costs, and the searcher efficiency levels, are taken into consideration in the fatality estimate calculations that will be used.

Based on EERA's review and analysis of available data the revised turbine layout should reduce the potential wildlife impacts from those proposed in the original turbine layout, due to increased turbine location setbacks from the Minnesota River and the river valley's associated habitat. The degree to which the turbine location shifts will reduce wildlife impacts are not known at this time. EERA has addressed the MN DNR concerns with the Project's ABPP in the Recommendation section that follows.

EERA Recommendations

EERA has determined the Applicant has provided sufficient environmental review documentation of the revised turbine layout for the Palmer's Creek Wind Farm, which moved the locations of turbines WTG-5, WTG-9, WTG-10, and WTG-12 per the request of MN DNR. Of primary concern to EERA are the anticipated increase in the number of residences that will potentially experience shadow flicker in excess of the 30 hours per year, the potential for turbine WTG-9 to interfere with a known microwave beam path, and resolution of issues on the ABPP.

Condition 7.2 Shadow Flicker in the DSP indicates that the shadow flicker modeling must differentiate between participants and non-participants, and the Permittee shall provide documentation of efforts to avoid, minimize, and mitigate shadow flicker exposure at least 14 days prior to the Project's pre-construction meeting.³² Should the Commission issue a Site Permit for the Palmer's Creek Wind Farm, EERA recommends the Applicant provide a supplemental shadow flicker document, which complies with Condition 7.2 as identified above. EERA can then confirm that Condition 7.2 of the Site Permit has been met prior to the pre-construction meeting, and authorization to commence construction can be granted. If necessary, authorization to commence construction can be delayed until shadow flicker concerns are adequately addressed.

²⁸ Summary of Public Testimony, Findings of Fact, Conclusions of Law, and Recommendation, OAH, November 8, 2017, eDocket # <u>201711-137239-01</u>

²⁹ Summary of Public Testimony, Findings of Fact, Conclusions of Law, and Recommendation, OAH, November 8, 2017, eDocket # <u>201711-137239-01</u>

³⁰ Summary of Public Testimony, Findings of Fact, Conclusions of Law, and Recommendation, OAH, November 8, 2017, eDocket # <u>201711-137239-01</u>

³¹ Comment Letter, MN DNR, April 12, 2018, eDocket # 20184-141918-01

³² Order Issuing DSP, PUC, August 23, 2017, eDocket # <u>20178-134955-01</u>

Condition 5.2.16 Interference in the DSP indicates the Permittee shall provide documentation assessing the Project's potential impacts to television and radio signal reception, microwave beam path, and telecommunications.³³ The interference assessment document must be submitted at least 14 days prior to the pre-construction meeting for review and analysis by EERA.³⁴ Additionally, Condition 5.2.16 specifies that the Project may not operate while causing any interference to the above mentioned communication services.³⁵ Should the Commission issue a Site Permit for the Palmer's Creek Wind Farm, EERA recommends the Applicant provide a supplemental interference assessment document that addresses potential Project related interference of communication services as identified in Condition 5.2.16 Interference of the DSP. The supplemental document should also specifically address EERA's concern with respect to the revised turbine WTG-9 location, which places the turbine in very close proximity of a known microwave beam path. EERA can then confirm that Condition 5.2.16 of the Site Permit has been met prior to the pre-construction meeting, and authorization to commence construction can be granted. If necessary, authorization to commence construction can be delayed until interference concerns are adequately addressed.

EERA concurs with MN DNR's concerns with respect to the ABPP, more specifically in what constitutes a qualified third party and the clearing of fatality monitoring search plots for operational phase fatality monitoring for the Project. Condition 6.2 Operational Phase Fatality Monitoring in the DSP indicates that fatality monitoring shall be conducted by a qualified third party.³⁶ As stated previously in the Review and Analysis section, EERA believes the ALJ Report³⁷ clearly demonstrates that Fagen, Inc., and employees, should not be considered a third party. The owners of the Applicant are also the majority owners of Fagen, Inc., and Fagen, Inc. staff has been identified as, and signed as the authorized representative of the Applicant. Should the Commission issue a Site Permit for the Palmer's Creek Wind Farm, EERA recommends the Commission, in its order, make it clear that Fagen, Inc., any of its subsidiaries, or its employees independently, will not be considered qualified third party consultants with reference to operational phase fatality monitoring.

The Applicant has indicated that the fatality estimation equations are able to take searcher efficiency into consideration, so clearing the vegetation from the fatality search plots is not necessary. Although it is true that the equations used to estimate the number of fatalities at an operational wind farm do have factors to account for searcher efficiency, regardless of vegetative cover, the fatality estimator calculations are generally far more accurate with higher searcher efficiencies. Clearing the vegetation from the fatality search plots does come at a financial cost, but the benefits of higher searcher efficiencies and improved fatality estimation are not the only benefits. Cleared search plots also increase the searchers potential for finding fatalities of rare species. Rare species are likely to experience lower fatality rates as there are simply fewer individuals, but those few fatalities could result in a large impact to rare species. With more heavily vegetated plots the searchers visibility decreases, as do the odds of finding a species that is rare versus the more common species. Clearing the search plots also provides the searchers with a safer

³³ Order Issuing DSP, PUC, August 23, 2017, eDocket # <u>20178-134955-01</u>

³⁴ Order Issuing DSP, PUC, August 23, 2017, eDocket # <u>20178-134955-01</u>

³⁵ Order Issuing DSP, PUC, August 23, 2017, eDocket # <u>20178-134955-01</u>

³⁶ Order Issuing DSP, PUC, August 23, 2017, eDocket # <u>20178-134955-01</u>

³⁷ Summary of Public Testimony, Findings of Fact, Conclusions of Law, and Recommendation, OAH, November 8, 2017, eDocket # <u>201711-137239-01</u>

work environment, if searches are conducted in agricultural row crops the searchers can more easily be exposed to pesticides that have been applied to the surface of the crops, and the heat and humidity exposure for the searchers during the summer months can create dangerous conditions. Providing the searchers with safer field conditions protects their health, but it also allows the searchers to focus on the task of searching, thus again supporting better searcher efficiency. The discussion of vegetative clearing within the fatality monitoring search plots is not specifically identified in any of the DSP conditions. However, it would need to be detailed in the ABPP as directed by Conditions 6.2 and 7.5.1 Avian and Bat Protection Plan.³⁸ Should the Commission issue a Site Permit for the Palmer's Creek Wind Farm, EERA recommends that the Commission direct the Permittee to clear the vegetation from the fatality monitoring search plots.

Condition 6.2 and Condition 7.5.1 specify a detailed monitoring protocol must be included in the Project's ABPP.³⁹ EERA recommends that the Project's ABPP be revised to include a detailed monitoring protocol, which will identify the specific third party consultant that will complete the operational phase fatality monitoring and include revisions to clear the vegetation from all of the fatality monitoring search plots. Although not specified in the DSP, for consistency, EERA recommends that a revised ABPP be submitted by the Applicant at least 14 days prior to the pre-construction meeting for review by EERA.

EERA recommends the Commission issue a Site Permit for the Palmer's Creek Wind Farm, based on the revised turbine layout. EERA recommends the Commission, specifically identify the following in its order issuing the Site Permit for Palmer's Creek Wind Farm:

- 1. The Permittee shall file, at least 14 days before the pre-construction meeting, a supplemental shadow flicker document, which complies with Condition 7.2 Shadow Flicker of the Site Permit.
- 2. The Permittee shall file, at least 14 days before the pre-construction meeting, a supplemental interference document that addresses potential Project related interference of communication services identified in Condition 5.2.16 Interference of the Site Permit. The supplemental interference document should also specifically address EERA's concern with respect to the revised turbine WTG-9 location, which places the turbine in very close proximity of a known microwave beam path.
- 3. Clearly state that Fagen, Inc., any of its subsidiaries, or its employees independently, will not be considered qualified third party consultants with reference to operational phase fatality monitoring.
- 4. Direct the Permittee to clear the vegetation from the fatality monitoring search plots.
- 5. The Permittee shall file, at least 14 days prior to the pre-construction meeting, a revised ABPP which will include a detailed monitoring protocol, identify the specific third party consultant that will complete the operational phase fatality monitoring, and include revisions to clear the vegetation from all of the fatality monitoring search plots.

³⁸ Order Issuing DSP, PUC, August 23, 2017, eDocket # <u>20178-134955-01</u>

³⁹ Order Issuing DSP, PUC, August 23, 2017, eDocket # 20178-134955-01

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

Minnesota Department of Commerce Comments and Recommendations

Docket No. IP6979/WS-17-265

Dated this 23rd day of April 2018

/s/Sharon Ferguson

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