



April 2, 2018

VIA EFILING AND U.S. MAIL

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

**Re: In the Matter of the Site Permit Amendment Application for Repowering the Trimont Wind I Project in Martin and Jackson Counties
MPUC Docket: IP6907/WS-13-258**

Dear Mr. Wolf:

Trimont Wind I, LLC (“Trimont”), a subsidiary of Avangrid Renewables, LLC, appreciates the opportunity to provide comments in reply to the March 19, 2018 comments of the Department of Commerce Energy Environmental Review and Analysis (“DOC-EERA”) on Trimont’s application (the “Application”) to retrofit the existing wind turbines at the Trimont project in Jackson and Martin counties (the “Project”).

The DOC-EERA, focusing on Trimont’s request that the wind access buffer (“WAB”) be adjusted for certain turbines, suggested that Trimont provide additional information on two specific points to support that request. First, DOC-EERA stated that “[t]he Applicant should provide technical evidence that the retrofitted blades would perform as stated. If newer blades can actually be proven to create less downstream wake loss, it improves the argument for adjusting the wind access buffer commensurately.” Second, DOC-EERA suggested that “the Applicant describe its efforts to coordinate with landowners of affected parcels, or develop a plan to do so.”¹

Trimont also provides comments responding to some of the suggested changes in permit language (the “Permit”). Specifically, Trimont will address DOC-EERA’s proposed changes to the Permit in sections 4.1 (Wind Access Buffer), 4.10 (Turbine Spacing), 7.5.1 (Avian and Bat Protection), 7.5.3 (Immediate Incident Reports), and 7.5.4 (Blade Feathering).

I. Technical Evidence Supporting Adjustment to Wind Access Buffer

The Minnesota Public Utilities Commission’s (“Commission”) mandate in siting large wind energy conversion systems, as set forth in Minn. Stat. § 216F.03, is to do so “in an orderly manner compatible with environmental preservation, sustainable development, and the efficient

¹ DOC EERA Comments (March 19, 2018) (eDocket No. 20183-141180-01) at 7.

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use of resources.” DOC-EERA has acknowledged in its comments that the Trimont Project meets the Legislature’s direction:

Repowering the existing facility allows for extending the life of that facility and continues the existing harvest of the wind resource without altering the current land use for wind or agriculture. In the end, the upgrade investment provides returns on life of project or reduced need for new facilities (economics) and capacity factor (efficiency) allowing the Permittee to better meet the demands of its power purchase agreement. The Project metrics appear favorable and could provide a good first example of the benefits of repowering existing LWECS.²

As the Commission is aware, the General Wind Permit Standards (“Standards”), which include a WAB of 5 rotor diameters on the dominant wind access and 3 rotor diameters on the other wind access (“5RD X 3RD WAB”) were adopted by the Commission in 2008.³ At the time, the Department of Commerce Energy Facility Permitting Staff (“EFP”) recognized that the WAB standard was “conservative,”⁴ and the Commission recognized that this standard could be modified in specific cases.⁵ Over a decade has passed since the Commission has adopted the WAB standard, and wind generation technology has progressed substantially during that time period. As noted in an email exchange between Trimont and DOC-EERA, referenced in DOC-EERA’s comments, the 91m rotors that will be used in the retrofit are more efficient than those currently in use at the Trimont Project, and will therefore create less wake loss than the current rotors once installed.⁶ DOC-EERA has specifically asked for “technical evidence that the retrofitted blades would perform as stated.”⁷ In response to that request, Trimont has provided the Energy Yield Assessment (“EYA”) (TRADE SECRET DOCUMENT, included as Attachment E) produced by Avangrid Renewables, LLC for the Project. The EYA (TRADE SECRET DOCUMENT) demonstrates that the blades that will be used in the proposed retrofit will result in a decrease in wake losses for the Trimont Project. The EYA (TRADE SECRET DOCUMENT) also indicates that the new blades will lead to lower internal wakes at the Trimont Project and lower wake effects at adjacent properties.

The Order establishing the Standards states that the purpose of the WAB is to ensure that an existing project does not impinge on the wind rights of non-participating landowners.⁸ EFP, in analyzing this issue, made the same observation. Specifically, EFP noted “[t]urbulence

² *Id.* at 5.

³ *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Docket No. E, G-999/M-07-1102, Order Establishing General Wind Permit Standards (January 11, 2008) (hereinafter “Standards Order”).

⁴ *In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Docket No. E, G-999/M-07-1102, Comments and Recommendations of the Minnesota Department of Commerce Energy Facility Permitting Staff (December 20, 2007) (hereinafter “DOC EFP Standards Comments”) at 7.

⁵ Standards Order at 8.

⁶ DOC EERA Comments (March 19, 2018) (eDocket No. 20183-141180-01) at 6.

⁷ *Id.* at 7.

⁸ Standards Order at 4.

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generated by a wind facility can affect lands and wind rights controlled by other parties and impact future wind development opportunities, if the intensity of the turbulence is high turbulence.”⁹ DOC-EERA stated that “if newer blades can actually be proven to create less downstream wake loss, it improves the argument for adjusting the wind access buffer commensurately.”¹⁰ The EYA (TRADE SECRET DOCUMENT) demonstrates that there will be a decrease in wake effects after the Project is retrofitted. This should eliminate the concern associated with allowing the requested adjustment.

Further, the exceedances are not substantial, and Trimont has recently determined that the size of the exceedances, and number of exceedances, are less than initially stated in the Application. Trimont has re-run its analysis of which retrofitted turbines would exceed the 5RD X 3RD WAB and the amount of those exceedances. Trimont’s revised analysis used GIS information and adjusted the ellipse to match the predominant wind direction of 330 degrees. This revision results in the elimination of exceedance at five (5) retrofitted turbines, and identification of four (4) additional turbines that would exceed the 5RD X 3RD WAB. The range of exceedances dropped from 16-226 feet (5m-69m) in the Application to 16-179 feet (5m-55m) in the revised table. To aid the Commission’s understanding of these changes, Trimont has provided a comparison table based on Table 7 in the Application (Attachment A) and an updated version of Figure 4 from the Application (Attachment B). These Attachments show the changes in turbines expected to cause exceedances and the changes in the amount of those exceedances. For comparison purposes, it is noteworthy that in its discussion of where to set the WAB in the Standards, EFP acknowledged that the minimum for turbine spacing was 4RD on the predominant wind access.¹¹ Here, all of the retrofitted turbines will be more than 4RD from the property line of non-participating landowners, more than meeting the 4RD setback. This is visually illustrated in Attachment C, which depicts the WAB setbacks if a 4RD setback was used rather than 5RD.

The Standards Order specifically contemplates that the relevant regulatory authority may approve adjustments to the 5RD X 3RD WAB.¹² Here, the turbulence resulting from the retrofitted Trimont turbines will be *less* than that generated by the turbines as they are currently operating, and the retrofit of the Project will extend its useful life and increase the efficient generation of wind energy without any replacement of turbines.¹³ If the operation of the current turbines does not impinge on the wind rights of adjacent parcels, it follows that the operation of the retrofitted turbines, which will generate lower internal wakes, will not impinge on those wind rights.

There is ample reason for the Commission to exercise its discretion to adjust the WAB for the 20 turbines as requested by Trimont.

⁹ DOC EFP Standards Comments at 6-7.

¹⁰ DOC EERA Comments (March 19, 2018) (eDocket No. 20183-141180-01) at 7.

¹¹ DOC EFP Standards Comments at 7.

¹² Standards Order at 8.

¹³ EYA (TRADE SECRET DOCUMENT).

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II. Landowner Coordination

Trimont has followed the requirements for seeking to amend its Permit, and has appropriately relied on the noticing and public participation processes conducted by the Commission. As set forth in Minn. R. 7854.0900, subp. 2, the “Notice of Public Information Meeting and Comment Period on the Trimont Wind I Project Site Permit Amendment Application” was sent to all of the participating and non-participating landowners inside of and adjacent to the Project Permit boundary that could be affected by an adjusted setback.¹⁴ In addition, notice of the comment period and meeting was published in the *Fairmont Sentinel* and the *Jackson County Pilot*.

As acknowledged by DOC-EERA, none of the non-participating landowners provided testimony at the public meeting or otherwise commented in opposition to the Project.¹⁵ In its comments, DOC-EERA states that this lack of comment does not necessarily indicate that the landowners either consented to or understood the setback issue. Trimont respectfully disagrees with DOC-EERA on this point. First, there is no reason to assume that the notice provided pursuant to the Commission’s processes was deficient – a number of interested parties appeared at the public meeting to provide testimony, including participating landowners. In fact, Mr. Neal Von Ohlen, one of the participating landowners, made the point that 67 landowners all agreed to extend their leases, demonstrating a lack of concern regarding visual impacts, noise, or other issues.¹⁶ Second, the public notice, which was drafted by the Commission with input by Trimont, specifically stated that Trimont was seeking adjustments to Project setbacks.¹⁷ Third, the comment period was extended, allowing for a longer period for public participation than normally provided.¹⁸ The strong support for the Project demonstrated by the testimony of participating landowner Mr. Von Ohlen at the public meeting, as well as the lack of formal complaints associated with this Docket or other comments raising concerns about the Project, demonstrate a lack of concern from landowners regarding this Project.

As discussed above, the technical information provided in the EYA (TRADE SECRET DOCUMENT) demonstrates that the retrofit will lead to fewer wake effects, and therefore there should be no concern about interference with non-participating landowner wind rights. Because there will be less wake on neighboring parcels after the Project, Trimont should not be required to go beyond the typical public notice requirements by seeking “consent” from non-participating landowners with respect to the requested adjustments. Requiring consent would amount to handing these landowners a potential “veto” over the Project, which would not be consistent with the legislative mandate to site wind projects in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources, as required by Minn. Stat. § 216F.03.

¹⁴ Notice – Certificate of Service and Service Lists (January 24, 2018) (eDocket No. 20181-139279-02).

¹⁵ DOC EERA Comments (March 19, 2018) (eDocket No. 20183-141180-01) at 7.

¹⁶ Comments – Public Information Meeting Record (February 22, 2018) (eDocket No. 20182-140412-01) at 27-29.

¹⁷ Notice – Of Public Information Meeting and Comment Period on the Trimont Wind Project Site Permit Amendment Application (January 24, 2018) (eDocket No. 20181-139279-01).

¹⁸ Notice of Extension Variance (February 28, 2018) (eDocket No. 20182-140593-01).

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III. Turbine Spacing

As noted in the EYA (TRADE SECRET DOCUMENT), the retrofitting of the existing turbines will increase energy production and reduce wake loss. Because of the longer blades that will be installed, Trimont is seeking an increase in the percentage of turbines spaced closer than 5RD X 3RD from 20% to 30%. As previously noted, there will be no change in placement of turbines as a result of this retrofit.

IV. Avian and Bat Protection

As described in Attachment C to the Application, long-term wildlife monitoring is conducted at Trimont per the Avangrid Renewables' Corporate Wildlife Plan. As requested by EERA in Section 7.5.1, Trimont will report the raw data of bird and bat fatalities and injuries. However, Trimont will not be including "bird and bat fatality estimates for the project using agreed upon estimators from the prior calendar year" as requested by EERA, because formal post-construction monitoring ("PCM") is not proposed and the application of estimators is not statistically appropriate for application to the data collected under long-term operational monitoring.

Trimont agrees to the language suggested by EERA for Section 7.5.3 regarding immediate incident reports. However, Trimont requests that notification occur within 24 hours of "identification" of a bird or bat rather than "discovery," and not apply to "species proposed for listing" because such species are not covered by federal regulation until actually listed. Additionally, Trimont will provide the latitude and longitude coordinates of any discovery, rather than the closest turbine, to provide more accurate location data of the discovery.

Trimont agrees with EERA in Section 7.5.4 on the importance of blade feathering for bat protection. As described in the Application and Trimont's comments dated February 28, 2018, Trimont Wind currently implements a voluntary strategy of feathering for all turbines up to the manufacturer's cut-in wind speed of 3.0 meters/second (m/s), from one-half hour before sunset to one-half hour after sunrise, between July 15 and October 15, when temperatures are over 50° Fahrenheit. Trimont Wind proposes to implement the same protocol with the repowered GE 1.6 turbine, which also has a cut-in speed of 3.0 m/s. As discussed in Trimont's earlier comments, based on PCM studies at the adjacent Elm Creek I and II wind plants and scientific literature, the time period from July to October is when most of the bat fatalities occur.¹⁹ By increasing the feathering to extend from April 1 to October 31 with no temperature threshold, as suggested by EERA, the turbine equipment will be subject to excessive wear during times when bats are either not present or are rarely using the airspace.

V. Suggestions on Permit Language

Trimont has attached a chart that includes its proposed responses and resolution to DOC-EERA's proposed permit language for consideration as Attachment D. In most cases, Trimont has agreed

¹⁹ Trimont Comments (March 12, 2018) (eDocket No. 20183-140937-01).

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with the DOC-EERA's recommended language. Trimont has provided alternative language with respect to the following sections: 4.1 (Wind Access Buffer, for the reasons discussed above); 4.10 (Turbine Spacing, for the reasons discussed above); 7.5.1 (Avian and Bat Protection, for the reasons discussed above); 7.5.3 (Immediate Incident Reports, for the reasons described above); and 7.5.4 (Blade Feathering, for the reasons discussed above).

Trimont thanks the Commission for its consideration of its Application for Amendment.

Sincerely,

AVANGRID RENEWABLES, LLC

DocuSigned by:

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Amy McGinty
Vice President, O&M Services

Attachments

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