Fredrikson

Fredrikson & Byron, P.A.
Attorneys and Advisors

60 South Sixth Street, Suite 1500
Minneapolis, MN 55402-4400
Main: 612.492.7000
fredlaw.com

October 31, 2025

VIA E-FILING

Ms. Sasha Bergman
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, MN 55101-2147

Re: *In the Matter of the Application of Big Bend Wind, LLC for a Large Wind Energy Conversion System Site Permit for the up to 311.1 MW Big Bend Wind Project in Cottonwood and Watonwan Counties, Minnesota*

MPUC Docket No. IP-7013/WS-19-619

Dear Ms. Bergman:

Big Bend Wind, LLC (Big Bend Wind or the Company), requests that the Minnesota Public Utilities Commission (Commission) amend the existing Big Bend Wind Large Wind Energy Conversion System (LWECS) site permit originally issued to Big Bend Wind on September 28, 2022, and extended on December 23, 2024 (the Site Permit). The Company makes this request pursuant to Minnesota Statute Section 216I.09 and Site Permit Section 13.0.

On November 9, 2020, Big Bend Wind filed applications for a certificate of need, site permit, and route permit to construct the up to 300 megawatt (MW) Big Bend Wind Project in Cottonwood and Watonwan Counties (Project). The Project would include a LWECS (Wind Project) and an associated 161 kilovolt (kV) transmission line (Transmission Line). The Company filed a Supplemental and Revised Site Permit Application on September 20, 2021 (Revised 2021 Application). The Commission issued an Order Issuing the Certificate of Need, Site Permit and Route Permit for the Project on September 28, 2022. On September 18, 2024, Big Bend Wind submitted a request to the Commission to amend Site Permit Sections 8.2 and 8.3 to extend the dates from two to five years after issuance of the Site Permit to obtain a power purchase agreement (PPA) or other enforceable mechanism, and to commence construction. The Commission issued an amended Site Permit on December 23, 2024.[1]

---

[1] *In the Matter of the Application of Big Bend Wind, LLC for a Large Wind Energy Conversion System Site Permit for the up to 300 MW Big Bend Wind Project in Cottonwood and Watonwan Counties, Minnesota*, MPUC Docket No. IP-7013/WS-19-619, Order Approving Big Bend Wind, LLC's Request to Extend Deadline to Secure a PPA and to Start Construction (Dec. 23, 2024).

This Site Permit Amendment is requested to address updates to (1) turbine technology, (2) the Site Layout that have occurred since the Site Permit was issued, and (3) references to Minn. Stat. Ch. 216I, which became effective after the Site Permit was issued.

Big Bend Wind is submitting this proposed Site Permit Amendment after consulting with Commission Energy Infrastructure Permitting (EIP) staff. Below, we provide a brief background, discuss the requested amendments, analyze the applicable law, and update the Environmental Information from the Revised 2021 Application based on:

- turbine technology changes, including:
  - removing a turbine model from consideration, and
  - uprating the capacity of a different turbine model (turbine dimensions have not changed); and
- site layout changes, including:
  - removal of two turbine locations (other turbine locations have not changed),
  - the addition of a collection line easement that avoids a Minnesota Department of Natural Resources (MDNR) driveway crossing, and
  - shifting the location of the operation and maintenance (O&M) building to the former Red Rock Solar Project substation (to be collocated with the Project substation).

These changes are shown on Figure 1 – Big Bend Wind Site Permit Layout Revisions. This letter then addresses various sections of the Site Permit, requesting amendments where necessary.

A. BACKGROUND

As noted above, the Commission originally issued a Site Permit to Big Bend Wind in 2022 and later extended the Site Permit in 2024. In January 2025, Big Bend Wind informed the Commission that it had executed a PPA with Great River Energy for the sale of power generated at the site.[2] Big Bend Wind is in the final stages of preparing the site for construction and is taking action needed to align the Project with the PPA and construction plans.

In addition to this Site Permit Amendment request, Big Bend Wind is also seeking a route permit for approximately 4.5 miles of 161 kV transmission line and associated substation facilities that will enable Big Bend Wind to interconnect to Great River Energy's system at the existing Lakefield Generation Substation in Martin County. This route permit application will be considered in MPUC Docket No. ET2, IP7013/TL-25-389 (Extension Project).

Big Bend Wind plans to begin construction of its planned substation in late Q1 of 2026, with full construction of the Wind Project and Transmission Line beginning in Q3 2026, once all necessary approvals have been issued.

---

[2] *See* Big Bend Wind Site Permit Condition Compliance Filing (Jan. 1, 2025) (eDocket No. 20251-214036-01).

B. AMENDMENTS REQUESTED

Big Bend Wind requests the Commission amend the Site Permit to update (1) the Project description to reflect changes in turbine technology available for the Project; (2) the site layout to reflect minor changes; and (3) references to Minn. Stat. Ch. 216I, which became effective after the Site Permit was issued. These changes are reflected in **Attachment A – Draft Site Permit Amendment**.

C. APPLICABLE LAW AND ANALYSIS

Requests for site permit amendments may be made under Minn. Stat. § 216I.09. A person seeking an amendment must apply to the Commission. The application must be in writing and must (1) describe the alteration to be made or the amendment sought, and (2) explain why the request meets the eligibility criteria. The application must describe any changes to the environmental impacts evaluated by the Commission as part of the initial permit approval. If there are significant changes to the environmental impacts evaluated by the Commission as part of the initial permit approval, additional environmental review must be conducted.

The Commission must provide notice of the amendment application to persons on the general list and the Project list. The Commission must provide at least 10 days for interested persons to comment and seven days for the applicant to reply. A Commission decision must be made within 30 days of the applicant's reply comments.

As demonstrated in this application, Big Bend Wind seeks amendments that will not result in significant changes in the human and environmental impact of the facility. Instead, the change in turbine technology, which does not change the physical characteristics of the turbines, has the potential to result in greater energy output with fewer constructed turbines.

The revised site layout removes two proposed turbine locations closest to the Jeffers Petroglyphs, reducing potential visual impacts to the site, consistent with the 2021 Settlement Agreement entered into between Big Bend Wind, Red Rock Solar, LLC, Apex Clean Energy Holdings, LLC , Minnesota Historical Society, Lower Sioux Indian Community in the State of Minnesota, and Upper Sioux Community (the Settlement Agreement). Big Bend Wind has continued to update the Settlement Agreement parties through quarterly updates with the Commission. In addition, Big Bend Wind provided Project updates after the announcement of the PPA, in development of the Extension Project, and specific to the requests in this Amendment. On October 22, 2025, Big Bend Wind met with David Kelliher, Vice President of Public Policy & Government Relations, with the Minnesota Historical Society to discuss updates regarding Big Bend Wind's proposed Extension Project, Site Permit Amendment, and planned construction activities. Big Bend Wind invited members of the Lower Sioux Indian Community in the State of Minnesota and Upper Sioux Community to also meet with no response.

Additionally, the slight modifications to the collection system remove a crossing of land owned by MDNR. Moving the O&M Facility to a location adjacent to the Project substation will also create efficiencies by more centrally locating the facility within the Wind Project.

D. SUPPLEMENTAL ENVIRONMENTAL INFORMATION

The Site designated by the Commission for the Big Bend Wind Project has not changed, i.e., the Project Boundary included in the Revised 2021 Application remains the same. Within the Site, Big Bend Wind includes an updated Site Control Map (Figure 2) to demonstrate additional landowner interest and commitments made by Big Bend Wind to sign wind access buffer parcels.

Figure 3 is a Site Plan map that incorporates minor layout revisions that include removing two turbine locations, shifting the O&M Facility, and rerouting a collocated collection line and crane path to avoid a MDNR parcel. Lastly, turbine numbering has been updated since the Revised 2021 Application. Therefore, Big Bend Wind includes a Turbine ID comparison table as **Attachment B**.

a. Demographics

The current demographics in the Wind Project area are not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to demographics have not changed and no additional information is provided.

b. Land Use and Zoning

The current land use and zoning in the Wind Project area is not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to land use and zoning have not changed and no additional information is provided.

c. Conservation Easements

The conservation easements in the Wind Project area are not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to conservation easements have not changed and no additional information is provided.

d. Noise

Big Bend Wind hired Paxwood Acoustics (Paxwood) to update the noise analysis to reflect the 51 turbine locations to be constructed and two turbine models (V162 6.0MW and GE-158 6.1MW) under consideration. Paxwood reviewed the 2021 Noise Assessment included in the Revised 2021 Application for Project-specific background sound monitoring data to include in the analysis. In addition, Big Bend Wind also reviewed and updated residence data to reflect either new construction or demolition of residences since 2021. Most of the additional residences were a new development in the town of Mountain Lake.

Paxwood used the Computer Aided Design for Noise Abatement (Cadna-A) software program to determine the sound levels at receptors within one mile of the Project Area. The Cadna-A acoustical analysis software is designed for evaluating environmental noise from stationary and mobile sources and was used to calculate the L_{50} for both turbine models. Assuming that wind speeds are at a level that produces the maximum sound power level for each turbine model and are constant for an entire one-hour period, the L_{50} calculated by Cadna-A was compared to the MPCA L_{50} standard.

The analysis accounted for all noise generating elements associated with the proposed wind turbine models and layout for the Project. All proposed wind turbines (noise sources) were modeled in Cadna-A, and Project-related noise levels were calculated at 973 noise-sensitive receptors within the Project Area and a buffer of approximately one mile. Table 1 presents analysis results.

Table 1

Summary of Noise Assessment

Turbine Model	Noise Source	Statistic	Residence Classification		
			dB(A) Levels at All Residences	dB(A) Levels at Participating	dB(A) Levels at Non-Participating
Vestas V162	Turbine-Only Noise	Avg L_{50} Modeled	31	36	31
		Max L_{50} Modeled	44	44	41
		Min L_{50} Modeled	16	19	16
	Total Sound (Background + Turbine)[1]	Avg L_{50} Modeled	35	38	35
		Max L_{50} Modeled	45	45	42
		Min L_{50} Modeled	33	33	33
GE-158	Turbine-Only Noise	Avg L_{50} Modeled	33	38	33
		Max L_{50} Modeled	47	47	44
		Min L_{50} Modeled	17	20	17
	Total Sound (Background + Turbine)[1]	Avg L_{50} Modeled	36	40	36
		Max L_{50} Modeled	47	47	44
		Min L_{50} Modeled	33	33	33

[1] The average Project nighttime sound was monitored at 33 dB(A) (L_{50})

Maximum calculated total sound levels at all residential receptors for both turbine models are below the nighttime L_{50} noise limit of 50 dB(A). The maximum calculated total sound level, based on assumptions incorporated into the Cadna-A model and the turbine layout, results in a 47 dB(A) L_{50} at the nearest noise-sensitive receptor (maximum Project-related L_{50} range from 44 to 47 dB(A)). Average Project-related sound levels at residences for both turbine models range from 31 to 33 dB(A), on an hourly L_{50} basis. As depicted in the Noise Assessment Report and summarized above in Table 1, both turbine models and the layout comply with MPCA noise guidelines at residential receptors.

Big Bend Wind has sited turbines to minimize noise impacts to residences. In addition, the GE-158 and V162 turbine models have sound mitigation built into the turbine blades in the form of low-noise trailing edges (LNTE) and serrated trailing edges (STE), respectively. In addition, one turbine may operate in Noise Reduced Operations mode for the GE-158 under certain wind

conditions. The modeling assumptions related to these sound mitigation measures are discussed in **Attachment C – Noise Assessment Report**.

Big Bend Wind has incorporated the 2019 LWECS Application Guidance and sited turbines so that turbine-only noise is < 45 dB(A) at non-participating residences and < 47 dB(A) at participating residences. The layouts have been modeled to help ensure cumulative impacts from all wind turbines, and maximum calculated noise levels for both turbine models are below the MPCA's nighttime L_{50} noise limit of 50 dB(A) at residential receptors.

e. Visual Resources

As noted above, the revised site layout removes two proposed turbine locations closest to the Jeffers Petroglyphs, reducing potential visual impacts to the site, consistent with the Settlement Agreement.

Big Bend Wind hired EDR to update the shadow flicker analysis to reflect the 51 turbine locations to be constructed and two turbine models (V162 6.0MW and GE-158 6.1MW) under consideration, even though the physical dimensions of the turbine models have not changed. In addition, Big Bend Wind also reviewed and updated residence data to reflect either new construction or demolition of residences since 2021. Most of the additional residences were a new development in the town of Mountain Lake.

Shadow flicker frequency calculations for the Project were modeled for 973 residences (receptors) with WindPRO based on all turbines in the layout. These receptors are those within the Project Area and one-mile buffer that could receive shadow flicker. As demonstrated in Table 2, all non-participating residences are expected to experience below 30 hours per year of shadow flicker. **Attachment D** shows results of the shadow flicker assessment at the Project.

Table 2

Summary of Shadow Flicker Assessment

Turbine Model	Shadow Flicker (hr/year)	Participating		Non-Participating		Total	
		No. Receptors	% of Receptors	No. Receptors	% of Receptors	No. Receptors	% of Receptors
Vestas V162	0	58	48.7%	800	93.7%	858	88.2%
	0-1	0	0.0%	6	0.7%	6	0.6%
	1-10	11	9.2%	36	4.2%	47	4.8%
	10-20	13	10.9%	9	1.1%	22	2.3%
	20-30	18	15.1%	3	0.4%	21	2.2%
	30-40	11	9.2%	0	0.0%	11	1.1%
	40-50	4	3.4%	0	0.0%	4	0.4%
	50-60	4	3.4%	0	0.0%	4	0.4%
GE-158	0	59	49.6%	807	94.5%	866	89.0%
	0-1	0	0.0%	6	0.7%	6	0.6%
	1-10	11	9.2%	29	3.4%	40	4.1%
	10-20	16	13.4%	10	1.2%	26	2.7%
	20-30	17	14.3%	2	0.2%	19	2.0%
	30-40	9	7.6%	0	0.0%	9	0.9%
	40-50	3	2.5%	0	0.0%	3	0.3%
	50-60	4	3.4%	0	0.0%	4	0.4%

WindPRO calculates the number of hours per year as well as the maximum minutes per day during which a given receptor could realistically expect to be exposed to shadow flicker from nearby wind turbines. The maximum shadow flicker (hours per year) for each layout is summarized in Table 3.

Table 3
Maximum Shadow Flicker (hours/year)

Turbine Model	Maximum Shadow Flicker (hours/year)	
	Participating	Non-Participating
Vestas V162	59:00	25:36
GE-158	57:02	24:04

The shadow flicker modeling is conservative and does not take in consideration several factors including:

- availability of the turbines (i.e., whether they are operating or not based on meteorological conditions and/or maintenance);
- turbines not operating below cut-in and above cut-out wind speeds;
- obstacles (like trees or buildings) obstructing shadow flicker from a receptor; and
- dust or aerosols in the air which reduce the impact of shadow flicker.

For example, the participating residence modeled to receive the maximum amount of shadow flicker is surrounded by trees that are not accounted for by the model. These trees provide an obstruction to shadows from nearby proposed turbines. There are no non-participating residences which the model calculates will receive more than 30 hours of shadow flicker per year both turbine models. Additionally, Big Bend Wind has met with all participating landowners anticipated to experience more than 30 hours, explained the potential impacts and mitigation measures, and each landowner has signed a shadow flicker waiver.

Lastly, Big Bend Wind has filed a Determination of No Hazard (DNH) for an Aircraft Detection Lighting System (ADLS) radar tower with the Federal Aviation Administration (FAA). If approved by the FAA, Big Bend Wind will implement this light-mitigation technology for the turbines to further mitigate visual impacts.

f. Public Services and Infrastructure

Public Services and Infrastructure in the Wind Project area are not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to public services and infrastructure have not changed.

g. Cultural and Archaeological Resources

As noted above, the revised site layout removes two proposed turbine locations closest to the Jeffers Petroglyphs, reducing potential visual impacts to the site, consistent with the Settlement Agreement.

Additionally, on June 24, 2022, Big Bend Wind received a concurrence letter from the Minnesota State Historic Preservation Office (SHPO) (**Attachment E**). This letter acknowledges the Settlement Agreement discussed above specific to the Jeffers Petroglyphs site. Separate from Jeffers, the SHPO concurred that the Wind Project will not impact any other National Register of Historic Places listed or State Register of Historic Places listed history-architecture properties and no archaeological resources will be directly affected (e.g. ground disturbance due to construction). If any linear facilities (i.e., access roads, crane paths, or collection lines) shift outside of previously surveyed corridors based on final engineering, Big Bend Wind will obtain additional SHPO concurrence.

h. Recreation

As noted above, Big Bend Wind has made slight modifications to the collection system that removes a crossing of land owned by the MDNR. The collection line and crane path will no longer cross the access road to the Mountain Lake Wildlife Management Area (WMA), just south of County Road 9. This modification eliminates potential temporary interruptions to public access to the WMA that otherwise may have occurred during the period of active construction. It also eliminates the need for a Utility License to Cross Public Lands from MDNR. Therefore, the impacts to recreation included in the Revised 2021 Application have been reduced.

i. Public Health and Safety

Public health and safety in the Wind Project area are not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to public health and safety have not changed.

By way of update, on April 6, 2023, Big Bend Wind received DNHs from the FAA for the 51 turbine locations included in this Amendment for a height of 661 feet above ground level. The tip height for both turbine models is below this approved height from the FAA. On September 30, 2024, Big Bend Wind extended the DNHs. To avoid further extensions, construction must commence prior to March 30, 2026.

j. Hazardous Materials and Wastes

Hazardous materials and wastes in the Wind Project area are not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to hazardous materials and wastes have not changed. Big Bend Wind will update its Phase I Environmental Site Assessment prior to construction to identify any potentially hazardous waste sites. If any wastes, fluids, or pollutants are generated during any phase of construction or operation of the Project, they will be handled, processed, treated, stored, and disposed of in accordance with Minn. R. Ch. 7045.

k. Land-Based Economies

Land-based economies in the Wind Project area are not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to land-based economies have not materially changed. Big Bend Wind has removed two turbines from the layout, which will result in slightly less impacts to agricultural lands (1-2 acres).

l. Tourism

Tourism in the Wind Project area is not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to tourism have not changed.

m. Local Economies and Community Benefits

Local economies and community benefits are not significantly different than the information included in the Revised 2021 Application; therefore, the impacts to local economies and community benefits have not changed.

n. Topography

The topography in the Wind Project area is not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to topography have not changed.

o. Soils

The soils in the Wind Project area are not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to soils have not changed.

p. Geologic and Groundwater Resources

The geologic and groundwater resources in the Wind Project area are not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to geologic and groundwater resources have not changed.

q. Surface Water and Floodplain Resources

The surface water and floodplain resources in the Wind Project area is not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to surface waters and floodplains have not changed.

r. Wetlands

The wetlands in the Wind Project area are not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to wetlands have not changed. Big Bend Wind has conducted wetland delineations for all permanent facilities included in the Revised 2021 Application (i.e., access roads, turbines, Project substation, O&M Building) and has designed Project facilities to avoid and minimize impacts to these features. If any linear facilities (i.e., access roads, crane paths, or collection lines) shift outside of previously surveyed corridors based on final engineering, Big Bend Wind will complete additional wetland delineations.

s. Vegetation

The vegetation in the Wind Project area is not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to vegetation have not materially changed.

t. Wildlife

The wildlife in the Wind Project area is not significantly different from the information included in the Revised 2021 Application; therefore, the impacts to wildlife have not changed.

u. Rare and Unique Resources

Based on an updated review of MDNR Natural Heritage Information System (NHIS) data (License Agreement 2024-058), the state-listed threatened and endangered species known to occur within 1 mile of the Wind Project have not changed since the Revised 2021 Application. Therefore, Big Bend Wind anticipates that the comments specific to rare and unique resources received from the MDNR on the Wind Project on April 29, 2021, and February 22, 2022, would still be applicable. In addition, Big Bend Wind submitted a request for an updated Natural Heritage Review for the Wind Project on October 29, 2025, via the MDNR's Minnesota Conservation Explorer tool; a response from the MDNR is pending. The NHIS request is included as **Attachment F**.

According to the U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) website, federally listed species that may occur in the Project Area include the federally threatened prairie bush clover (*Lespedeza leptostachya*), which was also addressed in the Revised 2021 Application. The monarch butterfly (*Danaus Plexippus*) and western regal fritillary (*Argynnis idalia occidentalis*) are species that are currently proposed for listing within the Project Area; protections would not apply until the effective date of a final rule for these species. Lastly, the northern long-eared bat (*Myotis septentrionalis*) is a species that was of concern in the Project Area in 2021 but is no longer present on the IPaC results for the Project Area.

E. SITE PERMIT AMENDMENTS

Big Bend Wind respectfully requests that the Commission amend the December 23, 2024, Site Permit as described below. A draft of the amendments to the Site Permit requested by Big Bend Wind with requested changes shown in redline is provided in **Attachment A.**

a. Miscellaneous Edits

Big Bend Wind requests that Sections 6.2, 7.4, 10.1, 10.2, and Attachment 2 of the Site Permit be amended to replace each mention of the "Department of Commerce" with the "Commission's Energy Infrastructure Permitting unit" where appropriate.

Big Bend Wind also requests that Sections 1, 1.1, 4.7, 8.1, 8.2, 8.3, 11.1, 12.1, 13, 14, and 15 of the Site Permit be amended to remove references to Minn. Stat. Ch. 216E and Minn. R. Ch. 7854 and replace with references to Minn. Stat. Ch. 216I, where appropriate.

b. Permit Cover

The Company requests an amendment to the cover page as follows:

> *In accordance with the requirements of Minnesota Statutes Chapter 216~~F~~I ~~and Minnesota Rules Chapter 7854~~ this site permit is hereby issued to:*

Big Bend Wind, LLC

The Permittee is authorized by this site permit to construct and operate a Large Wind Energy Conversion System of up to 311.1~~300~~ megawatts (MW) consisting of up to 51 turbines. The Large Wind Energy Conversion System and associated facilities shall be built within the site identified in this permit and as portrayed on the site maps and in compliance with the conditions specified in this permit.

This amended site permit shall expire thirty (30) years from the date of this approval.

Approved and adopted this [updated date of approval]~~23rd day of December, 2024~~

BY ORDER OF THE COMMISSION

~~Will Seuffert~~Sasha Bergman, Executive Secretary

Big Bend Wind requests these updates to the Permit Cover to reflect the update to the applicable statutes for permitting an LWECS and to extend the expiration date from 2054 (30 years from the date of the original permit) to 2056 (30 years from the date of the anticipated permit amendment).

c. Section 1.0 Site Permit

The Company requests an amendment to Section 1.0 as follows:

The Minnesota Public Utilities Commission (Commission) hereby issues this site permit to Big Bend Wind, LLC (Permittee) pursuant to Minnesota Statutes Chapter 216~~IF and Minnesota Rules Chapter 7854~~. This permit authorizes the Permittee to construct and operate the Big Bend Wind Project, an up to 311.1~~300~~-megawatt (MW) nameplate capacity Large Wind Energy Conversion System (LWECS) and associated facilities in Cottonwood and Watonwan counties. The LWECS and associated facilities shall be built within the site identified in this permit and as identified in the attached site maps, hereby incorporated into this document.

~~The nameplate capacity recognizes that the project is a combined hybrid wind and solar project with a combined nameplate capacity of up to 335 megawatts. The solar project may be constructed up to a 60-megawatt nameplate capacity. However, the solar project must be constructed as an at least 50-megawatt facility, otherwise it is subject to local permitting and is not covered by this permit. The nameplate language also recognizes that if the Red Rock Solar facility is not constructed, the Big Bend LWECS facility can be constructed up to 300 megawatts.~~

Big Bend Wind requests these amendments to update the statutory reference to the Minnesota Energy Infrastructure Permitting Act (Minn. Stat. Ch. 216I), which became effective after the Site Permit was issued and to remove references to the Red Rock Solar project which is no longer going to be constructed.[3]

d. Section 2.0 Project Description

The Company requests an amendment to Section 2.0 as follows:

> *The Big Bend Wind Project is an up to 311.1~~300~~ MW nameplate capacity LWECS located in portions of Cottonwood and Watonwan counties, Minnesota. The LWECS will consist of up to ~~52 Nordex N-163 turbines,~~ 51 Vestas V162 turbines, or 51~~2~~ GE-158 turbines. The ~~Nordex N-163 turbine is a 5.94 MW machine,~~ Vestas V162 turbine is a 6.0 MW machine, and the GE-158 turbine is a ~~5.8~~6.1 MW machine.*
>
> *The project area includes approximately 43,523 acres of land, of which 34,185 acres are currently leased or pending lease agreements. Upon completion of construction and restoration, the project site will include approximately 50 acres of land converted to wind turbines and associated facilities approved by this Site Permit.*

Big Bend Wind requests these amendments because, as noted above, updates to turbine technology has led Big Bend Wind to remove the Nordex N163 turbine from the list of turbines being considered for the Project, and update the GE-158 turbine to be uprated mechanically from 5.8 to 6.1 MW with the same physical dimensions detailed in the Revised 2021 Application.

e. Section 2.1 Associated Facilities

The Company requests an amendment to Section 2.1 as follows:

> *Associated facilities for the Project will include gravel access roads, underground and/or aboveground electrical collection and communication lines, an operations and maintenance (O&M) facility, a project substation, one permanent meteorological tower, one Sonic Detection and Ranging (SoDAR) or Light Detection and Ranging (LiDAR) unit, a construction laydown area, up to four Aircraft Detection Lighting Systems (ADLS) radars, and one temporary concrete batch plant area.*

---

[3] *See In the Matter of the Application of Red Rock Solar, LLC for a Site Permit for the up to 60 MW Solar Project in Cottonwood County*, MPUC Docket No. IP-7014/GS-19-620, Order Approving Red Rock Solar, LLC's Request to Terminate the Red Rock Solar Project Site Permit (March 18, 2025).

> *The project substation will interconnect to the existing ~~Blue Lake-Wilmarth Interstate Junction 345-kilovolt (kV) transmission line~~ Great River Energy Lakefield Generation Substation in Martin County with an approximately 18-mile long 161 kV high voltage transmission line (HVTL)~~. The Big Bend Wind 161 kV Transmission Line Project is being reviewed under~~ permitted in PUC Docket No. IP7013/TL-19-621. Big Bend Wind is seeking a route permit for a new approximately 4.5-mile extension of the Transmission Line in PUC Docket No. IP7013/TL-25-389. Issuance of the HVTL Route Permit is independent of the issuance of this LWECS Site Permit.*

Big Bend Wind requests amendments to this section of the Site Permit to provide updates to the point of interconnection (POI) for the Wind Project's substation and to include the new 4.5-mile extension of the Transmission Line to the POI at Lakefield Generation Substation (the Great River Energy Peaker Plant) that Big Bend Wind is currently seeking in a new route permit docket.

f. Section 4.9 Wind Turbine Towers

The Company requests an amendment to Section 4.9 as follows:

> *Structures for wind turbines shall be self-supporting tubular towers. The towers may be up to 119 meters (391 feet) above grade measured at hub height. The wind turbine specifications in the table below were provided in the Permittee's ~~September 20, 2021 Big Bend Wind Amended Site Permit Application~~ October 31, 2025 Site Permit Amendment Request.*

Design Feature	***~~Nordex N-163~~***	***Vestas V162***	***GE-158***
Capacity (MW)	*~~5.94~~*	*6.0*	*~~5.8~~6.1*
Total Height (ground to fully extended blade tip)	*~~199.5 meters~~ ~~655 feet~~*	*200 meters 656 feet*	*196 meters 643 feet*
Hub Height	*~~118 meters~~ ~~388 feet~~*	*119 meters 391 feet*	*117 meters 384 feet*
Rotor Diameter	*~~163 meters~~ ~~535 feet~~*	*162 meters 532 feet*	*158 meters 519 feet*

Big Bend Wind requests to amend this section of the Site Permit to reflect updates to turbine technology and describe the new turbine models proposed.

g. Section 5.3 Construction and Operation Practices

The Company requests an amendment to Section 5.3 as follows:

> *The Permittee shall comply with the construction practices, operation and maintenance practices, and material specifications described in the September 20, 2021 Big Bend Wind Supplemental and Amended Site Permit Application and as further described in its October 31, 2025 Site Permit Amendment Request, and the record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail.*

Big Bend Wind requests to amend this section of the Site Permit to incorporate the Site Permit Amendment request filed in October 2025.

h. Section 5.3.16 Archaeological and Historical Resources

The Company requests an amendment to Section 5.3.16 as follows:

> *The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when constructing the facility. In the event that a resource is encountered, the Permittee shall consult with the State Historic Preservation Office (SHPO) and the State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize project impacts on the resource consistent with SHPO and State Archaeologist requirements.*
>
> *Prior to construction, workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If human remains are encountered during construction, the Permittee shall immediately halt construction at such location and promptly notify local law enforcement and the State Archaeologist. Construction at such location shall not proceed until authorized by local law enforcement and the State Archaeologist. The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff.*

Big Bend Wind requests to amend this section of the Site Permit to require the permittee to keep records of compliance with this section and provide them to Commission staff upon request. Similar language has been added to other recent permits issued by the Commission.

i. Section 5.3.30 Bio-netting, Natural Netting, and Mulch Products

The Company requests to add this section to the Site Permit:

> *The Permittee shall use only "bio-netting" or "natural netting" types and mulch products without synthetic (plastic) fiber additives.*

EIP staff has recommended that site permits include this condition in recent permits, reflecting MDNR recommendations on using biodegradable netting and mulch products. Because this condition is typically included in recently issued site and route permits, the Commission may choose to incorporate it into Section 5 (General Conditions) or, because it is a new condition for this permit, may wish to identify it as a special condition.

j. Section 5.3.30 Project Substation Lighting

The Company requests to add this section to the Site Permit:

> *The Permittee must use shielded and downward facing lighting and LED lighting that minimizes blue hue at the project substation. Downward facing lighting must be clearly visible on the plan and profile submitted for the project.*

EIP staff has recommended that site permits include this condition in recent permits reflecting MDNR recommendations on minimizing lighting impacts at the Project substation. Because this condition is typically included in recently issued site and route permits, the Commission may choose to incorporate it into Section 5 (General Conditions) or, because it is a new condition for this permit, may wish to identify it as a special condition.

k. Section 5.3.31 Dust Control

The Company requests to add this section to the Site Permit:

> *The Permittee shall minimize, and avoid, if possible, the use of chloride-based dust control chemicals (i.e., calcium chloride and magnesium chloride).*

EIP staff has recommended that site permits include this condition in recent permits reflecting MDNR recommendations to avoid chloride-based dust control materials. Because this condition is typically included in recently issued site and route permits, the Commission may choose to incorporate it into Section 5 (General Conditions) or, because it is a new condition for this permit, may wish to identify it as a special condition.

l. Section 5.3.32 State Historic Preservation Office Recommendations

The Company requests to add this section to the Site Permit:

> *The Permittee shall file correspondence from the State Historic Preservation Office (SHPO) containing recommendations for surveys or other mitigation measures related to the Project promptly upon receipt by the Permittees.*

EIP staff has recommended that site permits include this condition in recent permits requiring the permittee to file correspondence from SHPO to ensure that SHPO recommendations on mitigation measures, including surveys, are filed in the record Because this condition is typically included in recently issued site and route permits, the Commission may choose to incorporate it into Section 5 (General Conditions) or, because it is a new condition for this permit, may wish to identify it as a special condition.

m. Section 5.3.33 Unanticipated Discoveries Plan

The Company requests to add this section to the Site Permit:

> *The Permittee shall develop an Unanticipated Discoveries Plan (UDP) to identify guidelines to be used in the event previously unrecorded archeological or historic properties, or human remains, are encountered during construction, or if unanticipated effects to previously identified archaeological or historic properties occur during construction. This is in addition to and not in lieu of any other obligations that may exist under law or regulation relating to these matters. The UDP shall describe how previously unrecorded, non-human burial, archaeological sites found during construction shall be marked and all construction work must stop at the discovery location. The Permittee shall file the UDP with the Commission at least 14 days prior to the preconstruction meeting.*

EIP Staff has recommended that site permits include this condition in recent dockets, and this, or a similar condition has been included in several recent permits issued by the Commission.

n. Section 10.6 Prevailing Wages

The Company requests to add this section to the Site Permit:

> *The Permittee, its contractors, and subcontractors shall pay no less than the prevailing wage rate as defined in Minn. Stat. § 177.42 and shall be subject to the requirements and enforcement provisions under Minn. Stat. §§ 177.27, 177.30, 177.32, 177.41 to 177.435, and 177.45. The Permittee shall keep records of contractor and subcontractor pay and provide them at the request of Commission staff.*

Big Bend Wind proposes to add a new permit condition and renumber the remaining conditions in Section 10 of the Site Permit accordingly, consistent with Minn. Stat. § 216I.05, subd.12, requiring the permittees and its contractors and subcontractors to pay prevailing wage. This is a standard condition in recent site permits issued by the Commission.[4]

---

[4] *See e.g., In the Matter of the Application of Snowshoe BESS, LLC for a Site Permit for the up to 150 MW Snowshoe Energy Storage Project in Olmsted County*, MPUC Docket No. IP-

o. Section 11.1 Decommissioning Plan

The Company requests an amendment to Section 11.1 as follows:

> *The Permittee shall comply with the provisions of the most recently filed and accepted Decommissioning Plan. The initial version of the Decommissioning Plan was submitted for this Project as Appendix J of the November 9, 2020 site permit application, followed by a Revised Decommissioning Plan as Attachment M of the September 20, 2021 Supplemental and Revised Site Permit Application, and most recently followed by a Decommissioning Plan as Attachment G of the October 31, 2025 Site Permit Amendment Request. The Permittee shall file an updated Decommissioning Plan incorporating comments and information from the permit issuance process and any updates associated with the final construction plans, with the Commission at least fourteen 14 days prior to the pre- construction meeting. The Decommissioning Plan shall be updated every five years following the commercial operation date.*
>
> *The Decommissioning Plan shall provide information identifying all surety and financial securities established for decommissioning and site restoration of the project ~~in accordance with the requirements of Minn. R. 7854.0500, subp. 13~~. The decommissioning plan shall provide an itemized breakdown of the costs of decommissioning all project components, which shall include labor and equipment. The plan shall identify cost estimates for the removal of turbines, turbine foundations, underground collection cables, access roads, crane pads, substations, and other project components. The plan may also include anticipated costs for the replacement of turbines or repowering the project by upgrading equipment.*
>
> *The Permittee shall also submit the decommissioning plan to the local unit of government having direct zoning authority over the area in which the project is located. The Permittee shall ensure that*

7138/ESS-24-279, Order Adopting Administrative Law Judge Report, Determining Environmental Assessment Adequate, and Issuing Site Permit (Sept. 22, 2025); *In the Matter of the Application of Enbridge Solar, LLC for a Site Permit for the up to 130 Megawatt Plummer Solar Project in Red Lake County*, MPUC Docket No. IP-7103/GS-22-451, Order Issuing Site Permit (April 1, 2025); and *In the Matter of the Applications of Plum Creek Wind Farm, LLC for a Certificate of Need, Site Permit, and Route Permit for an up to 414 MW Large Wind Energy Conversion System and 345 kV Transmission Line Cottonwood, Murray, and Redwood Counties*, MPUC Docket No. IP-6997/CN-18-699; IP-6997/WS-18-700; IP-6997/TL-18-701, Approving Plum Creek Wind Farm's Request to Amend the Certificate of Need, Site Permit, and Route Permit (Sept. 3, 2025).

> *it carries out its obligations to provide for the resources necessary to fulfill its requirements to properly decommission the project at the appropriate time. The Commission may at any time request the Permittee to file a report with the Commission describing how the Permittee is fulfilling this obligation.*

Big Bend Wind requests to amend this section of the Site Permit to include reference to the Decommissioning Plan (**Attachment G**) filed with this October 31, 2025, Site Permit Amendment Request and to remove the reference to a rule that has recently been repealed.

F. CONCLUSION

For the reasons stated above, the Company respectfully requests the Commission approve this Request for Amendment to the Big Bend Wind Site Permit. The Company agrees to abide by all the terms and conditions of the currently approved Site Permit, as modified by the above-requested amendments.

In accordance with Minnesota Rules, part 7829.0500, and Minn. Stat. Ch. 13, Big Bend Wind has designated as trade secret certain commercially sensitive information, i.e., certain wind turbine sound power levels, which are considered confidential and proprietary information, included with the NONPUBLIC Attachment C. Release of this data would have a detrimental effect on Big Bend Wind and its potential turbine suppliers by providing potential competitors and others with valuable information not otherwise readily ascertainable and from which these persons would obtain economic value. Given the need to include nonpublic information, Big Bend Wind has prepared and is efiling both NONPUBLIC and PUBLIC versions of Attachment C.

We have electronically filed this document with the Commission, and copies have been served on the parties on the attached service list. Please let me know if you have any questions regarding this filing.

Sincerely,

FREDRIKSON & BYRON, P.A.

Christina K. Brusven
Direct Dial: (612) 492-7412
Email: cbrusven@fredlaw.com

Enclosures

In the Matter of the Application of Big Bend Wind, LLC for a Large Wind Energy Conversion System Site Permit for the up to 311.1 MW Big Bend Wind Project in Cottonwood and Watonwan Counties, Minnesota

CERTIFICATE OF SERVICE

MPUC Docket No. IP-7013/WS-19-619

Breann L. Jurek certifies that on the 31st day of October, 2025, she e-filed a true and correct copy of the following documents on behalf of Big Bend Wind, LLC via eDockets (www.edockets.state.mn.us).

- Site Permit Amendment Request, including Figures and Public Attachments A – G;
- NONPUBLIC Attachment C; and
- Certificate of Service.

Said documents were also served as designated on the Official Service List on file with the Minnesota Public Utilities Commission and as attached hereto.

Executed on: October 31, 2025

Signed: /s/ Breann L. Jurek

Fredrikson & Byron, P.A.
60 South Sixth Street
Suite 1500
Minneapolis, MN 55402

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Sasha	Bergman	sasha.bergman@state.mn.us		Public Utilities Commission		Electronic Service		No	19-61919-619
2	Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron		60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		Yes	19-61919-619
3	Mike	Bull	mike.bull@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St. Paul MN, 55101 United States	Electronic Service		Yes	19-61919-619
4	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	19-61919-619
5	Adam	Duininck	aduininck@ncsrcc.org	North Central States Regional Council of Carpenters		700 Olive Street St. Paul MN, 55130 United States	Electronic Service		No	19-61919-619
6	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	19-61919-619
7	Lucas	Franco	lfranco@liunagroc.com	LIUNA		81 Little Canada Rd E Little Canada MN, 55117 United States	Electronic Service		No	19-61919-619
8	Brenna	Gunderson	brenna.gunderson@apexcleanenergy.com	Apex Clean Eenrgy		8665 Hudson Blvd N Ste 110 Lake Elmo MN, 55042 United States	Electronic Service		Yes	19-61919-619
9	Kate M	Heins	kate.heins@apexcleanenergy.com	Apex Clean Energy		310 4th St NE Ste 200 Charlottesville VA, 22902 United States	Electronic Service		Yes	19-61919-619
10	Valerie	Herring	vherring@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 S. Eighth Street Minneapolis MN, 55402 United States	Electronic Service		No	19-61919-619
11	Dylan	Ikkala	dylan.ikkala@apexcleanenergy.com	Apex Clean Energy		8665 Hudson Blvd N Ste 110 Lake Elmo MN, 55042 United States	Electronic Service		Yes	19-61919-619
12	David	Kelliher	david.kelliher@mnhs.org			345 Kellogg Blvd W SAINT PAUL MN, 55102 United States	Electronic Service		No	19-61919-619
13	Stacy	Kotch Egstad	stacy.kotch@state.mn.us		MINNESOTA DEPARTMENT OF TRANSPORTATION	395 John Ireland Blvd. St. Paul MN, 55155 United States	Electronic Service		No	19-61919-619
14	James	LaFave	james.lafave@state.mn.us		Office of Administrative Hearings	600 N Robert Street St. Paul MN,	Electronic Service		No	19-61919-619

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						55164-0620 United States				
15	Kevin	Maijala	kevin.maijala@mnhs.org	Minnesota Historical Society		null null, null United States	Electronic Service		No	19-61919-619
16	Samantha	Odegard	samanthao@uppersiouxcommunity-nsn.gov			PO Box 147 Granite Falls MN, 56241 United States	Electronic Service		No	19-61919-619
17	Kevin	Pranis	kpranis@liunagroc.com	Laborers' District Council of MN and ND		81 E Little Canada Road St. Paul MN, 55117 United States	Electronic Service		No	19-61919-619
18	Peter	Rademacher	prademacher@hogenadams.com			1935 County Road B2 West Suite 460 St. Paul MN, 55113 United States	Electronic Service		No	19-61919-619
19	Leif	Rasmussen	leif@steffensandrasmussen.com	Steffens & Rasmussen		6600 France Ave South Edina MN, 55435 United States	Electronic Service		No	19-61919-619
20	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	19-61919-619
21	Nathaniel	Runke	nrunke@local49.org			611 28th St. NW Rochester MN, 55901 United States	Electronic Service		No	19-61919-619
22	Ronald C	Schirmer	ronald.schirmer@mnsu.edu	Department of Anthropology		359 Trafton Science Center N Mankato MN, 56001 United States	Electronic Service		No	19-61919-619
23	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		Yes	19-61919-619
24	Cheyanne	St. John	cheyanne.stjohn@lowersioux.com	Lower Sioux Tribal Community		39527 Reservation Hwy 1 Morton MN, 56270 United States	Electronic Service		No	19-61919-619
25	Haley	Waller Pitts	hwallerpitts@fredlaw.com	Fredrikson & Byron, P.A.		60 S Sixth St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		Yes	19-61919-619
26	Cynthia	Warzecha	cynthia.warzecha@state.mn.us	Minnesota Department of Natural Resources		500 Lafayette Road Box 25 St. Paul MN, 55155-4040 United States	Electronic Service		No	19-61919-619