

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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

DOCKET NOS. IP7013/CN-19-408, WS-19-619, TL-19-621

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In the Matter of Big Bend Wind, LLC's Certificate of Need (LWECS & HVTL), LWECS Site Permit, and HVTL Route Permit applications for the Big Bend Wind Project and associated facilities in Cottonwood, Martin, and Watonwan counties, Minnesota

Issues Addressed: These comments and recommendations address the completeness of the certificate of need, LWECS site permit, and HVTL route permit applications, environmental review, the advisability of combining the proceedings, contested issues of fact, and the appointment of an advisory task force.

Documents Attached:

- (1) Table 1 LWECS Completeness Checklist
- (2) Table 2 HVTL Completeness Checklist
- (3) Table 3 EERA Concept Schedule
- (4) Figure 1 Project Location Map HVTL
- (5) Figure 2 Project Location Map LWECS

Relevant documents and additional information can be found on the eDockets website at <u>https://www.edockets.state.mn.us/EFiling/search.jsp</u> (enter the year "19" and the number "408" for the CN, year "19" and the number "619" for the LWECS Site Permit, or year "19" and the number "621" for the HVTL Route Permit).

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Introduction and Background

Big Bend Wind, LLC (Big Bend or Applicant) filed three separate applications in support of its proposed up to 308 megawatt (MW) Big Bend Wind Farm and an 18-mile 161 kilovolt (kV) transmission line to be

located in portions of Cottonwood, Martin, and Watonwan counties (collectively, the Project):

- a certificate of need application for the wind farm and the associated 161 kV transmission line,¹
- a large wind energy conversion system (LWECS) site permit application,² and
- a high-voltage transmission line (HVTL) route permit application for the proposed 161 kV transmission line³

On November 23, 2020, the Commission issued a notice soliciting comments on the completeness of the applications.⁴ In addition to completeness, the notice also requested comments on:

- whether either or both the certificate of need and LWECS site permit applications should be referred to the Office of Administrative Hearings (OAH) for contested case proceedings,
- combining the environmental report and environmental assessment processes and completion,
- the advisability of combining the certificate of need, site permit, and route permit proceedings,
- joint proceeding on Big Bend Wind and Red Rock Solar,
- the presence of contested issues of fact, and
- the need for an advisory task force for the HVTL route permit application.

The Big Bend Wind Project and Red Rock Solar Project have been proposed as a hybrid renewable energy generation project, which could generate up to a total of 335 MW of electricity. The Red Rock Solar Project would generate up to 60 MW of electricity, and the proposed Big Bend Wind 161 kV HVTL would be utilized to deliver the electricity generated to the grid. Depending on the approval and electricity generated at the Red Rock Solar Project, the total energy generation at the Big Bend Wind Project will be adjusted to not exceed a total of up to 335 MW. The Red Rock Solar Project will not proceed without the construction and operation of the Big Bend Wind Project, as Red Rock would not be feasible as a "stand alone" generation facility and having to construct the necessary HVTL to connect to the grid.

Red Rock Solar, LLC has applied for a separate certificate of need (CN-19-486) and a site permit (GS-19-620) for the Red Rock Solar Project. With the exception of addressing the Commission's request for comments on holding joint proceedings for Big Bend Wind and Red Rock Solar, EERA will address comments and recommendations on the Red Rock Solar Project applications in a separate letter.

¹ Big Bend Wind, LLC. Initial Filing – Certificate of Need Application. November 9, 2020 eDocket ID# 202011-168164-04, 202011-168164-05 [hereinafter CN Application].

 ² Big Bend Wind, LLC. Initial Filing – Site Permit Application and Appendices. November 9, 2020. eDocket ID#
 <u>202011-168170-02</u>, <u>202011-168170-03</u>, <u>202011-168170-04</u>, <u>202011-168170-05</u>, <u>202011-168170-06</u>, <u>202011-168170-06</u>, <u>202011-168172-02</u>, <u>202011-168172-03</u>, <u>202011-168172-04</u>, <u>202011-168172-04</u>, <u>202011-168172-05</u>, <u>202011-168172-06</u>, <u>202011-168172-07</u>, <u>202011-168172-08</u>, <u>202011-168172-08</u>, <u>202011-168172-09</u>, <u>202011-168172-09</u>, <u>202011-168173-01</u> [hereinafter Wind SPA]

³ Big Bend Wind, LLC. Initial Filing – Route Permit Application and Appendices. November 9, 2020. eDocket ID# <u>202011-168176-02</u>, <u>202011-168176-03</u>, <u>202011-168176-04</u>, <u>202011-168176-05</u>, <u>202011-168176-06</u>, <u>202011-168177-07</u>, <u>202011-168177-01</u>, <u>202011-168177-01</u>, <u>202011-168177-02</u>. November 9, 2020 [hereinafter RPA].

⁴ Public Utilities Commission. Notice of Comment Period. November 23, 2020. eDockets ID# 202011-168501-02.

Project Purpose

The proposed Big Bend Wind Project will generate up to 308 MW of electric energy; the Applicant states that the Project will generate renewable power to be offered for sale to wholesale customers, which could include Minnesota utilities and cooperatives that have a need for additional renewable energy sources.⁵ The Applicant continues that given the demand for renewable energy, a market exists for independently produced electricity generated from wind and other renewables, including the up to 308 MW to be generated by the Project.⁶

Big Bend is also proposing to build a new 18-mile 161 kV transmission line and associated facilities to connect the Wind Farm to the existing Blue Lake-Wilmarth-Interstate Junction 345 kV transmission line in Martin County, Minnesota.

Project Description

The Project consists of two major components, a LWECS of up to 308 MW, and an approximately 18 mile long 161 kV HVTL.

308 MW LWECS

The Project will be located in portions of Cottonwood and Watonwan counties, Minnesota, with a Project footprint that spans 43,523 acres of land in Delton, Selma, Carson, and Midway Townships (Cottonwood County) and Butterfield Township (Watonwan County). The Project will have up to 308 MW of nameplate wind energy capacity. Big Bend continues to assess its turbine options and is currently evaluating three wind turbine models with rated nameplate power outputs ranging from 5.5 MW to 5.7 MW, which would result in the construction and operation of between 55 and 54 wind turbines, respectively.⁷

A number of facilities will be constructed to support the operation of the wind turbines and facilitate the delivery of the electricity to consumers. Big Bend is seeking approval from the Commission through the LWECS site permit for the following associated facilities: new gravel access roads, improvements to existing roads, underground and/or aboveground electrical collection and communication lines, operation and maintenance (O&M) building/facility, a Project substation, one permanent meteorological tower, one Sonic Detection and Ranging (SoDAR) or Light Detection and Ranging (LiDAR) unit, a laydown area, up to four Aircraft Detection Lighting Systems (ADLS) radars, and if needed a temporary concrete batch plant area.⁸

At the time of the filing, Big Bend stated it had acquired 78 percent of the land easements have been acquired, or are pending, for successful construction and operation of the Project site.⁹ Easement negotiations are ongoing. The Big Bend SPA does not provide an anticipated commencement of construction date, but EERA anticipates construction could begin in the first quarter of 2022. EERA has based this predicted construction start date on the Applicants anticipates turbine delivery date as early as the second quarter of 2020¹⁰, and an anticipated commercial operation date (COD) in the fourth quarter of 2022.¹¹

⁵ CN Application at Section 3.1

⁶ CN Application at Section 3.1

⁷ Wind SPA at Section 4.2

⁸ Wind SPA at Section 4.2

⁹ Wind SPA at Section 4.2

¹⁰ Wind SPA at Section 10.8

¹¹ Wind SPA at Section 10.8

161 kV HVTL

Big Bend proposes to construct a Project substation within the LWECS site, which will serve as a collection point for the electrical energy generated at the Big Bend Wind Project and the Red Rock Solar Project.¹² Big Bend proposes to connect the LWECS, and Red Rock Solar, to the electrical grid through approximately 18 miles of new 161 kV transmission line. The HVTL Project will begin at the new Project substation to be constructed in Midway Township of southeastern Cottonwood County; the HVTL will then proceed generally south and east through Midway and Mountain Lake Townships in Cottonwood County, Odin Township Watonwan County, and Cedar Township in Martin County for approximately 18 miles to connect to a proposed Step-up substation in Martin County near the Crandall Switching Station.¹³ A less than 1,500 foot 345 kV transmission line segment is proposed to be constructed to connect the proposed Step-up substation to the existing Crandall Switching Station (Point of Interconnection, POI), which will allow for connection to the electrical grid via the existing Blue Lake-Wilmarth-Interstate Interconnect 345 kV transmission line.¹⁴ A second interconnection opportunity is located approximately two miles southwest of Crandall Switching Station along the Blue Lake-Wilmarth-Interstate 345 kV line. The second interconnection opportunity would be a "net-zero" interconnection, which connects through the existing Great River Energy Lakefield Junction Peaking Plant.¹⁵

The proposed 161 kv HVTL Project is submitted under the Alternative Permitting Process under Minn. Stat. 216E.04, subd. 2(3) and Minnesota Rules 7850.2800 to 7850.3900. Minnesota Rule 7850.3100, requires that an applicant provide one proposed route for the HVTL, and the applicant must describe alternatives considered, but rejected, and the reason the identified alternatives were rejected.

Big Bend indicates that the proposed single-circuit 161 kV HVTL will require a right-of-way (easement width) of 100 to 150 feet. The proposed HVTL right-of-way located parallel to existing road rights-of-way will be 150 feet wide, with 50 feet on the roadside of the alignment and 100 feet on the non-roadside of the alignment. Areas where paralleling existing road rights-of-way that poles would be placed on adjacent private property, within approximately 15 feet of the existing road rights-of-way.¹⁶ Sections of the HVTL right-of-way proposed to be located away from existing road rights-of-way will be 100 feet wide, with the exception of three locations along the route where a width of 150 feet rights-of-way will be used to allow for better accommodation of farming practices in those areas.¹⁷

Big Bend has requested a 1,000 foot route width for the majority of the proposed route.¹⁸ The Applicant has requested a wider route width, ranging from 1,000 feet to 1.15 miles wide, to allow flexibility in working landowners on alternate segments (Alternate Red, Yellow, and Purple segments) and in northwestern Martin County to allow for flexibility in working with landowners on parcels currently under easement with other entities.¹⁹

- ¹⁵ RPA at Section 1.0
- ¹⁶ RPA at Section 2.4
- ¹⁷ RPA at Section 2.4
- ¹⁸ RPA at Section 2.2

¹² RPA at Section 1.2

¹³ RPA at Section 2.5

¹⁴ RPA at Section 2.5

¹⁹ RPA at Section 2.2

At the time of filing, Big Bend had secured 100 percent of the total necessary private easements on the proposed route and continues to work on acquiring land easements along the alternate segments.²⁰ If additional property rights are required for the HVTL, Big Bend has stated that it will seek to negotiate a voluntary easement agreement with each affected landowner.

Big Bend proposes to use four types of wood or steel monopole structures: tangent, angle, and dead end.²¹ The proposed structures will range in height from approximately 70 feet to 120 feet, with spans of approximately 600 to 800 feet between structures in areas with 100 foot wide right-of way, and the structure spans will be approximately 800 to 1,100 feet where the right-of-way is 150 feet wide.²² EERA will include some impact analysis of the various structure heights and line spans as they relate to the width of the route right-of-way.

Big Bend anticipates the HVTL project construction will begin in the second quarter 2022, and that the new line will be in service by the fourth quarter of 2022.²³

Regulatory Process and Procedures

The Project requires review and approval through three separate processes. For purposes of brevity, the following section summarizes what Department of Commerce, Energy Environmental Review and Analysis (EERA) staff considers particularly important milestones in the review of the applications.

LWECS Site Permit

A site permit from the Commission is required to construct an LWECS, which is any combination of wind turbines and associated facilities with the capacity to generate five megawatts or more of electricity. This requirement became law in 1995. The Minnesota Wind Siting Act is found at Minnesota Statutes Chapter 216F. The rules to implement the permitting requirements for LWECS are in Minnesota Rule 7854.

Application Acceptance

Pursuant to Minnesota Rule 7854.0600, the Commission may elect to accept, conditionally accept, or reject the application. If the Commission conditionally accepts or rejects an application, the Commission must advise the Applicant of the deficiencies in the application and the manner in which the deficiencies can be addressed.

Preliminary Determination and Draft Site Permit

Minnesota Rule 7854.0800 states, "Within 45 days after acceptance of the application by the Commission, the Commission shall make a preliminary determination whether a permit may be issued or should be denied. If the preliminary determination is to issue a permit, the Commission shall prepare a *draft site permit* for the project. The draft site permit must identify the permittee, the proposed LWECS, and proposed permit conditions."

Issuing a draft site permit does not confer an authority to construct an LWECS. The Commission may change, amend or modify the draft site permit in any respect before final issuance, or may deny the site permit at a later date.

²⁰ RPA at Section 4.1

²¹ RPA at Section 2.3

²² RPA at Section 2.3

²³ RPA at Section 2.6

The PUC shall afford the public a minimum of 30 days after publication of the draft site permit notice in the EQB Monitor to submit written comments to the PUC. The Commission may extend the public comment period if necessary to afford the public adequate time to review the application and other pertinent information in order to formulate complete comments on the draft site permit and the project.²⁴

Public Information Meeting

Minnesota Rule 7854.0800, subpart 4 requires the Commission to hold at least one public information meeting in a location convenient to the vicinity of the proposed LWECS during the public comment period on the draft site permit. The public information meeting must be held more than ten days prior to the end of the public comment period on the draft site permit. The Commission shall extend the comment period if necessary to meet this requirement.

Contested Case Hearing

Minnesota Rule 7854.0800, subpart 5, provides the opportunity for any person to request a contested case hearing on an LWECS site permit application.

Final Site Permit Decision

Upon completion of the procedures and requirements of Minnesota Rule 7854, the matter must be brought to the Commission for a final decision. The Commission shall take final action on the application for a site permit for an LWECS within 180 days after acceptance of an application by the Commission, unless the applicant agrees to an extension or the Commission extends this deadline for cause.²⁵

The Commission may include in a site permit conditions for turbine type and designs, site layout and construction, and operation and maintenance of the LWECS, including the requirement to restore, to the extent possible, the area affected by construction of the LWECS to the natural conditions that existed immediately before construction of the LWECS and other conditions that the Commission determines are reasonable.²⁶

High Voltage Transmission Line Route Permit

Under Minnesota Statute 216E, no person may construct a high voltage transmission line in Minnesota without a route permit from the Commission. A HVTL is defined as a conductor of electric energy designed for and capable of operation at a voltage of 100 kV or more and greater than 1,500 feet in length.

As proposed, the Project will consist of approximately 18 miles of new 161 kV transmission line and therefore requires a route permit from the Commission. Because of the length and voltage of the proposed HVTL, the route permit application is eligible to be considered using the Alternative Permitting Process prescribed by Minnesota Statute 216E.04, subd. 2(3) and Minnesota Rules 7850.2800, subp. 1(C).²⁷

²⁴ Minnesota Rule 7854.0900, Subpart 3

²⁵ Minnesota Rule 7854.1000

²⁶ Minnesota Rule 7854.1000

²⁷ Minnesota Statute 216E.04, Subd. 2 (noting those projects that are eligible to proceed under an alternative permitting process).

Application Review and Acceptance

Route permit applications for HVTLs must provide specific information about a project including applicant information, route descriptions, and potential environmental impacts and mitigation measures. The Alternative Permitting Process under Minn. Stat. 216E.04, subd. 2(3) and Minnesota Rules 7850.2800 to 7850.3900. Minnesota Rule 7850.3100, requires that an applicant provide one proposed route for the HVTL, and the applicant must describe alternatives considered, but rejected, and the reason the identified alternatives were rejected.

The Commission may accept an application as complete, reject an application and require additional information to be submitted, or accept an application as complete upon filing of supplemental information. The environmental review and permitting process begins on the date the Commission determines that a route permit application is complete.²⁸ The Commission has six months (or three months, with just cause) from the date of this determination to reach a route permit decision.²⁹

Environmental Review

HVTL Route permit applications are subject to environmental review conducted by EERA staff. Projects proceeding under the Alternate Permitting Process require the preparation of an environmental assessment (EA). An EA is a document that describes the potential human and environmental impacts of a proposed project and possible mitigation measures.

A comment period, including at least one public meeting in the project area, will be used to solicit comments on the scope of the EA. The Commissioner of the Department of Commerce determines the scope of the environmental impact statement by issuing the *Scoping Decision*; this shall be done as soon after holding the public meeting as possible. During the scoping process, a person may suggest alternative routes to be evaluated in the EA. The Commissioner shall provide the applicant with an opportunity to respond to each request that an alternative be included in the EA.³⁰

In assessing which route alternatives proposed during the scoping process should be carried forward (i.e., included in the *Scoping Decision* recommendation) for evaluation in the environmental review document for a project, EERA staff considers five criteria: 1) timeliness of the request, 2) does the request contain the information required in Minnesota Rule 7850.3700, 3) does the requested alternative lie outside of areas prohibited in Minnesota Rule 7850.4300, 4) does the requested alternative fit the stated need/purpose of the project, and 5) is the requested alternative feasible.

Under Minnesota Statute 216E.04, subdivision 5 and Minnesota Rule 7850.3700, subp. 4 the EA must contain information on the human and environmental impacts of the proposed route and on other routes identified by the Commission.

Following a determination of the scope of the EA (*Scoping Decision*), EERA staff will prepare and issue an environmental assessment, per the time frame established in the Scoping Decision. EERA staff will publish notice of availability of the EA in the EQB Monitor and provide notice of EA availability to persons on the project contact list. ³¹

²⁸ Minnesota Statutes 216E.03, subd. 9

²⁹ Minnesota Rule 7850.3900, subp. 1

³⁰ Minnesota Rule 7850.3700, subp. 2 (B)

³¹ Minnesota Rule 7850.3700, subp. 6

Advisory Task Force

The Commission may appoint an advisory task force to aid the environmental review process. An advisory task force must include representatives of local governmental units in the project area.³² A task force assists EERA staff with identifying impacts and mitigation measures (including route alternatives) to be evaluated in the EA. A task force expires upon issuance of the EA scoping decision.³³

The Commission is not required to appoint an advisory task force for every project. If the Commission does not appoint a task force, citizens may request that one be appointed.³⁴ If such a request is made, the Commission would then need to determine at a subsequent meeting if a task force should be appointed or not.³⁵

The decision whether to appoint an advisory task force does not need to be made at the time of application acceptance; however, it should be made as soon as practicable to ensure its charge can be completed prior to issuance of the EA scoping decision.

Public Hearing

Route permit applications under the Alternate Permitting Process require a public hearing be held after the EA for the project has been prepared.³⁶ If the route permitting process and a certificate of need determination are proceeding concurrently, the Commission may order that a joint hearing be held to consider both permitting and need.³⁷

EA Completeness and Final Route Permit Decision

The Commission shall make a final decision on a route permit application within 60 days after receipt of the report of the administrative law judge. A final decision must be made within one year after the Commission's determination that an application is complete. The Commission may extend this time limit for up to three months for just cause or upon agreement of the applicant. When the Commission makes its final decision on route permit issuance it must also determine if the EA and the public hearing record address the issues identified in the Scoping Decision.³⁸ The Commission shall not make a final decision on a route permit for a project that requires a CN from the PUC until the applicant has obtained the necessary approval.³⁹

When the Commission issues a HVTL route permit, a specific route and anticipated alignment are designated, and construction and maintenance conditions are specified. The HVTL permit anticipates that the right-of-way will generally conform to the anticipated alignment as identified within the route permit, unless changes are requested by individual landowners or unforeseen conditions are encountered. Any right-of-way modifications within the designated route shall be located so as to have comparable overall impacts relative to the factors in Minn. R. 7850.4100, as the alignment identified in the permit, and shall be specifically described and documented in and approved as part of the plan and profile deliverable. Should such modification in the alignment require deviation outside of the designated route, the

³² Minnesota Statute 216E.08, Minnesota Rule 7850.2400

³³ Minnesota Rule 7850.2400

³⁴ Minnesota Rule 7850.2400

³⁵ Minnesota Rule 7850.2400

³⁶ Minnesota Rule 7850.3800

³⁷ Minnesota Statute 218B.243, Subd. 4

³⁸ Minnesota Rule 7850.3900, subp. 2

³⁹ Minnesota Rule 7850.3900, subp. 3

permittee shall follow the requirements of Minnesota Rule 7850.4900 (Amendment of Permit Conditions) to seek approval.

Certificate of Need

Minnesota Statue 216B.243 precludes construction of any large energy facility without a Certificate of Need issued by the Commission. The proposed project includes both an electric power generating plant (LWECS) with a combined capacity of 50,000 kilowatts or more and a transmission line (HVTL) necessary to interconnect the plant to the transmission system; accordingly the proposed project meets the statutory definition of a large energy facility in Minnesota Statutes 216B.2421, Subdivision 2(1) and requires a certificate of need from the Commission.⁴⁰ The certificate of need application must be considered using the process prescribed by Minnesota Statute 216B.243 and Minnesota Rules 7849.

Environmental Review

Certificate of need applications are subject to environmental review conducted by EERA staff – staff must prepare an environmental report (ER) for the proposed project.⁴¹

If an applicant for a certificate of need applies for a route permit (for the same project) prior to completion of the ER, EERA staff may elect to prepare an EA in lieu of an environmental report.⁴² If an EA is prepared in lieu of an environmental report, the EA must include an analysis of alternatives to the project required by Minnesota Rule 7849.1500.

EERA Staff Analysis and Comments

EERA staff has reviewed the applications, and provides the following analysis and comments in response to the Commission's notice requesting comments on completeness and other issues related to the procedures to review and process the applications.

Completeness of Applications

EERA staff has conferred with Big Bend, agency partners, and several tribes about the Project and reviewed drafts of both the LWECS site and HVTL route permit applications. EERA staff believes that its comments on the draft applications have been substantially addressed in both the site and route permit applications submitted to the Commission.

EERA staff has reviewed the LWECS site permit application pursuant the requirements of Minnesota Rule 7854 (Wind Siting Rules) and believes that the application provides the information required by Minnesota Rule 7854.0500 in a format that members of the public can access (**Table 1**).

Staff has evaluated the HVTL route permit application against the application completeness requirements of Minnesota Rule 7850.3100 (**Table 2**). EERA staff finds that the application contains appropriate and substantially complete information with respect to these requirements, including descriptions of the proposed project and potential environmental impacts and mitigation measures.

⁴⁰ Minnesota Statute 216B.2421; Minnesota Statute 216B.243

⁴¹ Minnesota Rule 7849.1200.

⁴² Minnesota Rule 7849.1900, subp. 1

EERA staff has reviewed the CN application pursuant to the requirements of Minnesota Rule 7849.0310 (Environmental Information Required). The information in the CN application, combined with the more detailed information contained in the LWECS and HVTL applications, is sufficient to begin review of the Project.

The Commission's acceptance of the applications will allow EERA staff to commence the environmental review process.

Advisory Task Force

EERA staff has analyzed the merits of establishing an advisory task force for the proposed HVTL and does not believe that a task force is warranted for this HVTL project.

In analyzing the need for an advisory task force for the project, EERA staff considered four characteristics: project size, project complexity, known or anticipated controversy, and sensitive resources.

- **Project Size.** The proposed HVTL project is a 161 kV line approximately 18 miles in length. Transmission line structures will range from 70 to 100 feet in height. The voltage, length, and size of the structures make this a typical size transmission line project for Minnesota.
- **Project Complexity.** With respect to land uses and development density in the project area, the HVTL project is relatively straightforward. The proposed route will be located on primarily agricultural land, with some residences present along the route. The proposed route follows field and division lines, and road ROWs for the majority of their length.

An issue complicating seeking alternative route segments for consideration is the apparent need for Big Bend to acquire voluntary easements and work around existing land easements in place. The applicant states they have acquired voluntary easements for 100 percent of the length of the proposed route, and is still coordinating and working with landowners on acquiring easements for possible alternate segments under consideration.⁴³

- Known or Anticipated Controversy. EERA staff is aware that there is some concern from the public regarding the project, as well as concerns for impacts to Tribal resources in the area. To date, the few calls and queries that EERA staff has received have been seeking information about project and regulatory process. EERA staff has heard concerns from citizens about potential impacts to eagles, aesthetics, and cultural values, all concerns that typically come up in HVTL proceedings. Based on comments to date, the proposed Big Bend Wind Project appears to be a more notable source of controversy. Because of the length of the line and the size of the proposed transmission line structures, EERA staff anticipates that there will be some controversy concerning the project. Controversy, by itself, does not necessitate an advisory task force be appointed.
- Sensitive Natural Resources. Potential impacts to sensitive ecological resources are minimal, because much of the proposed Project is located on agricultural lands and parallel to existing road ROWs. A desktop review of the Natural Heritage Inventory System (NHIS) records indicate two occurrences of state-listed threatened or endangered species, and three records of state species of concern are recorded within one mile of the proposed route, but all potential habitats for these

⁴³ RPA at Section 3.3

species along the proposed route can be spanned and pole placement with habitat areas will be avoided.

EERA staff believes that the existing EA scoping and development process contains adequate opportunity for the public, agencies, and tribes to propose alternative routes and identify issues and potential mitigation measures that may reduce the potential for impacts. The Big Bend Wind site permit process will also provide an appropriate location for the public, agencies, and Tribes to voice concerns on the more controversial issues and potential impacts of the Big Bend Wind Project. Based on the above analysis, EERA staff believes that an advisory task force is not warranted for the Project.

Contested Issues of Fact

Staff is aware of contested issues of fact with respect to the applications related to the proposed LWECS, but staff is not aware of any contested issues with respect to the HVTL.

1. Potential Impacts to Jeffers Petroglyphs: The Jeffers Petroglyphs is identified as part of the state historic site network in Minnesota Statute 138.663, subd. 17, and as such, the state, state departments, and agencies are responsible for protecting the physical features and historic character of the site per Minnesota Statute 138.665, subd. 2. Being the viewshed is a significant feature of a user's experience at the Jeffers Petroglyphs, an impact to the viewshed would be considered an impact to the historic character of the Jeffers Petroglyph site. Should the Commission proceed with consideration of the Site Permit Application for the Big Bend Wind Project, the Commission will have to consult directly with Minnesota State Historic Preservation Office (SHPO) to seek ways to avoid and mitigate any adverse effects to the Jeffers Petroglyphs.⁴⁴ Minnesota Statute 138.665 requires the licensing state department or agency, the Commission in this case, to agree in writing to a suitable course of action in consultation with SHPO. If the Commission and SHPO were not able to come to an agreement on a course of action to avoid and mitigate any adverse effects to the Jeffers Petroglyphs site and users a mediation task force could be convened per Minnesota Statute 138.665, subd. 2 to determine the best course of action. EERA is not aware of any established procedures at the Commission for permitting a project with adverse impacts to a listed historic site while complying with Minnesota Statute 138.665.

The Jeffers Petroglyphs site is of significant cultural importance to a number of American Indian Tribes, and is actively used for tribal ceremonies and considered to be sacred and pivotal to various tribal origin stories. There are numerous ancestral rock carvings present at the Jeffers Petroglyphs site, which are used and correspond with the horizon and constellations in the night sky.

EERA has been in meetings with various Tribes, SHPO, and the Minnesota Historical Society (MHS) with respect to the potential visual impacts the Big Bend Wind Project could have on users at the Jeffers Petroglyphs site. There are Tribal and agency concerns that the Big Bend Wind Project will likely have an adverse visual impact on the users of the Jeffers Petroglyphs. Should the Commission move forward with consideration of the Site Permit Application for the Big Bend Wind Project, EERA strongly encourages the Commission to maintain open communication with interested Tribes, SHPO, and MHS. EERA staff is available and willing to facilitate correspondence and communication with the Tribes, SHPO, and MHS, and will also work with all parties to ensure

⁴⁴ Minnesota Statute 138.665, Subd. 2

development of the project's record and inclusion and analysis of the potential impacts to Jeffers Petroglyphs in the EA.

2. Use of eminent domain: Big Bend does not address the question of whether they have the authority to exercise eminent domain within the application documents. Big Bend states they have secured voluntary easements necessary to construct the HVTL Project, but the Applicant is still working with landowners to acquire land easements along the identified alternate segments..⁴⁵ In the Dodge County Wind, LLC (Docket IP6981/TL-17-308) proceedings, DCW stated that they do not have the authority to exercise eminent domain.⁴⁶ In a similar proceeding before the Commission, Freeborn Wind Energy, LLC states that it has the authority to exercise eminent domain to acquire easements to construct a 115 kV HVTL connecting its proposed LWECS to the electric grid.⁴⁷

This uncertainty surrounding Independent Power Producers and the use of eminent domain creates two areas of concern relative to environmental review of HVTL projects.

a) If an entity must rely solely on securing voluntary easements in order to route a HVTL, it has the effect of creating a super-factor or key factor (ability to obtain a voluntary easement) that supersedes the criteria found in Minnesota Rule 7850.4100. EERA does not believe that application of this super-factor is consistent with either rule or statute.

b) It limits the utility of studying alternatives. With respect to route or route segment alternatives for HVTLs, commerce is charged with including only those alternatives that will assist in the Commission's "ultimate decision on the permit application." If the ability to obtain voluntary easements is critical to the viability of the project, analyzing alternatives that would require eminent domain will likely not assist in the Commission's "ultimate decision on the permit application". EERA will evaluate alternatives as directed by the Commission, however, we note that it is not a prudent use of stakeholder, staff, or Commission time to study and consider alternatives that are not truly viable.

EERA staff requests Commission guidance on how to evaluate incorporating into the *Scoping Decision* recommendation any proposed alternative routes for which the availability of a voluntary easement is unknown.

Referral for Contested Case Proceedings

At this time, EERA staff does not know of any controversial issues or unaccounted for sensitive resource impacts associated with the HVTL route permit application that require a contested case proceeding. However, due to the proposed Big Bend Wind Project's proximity to the Jeffers Petroglyphs and potential adverse visual impacts to users of the Jeffers Petroglyphs site, and to ensure complete record development and engagement of the interested American Indian Tribes, EERA recommends the Commission proceed with a Contested Case. An ALJ Report with recommendations and findings of fact on the proposed LWECS and HVTL would assist the Commission in its decisions.

⁴⁵ RPA at Section 4.1

⁴⁶ Dodge County Wind, LLC, Application to the Minnesota Public Utilities Commission for a Route Permit for a 345 *kV High Voltage Transmission Line in Dodge County*, June 29, 2018.

⁴⁷ Freeborn Wind Energy, LLC, *Freeborn Wind Farm to Glenworth Substation Transmission Line Route Permit Application,* September 20, 2017, at p. 1, eDocket ID# <u>20179-135684-02</u>

Joint Processing of the Applications

EERA staff recommends that the LWECS site permit application, the HVTL route permit application and a certificate of need application for the proposed project be processed jointly. The three applications were submitted simultaneously and the project components are clearly interrelated.

Combining the Environmental Report and Environmental Assessment

EERA staff believes that preparation of an EA in lieu of an ER for the CN will not lengthen the certificate of need or route permitting processes. Although it would lengthen the timeline for the site permit, the site permit cannot be issued before a CN determination is made, rendering the difference immaterial. EERA believes that joint public information meetings, environmental review, and hearings is feasible, provides for some efficiencies, and may further the public interest by reducing confusion about comment periods and acknowledging the interrelatedness of the projects components (**Table 3**).

Joint Proceedings on the Big Bend Wind Project and the Red Rock Solar Project

The Applicant has proposed that the Big Bend Wind Project and the Red Rock Solar Project would function as a hybrid renewable energy generation project. If approved, both Project would utilize adjacent Project substations, the same HVTL and electrical grid POI, and the layout of the Projects and associated facilities will be in part dependent on one another. With all the previously stated interrelatedness and shared project features, EERA believes the proceedings for the Big Bend Wind Project and the Red Rock Solar Project should be held jointly for efficiency purposes and to reduce confusion for members of the public whom wish to be involved throughout the permitting processes.

Other Issues and Concerns

1. Proposed Turbine Sizes

EERA would like to note the three turbine models being proposed for the Big Bend Wind Project, if constructed would be the largest turbines on the Minnesota landscape. EERA will continue to review available data and research on the three proposed turbine models, and any potential impacts that may occur due to the increased turbine blade tip height, increased hub height, increased rotor diameter, or any other turbine features not typical of turbines currently operating at Minnesota facilities.

Additionally, EERA has reviewed the noise modeling for the three turbine models and would like to point out that one of the proposed turbine models does appear to generate two dBA lower noise levels at the proposed turbine locations. The GE 5.5-158 LNTE turbine model appears to cause lower levels of noise exposure, per modeling, to residences within the project area, when compared to the other turbine models proposed, Vestas V162 and Nordex N 163 LNTE. EERA acknowledges the GE 5.5-158 LNTE turbine has the smallest name-plate capacity of the three proposed turbine models, which means one additional turbine must be constructed and operated to the Nordex N163 LNTE model, and we also acknowledge that noise modeling of the GE 5.5-158 LNTE model utilized low-noise trailing edge (LNTE) blade technology.

The GE 5.5-158 LNTE turbine model also has the lowest hub height, smallest rotor diameter, and ultimately the lowest turbine blade tip height of the three proposed wind turbines being considered for the Project. All though the size differences between the proposed turbine models

are not drastically different, there may be additional benefits of utilizing a "smaller" turbine model, such as, reduced impacts to visual resources and reduced impacts to bird and bat species utilizing the airspace within the wind facility. EERA staff will continue to evaluate available data and research to determine if any of the proposed turbine models have notable advantages and/or disadvantages when compared to the other turbine models proposed for this Project.

2. Public Version of Phase Ia Literature Review and Natural Heritage Information System Appendices

Both the Big Bend Wind SPA and the Big Bend HVTL RPA have included a Public version and a Trade Secret version of the Phase Ia Literature Review and Natural Heritage Information System Request. In both Projects' initial filings the Public version of the Appendix has been redacted in its entirety, and only summaries have been provided in the appropriate sections in the Applications.

EERA acknowledges the sensitivity and the non-public nature of the detailed cultural resources and natural heritage information included in these appendices, but these restrictions have never led to the entire redaction of the Public version of these appendices.

To allow for adequate public access and review, the Public version of Phase Ia Literature Review and Natural Heritage Information System Request, Big Bend Wind LWECS Site Permit Application, Appendix F and the Big Bend HVTL Route Permit Application, Appendix F need to be filed with the typical detail and appropriately redacted specifics, as is typically seen in these filings for previously reviewed and permitted projects.

Staff believes the applicant can provide this information within 30 days from the date of this letter (December 15, 2020). The lack of this information does not interfere with the public's ability to review the project at this time. EERA staff does not believe this issue should impact the Commission decision to accept the application.

3. Hybrid Nature of the Project

EERA understands the benefits for the Applicant to develop the Big Bend Wind Project and Red Rock Solar Project as a hybrid wind and solar energy generation project. However, with multiple methods of electricity generation, and the potential for multiple layouts and generation capacities of the hybrid project components and infrastructure this could create some uncertainty around the bounds of the hybrid project with respect to potential project related impacts. EERA will continue to work with the Applicant to develop the "most realistic" hybrid project layouts and incorporate those layouts into future Notices for public comments and the EA Scoping Decision.

EERA Staff Recommendations

EERA staff recommends that the Commission accept the site permit and route permit applications for the proposed Big Bend Wind Farm Project as substantially complete, with the understanding that the Applicant will file updated Public version of Appendix F for the Big Bend Wind HVTL Route Permit Application and an updated Public version of Appendix F for the Big Bend Wind HVTL Route Permit Application. Additionally, it is our understanding that Big Bend will continue to assist EERA in gathering

information as necessary for the environmental review of the proposed projects. EERA wants to reiterate the importance of coordinating and communicating with interested American Indian Tribes, SHPO, Minnesota Office of the State Archaeologist, and Minnesota Historical Society due to the Big Bend Wind Project's proximity to the Jeffers Petroglyphs site and the potential for the Project to adversely impact the visual experience of users at the Jeffers Petroglyphs site.

Additionally, EERA staff recommends the applications be processed jointly (with an EA in lieu of an ER, and with joint public meetings and hearings to the extent possible). EERA staff recommends that the Big Bend Wind Project and the Red Rock Solar Project proceed together due to the proposed hybrid nature of the Projects and the noted interrelatedness of the Projects. EERA staff recommends that the Commission direct the OAH to prepare findings and a recommendation for the Projects. EERA staff does not recommend the Commission authorize appointment of an advisory task force for the HVTL at this time.

Table 1 - LWECS Site Permit Application Completeness

	Table 3.0-1 Completeness Checklist				
Authority	Required Information	Location			
	Minn. R. Ch. 7854				
Minn. R. 7854.0500	SITE PERMIT APPLICATION CONTENTS				
Minn. R. 7854.0500, subp. 1	Applicant . An applicant for a site permit must provide the following background information regarding the applicant:				
Α.	A letter of transmittal signed by an authorized representative or agent of the applicant;	See Application Filing Letter and Cover Page			
В.	The complete name, address, and telephone number of the applicant and any authorized representative;	See Application Filing Letter and Cover Page			
C.	The signature of the preparer of the application if prepared by an agent or consultant of the applicant;	See Application Filing Letter and Cover Page			
D.	The role of the permit applicant in the construction and operation of the LWECS;	Section 1.0			
Ε.	The identity of any other LWECS located in Minnesota in which the applicant, or a principal of the applicant, has an ownership or other financial interest;				
F.	The operator of the LWECS if different from the applicant; and	Section 1.0			
G.	The name of the person or persons to be the permittees if a site permit is issued.	Section 1.0			
Minn. R. 7854.0500, subp. 2	Certificate of need or other commitment.				
Α.	The applicant shall state in the application whether a certificate of need for the system is required from the commission and, if so, the anticipated schedule for obtaining the certificate of need. The commission shall not issue a site permit for an LWECS for which a certificate of need is required until the applicant obtains the certificate, although the commission may process the application while the certificate of need request is pending before the commission.	Section 2.0			
В.	The commission may determine if a certificate of need is required for a particular LWECS for which the commission has received a site permit application.	N/A			
C.	If a certificate of need is not required from the commission, the applicant shall include with the application a discussion of what the applicant intends to do with the power that is generated. If the applicant has a power purchase agreement or some other enforceable mechanism for sale of the power to be generated by the LWECS, the applicant shall, upon the request of the	N/A			

which must be delineated on a United States Geological Survey Map or other map as appropriate;Figure 1B.The following characteristics of the wind at the proposed site: (1) interannual variation; (2) seasonal variation; (3) diurnal conditions; (4) atmospheric stability, to the extent available; (6) extreme conditions; (7) speed frequency distribution; (8) variation with height; (9) spatial variations; and (10) wind rose, in eight or more directions;Section 9.1C.Other meteorological conditions at the proposed site, including the temperature, rainfall, snowfall, and extreme weather conditions; andSection 9.1.1D.The location of other wind turbines in the general area of the proposed LWECS.Section 9.2Minn. R. 7854.0500, subp. 6Design of project. The applicant shall include in the application information regarding the design of the proposed project:Section 5.1 a array spacing of the turbines;A.A project layout, including a map showing a proposed array spacing of the turbines;Section 5.1 a Figure 1.		Table 3.0-1	
commission, provide the commission with a copy of the document.Section 3.0Minn. R. 7854.0500, subp. 3State policy. The applicant shall describe in the application how the proposed LWECS project furthers state policy to site such projects in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources.Section 3.0Minn. R. 7854.0500, subp. 4Proposed site. The applicant shall include the following information about the site proposed for the LWECS, which must be delineated on a United States Geological Survey Map or other map as appropriate;Section 4.0 aB.The following characteristics of the wind at the proposed site: (1) interannual variation; (2) seasonal variation; (3) diurnal conditions; (4) atmospheric stability, to the extent available; (6) extreme conditions; (7) speed frequency distribution; (8) variation with height; (9) spatial variations; and (10) wind rose, in eight or more directions;Section 9.1.1C.Other meteorological conditions at the proposed site, including the temperature, rainfall, snowfall, and extreme weather conditions; and the proposed LWECS.Section 9.1.1Minn. R. 7854.0500, subp. 5Wind rights. The applicant shall include in the application information describing the applicant's wind rights within the boundaries of the proposed site, following information regarding the design of the proposed LWECS.A.Design of project. The applicant shall include in the application information regarding the design of the proposed project.Section 5.1 a Figures 1, an Figures 1, an Figures 1, an Figures 1, an		Completeness Checklist	
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subp. 3application how the proposed LWECS project furthers state policy to site such projects in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources.Minn. R. 7854.0500, subp. 4Proposed site. The applicant shall include the following information about the site proposed for the LWECS and any associated facilities:Section 4.0 aA.The boundaries of the site proposed for the LWECS, which must be delineated on a United States Geological Survey Map or other map as appropriate;Section 4.0 aB.The following characteristics of the wind at the proposed site: (1) interannual variation; (2) seasonal variation; (3) diurnal conditions; (4) atmospheric stability, to the extent available; (6) extreme conditions; (7) speed frequency distribution; (8) variation with height; (9) spatial variations; and (10) wind rose, in eight or more directions;Section 9.1C.Other meteorological conditions at the proposed site, including the temperature, rainfall, snowfall, and extreme weather conditions; and (10) wind rose, in eight or more directions;Section 9.2Minn. R. 7854.0500, subp. 5Wind rights. The applicant shall include in the application information describing the applicant swind rights within the boundaries of the proposed site.Section 7.0Minn. R. 7854.0500, subp. 6Seign of project. The applicant shall include in the application information regarding the design of the proposed layers.Section 5.1 a a Figures 1, an		document.	
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which must be delineated on a United States Geological Survey Map or other map as appropriate;Figure 1B.The following characteristics of the wind at the proposed site: (1) interannual variation; (2) seasonal variation; (3) diurnal conditions; (4) atmospheric stability, to the extent available; 	-	information about the site proposed for the LWECS and	
site: (1) interannual variation; (2) seasonal variation; (3) diurnal conditions; (4) atmospheric stability, to the extent available; (5) turbulence, to the extent available; (6) extreme conditions; (7) speed frequency distribution; (8) variation with height; (9) spatial variations; and (10) wind rose, in eight or more directions;Section 9.1.1C.Other meteorological conditions at the proposed site, including the temperature, rainfall, snowfall, and extreme weather conditions; andSection 9.1.1D.The location of other wind turbines in the general area of the proposed LWECS.Section 9.2Minn. R. 7854.0500, subp. 5Wind rights. The applicant shall include in the application information describing the applicant's wind rights within the boundaries of the proposed site.Section 7.0Minn. R. 7854.0500, subp. 6Design of project. The applicant shall provide the following information regarding the design of the proposed project:Section 5.1 a Figures 1, an Figures 1, an	Α.	which must be delineated on a United States Geological	Section 4.0 and Figure 1
including the temperature, rainfall, snowfall, and extreme weather conditions; andSection 9.2D.The location of other wind turbines in the general area of the proposed LWECS.Section 9.2Minn. R. 7854.0500, subp. 5Wind rights. The applicant shall include in the 		site: (1) interannual variation; (2) seasonal variation; (3) diurnal conditions; (4) atmospheric stability, to the extent available; (5) turbulence, to the extent available; (6) extreme conditions; (7) speed frequency distribution; (8) variation with height; (9) spatial variations; and	
the proposed LWECS.Wind rights. The applicant shall include in the application information describing the applicant's wind rights within the boundaries of the proposed site.Section 7.0Minn. R. 7854.0500, subp. 6Design of project. The applicant shall provide the following information regarding the design of the proposed project:Section 5.1 a Figures 1, an	С.	including the temperature, rainfall, snowfall, and extreme	Section 9.1.11
subp. 5application information describing the applicant's wind rights within the boundaries of the proposed site.Minn. R. 7854.0500, subp. 6Design of project. The applicant shall provide the following information regarding the design of the proposed project:A.A project layout, including a map showing a proposed array spacing of the turbines;Section 5.1 a Figures 1, an	D.		Section 9.2
subp. 6following information regarding the design of the proposed project:A.A project layout, including a map showing a proposed array spacing of the turbines;Section 5.1 a Figures 1, an	-	application information describing the applicant's wind	Section 7.0
array spacing of the turbines; Figures 1, an		following information regarding the design of the	
2a – 2c	Α.		Section 5.1 and Figures 1, and 2a – 2c
B.A description of the turbines and towers and other equipment to be used in the project, including the name of the manufacturers of the equipment;Section 5.2	В.	equipment to be used in the project, including the name	Section 5.2
C. A description of the LWECS electrical system, including transformers at both low voltage and medium voltage; and	C.	transformers at both low voltage and medium voltage;	Section 5.3
D. A description and location of associated facilities. Section 6.0	D.	A description and location of associated facilities.	Section 6.0

Table 3.0-1 Completeness Checklist				
Authority	Required Information	Location		
Minn. R. 7854.0500, subp. 7	Environmental impacts . An applicant for a site permit shall include with the application an analysis of the potential impacts of the project, proposed mitigative measures, and any adverse environmental effects that cannot be avoided, in the following areas:			
Α.	Demographics, including people, homes, and businesses;	Sections 8.1 and 8.2		
В.	Noise;	Section 8.4		
С.	Visual impacts;	Section 8.5		
D.	Public services and infrastructure;	Section 8.6		
E.	Cultural and archaeological impacts;	Section 8.7		
F.	Recreational resources;	Section 8.8		
G.	Public health and safety, including air traffic, electromagnetic fields, and security and traffic;	Section 8.9		
Н.	Hazardous materials;	Section 8.10		
1.	Land-based economics, including agriculture, forestry, and mining;	Section 8.11		
J.	Tourism and community benefits;	Sections 8.12 and 8.13		
К.	Topography;	Section 8.14		
L.	Soils;	Section 8.15		
М.	Geologic and groundwater resources;	Section 8.16		
Ν.	Surface water and floodplain resources;	Section 8.17		
0.	Wetlands;	Section 8.18		
Ρ.	Vegetation;	Section 8.19		
Q.	Wildlife; and	Section 8.20		
R.	Rare and unique natural resources.	Section 8.21		
Minn. R. 7854.0500, subp. 8	Construction of project . The applicant shall describe the manner in which the project, including associated facilities, will be constructed.	Sections 10.1, 10.2, 10.3, 10.4, and 10.5		
Minn. R. 7854.0500, subp. 9	Operation of project . The applicant shall describe how the project will be operated and maintained after construction, including a maintenance schedule.	Section 10.6		
Minn. R. 7854.0500, subp. 10	Costs . The applicant shall describe the estimated costs of design and construction of the project and the expected operating costs.	Section 10.7		
Minn. R. 7854.0500, subp. 11	Schedule . The applicant shall include an anticipated schedule for completion of the project, including the time periods for land acquisition, obtaining a site permit, obtaining financing, procuring equipment, and completing construction. The applicant shall identify the expected date of commercial operation.	Section 10.8		
Minn. R. 7854.0500, subp. 12	Energy projections . The applicant shall identify the energy expected to be generated by the project.	Section 10.9		

Table 3.0-1 Completeness Checklist						
Authority	Authority Required Information Location					
Minn. R. 7854.0500, subp. 13	Decommissioning and restoration . The applicant shall include the following information regarding decommissioning of the project and restoring the site:					
Α.	The anticipated life of the project;	Section 11.1				
В.	The estimated decommissioning costs in dollars;	Section 11.2				
С.	The method and schedule for updating the costs of decommissioning and restoration;	Section 11.2				
D.	The method of ensuring that funds will be available for decommissioning and restoration; and	Section 11.3				
Ε.	The anticipated manner in which the project will be decommissioned and the site restored.	Section 11.4				
Minn. R. 7854.0500, subp. 14	Identification of other permits. The applicant shall include in the application a list of all known federal, state, and local agencies or authorities, and titles of the permits they issue that are required for the proposed LWECS.	Section 12.0				

Table 2 - HVTL Application Completeness

Authority	Required Information	Located in Section				
Minn. R. 7850.2	2800, Subp. 1 - Eligible Projects					
С.	An applicant for a site permit or a route permit for one of the following projects may elect to follow the procedures of parts 7850.2800 to 7850.3900 instead of the full permitting procedures in parts 7850.1700 to 7850.2700 for high voltage transmission 					
Minn. R. 7850.	2800, Subp. 2 - Notice to Commission					
	An applicant for a permit for one of the qualifying projects in subpart 1, who intends to follow the procedures of parts 7850.2800 to 7850.3700, shall notify the PUC of such intent, in writing, at least 10 days before submitting an application for the project.	1.6 and Appendix B				
	ction 216E.04, Subd. 3; Minn. R. 7850.3100 - Contents of Applicatio ermitting Process)	on				
	The applicant for a route permit who chooses to follow the procedures outlined in the Alternative Permitting Process shall include in the application the same information required in part 7850.1900, except the applicant need not propose any alternative routes to the preferred route. If the applicant has rejected alternative routes, the applicant shall include in the application the identity of the rejected routes and an explanation of the reasons for rejecting them.	3.5				
Minn. R. 7850.	1900, Subp. 2 (applicable per Minn. R. 7850.3100) - Route Permit fo	or HVTL				
А.	A statement of proposed ownership of the facility at the time of filing the application and after commercial operation.	1.1				
В.	The precise name of any person or organization to be initially named as permittee or permittees and the name of any other person to whom the permit may be transferred if transfer of the permit is contemplated.	1.3				
C.	At least two proposed routes for the proposed HVTL and identification of the applicant's preferred route and the reasons for the preference.	Not applicable per Minn. R. 7850.3100 (however, see 3.5)				
D.	A description of the proposed HVTL and all associated facilities including the size and type of the HVTL.	Chapter 2				
E.	The environmental information required under 7850.1900, Subp. 3.	Chapter 5 and Appendix E				
F.	Identification of land uses and environmental conditions along the proposed routes.	5.1 and 5.2.9				
G.	The names of each owner whose property is within any of the proposed routes for the HVTL.	Appendix H				
H.	United States Geological Survey topographical maps or other maps acceptable to the Commission showing the entire length of the HVTL on all proposed routes.	Appendix C				

Authority	Required Information	Location in Application
l.	Identification of existing utility and public rights-of-way along or parallel to the proposed routes that have the potential to share the right-of-way with the proposed line.	5.2.10.5, Appendix E, and Appendix C
J.	The engineering and operational design concepts for the proposed high voltage transmission line, including information on the electric and magnetic fields of the transmission line.	2.3, and 5.2.2
K.	Cost analysis of each route, including the costs of constructing, operating, and maintaining the HVTL that are dependent on design and route.	2.7 and 4.4, and Appendix E
L.	A description of possible design options to accommodate expansion of the HVTL in the future.	2.8
M.	The procedures and practices proposed for the acquisition and restoration of the right-of-way, construction, and maintenance of the HVTL.	Chapter 4
N.	A listing and brief description of federal, state, and local permits that may be required for the proposed HVTL.	Chapter 7 and Table 7.0-1
О.	A copy of the Certificate of Need (CON) or the certified HVTL list containing the proposed HVTL or documentation that an application for a CON has been submitted or is not required.	1.4
Minn. R. 7850.1	1900, Subp. 3 (applicable per Minn. R. 7850.2800) - Environmenta	I Information
А.	A description of the environmental setting for each route.	5.1
В.	A description of the effects of construction and operation of the facility on human settlement, including, but not limited to, public health and safety, displacement, noise, aesthetics, socioeconomic impacts, cultural values, recreation, and public services.	5.2 and Appendix E
C.	A description of the effects of the facility on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining.	5.3 and Appendix E
D.	A description of the effects of the facility on archaeological and historic resources.	5.4 and Appendix E
E.	A description of the effects of the facility on the natural environment, including effects on air and water quality resources and flora and fauna.	5.5 and Appendix E
F.	A description of the effects of the facility on rare and unique natural resources.	5.6 and Appendix E
G.	Identification of human and natural environmental effects that cannot be avoided if the facility is approved at a specific site or route.	Chapter 5 and Appendix E
H. Bia Bend Wind.	A description of the measures that might be implemented to mitigate the potential human and environmental impacts in items A to G and the estimated costs of such mitigative measures.	Chapters 5

Big Bend Wind, LLC Project 2 Docket No. IP7013/TL-19-621 Appendix A

Table 3. Conceptual schedule for

Big Bend Wind Project, Big Bend Wind HVTL, and Red Rock Solar Projects

Number	BB and RR Certificate of Need Applications (CN)	BB Site Permit Application (LWECS)	RR Site Permit and HVTL Route Permit Applications (SP and RP)	<u>ESTIMATED</u> Date	Notes
1	Application Filed	Application Filed	Application Filed	11/9/2020	
	Notice of Comment Period on Completeness	Notice of Comment Period on Completeness	Notice of Comment Period on Completeness	11/23/2020	
	Completeness Comments Due	Completeness Comments Due	Completeness Comments Due	12/15/2020	
2	Completeness Reply Due	Completeness Reply Due	Completeness Reply Due	12/24/2020	
	Commission Considers Completeness	Commission Considers Completeness	Commission Considers Completeness	1/20/2021	PUC staff submits Draft Site Permit <u>Template</u> into record, along with staff briefing paper on acceptance.
3	Order Accepting Application	Order Accepting Application	Order Accepting Application	2/18/2021	Review start dates: CN: (filing date) • LWECS & HVTL: Order accepting Application
4	Notice of Application Acceptance and ER Scoping Meeting	Notice of Application Acceptance and Public Information Meeting	Notice of Application Acceptance and EA Scoping Meeting	2/26/2021	Notice requirements differ: CN: Notice at least 15 days prior to meeting. Meeting required to be

Number	BB and RR Certificate of Need Applications (CN)	BB Site Permit Application (LWECS)	RR Site Permit and HVTL Route Permit Applications (SP and RP)	<u>ESTIMATED</u> Date	Notes
					 held 40 days from filing date (this will require a variance from the rule). LWECS: Notice of Application Acceptance required 15 days after acceptance of application. HVTL: Notice required at least 10 day prior to meeting. Meeting must be held within 60 days of application acceptance.
5	ER Scoping Meeting	Public Information Meeting on Draft Site Permit Template	EA Scoping Meeting	3/21/2021	 This meeting is an additional public meeting in the LWECS siting process, as the required meeting is typically held later in the siting process. The required or

Number	BB and RR Certificate of Need Applications (CN)	BB Site Permit Application (LWECS)	RR Site Permit and HVTL Route Permit Applications (SP and RP)	<u>ESTIMATED</u> Date	Notes
					second public meeting is generally combined with the public hearing later in the process.
6	ER Scoping Comment Period Closes	Draft Site Permit Template Comment Period Closes	EA Scoping Comment Period Closes	4/11/2021	For all processes, the comment period opens with the notice: CN: Minimum 20 day comment period from meeting date. LWECS: No comment period prescribed. HVTL: Minimum 7 day comment period from the meeting date.
7	N/A	N/A	Applicant Comments on Suggested Alternative Routes	4/13/2021	The commissioner shall provide the applicant with an opportunity to respond to each request that an alternative be included in the environmental impact statement.

Number	BB and RR Certificate of Need Applications (CN)	BB Site Permit Application (LWECS)	RR Site Permit and HVTL Route Permit Applications (SP and RP)	<u>ESTIMATED</u> Date	Notes
	Proposed ER Scope within the EA Scoping Decision	Preliminary Draft Site Permit	Proposed EA Scope	5/2/2021	DOC EERA submits Preliminary Draft Site Permit & proposed EA scope to Commission.
	Commission considers EA Scope	Commission considers Issuance of Draft Site Permit	Commission considers EA Scope	5/27/2021	Commission can identify additional HVTL route alternatives to be evaluated in the EA at this time.
8	Order on EA Scoping	Order Issuing Draft Site Permit	Order on EA Scope	6/23/2021	Within 45 days of Site Permit application acceptance (<u>this will</u> <u>require a variance from</u> <u>the rule</u>). Draft Site Permit notice appears in EQB Monitor.
9	ER Scope Issued	N/A	EA Scope Issued	6/25/2021	 CN/ER: Within 10 days of close of comment period HVTL/EIS: As soon after holding the public meeting a possible.
10	Intervention Deadline	Intervention Deadline	Intervention Deadline	7/6/2021	If needed

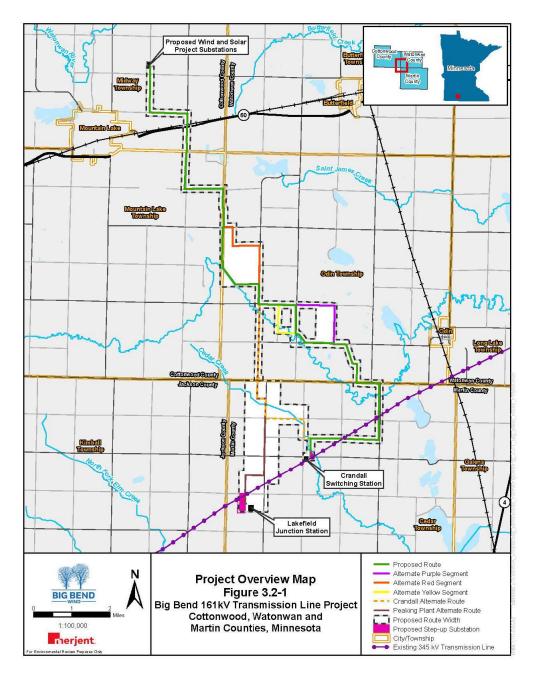
Number	BB and RR Certificate of Need Applications (CN)	BB Site Permit Application (LWECS)	RR Site Permit and HVTL Route Permit Applications (SP and RP)	<u>ESTIMATED</u> Date	Notes
11	ER Issued	N/A	EA Issued and Notice of Public Meeting Issued	10/29/2021	CN/ER: To be completed within 4 months from application filing (<u>this</u> <u>will require a variance</u> <u>from the Minnesota</u> <u>Rule 7849.1400,</u> <u>subpart 10</u>).
12			Pre-hearing testimony	11/8/2021	Joint Public Hearing serves all three dockets. The PUC shall afford the public a minimum of 30 days after publication of the draft site permit notice in the EQB Monitor to submit written comments. Pre-filed Written Testimony of Parties due
13	Joint Public Hearing	Joint Public Hearing	Joint Public Hearing	11/22/2021	Joint Public Hearing serves all five dockets.

Number	BB and RR Certificate of Need Applications (CN)	BB Site Permit Application (LWECS)	RR Site Permit and HVTL Route Permit Applications (SP and RP)	ESTIMATED Date	Notes
14	Comment Period on Merits Closes	Comment Period on Draft Site Permit Closes	Comment Period on Merits Closes	12/3/2021	Corresponds w/close of the joint Public Hearing comment period.
15	Proposed Findings	Proposed Findings	Proposed Findings	12/17/2021	EERA submits comments on proposed FOF.
16	ALJ Report	ALJ Report	ALJ Report	1/10/2021	Findings of fact, conclusions of law, and recommendation.
17	Exceptions to ALJ Report	Exceptions to ALJ Report	Exceptions to ALJ Report	1/25/2022	Due 15 days after filing of the ALJ Report.
18	Commission Decision	Commission Decision	Commission Decision	2/24/2022	

Figure 1 Project Location Map – Big Bend HVTL

BIG BEND WIND, LLC APPLICATION FOR ROUTE PERMIT FACILITY DESCRIPTION AND ROUTE SELECTION PROCESS

November 2020



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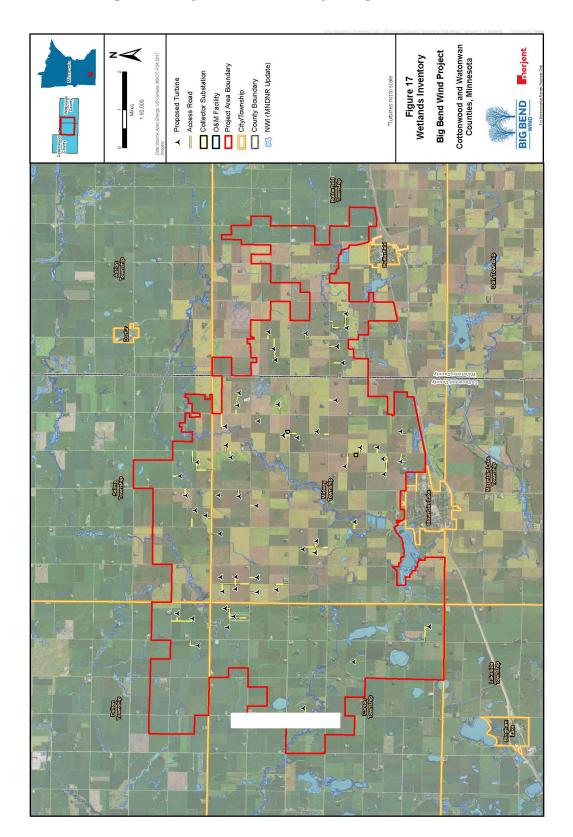


Figure 2 Project Location Map – Big Bend LWECS