

May 21, 2021

*Via eDockets*

Mr. Will Seuffert  
Executive Secretary  
Public Utilities Commission  
121 Seventh Place East, Suite 350  
St. Paul, MN 55101-2147

RE: Scoping Summary and Recommendation  
Big Bend Wind, Big Bend Transmission Line, and Red Rock Solar  
Docket Nos. IP7013/CN-19-408 and WS-19-619, IP7013/TL-19-621, IP7014/CN-19-486 and  
IP7014/GS-19-620

Mr. Seuffert:

On March 11, 2021, the Public Utilities Commission issued an order accepting the Big Bend Wind Farm site permit application, Big Bend Wind High Voltage Transmission line route permit application, and the Red Rock Solar Project site permit application as complete. The Big Bend Wind Transmission Line route permit application and the Red Rock Solar Project site permit application have been authorized for review under the alternative permitting process, and the Big Bend Wind Farm site permit application process will proceed as normal, with additional contested case proceedings specific to potential viewshed impacts of the proposed project on the users of the Jeffers Petroglyphs. The Commission acceptance order also directed the Big Bend Wind and Red Rock Solar Certificate of Need Applications be reviewed with the informal review process.

The attached recommendation summaries the environmental assessment scoping process, including comments received and alternatives proposed. It informs the Commission of the system alternatives, route, and route segments staff intends to recommend the Commissioner of Commerce include in the scoping decision for the environmental assessment.

Staff is available to answer any questions the Commission might have.

Sincerely,

/s/ Richard Davis

Richard Davis, Environmental Review Manager  
Energy Environmental Review and Analysis

cc: Cezar Panait, Public Utilities Commission  
Charley Bruce, Public Utilities Commission  
Bret Eknes, Public Utilities Commission  
Louise Miltich, Energy Environmental Review and Analysis  
Mary Otto, Department of Commerce

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**BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION****ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS  
SCOPING SUMMARY AND RECOMMENDATION****BIG BEND WIND FARM PROJECT - DOCKET NOS. IP7013/CN-19-408 AND IP7013/WS-19-619  
BIG BEND WIND HIGH VOLTAGE TRANSMISSION LINE – DOCKET NO. IP7013/TL-19-621  
RED ROCK SOLAR PROJECT – DOCKET NOS. IP7014/GS-19-620**

Date: May 21, 2021

Staff: Richard Davis | [richard.davis@state.mn.us](mailto:richard.davis@state.mn.us) | 651-539-1846

**Issues Addressed:** These comments summarize the scoping process, including a summary of comments received and alternatives proposed, and informs the Commission of system alternatives, routes, and route segments staff intends to recommend be included in the scoping decision for the environmental assessment (EA).

**Documents Attached:**

- (1) Map of System – Figure 1. Big Bend Wind LLC. Certificate of Need Application
- (2) Project Overview Map – Figure 3.2-1. Big Bend Wind, LLC. Big Bend 161 kV Transmission Line Route Permit Application
- (3) Preliminary Project Layout – Figure 3. Red Rock Solar, LLC. Certificate of Need Application

Additional documents and information, including the route permit application, can be found on eDockets by searching “19” for year and “619” for number: <https://www.edockets.state.mn.us/EFiling/search.jsp> or the EERA webpage: <https://apps.commerce.state.mn.us/eera/web/project/14153>.

This document can be made available in alternative formats, that is, large print or audio, by calling (651) 539-1530 (voice).

## Introduction and Background

This document summarizes the scoping process for the Big Bend Wind Farm, Big Bend Transmission Line, and the Red Rock Solar Project (Projects). It advises the Public Utilities Commission (Commission) on issues and alternatives Energy Environmental Review and Analysis (EERA) staff intends to recommend the Commissioner of the Department of Commerce (Commerce) include in the scoping decision for the environmental assessment (EA).

On November 9, 2020, Big Bend Wind, LLC (Big Bend or Applicant) filed an application for a Large Wind Energy Conversion System (LWECS) site permit for the proposed up to 308 megawatt (MW) Big Bend Wind Farm in Cottonwood and Watonwan Counties, Minnesota.<sup>1</sup>

<sup>1</sup> Big Bend Wind, LLC. Initial Filing – Site Permit Application and Appendices. November 9, 2020. eDocket ID# [202011-168170-02](#), [202011-168170-03](#), [202011-168170-04](#), [202011-168170-05](#), [202011-168170-06](#), [202011-168170-07](#), [202011-168170-08](#), [202011-168170-09](#), [202011-168170-10](#), [202011-168172-01](#), [202011-168172-02](#), [202011-](#)

On January 14, 2021, the Applicant filed additional application information in the form of a revised Appendix F – Phase 1A Literature Review and NHIS Request.<sup>2</sup> The Commission found the LWECS site permit application substantially complete and a contested case proceeding would assist in further development of the proposed project record on March 11, 2021.<sup>3</sup> At this time the contested case is specific to the mitigative measures and unavoidable adverse environmental effects related to the cultural and archaeological impacts, specific to the Jeffers Petroglyphs Site.<sup>4</sup>

Big Bend Wind, LLC is a wholly-owned subsidiary of Apex Clean Energy Holdings, Inc. Apex Clean Energy Holdings, Inc. has developed, constructed, and operates numerous wind and solar energy projects throughout the United States, but Big Bend Wind is the first wind energy project proposed by Apex Clean Energy Holdings, Inc. in the State of Minnesota.

The Applicant has indicated that Big Bend Wind will be operated as an independent power producer (IPP). The power generated at the Big Bend Wind Project will be offered for wholesale to customers, which would likely include Minnesota utilities and cooperatives that need additional renewable energy. Big Bend Wind, LLC has appropriately filed an Application for a Certificate of Need (CN)<sup>5</sup> with the Commission, and specific details about the Project's CN Application process are under Docket number IP-7013/CN-19-408. The Commission accepted the Big Bend Wind CN Application as complete on March 11, 2021.<sup>6</sup>

Big Bend Wind, LLC has proposed a 18-mile 161 kilovolt (kV) high voltage transmission line (HVTL) to be located in portions of Cottonwood, Martin, and Watonwan counties to ultimately deliver energy generated at the Big Bend Wind Farm to one of two proposed Points of Interconnection (POI) to the to the existing Blue Lake-Wilmarth-Interstate Interconnect 345 kV transmission line located to the southeast of the proposed wind project. Big Bend Wind LLC submitted a route permit application (RPA) to the Commission on November 9, 2020.<sup>7</sup>

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

[68172-03](#), [202011-168172-04](#), [202011-168172-05](#), [202011-168172-06](#), [202011-168172-07](#), [202011-168172-08](#), [202011-168172-09](#), [202011-168173-01](#) [hereinafter Wind SPA]

<sup>2</sup> Big Bend Wind, LLC. Other – Appendix F Phase 1A Literature Review and NHIS Request Part 1 and Part 2. January 14, 2021. eDocket Nos. [20211-169816-08](#) and [20211-169816-09](#).

<sup>3</sup> Commission. Order - Order Accepting Applications Complete. March 11, 2021, eDocket # [20213-171785-05](#).

<sup>4</sup> Commission. Order - Order Accepting Applications Complete. March 11, 2021, eDocket # [20213-171785-05](#).

<sup>5</sup> Big Bend Wind, LLC. Initial Filing – Certificate of Need Application. November 9, 2020 eDocket ID# [202011-168164-03](#), [202011-168164-04](#), [202011-168164-05](#) [hereinafter CN Application].

<sup>6</sup> Commission. Order - Order Accepting Applications Complete. March 11, 2021, eDocket # [20213-171785-05](#).

<sup>7</sup> Big Bend Wind, LLC. Initial Filing – Route Permit Application and Appendices. November 9, 2020. eDocket ID# [202011-168176-02](#), [202011-168176-03](#), [202011-168176-04](#), [202011-168176-05](#), [202011-168176-06](#), [202011-168176-07](#), [202011-168176-10](#), [202011-168177-01](#), [202011-168177-02](#). November 9, 2020 [hereinafter RPA].

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)<sup>8</sup> and a solar generation site permit (GS-19-620)<sup>9</sup> for the Red Rock Solar Project.

The Big Bend Wind 116 kV HVTL RPA and the Red Rock Solar CN application and the solar Site Permit application were accepted as substantially complete on March 11, 2021.<sup>10</sup>

## 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.<sup>11</sup> 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.<sup>12</sup> The proposed Big Bend Wind Farm will function as a hybrid renewable project in conjunction with the proposed Red Rock Solar Project.

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 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 Big Bend Wind Farm could generate up to 308 MW of electricity, the Red Rock Solar Project would generate up to 60 MW of electricity, and the proposed 18 mile long 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. This means that if Red Rock Solar Project was permitted to at full 60 MW, the Big Bend Wind Project would be limited to 275 MW. The applicant has indicated that 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 when considering the cost and expenses associated with the construct of the necessary HVTL to connect to the grid.

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<sup>8</sup> Red Rock Solar, LLC. Initial Filing – Certificate of Need Application and Appendices. November 9, 2020. eDocket Nos. [202011-168166-03](#), [202011-168166-04](#), [202011-168166-05](#) (hereinafter referred to as the Solar CN Application)

<sup>9</sup> Red Rock Solar, LLC. Initial Filing – Site Permit Application and Appendices. November 9 and 10, 2020. eDocket Nos. [202011-168174-02](#), [202011-168174-03](#), [202011-168174-04](#), [202011-168174-05](#), [202011-168174-06](#), [202011-168174-07](#), [202011-168174-08](#), [202011-168174-09](#), [202011-168174-10](#), [202011-168178-01](#), [202011-168178-03](#), [202011-168178-04](#) (hereinafter referred to as the Solar SPA)

<sup>10</sup> Commission. Order - Order Accepting Applications Complete. March 11, 2021, eDocket # [20213-171785-05](#).

<sup>11</sup> CN Application at Section 3.1

<sup>12</sup> CN Application at Section 3.1

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### *Big Bend Wind Farm*

The Big Bend Wind Farm 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.<sup>13</sup>

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.<sup>14</sup>

The applicant anticipates turbine delivery date as early as the second quarter of 2020<sup>15</sup>, and an anticipated commercial operation date (COD) in the fourth quarter of 2022.<sup>16</sup>

### *Big Bend Wind 161 kV HVTL*

Big Bend proposes to connect the LWECS project substation and the Red Rock Solar project substation, to the electrical grid through approximately 18 miles of new 161 kV transmission line. The HVTL Project will begin at the new project substations 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.<sup>17</sup> 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.<sup>18</sup> 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.<sup>19</sup>

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<sup>13</sup> Wind SPA at Section 4.2

<sup>14</sup> Wind SPA at Section 4.2

<sup>15</sup> Wind SPA at Section 10.8

<sup>16</sup> Wind SPA at Section 10.8

<sup>17</sup> RPA at Section 2.5

<sup>18</sup> RPA at Section 2.5

<sup>19</sup> RPA at Section 1.0

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 right-of-way.<sup>20</sup> 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.<sup>21</sup>

Big Bend has requested a 1,000 foot route width for the majority of the proposed route.<sup>22</sup> The Applicant has requested a wider route width, ranging from 1,000 feet to 1.15 miles wide, to allow flexibility in working with landowners on alternate route segments (Alternate Red, Yellow, and Purple route segments) and in northwestern Martin County to allow for flexibility in working with landowners on parcels currently under easement with other entities.<sup>23</sup>

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.<sup>24</sup> 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.<sup>25</sup> 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.<sup>26</sup>

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.<sup>27</sup>

### *Red Rock Solar Project*

The applicant proposes to construct the Red Rock Solar Project on approximately 485 acres of land in Sections 1, 2, 11, 12, 14, 22, and 23 of Midway Township (Township 106 North, Range 34 West) Cottonwood County (**Figure 1**). Its primary components include photovoltaic (PV) panels affixed to a linear ground-mounted single-axis tracking system, inverters and transformers housed in electrical cabinets, electrical collection system, solar project substation, and SCADA systems and metering equipment.<sup>28</sup> The project also requires fencing, access roads, laydown areas, weather stations, and

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<sup>20</sup> RPA at Section 2.4

<sup>21</sup> RPA at Section 2.4

<sup>22</sup> RPA at Section 2.2

<sup>23</sup> RPA at Section 2.2

<sup>24</sup> RPA at Section 4.1

<sup>25</sup> RPA at Section 2.3

<sup>26</sup> RPA at Section 2.3

<sup>27</sup> RPA at Section 2.6

<sup>28</sup> Solar SPA at Section 2.2

stormwater drainage basins.<sup>29</sup> If the solar project needs an operation and maintenance (O&M) facility, the Project will share facility space in the O&M facility for the Big Bend Wind Project, which is included in the wind project Site Permit Application.<sup>30</sup>

The Project will connect to the proposed 18 mile long – 161 kilovolt (kV) Big Bend Wind High Voltage Transmission Line (HVTL) through the proposed project substation, and the solar generated electricity will be connected to the Blue Lake-Wilmarth-Interstate Interconnection 345 kV transmission line at the Xcel Energy Crandall Switching Station or as a “net-zero” interconnection at the Great River Energy Lakefield Junction Natural Gas Peaking Plant located approximately two miles southwest of the Xcel Energy Crandall Switching Station.<sup>31</sup>

The Applicant currently holds lease agreements with landowners of all parcels of lands proposed to be utilized for construction and operation of the Red Rock Solar Project.<sup>32</sup> Red Rock plans to purchase and hold title on some of the Project properties if the Site Permit is issued, and project lands to remain under lease will move into the operation terms of the lease agreements.<sup>33</sup> The properties currently under lease, but not utilized for Project construction and operation, will revert to previous land uses, farming.<sup>34</sup>

The Red Rock Solar Project has been proposed to be constructed and operated only in combination with the proposed Big Bend Wind Farm. The Applicant has indicated the proposed projects are intended to function as a hybrid project of wind and solar energy generation. The Big Bend Wind Farm is feasible as a stand alone project or as a hybrid, but to be feasible the Red Rock Solar Project must be part of hybrid generation project.

## Regulatory Background

The Projects require five distinct approvals from the Public Utilities Commission (Commission). The Big Bend Wind Farm will need a Certificate of Need (CN) and a LWECs Site Permit, the Big Bend Wind HVTL will need a Route Permit, and the Red Rock Solar Project will need a CN and a Site Permit. On November 9, 2020, the Applicants filed separate certificate of need<sup>35, 36</sup>, site permits<sup>37, 38</sup>, and route permit<sup>39</sup> applications. The Commission met to consider the applications at its February 4, 2021 meeting.

Per the Commission’s March 11, 2021, written order, these applications were deemed substantially complete, indicated the CN applications would reviewed using the informal process, the route and Red

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<sup>29</sup> Solar SPA at Section 2.2

<sup>30</sup> Solar SPA at Section 2.2

<sup>31</sup> Solar SPA at Section 2.1

<sup>32</sup> Solar SPA at Section 2.2

<sup>33</sup> Solar SPA at Section 2.2

<sup>34</sup> Solar SPA at Section 2.2

<sup>35</sup> Big Bend Wind, LLC CN Application

<sup>36</sup> Red Rock Solar, LLC CN Application

<sup>37</sup> Wind SPA

<sup>38</sup> Solar SPA

<sup>39</sup> RPA



Rock Solar site permit application will be handled through the alternative permitting processes, the Big Bend Wind Farm site permit application will be handled through a contested case proceeding, and the Order referred the matters to the Office of Administrative Hearings (OAH) for appointment of an administrative law judge (ALJ) to conduct the necessary proceedings.<sup>40</sup>

The proposed Big Bend Wind Farm CN application was submitted as required under Minn. R. 7849.0220, and a LWECS Site Permit Application was submitted including all the information required under Minn. R. 7854.0500. The proposed Red Rock Solar Project CN application was submitted as required under Minn. R. 7849.0220, and a large electric power generating plant (LEPGP) site permit application was submitted per Minn. R. 7850.3100.

The proposed 161 kV HVTL Project is submitted under the Alternative Permitting Process under Minn. Stat. 216E.04, subd. 2(3) and Minn. R. 7850.2800 to 7850.3900. Minn. R. 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.

### *Environmental Review*

Environmental review must be completed prior to the Commission's decisions on the necessary CNs, site permits, and route permits. In this matter, department Energy Environmental Review and Analysis (EERA) staff will conduct environmental review under Minnesota Statutes 216B and 216E and Minn. R. 7849 and 7850. The completion of an Environmental Report (ER) is required for the necessary CN approvals, and the Red Rock Solar Project Site Permit and the Big Bend Wind HVTL Route Permit require the completion of an EA. Per Minn R. 7854.050 Subpart 7, the LWECS site permit application submitted by Big Bend Wind serves as the environmental document for the evaluation of the wind site and no other environmental document shall be required.

Minn. R. 7849.1900 allows for the necessary environmental review to be completed under joint proceedings as the Red Rock Solar Site Permit Application and the Big Bend Wind HVTL Route Permit Application qualify for the alternative review process, and the applications have been submitted to the Commission at the same time as the CN Applications for the Big Bend Wind Farm and the Red Rock Solar Project. Under joint proceedings, an EA can be prepared under Minn. R. 7850.3700 to meet the necessary environmental review for the CNs, site permits, and route permit, in lieu of completing separate ERs and EAs.

An ER contains "information on the human and environmental impacts of the [project] associated with the size, type, and timing of the project, system configurations, and voltage".<sup>41</sup> It also contains information on system alternatives to the project, as well as mitigation measures.

Minnesota Rule 7849.1500, subpart 1, requires an ER include: **A.** A general description of the proposed project and associated facilities; **B.** A general description of the alternatives to the proposed project that are addressed . . . ; **C.** An analysis of the human and environmental impacts of a project of the

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<sup>40</sup> Commission. Order - Order Accepting Applications Complete. March 11, 2021, eDocket # [20213-171785-05](#).

<sup>41</sup> Minn. R. [7849.1500](#).

type proposed and of the alternatives identified; **D.** An analysis of the potential impacts that are project specific; **E.** An analysis of mitigative measures that could reasonably be implemented to eliminate or minimize any adverse impacts identified for the proposed project and each alternative analyzed; **F.** An analysis of the feasibility and availability of each alternative considered; **G.** A list of permits required for the project; **H.** A discussion of other matters identified by the commissioner [of commerce].

On June 19, 2019, the Applicant requested exemptions from certain CN filing requirements under Minn. R. 7849.<sup>42</sup> Several of these exemption requests concern alternatives to the proposed project that must be discussed in an ER under Minnesota Rule 7849.1500, subpart 1(B). The Commission, in adopting the recommendations of the Department’s Division of Energy Resources (DER) through its September 24, 2019, written order, authorized the requested exemptions.<sup>43</sup> As a result, the following system alternatives to the proposed project need not be studied: demand side management, purchased power, facilities using a non-renewable energy source, upgrading existing facilities, and transmission rather than generation.<sup>44</sup>

The EA prepared for the solar site and HVTL route contains “information on the human and environmental impacts of proposed site and route”.<sup>45</sup> It also contains information on site and route alternatives to the project identified in the scope, as well as mitigation measures.

Minnesota Rule 7850.3700, subpart 4, requires an EA include: **A.** a general description of the proposed facility; **B.** a list of any alternative sites . . . that are addressed; **C.** a discussion of the potential impacts of the project and each alternative site . . . on the human and natural environment; **D.** a discussion of mitigative measures that could reasonably be implemented to eliminate or minimize any adverse impacts identified for the project and each alternative site . . . analyzed; **E.** an analysis of the feasibility of each alternative site . . . considered; **F.** a list of permits required for the project; and **G.** a discussion of other matters identified in the scoping process.

Because the LWECs site permit application submitted by Big Bend Wind serves as the environmental document for the evaluation of the wind site in lieu of a department-prepared document, the evaluation of alternative LWECs sites is limited to the analysis provided in the permit application.

The Commission authorized the Department to combine the environmental review required for the CNs, Site Permits, and Route Permit; therefore, these applications will be processed jointly using Minnesota Rule 7829.1200 and Minnesota Rule 7850.2800 to 7850.3900.<sup>46</sup> Staff will prepare an EA in lieu of an ER,

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<sup>42</sup> Big Bend Wind, LLC and Red Rock Solar, LLC. Initial Filing – Request for Exemption from Certain Application Content Requirements and Rule 7829.2550 HVTL Notice Plan. June 19, 2019. eDockets No. [20196-153717-01](#)

<sup>43</sup> Public Utilities Commission. Order – Approving Exemptions to Certain Filing Requirements. September 24, 2019. eDockets No. [20195-152889-01](#).

<sup>44</sup> Department of Commerce, Division of Energy Resources. Comments. July 22, 2019. eDockets No. [20197-154575-01](#).

<sup>45</sup> Minn. R. [7850.3700](#).

<sup>46</sup> Public Utilities Commission. Order – Accepting Applications as Complete. March 11, 2021. eDockets No. [20213-171785-01](#).

which means the EA will combine the analysis of issues typically reviewed for a site permit and route permit in an EA and system alternatives otherwise studied in an ER into a single document. This is the only state environmental review document required for the project.

After the EA is complete and made available a public hearing will be held in the project area. The Commission will then decide on the issuance of Certificates of Need, site permits, and the route permit.

## Scoping Process Summary

Scoping is the first step in the environmental review process. Staff used the information gathered during scoping to focus the EA on the most relevant information needed by the Commission to make informed decisions. Scoping includes a public meeting and comment period that provide opportunities for interested persons to help develop the scope of the EA.<sup>47</sup>

Based on input from the scoping process, the Commission, staff, and the Commissioner of Commerce will finalize and issue a scoping decision for the EA.<sup>48</sup> This may include alternative route or route segments suggested during the scoping process if the alternatives would aid the Commission in making permit decision. Applicants are provided the opportunity to respond to each request that an alternative be included in the EA.<sup>49</sup>

On October 28, 2019, the commission and department issued a joint *Notice of Public Information and Environmental Assessment Scoping Meeting* and associated public comment period.<sup>50</sup> Notice was sent to those individuals on the project contact list and to potentially affected landowners.<sup>51</sup> The Applicant published notice in the *Cottonwood County Citizen* (March 17, 2021), the *Fairmont Sentinel* (March 18, 2021), and the *St. James Plaindealer* (March 18, 2021).<sup>52</sup> Additionally, notice was available on the EERA webpage.<sup>53</sup>

### *Public Meeting and Comment Period*

The Commission's Order of March 11, 2021 waived the 45-day requirement of the rule to allow time for public comments and state and federal agencies input.

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<sup>47</sup> Minn. R. [7850.3700](#), subp. 2.

<sup>48</sup> Minn. Rule 7850.3700, subp. 3.

<sup>49</sup> Minn. Rule 7850.3700, subp. 2.

<sup>50</sup> Public Utilities Commission. Notice – Public Information and Environmental Review Scoping Meeting. March 17, 2021. eDockets No. [20213-171972-04](#).

<sup>51</sup> Public Utilities Commission. Notice – Public Information and Environmental Review Scoping Meeting. March 17, 2021. eDockets No. [20213-171972-04](#).

<sup>52</sup> Public Utilities Commission. Affidavit of Publication – Pub Info Scoping Mtg Affidavits of Publication. March 31, 2021. eDockets No. [201911-157657-02](#).

<sup>53</sup> Department of Commerce – EERA.

Big Bend Wind Project <https://apps.commerce.state.mn.us/eera/web/project/14153>

Red Rock Solar Project <https://apps.commerce.state.mn.us/eera/web/project/14155>

Big Bend Wind 161 kV Transmission Line <https://apps.commerce.state.mn.us/eera/web/project/14156>

Commission and EERA staff held a joint public information and EA scoping meeting on April 1, 2021. The purpose of the meeting was to:

- inform the public of the proposed project,
- provide an overview of the Commission’s review of the proposed project,
- receive comments on issues and project alternatives to be considered in the EA to be prepared for the CN process,
- receive comments on potential impacts and mitigation measures for consideration in the development of the LWECs DSP,
- receive comments on issues and project alternatives to be considered in the EA for the proposed Big Bend Wind HVTL and the proposed Red Rock Solar Project, and
- receive comments on potential impacts and mitigation measures for the proposed Big Bend Wind HVTL and the Red Rock Solar Project for consideration in the EA scope for the proposed projects.

Commission and EERA staff jointly held the public information and scoping meeting as noticed. The purpose of the meeting was to provide information and answer questions about the Projects, CN process, site permitting processes, route permitting process, and gather input regarding potential impacts and mitigative measures that should be studied in the EA. The meeting also provided an opportunity to solicit potential site, route, or system alternatives. Commission staff, the Applicant, and EERA staff provided presentations during the public information and scoping meeting, and presentation slides were made available following the meeting.<sup>54</sup> A court reporter was present to document verbal statements.<sup>55</sup>

Approximately 50 individuals were present for the virtual Public Information and Environmental Scoping Meeting. Some individuals attended through both the Webex visual portal and call-in phone conferencing and others attended only by call-in phone conferencing. Several verbal questions and comments were provided during the Public Information Meeting, no detailed system alternatives were provided during the meeting, but commentors suggested ideas such as developing only solar energy generation for the project and reducing the number of proposed turbines to be constructed and operated. There were no transmission line route alternatives or route alternative segments recommended during the Public Information and Scoping Meeting.

The associated public comment period, ended April 30, 2021, and provided an opportunity for interested persons to identify issues, mitigation measures, and site, route or system alternatives for study in the EA. Written comments were received from two State agencies, two intervening parties, and several members of the public. Several system alternatives were recommended in the written comments received. No route alternatives or route segment alternatives were recommended for the proposed Big Bend Transmission Line.

<sup>54</sup> Public Utilities Commission. Handout – Commission-Public Information and Scoping Meeting Presentation. April 7, 2021. eDockets No. [20214-172659-01](#).

<sup>55</sup> DOC-EERA. Public Information and Scoping Meeting Minutes. April 30, 2021. eDockets No. [20214-173685-03](#).

Agency comment letters were provided by the Minnesota Department of Natural Resources (MN DNR), Minnesota Department of Transportation (MnDOT) – Office of Aeronautics, and MnDOT – Office of Land Management. Cottonwood County Commissioners provided comments at the Public Information and EA Scoping meeting. Comments were also received from intervening parties; Minnesota Historical Society (MNHS) and the Lower Sioux Indian Community. Several comments were provided by members of the public during the Public Information and EA Scoping meeting, and also submitted written comments.

Agency comments identified concerns with possible calcareous fens, wetland, State listed wildlife species, flight diverter use, native prairie, private airplane runaway conflicts, aviation safety permitting needs, transmission line pole placement and spans near the intersection of Trunk Highway 60 and County State Aid Highway 8, necessary road use permitting, and turbine shadow flicker on Trunk Highway 60.

Intervening parties' comments primarily focused on concerns of the potential visual impacts on users of the Jeffers Petroglyphs site and the Red Rock Ridge, resulting from the proposed Big Bend Wind Farm. The interveners also identified concerns with Tribal Community coordination, potential human health impacts, turbine location and size considerations, impacts to wildlife and wildlife habitat, potential disturbance and impacts to native prairie and wetlands, and potential impediments to conservation efforts in the project area. Both intervening parties provided system alternatives for the proposed Big Bend Wind Farm and Red Rock Solar Project.

Public comments received expressed concerns about the proposed projects. These concerns include, but are not limited to, impacts resulting from both construction and operation of the proposed projects; including, aesthetics, local jobs, socioeconomic impacts, shadow flicker, noise, erosion, electromagnetic field, impacts to wildlife, property values, impacts to native prairie and wetlands, State listed species, bald eagles, and local conservation efforts.

## Alternatives

The following section specifically addresses system alternatives, route and route segment alternatives, and solar site alternatives that were identified by agencies, intervening parties, and public commentors. If an alternative is identified as not appropriate for inclusion in the EA scope, EERA has provided the reasons for not including the specific alternative and a recommendation as to how, if possible, the issues raised in relation to the proposed alternative can be addressed.

### *Alternatives Suggested*

MNHS has identified the following alternatives to be included in the EA;

- Removal of all wind turbines within 8 miles of the Jeffers Petroglyphs site property boundary, and the remaining turbines be reduced in height to no more than 570 feet (ground to blade tip),
  - Any energy output lost from turbine removal should be shifted to the solar facility, and additional solar panels should be constructed
- Removal of all wind turbines within 10 miles of the Jeffers Petroglyphs site property boundary, and the remaining turbines be reduced in height to no more than 656 (ground to blade tip)
  - Any energy output lost from turbine removal should be shifted to the solar facility, and additional solar panels should be constructed

The Lower Sioux Community has identified the following alternatives to be considered in the EA;

- No build
- Solar Only Project
  - Including additional solar panels and modifications to the high voltage transmission line
- Wind and Solar
  - 8 mile buffer between Jeffers Petroglyphs and Red Rock Ridge and the wind project, and no turbines taller than 570 feet (ground to blade tip)
  - Any energy output lost from turbine removal should be shifted to the solar facility, and additional solar panels should be constructed
- Wind and Solar
  - 10 mile buffer between Jeffers Petroglyphs and Red Rock Ridge and the wind project, and no turbines taller than 660 feet (ground to blade tip)
  - Any energy output lost from turbine removal should be shifted to the solar facility, and additional solar panels should be constructed
- Wind and Solar
  - 11 mile buffer between Jeffers Petroglyphs and Red Rock Ridge and the wind project, and no turbines taller than 660 feet (ground to blade tip)
  - Any energy output lost from turbine removal should be shifted to the solar facility, and additional solar panels should be constructed

### *Route Alternatives and Route Segment Alternatives Suggested*

No route alternatives or route segment alternatives were recommended during the Public Information and EA Scoping Meeting or during the associated comment period.

The Applicant's proposed route and route segment are shown on the second attachment.

### *Site Alternatives Suggested*

No specific solar site alternatives were recommended during the Public Information and EA Scoping Meeting or during the associated comment period.

Some recommendations were made to increase the size of the Red Rock Solar Project to offset the need for all or a portion of the proposed Big Bend Wind Farm. EERA will evaluate these as system alternatives, as the general location of the proposed projects will still remain similar to what has been proposed.

### *EERA Staff Alternatives Analysis*

The scoping process assists staff to identify “only those potentially significant issues relevant to the project” and alternatives to the project. Staff will not dismiss issues from analysis in the scoping decision. Staff will, however, abbreviate analysis in the EA for certain resource topics that are commonly considered in environmental review, but are determined immaterial to the Commission's decision in these dockets. Abbreviated analysis means that the resource topic will not be discussed in as much detail as the standard analysis.

Abbreviating analysis for certain resource topics will provide for a shorter document that is more relevant and useable. This approach is consistent with Minnesota Statute and Rule, which state the purpose of scoping, in part, is to reduce the scope and bulk of environmental review documents. The decision whether to abbreviate analysis for certain resource topics will be made by EERA staff, and will be based on information from the CN applications, site permit applications, route permit application, field visits, scoping comments received, preliminary environmental analysis, and staff experience with similar projects.

The portion of the EA evaluation related to LWECS need is limited to analyzing and assessing the potential impacts of proposed projects compared broadly to system alternatives. For example, the EA analysis will allow for a comparison of the proposed 335 MW hybrid Big Bend Wind Farm and Red Rock Solar Project to a hypothetical hybrid 335 MW Big Bend Wind Farm and Red Rock Solar Project located such that the with the applicant's proposed wind turbines within eight miles of the Jeffers Petroglyphs site. As such, EERA believes that the proposed alternatives considering the use of a hypothetical 335 MW solar facility (with no wind component), a 335 MW hybrid of wind energy and solar energy projects in a such that no proposed turbines will be placed within 8 miles of the Jeffers Petroglyphs site and the lost generation capacity will be replaced with additional solar, a 335 MW hybrid of wind energy and solar energy projects in a such that no proposed turbines will be placed within 10 miles of the Jeffers Petroglyphs site and the lost generation capacity will be replaced with additional solar, and a 335 MW hybrid of wind energy and solar energy projects in a such that no proposed turbines will be placed within 11 miles of the Jeffers Petroglyphs site and the lost generation capacity will be replaced with additional solar, to be appropriate for inclusion in the EA Scoping Decision as system alternatives to be evaluated to inform the CN decision.

EERA acknowledges that the MNHS and Lower Sioux Tribal Community suggested alternatives included limitation on the total turbine height outside of the no turbine buffer areas around the Jeffers Petroglyphs. However, the turbines that have been proposed by the Applicant have specific characteristics (turbine height, rotor diameter, noise generation level, etc.) that influence numerous setbacks, and the proposed turbine layout and locations are based on those setbacks.

Additionally, the turbine height and turbine power output are connected turbine characteristics. Reducing turbine height will reduce the individual turbine power output, which would likely result in the Applicant modifying several proposed wind turbine location and ultimately increasing the overall number of turbines and the density of turbines outside of the proposed no turbine buffer area around the Jeffers Petroglyphs. The result could be a number of different LWECS sites and configurations.

As Minn. R. 7854.0500 Subpart 7 does not contemplate preparation of an environmental document beyond the LWECS site permit application EERA does not believe the EA is the appropriate document to evaluate alternate turbine sites, spacing, heights, or specific LWECS site alternatives with different turbine types and specific turbine layouts to achieve appropriate setbacks.

## EERA Staff Recommendations

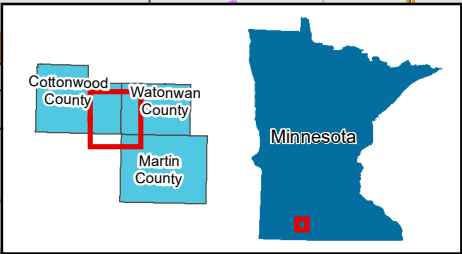
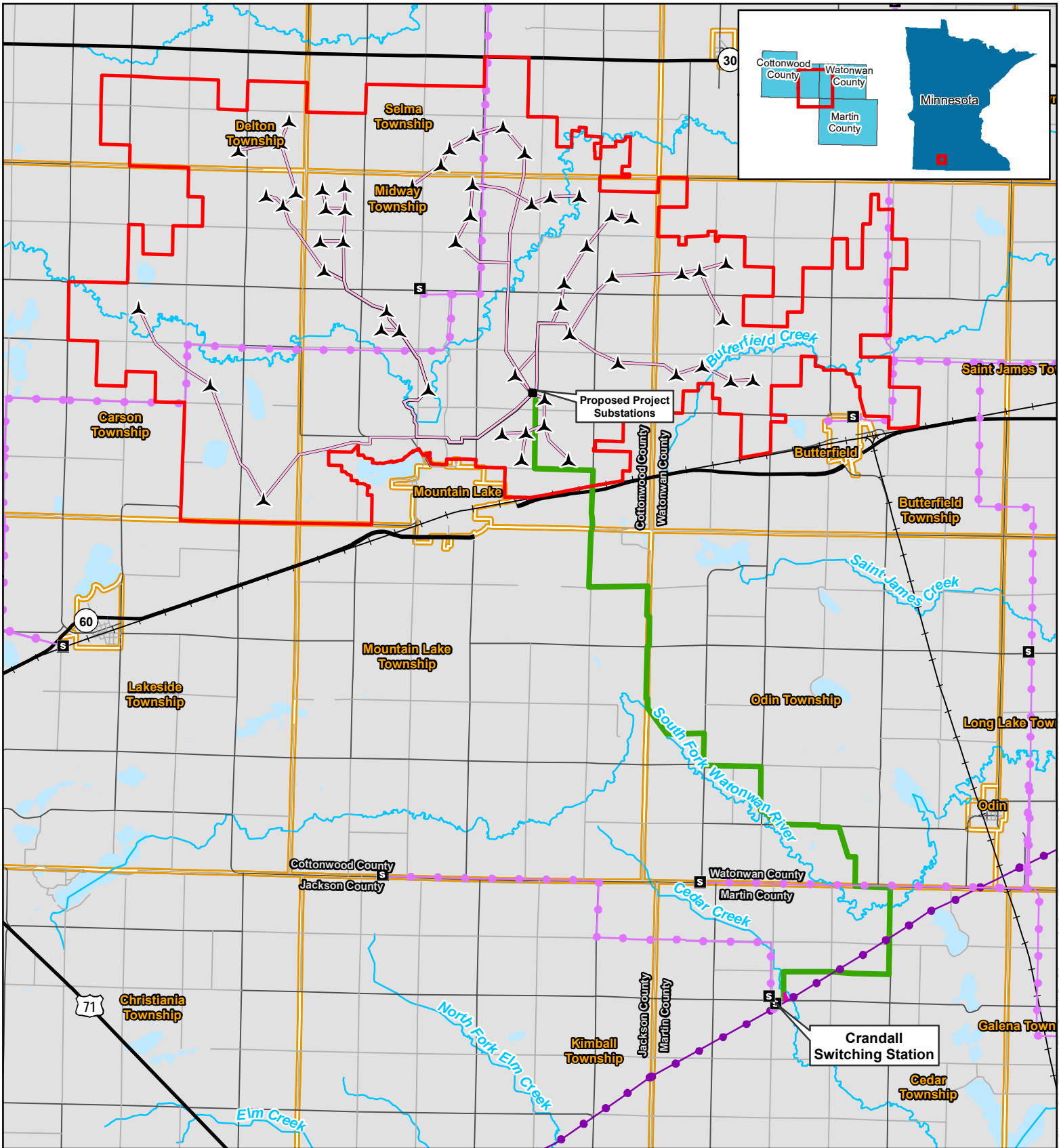
EERA recommends the following system alternatives for inclusion in the Scoping Decision.

- 335 MW solar facility (with no wind component)
- 335 MW hybrid project wind energy and solar energy
  - with no proposed turbines placed within 8 miles of the Jeffers Petroglyphs site
  - lost wind generation capacity will be replaced with additional solar
- 335 MW hybrid project wind energy and solar energy
  - with no proposed turbines placed within 10 miles of the Jeffers Petroglyphs site
  - lost wind generation capacity will be replaced with additional solar
- 335 MW hybrid project wind energy and solar energy
  - with no proposed turbines placed within 11 miles of the Jeffers Petroglyphs site
  - lost wind generation capacity will be replaced with additional solar

EERA staff understands if the Commission takes no action on the system alternatives recommended for inclusion in the scope of the EA, and does not put forward any route alternatives, route segment alternatives, or site alternatives, the Department would proceed to finalize and issue an EA scoping decision with the system alternatives as described herein. If the Commission takes action, the Department will incorporate the Commission’s input and will finalize and issue an EA scoping decision that reflects this input.

With respect to the issue of consideration of different wind turbine heights, the Commission could request the Applicant to provide additional detail and context as to the reasons for selecting the proposed turbine models, and if there would be the potential to reduce the turbines total height or select a different turbine model that is shorter than the machines proposed. This type of information is more relevant to the LWECS site permit process, which is not part of the EA.





**Figure 1**  
**Map of System**  
**Big Bend Wind, LLC**  
**Cottonwood, Watonwan and**  
**Martin Counties, Minnesota**

- ▲ Preliminary Turbine
- Existing Substation
- Collection Line
- Proposed Route
- ▭ Project Area Boundary
- ▭ Proposed Step-up Substation
- ▭ City/Township
- Existing 345 kV Transmission Line
- Existing 69 kV and 115 kV Transmission Line

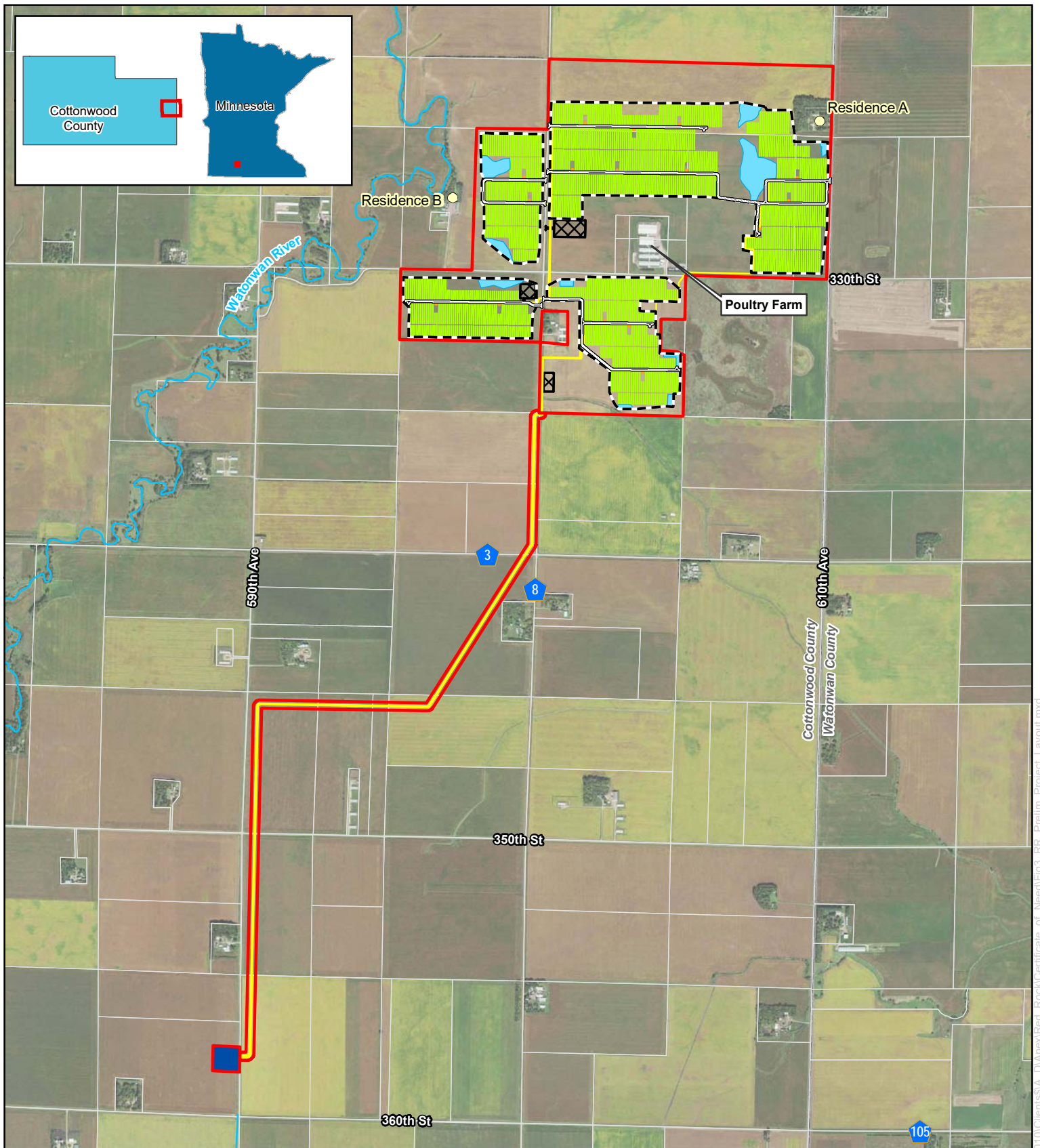
0 1 2 Miles

1:140,000

For Environmental Review Purposes Only







0 0.3 0.6 Miles

1:29,000



For Environmental Review Purposes Only



**Figure 3**  
**Preliminary Project Layout**  
**Red Rock Solar, LLC**  
**Cottonwood County, Minnesota**

- Residence on Solar Development Parcel
- Collection Line
- Project Boundary
- Access Road
- Security Fence
- Inverter
- Solar
- Project Substation
- Laydown
- Stormwater Basin
- Parcel Boundary
- NHD Stream (Perennial)

Date: (11/6/2020) Source: \\MOUNT-SRV010\Clients\A\_D\Apex\Red\_Rock\Certificate\_of\_Need\fig3\_RR\_Prelim\_Project\_Layout.mxd