

# OF THE STATE OF SOUTH DAKOTA

# IN THE MATTER OF THE APPLICATION BY PREVAILING WIND PARK, LLC FOR A PERMIT FOR A WIND ENERGY FACILITY IN BON HOMME, CHARLES MIX, AND HUTCHINSON COUNTIES, SOUTH DAKOTA, FOR PREVAILING WIND PARK ENERGY FACILITY

**SD PUC DOCKET EL-18-026** 

PREFILED REBUTTAL TESTIMONY OF PETER PAWLOWSKI
ON BEHALF OF PREVAILING WIND PARK, LLC

September 26, 2018

#### I. INTRODUCTION

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- 3 Q. Please state your name.
- 4 A. My name is Peter Pawlowski.

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- 6 Q. Did you provide Direct Testimony in this Docket?
- 7 A. Yes. I submitted Supplemental Direct Testimony on August 10, 2018.

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- 9 Q. What is the purpose of your Rebuttal Testimony?
- 10 A. The purpose of my Rebuttal Testimony is to: (1) provide an update regarding the
- 11 Project's county-level permits; (2) provide an update regarding the specifications of
- the GE 3.8-137 wind turbine model that Prevailing Wind Park, LLC ("Prevailing Wind
- Park") proposes to use for the Project; and (3) respond to the testimony of Darren
- 14 Kearney on behalf of South Dakota Public Utilities Commission ("Commission") Staff
- with respect to setbacks, the shadow flicker commitment, and decommissioning
- funding for the Prevailing Wind Park Project ("Project").

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#### II. LOCAL PERMITTING UPDATE

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- 20 Q. In your Supplemental Direct Testimony, you provided an update regarding the status of the Project's local permitting. Do you have further updates?
- A. Yes. The current permitting status in each county where Project facilities are proposed is as follows:
  - Bon Homme: Bon Homme County granted a Large Wind Energy System approval for the Project on August 21, 2018.
    - Hutchinson: Hutchinson County granted conditional use approvals for the Project on September 4, 2018.
  - <u>Charles Mix</u>: As I discussed in my Supplemental Direct Testimony, the Project received building permits in July 2018, and Prevailing Wind Park has worked with Charles Mix County to address any concerns regarding the Project.

In addition, Prevailing Wind Park is also constructing a substation and 115 kilovolt transmission line that will interconnect the Project with the transmission system and is in the process of seeking appropriate approvals from Yankton County and Bon Homme Counties.

#### III. TURBINE MODEL SPECIFICATIONS

# Q. Do you have any updates to the turbine model specifications that PrevailingWind Park proposes to use for the Project?

A. Yes. As stated in Prevailing Wind Park's response to Staff Data Request ("DR") 1-3,
Prevailing Wind Park has selected the GE 3.8-137 wind turbine model for the
Project. While Table 8-3 in the Project's Application for a Facility Permit indicated
that the hub height of this turbine model would be 110 meters (586 feet), Prevailing
Wind Park has chosen to use a taller hub for the turbine. The taller hub height is
111.5 meters (590 feet, 5.5 inches).

## Q. Why did Prevailing Wind Park select a taller hub?

A. By increasing the hub height from 110 meters to 111.5 meters, the turbine can house the transformer within the turbine tower. With the 110-meter hub, the transformer must be placed on a base external to the turbine tower. Thus, the slight increase in height 1.5 meters (4.9 feet) enables Prevailing Wind Park to use an internal – rather than external – transformer.

## Q. Have any of the other turbine model specifications changed?

56 A. No.

# Q. With the increased hub height, does the Project still comply with all applicable requirements and Prevailing Wind Park's prior commitments?

A. Prevailing Wind Park has confirmed that, with one exception, the layout using the updated turbine height will comply with all highway and property line setbacks. For one turbine location, T28, the turbine location was adjusted 10 feet to the west to

meet the property line setback requirement. Bridget Canty describes this move and two smaller moves in her Rebuttal Testimony.

Prevailing Wind Park also conducted updated noise and shadow flicker modeling with the taller hub. The results of that analysis show that for noise, as described in Chris Howell's Rebuttal Testimony, the modeled level at occupied residences remains below 43 A-weighted decibels ("dBA") as stated in the Application. The highest predicted level at an occupied residence is 41.9 dBA.

The updated shadow flicker analysis is described in Aaron Anderson's Rebuttal Testimony and discussed further below.

#### IV. RESPONSE TO TESTIMONY OF DARREN KEARNEY

## A. <u>Setbacks</u>.

# Q. Mr. Kearney discusses Intervenors' comments regarding a 2-mile setback from non-participating residences. What is your response?

A. I agree with Mr. Kearney that there is no evidence supporting a 2-mile setback for the Project. Rather, as Applicant's witnesses' testimony demonstrate, the Project meets the Commission's siting requirements applying the current setbacks, as well as Prevailing Wind Park's voluntary commitments.

Further, I agree with Mr. Hessler's observation that a 2-mile setback would have the effect of leaving few or no viable locations for turbines, making it impossible to site most projects. (Hessler Direct at 5-6.) A setback of this distance would effectively eliminate the ability to develop a wind farm in the Project area.

- 91 Q. Mr. Kearney also discusses Intervenors' comments regarding a 1,500 foot 92 setback from property lines. What is your response?
- A. For the same reasons noted in response to the prior question, I agree with Mr.

  Kearney that there is no evidence supporting such a setback. Scott Screech

  addresses this setback in more detail in his Rebuttal Testimony.

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### B. Shadow Flicker Commitment.

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- Q. Mr. Kearney states that "Staff has one concern regarding shadow flicker that
   is expected to occur at a nonparticipant (receptor REC-076)." Has Prevailing
   Wind Park reviewed this issue?
- 102 A. Yes. As an initial matter, I note that Prevailing Wind Park has committed to shadow 103 flicker being less than 30 hours per year and/or 30 minutes per day at currently 104 inhabited, non-participating residences in Charles Mix County. Mr. Kearney 105 correctly notes that the initial modeling for Charles Mix County REC-076 in the 106 Application estimated more than 30 hours of shadow flicker per year. The updated 107 shadow flicker modeling conducted for the current turbine specifications and with the 108 additional receptors indicates that REC-076 remains the only non-participant 109 residence expected to experience more than 30 shadow flicker per year with 33.82 110 hours per year. (See also the Rebuttal Testimony of Aaron Anderson and the 111 Rebuttal Testimony of Bridget Canty.) There are also six other non-participants in 112 Charles Mix County for which shadow flicker is modeled at more than 30 minutes 113 per day.

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Prevailing Wind Park will be installing turbine control equipment on the Project's turbines that will allow for shutting down individual turbines as necessary to ensure that the shadow flicker experienced by the non-participant receptors does not exceed the levels committed to by Prevailing Wind Park.

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## C. Decommissioning Fund.

- Q. Mr. Kearney states that "one permit condition that Prevailing Wind Park and Staff may differ on is the amount of funding required to be set aside in an escrow account for the decommissioning of wind turbines." Has Prevailing Wind Park proposed a permit condition related to a decommissioning fund?
  - A. Yes. After reviewing Mr. Kearney's testimony, Prevailing Wind Park has determined that it will propose a decommissioning condition consistent with the Staff's recommendation. Specifically, Prevailing Wind Park proposes the following condition:

At least 30 days prior to the start of construction, or as otherwise approved by the Commission, Applicant shall submit an escrow plan for Commission approval that is consistent with the escrow plan approved by the Commission in In the Matter of the Application by Crocker Wind Farm, LLC for a Permit of Wind Energy Facility and a 345 kV Transmission Line in Clark County, South Dakota, for Crocker Wind Farm, Docket EL17-055, Order Approving Escrow Plan (August 3, 2018).

Pursuant to the escrow plan, the escrow account shall be funded by the Applicant annually at a rate of \$1,718 per turbine for a period of 30 consecutive years.

If the Applicant fails to execute the decommissioning requirement found in this Section \_\_\_\_ of the Conditions, the account is payable to the landowner as the landowner incurs and pays decommissioning costs.

The level of funding proposed in the above condition is based on the no resale cost estimate provided in the Decommissioning Cost Analysis prepared by DNV GL for the Project. (See the Supplemental Direct Testimony of Daniel Pardo, Exhibit 2.)

153 V. CONCLUSION

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155 Q. Does this conclude your Rebuttal Testimony?

156 A. Yes.

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158 Dated this 26th day of September, 2018.

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Peter Pawlowski

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