

**BEFORE THE PUBLIC UTILITIES COMMISSION
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 AARON ANDERSON
ON BEHALF OF PREVAILING WIND PARK, LLC**

September 26, 2018

1 **I. INTRODUCTION**

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3 **Q. Please state your name.**

4 A. My name is Aaron Anderson.

5

6 **Q. Did you provide Direct Testimony in this Docket?**

7 A. Yes. I submitted direct testimony in this docket on May 30, 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 provide an updated shadow flicker
11 analysis to reflect a taller hub height for the proposed turbine and to model shadow
12 flicker at nine (9) additional occupied residences that were identified in Prevailing
13 Wind Park, LLC's re-review of residences within and near the Prevailing Wind Park
14 Project area, as described in Bridget Canty's Rebuttal Testimony.

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16 **Q. What exhibits are you attaching to your Rebuttal Testimony?**

17 A. Exhibit 1: Results of Updated Shadow Flicker Analysis.

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19 **II. SHADOW FLICKER ANALYSIS UPDATE**

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21 **Q. Please describe the updates reflected in the updated shadow flicker analysis.**

22 A. There are two updates reflected in my updated shadow flicker analysis. First, the
23 analysis uses the GE 3.8-137 wind turbine with the 111.5 meter hub height in place
24 of the 110 meter hub height. Second, the analysis evaluates shadow flicker on 146
25 occupied residences. This includes the original 137 residences and the nine (9)
26 additional residences identified during the September 2018 field review.

27

28 **Q. What are the results of your analysis?**

29 A. Attached as Exhibit 1 is a table showing the full results of my analysis. For summary
30 purposes, a table identifying receptors that were modeled to exceed the shadow
31 flicker commitments made by Prevailing Wind Park is included below. For a

32 discussion of mitigation that Prevailing Wind Park will undertake with respect to
33 shadow flicker, see the Rebuttal Testimony of Peter Pawlowski.

34

Summary of Shadow Flicker Results				
Receptor Name	Flicker Duration [hour/year]	Flicker Duration [max minutes/day]	Participating Status	County Name
076	33.90	51	Non-Participating	Charles Mix
017	19.87	40	Non-Participating	Charles Mix
024	6.20	31	Non-Participating	Charles Mix
031	6.43	31	Non-Participating	Charles Mix
070	8.80	36	Non-Participating	Charles Mix
112	5.37	31	Non-Participating	Charles Mix
149	7.35	31	Non-Participating	Charles Mix

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36 **III. CONCLUSION**

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38 **Q. Does this conclude your Rebuttal Testimony?**

39 A. Yes.

40 Dated this 26th day of September, 2018.

41 *Aaron Anderson*

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43 Aaron Anderson

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