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 OF A WIND ENERGY FACILITY IN BON HOMME COUNTY, CHARLES MIX COUNTY AND HUTCHINSON COUNTY, SOUTH DAKOTA, FOR THE PREVAILING WIND PARK PROJECT

KELLI PAZOUR, INTERVENORS POST-HEARING BRIEF

EL 18-026

I, Kelli Pazour, Intervenor, hereby submit this post-evidentiary hearing brief requesting the Commission deny the application of Prevailing Wind Park, LLC for a permit to construct a Wind Energy Conversion Facility in Bon Homme County, Charles Mix County and Hutchinson County of South Dakota, or alternatively, approve the Application with the below-referenced conditions.

INTRODUCTION

SDCL 49-41B-22 provides that Prevailing Wind Park, LLC (Applicant) has the burden of proof to establish that: 1) The proposed facility will comply with all applicable laws and rules; 2) The facility will not pose a threat of serious injury to the environment nor to the social and economic condition of inhabitants or expected inhabitants in the siting area; 3) The facility will not substantially impair the health, safety or welfare of the inhabitants; and 4) The facility will not unduly interfere with the orderly development of the region with due consideration having been given the views of governing bodies of affected local units of government.

As the applicant, Prevailing Winds Park shoulders the burden of proof to establish its proposed project satisfies the provisions of SDCL 49-41B-22. Intervenors and non-participating land

owners shoulder no burden. There remains a question as to whether the proposed project complies with SDCL 49-41B-22 and the permit application must be denied. I respectfully request the Commission deny Prevailing Wind Park's permit application.

Alternatively, I request the Commission impose the following conditions if the permit application is approved:

- 35 dBA nighttime noise limit for non-participating residences;
- 2 mile setback from non-participating residences;
- 1,500 foot setback from property lines and rights-of-way;
- No shadow flicker be permitted on non-participating residences; and
- These conditions/restrictions may be waived by any non-participating landowner.

FINDINGS

- 1) Figure 9 of Appendix A of the Application for Permit indicates that the land directly across the road from Mr. Jerome Powers is "Land used primarily for row or non-row crops in rotation". Mr. Powers testified that the land is in fact pristine native grasslands. How does Applicant intend to protect native prairie remnants to the extra practicable if it has not properly identified them all?
- 2) The annual taxes paid to local county governments and school districts listed in Section 20.1.2.1 of the Application amount to pennies on the acre.
- 3) Section 20.1.2.2 of the Application states "The Applicant anticipates that there would not be sufficient trained local labor to fill the number of jobs available." and "The Project would have a less than significant impact on overall population and occupation distribution."

- 4) Apart from the numbers presented in Table 8.3 of Section 8.2 of the Application, there is no evidence that residents of the project area or the general public comprehend the enormity of the physical size of the turbines proposed for the project, nor their size or power output relative to the existing wind turbines in the area.
- 5) At the time of the evidentiary hearing not all environmental assessments and impact studies were complete.
- 6) A question answered by Dr. Roberts indicates that there are negative peer reviews of peerreviewed literature used as exhibits by him.
- 7) Literature reviewed by Dr. Roberts suggested that further study should be conducted on the relationship between wind turbine noise and human health.
- 8) There was no evidence that habituation to the annoyance caused by the nature of the sound produced by wind turbines will occur as opposed to the sensitization that is occurring as testified to by multiple witnesses.
- 9) Mr. Howell admitted that the ISO 9613-2 model for sound projections is not validated for heights above 30 meters, so extrapolation is used on top of calculations to determine projections for taller sound sources and ISO 9613-2 remains "the industry standard" despite newer and more accurate models being available.

- 10) A ground effect factor of .5 was used in the ISO 9613-2 calculations. Mr James testified that a factor of 0 was needed to accurately reflect the louder conditions occurring over frozen and ice covered winter time ground.
- 11) There were no Applicant witnesses who have experience working, living and sleeping 24/7/365 at distances of less than 2 miles from an operating wind power facility.
- 12) Mr. Hessler testified that the Cooper study had convinced him that inaudible sound levels are affecting some people living near wind energy facilities
- 13) Mr. Hessler suggested that this project could meet a 40 dBA limit.
- 14) Mr. Hessler testified that a study gauging community response to the noise impact of a project should be part of a sound study.
- 15) Mr. James testified that sound pressure levels of 45 dBA are especially annoying in rural areas where there is an expectation of quiet.
- 16) Mr. James testified to the measurability of infrasound.
- 17) Dr. Punch recognized that the World Health Organization was reviewing noise standards especially in regards to wind turbines as the hearing was underway.

- 18) Mr. Powers testified that at least one local business will be affected by loss of leases of land in the project area.
- 19) Testimony was presented that local government officials have insufficient background, knowledge and unbiased information to make difficult decisions regarding regulations concerning wind energy facilities.
- 20) Testimony was presented that some local governments are unable to regulate development within their jurisdiction because of social and inter-governmental body issues.
- 21) Multiple witnesses testified to the fragmentation of the social fabric of the project area that is taking place.
- 22) Residents and landowners who were not contacted by Applicant prior to the application being filed were expected to take the initiative and approach Applicant representatives at county meetings after the filing in hopes of receiving information about their concerns.
- 23) The project is proposed for an area with a history of icing issues.
- 24) Multiple witnesses testified to the adverse effects they experience working, living and sleeping 24/7/365 within distances of .75 to 2 miles of operating wind energy facilities.

- 25) There was no evidence or rationale presented for subjecting unwilling residents of the project to any level of shadow flicker trespass on their own property.
- 26) There was no evidence or rationale presented for the establishment of the "industry standard" of 30 minutes per day and 30 hours per year of shadow flicker trespass.
- 27) There was no evidence or rationale presented for subjecting unwilling residents to the noise trespass on their own property of increasing the ambient sound pressure levels by 10 to 15 dBA or more.

Prevailing Winds Park Failed to Prove that the Sound Generated by the Proposed Project Will Not Substantially Impair the Health and Welfare of the Inhabitants

During the evidentiary hearing several expert witnesses stated that wind turbines create different types of sound. The most obvious and readily perceivable type of sound is audible sound. Audible sound generated from turbines can impact inhabitants as well as disrupt their sleep if not adequately regulated. In addition to audible sound, wind turbines produce infrasound and low-frequency noise. This sound has the ability to affect people as well and is most concerning.

Due to these concerns, I request a condition be placed on the project imposing a 2 mile setback from non-participating residences.

Greater Setbacks from Property Lines and Rights-of-Way are needed to protect the residents.

Currently there is only a 1.1 times the height of the turbines setback for road ways. I drive my children and myself throughout the proposed wind turbine area. Prevailing Winds did not

provide any evidence that the residents who work in adjacent property areas and use the roads

would be safe in case of turbine malfunction or ice throw.

Shadow Flicker Should Not Be Permitted On Any Non-Participating Residence

During the hearing no representative or expert witness for the Prevailing Winds Project

could justify or show any scientific evidence that state 30 hours/year and 30 minutes/day were

considered not harmful to residence in their home. They were also not able to identify the

difference in shadow flicker impacts inside a residence or outside of a residence and if the impact

would be different or the same.

CONCLUSIONS

I respectfully request that the Public Utilities Commission deny the permit for the Prevailing

Wind Park, LLC project.

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November 13, 2018

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