

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**EL18-026 - 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**

*** APPLICANT’S UPDATED RESPONSES
* TO STAFF’S DATA REQUESTS NOS. 2-
* 13, 2-14 and 2-16
* EL18-026
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Below please find Applicant’s Updated Responses to Staff’s Data Requests Nos. 2-13, 2-14 and 2-16 to Applicant.

2-13) Referring to the Sound Study (Appendix M), would it be necessary to include the existing Beethoven Wind Project in the model to capture the cumulative noise impacts to receptors in or near the Project Area? If not, please explain why.

Chris Howell: I performed an analysis of the sound created by the Beethoven Wind Project turbines and the Prevailing Wind Park, which is enclosed as Attachment 2-13. The Analysis shows that the modeled sound from the existing Beethoven Wind farm exceeds 45 dBA at one receptor – REC 129. The modeled sound for REC 129 from the Beethoven Wind Farm is 46.2 dBA. When the two wind farms are modeled together, the sound at REC 129 is 46.3 dBA, showing that the Project would contribute only .1 dBA of sound. This added amount is acoustically negligible.

Updated Response (Chris Howell): After responding to this data request, Prevailing Wind Park decided to use a taller hub height for the GE 3.8-137 turbine and identified nine additional occupied residences in the Project area. I have reviewed my analysis in Attachment 2-13 and confirm that the predicted sound levels would be no greater than modeled in that analysis. The taller hub height results in similar or slightly lower sound levels at receptors due to the increased distance between the nacelles and receptors.

2-14) Referring to the Shadow Flicker Study (Appendix N), please explain if shadow flicker from the Beethoven project wind turbines in addition to the Prevailing Wind Park wind turbines could cause receptors to experience greater than 30hrs of shadow flicker per year.

Aaron Anderson: No. I evaluated shadow flicker at the Beethoven project wind turbines and the Prevailing Wind Park. No receptor that will experience shadow flicker from the Prevailing Wind Park would also experience shadow flicker from the Beethoven project.

Updated Response (Aaron Anderson): After responding to this data request, Prevailing Wind Park decided to use a taller hub height for the GE 3.8-137 turbine and identified nine additional

occupied residences in the Project area. I assessed shadow flicker within 10 rotor diameters of the GE 3.8-137 with the taller hub height and confirmed that there was no receptor that would experience shadow flicker from the Prevailing Wind Park and shadow flicker from the Beethoven project.

2-16) What is the modeled noise level and shadow flicker at the Gramkow-Vesper Cemetery located at the intersection of 409th Ave. and 298th St. near turbine 35?

Chris Howell: The noise level of the Project at the Gramkow-Vesper Cemetery is 43.2 dBA for the GE 3.8-137 model.

Aaron Anderson: The shadow flicker level of the Project at the Gramkow-Vesper Cemetery is approximately 5 hours per year for the GE 3.8-137 model.

Updated Responses (Aaron Anderson for shadow flicker and Chris Howell for sound): The following cemeteries were identified in the Project area. The predicted sound and shadow flicker levels are provided in the table below and are based on the GE 3.8-137 model with the 111.5 – meter hub height.

Name	ID	dBA	Shadow Flicker hours/year
Zion Cemetery (REC-119)	DK-09	29.7	0.00
New Salem Cemetery (REC-152)	DK-15	-	0.00
St. Paul’s Cemetery (REC-153)	DK-18	20.8	0.00
Name not shown on maps. (REC-151)	DK-35	42.0	Approximately 18
Zion Cemetery (REC-150)	DK-36	42.6	Approximately 30
Presbyterian-Bohemian Cemetery (REC-149)	DK-69	33.8	7.35
Gramkow-Vesper (REC-140)	JK-22	43.2	5.27
Danzig Cemetery (REC-111)	JK-59	30.7	0.00

Dated this 8th day of October, 2018.

By: /s/ Lisa M. Agrimonti

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