

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

**IN THE MATTER OF THE
APPLICATION OF SWEETLAND
WIND FARM, LLC FOR FACILITY
PERMITS FOR A WIND ENERGY
FACILITY AND A 230-KV
TRANSMISSION FACILITY IN HAND
COUNTY, SOUTH DAKOTA FOR THE
SWEETLAND WIND FARM PROJECT**

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**APPLICANT’S RESPONSES TO
STAFF’S FIRST SET OF DATA
REQUESTS TO APPLICANT**

EL19-012

Below, please find Applicant’s responses to Staffs First Set of Data Requests to

Sweetland Wind Farm, LLC (“Applicant”).

- 1-1) Provide copies of all data requests submitted by any intervenor to you in this proceeding and copies of all responses to those data requests. Provide this information to date and on an ongoing basis.

Mollie Smith: None at this time. Sweetland will provide copies of data requests from other parties, if received.

- 1-2) Provide copies of all pleadings in any civil appeal associated with the county permit(s) related to this project.

Mollie Smith: None.

- 1-3) Confirm that the setbacks accounted for section line roads, which are defined as public highways pursuant to state law.

Mark Wengierski: Yes, this statement is accurate.

- 1-4) Do the studies submitted with the Application, including but not limited to shadow and noise studies, account for the cumulative impact any other existing or planned project in the area?

Mark Wengierski: As stated on page 10-4 of the Application, “[t]here are no other operating energy conversion facilities, existing or under construction, or other major industrial facilities under regulation by the Commission within or adjacent to the Project Area. . . . Given the lack of energy conversion facilities in the vicinity of the Project, and the distance of existing wind energy facilities from the Project, construction and operation of the Project would not result in cumulative effects on resources, as addressed in ARSD 20:10:22:13.” The closest existing wind farm is approximately 11.5 miles from the Project.

- 1-5) Has Applicant applied to the FAA for approval to utilize ADLS technology? Provide copies of agency communication.

Mark Wengierski: No, not at this time.

- 1-6) Provide a copy of the contract/land use agreement signed by landowners, as well as any contracts that differ from the standard contract.

Mark Wengierski: See Attachments 1-6(A) and 1-6(B), which are being provided confidentially. Public versions may be provided if requested.

- 1-7) On page 2-1 the Applicant states it offers a “good neighbor” contract, provide a sample contract.

Mark Wengierski: See Attachment 1-6(B), which has been provided confidentially. A public version may be provided if requested.

- 1-8) Did Applicant base its 30 hour per year shadow flicker limit on any factor other than county ordinance? If so, provide support.

Mark Wengierski: As discussed in Section 2.3, Table 9-1, and Section 15.5 of the Application, Hand County’s ordinance does not include shadow flicker limits, and the Project is a permitted use in Hand County. The Applicant’s Development Agreement with Hand County limits shadow flicker from Project wind turbines at currently occupied residences to 30 hours per year or less, unless waived in writing by the owner of the occupied residence. Thus, the 30 hours per year limit is established in the Development Agreement. The 30 hours per year limit is also consistent with industry standards, including limits approved by the PUC in prior dockets.

- 1-9) Have all four participants that may exceed the 30 hour per year shadow flicker limit signed waiver agreements? If not, when will these waiver agreements be signed?

Mark Wengierski: Sweetland has determined that it will not construct Turbine No. 43, and has confirmed that, as a result, the expected shadow flicker level at receptor 6 is below 30 hours per year. In addition, Sweetland has determined through further field verification that receptor 43 is not an occupied residence. As a result, Sweetland will only need to obtain two waivers. Sweetland plans to present the shadow flicker waiver agreements to the two participating landowners in the near future, and will address the waivers further in Supplemental Testimony.

- 1-10) Provide an update on any pending easements in the project area. When will these easements be signed?

Mark Wengierksi: As discussed in the letter filed on April 24, 2019, Sweetland is in the process of securing three Good Neighbor Agreements and one amendment to an existing Wind Energy Lease and Easement Agreement, as identified in the revised Figure A-2.

Sweetland expects to have the agreements finalized soon, and will address the status of the agreements further in Supplemental Testimony. Sweetland only knows of the four agreements needed for the out-lots identified in the revised Figure A-2. Sweetland continues to do title curative and plans to secure additional agreements, if needed.

1-11) What capacity factor was assumed when calculating the predicted tax revenue?

Mark Wengierski: Please see the response provided as Attachment 1-11, which is being provided confidentially.

1-12) Have any landowners waived the maximum dBA requirement? If not, when will these waiver agreements be signed?

Mark Wengierski: Based on the sound modeling analysis conducted for the Project (Appendix L to the Application), no such waivers will be needed.

1-13) For what reason did Hand County desire to have the PUC complete its process before the county issued a CUP?

Mark Wengierski: To clarify, and as stated in Section 2.3 of the Application, the Wind Farm is a permitted use in Hand County, so no CUP is required for the Wind Farm. A CUP is required only for the Project substation and switchyard. Sweetland is not aware of the specific reason that Hand County requested that those CUPs be obtained after the Commission's process.

1-14) Provide an update on when Applicant will have a pole type selected for the transmission line?

Mark Wengierski: Sweetland has not yet selected a pole type for the transmission line and will provide an update when it has done so.

1-15) Refer to Figure A-2. Confirm that "Karen Haigh" is actually "non-participating" as shown in the middle of the project area when to the south "Clinton & Karen Haigh" are listed as "participating".

Mark Wengierski: Yes, the parcels owned by Clinton and Karen Haigh are under lease, but the parcel owned by Karen Haigh was not included in the lease agreement.

1-16) Provide a status update on the remaining 32% of the APE surveys remaining.

Mark Wengierski and Doug Shaver: The remaining cultural field surveys are anticipated to be completed by June 7, weather permitting. The report will then take a few weeks to finalize.

- 1-17) Refer to page 8-5 of the application. Has Sweetland picked a final O&M Facility location. If so, which location was chosen? If not, when will a final decision be made?

Mark Wengierski: Sweetland is still analyzing the location of the O&M Facility, and the final location will not be selected until after geotechnical analysis is performed. That geotechnical analysis is considered an interim action by WAPA, and Sweetland will work with WAPA to obtain approval to do such work.

- 1-18) Refer to page 8-6 of the application. Provide Specific location of the 4 meteorological towers.

Mark Wengierski: As with the O&M Facility, the location of the met towers for the Project is dependent upon geotechnical analysis and selection of the final turbine locations. See Response to DR 1-17.

- 1-19) Also, on page 8-6 of the application, provide the decision, if made, on how the company will mount each transformer either at the base of the turbine, in the nacelle, or within the tower. If a determination hasn't been made, when will Sweetland finalize that portion of the construction layout?

Mark Wengierski: Sweetland proposes to use General Electric turbines for the Project. General Electric turbines have a pad mount transformer.

- 1-20) Refer to page 8-13, explain when the Noxious and Invasive Weed Management Plan will be completed. If already completed, provide a copy of the plan.

Mark Wengierski: Consistent with our experience on other projects, Sweetland will have a completed Plan before the start of construction.

- 1-21) Refer to page 8-16, which of the two locations for the temporary laydown yard has the company chosen? If a decision has not been made, when will the company make a decision?

Mark Wengierski: The final locations of laydown yards will be made once the location of the O&M Facility is determined. See Response to DR 1-17.

- 1-22) Refer to page 11-9, when does Sweetland anticipate the SWPPP will be completed?

Carrie Barton: The SWPPP will be completed prior to construction; the SWPPP is related to construction activities and the SDDENR permits for which it is required, which are required before construction begins.

- 1-23) Refer to pages 13-9 and 13-10, provide the results for Year 2 of the Avian surveys when it becomes available.

Todd Mabee: Year 2 avian surveys are anticipated to be completed this spring, with data analysis completed and preliminary results available by late July.

- 1-24) Refer to page 15-4, do the NRCS Grassland Reserve program parcel easements allow wind turbines or transmission towers to be built on them while under contract with the NRCS?

Mark Wengierski: Yes, but NRCS and landowner approval is required. Sweetland will coordinate with the NRCS and landowners, as needed, to secure approval.

- 1-25) Refer to page 19-1, provide an updated completion dates in the chart. If completion dates have been missed or moved out explain why.

Mark Wengierski: Due to ongoing title curative work, land acquisition may extend into Q3 2019. See Response to DR 1-10.

- 1-26) Refer to page 27-2, when will the final design of the project be completed?

Mark Wengierski: As discussed in Section 2.6 of the Application, “[f]inal micro-siting of Project facilities will continue to occur between now and summer 2019, based on the Phase I Environmental Site Assessment; remaining wetland and waterbodies evaluations, cultural and tribal resource surveys, and geotechnical analysis; and final engineering design.”

- 1-27) ARSD 20:10:22:11 requires that a map be filed that includes places of historical significance and transportation facilities. Provide a map showing the locations of these items or confirm that no places of historical significance or transportation facilities are located in the project area.

Carrie Barton: Roads are shown on Figures A-1 and A-5. There are no historical markers or public historical sites in the Project Area.

- 1-28) Refer to ARSD 20:10:22:12, provide the following:

- a. The general criteria used to select alternative sites, how these criteria were measured and weighed, and reasons for selecting these criteria;

Mollie Smith and Mark Wengierski: Please refer to Sections 9.1 and 9.2 of the Application, which discuss the criteria that were considered when selecting the proposed Project site. All criteria were equally important to the decision making process, as they are the key criteria used in selecting a wind project site.

- b. An evaluation of alternative sites considered by the applicant for the facility

Mollie Smith: Please refer to Sections 9.1 and 9.2 of the Application.

- 1-29) Refer to ARSD 20:10:22:14, provide “(8) An analysis of any constraints that may be imposed by geological characteristics on the design, construction, or operation of the proposed facility and a description of plans to offset such constraints.”

Mollie Smith: Please refer to Chapter 11.0 of the Application, in particular, the first sentence of Section 11.1.2.1.

- 1-30) Refer to ARSD 20:10:22:15, provide the following:

- a. A map drawn to scale of the plant, wind energy, or transmission site showing surface water drainage patterns before and anticipated patterns after construction of the facility;

Mollie Smith: Please see Figure A-9 in Appendix A of the Application. Additionally, as discussed in Section 12.2.2 of the Application, the Project is not anticipated to result in changes to existing drainage patterns in the Project Area.

- b. A map drawn to scale locating any known surface or groundwater supplies within the siting area to be used as a water source or a direct water discharge site for the proposed facility and all offsite pipelines or channels required for water transmission;

Mark Wengierski: As discussed on page 12-7 of the Application, Sweetland's preference is to utilize Mid-Dakota Rural Water System's water distribution system, and Sweetland plans to coordinate to locate and map the network of distribution lines within the Project Area and determine if a rural water supply connection is necessary for the Project. The location of any potential connection pipe would then be determined in coordination with Mid-Dakota Rural Water System. Water resources within the Project Area are shown on Figure A-9.

- c. If aquifers are to be used as a source of potable water supply or process water, specifications of the aquifers to be used and definition of their characteristics, including the capacity of the aquifer to yield water, the estimated recharge rate, and the quality of ground water;

Mark Wengierski: If the Project is able to utilize the Mid-Dakota Rural Water System, aquifers will not be used.

- 1-31) Refer to ARSD 20:10:22:18(1) and page 15-2 of the application. 20:10:22:18(1) requires a map noting all noise sensitive land uses and page 15-2 states that there are identified noise sensitive land uses in the project area yet the maps in appendix A do not identify where these noise sensitive locations are. Provide a map detailing the locations of each noise sensitive land use location in the project area.

Mollie Smith: The “noise sensitive land uses” are the residences identified in Figure 5-2 of Appendix L.

- 1-32) Refer to ARSD 20:10:22:23, provide a forecast of the impact on population, income, occupational distribution, and integration and cohesion of communities.

Mollie Smith: As described in Sections 20.1.2, 20.2.2, 20.3.2, and 20.4.2, and Chapter 21.0 of the Application, no negative impacts from the Project are anticipated to the specified items; rather, the Project is anticipated to result in positive impacts.

- 1-33) Refer to Appendix L of the Application, Sound Study, Figure 5-2. Has the Applicant discussed the Project with the property owners of receptors 8 and 11? If yes, please provide the following information:

Mark Wengierski: See specific responses in subsections below.

- i) Have either property owners indicated any concerns regarding the sound associated with the Project?

Mark Wengierski: Sweetland has discussed the Project with the owner of Receptor 8, who did not identify any concerns. Sweetland has contacted the owner of Receptor 11, but has not received a response and is not aware of any concerns by that landowner.

- ii) Have either property owners indicated any concerns regarding the shadow flicker associated with the Project?

Mark Wengierski: See Response to DR 1-33(i).

- iii) Have either property owners indicated any concerns regarding the Project?

Mark Wengierski: See Response to DR 1-33(i).

- iv) Did the Applicant ask these property owners to participate in the Project? If yes, please provide the reason(s) why the property owners did not elect to participate. If no, please explain why the Applicant did not ask these landowners to participate in the Project.

Mark Wengierski: No, as these residences are outside the Project Area.

- 1-34) Refer to Appendix L of the Application, Sound Study, Figure 5-2. Please provide a revised Figure 5-2 with turbine locations 10 and 22 utilizing the GE 2.82 – 127 LNTE turbine model. Provide the expected sound level at receptors 8 and 11 with this turbine model change. Explain any challenges or additional costs from changing the turbine model at the requested locations.

Rob O’Neal and Mark Wengierski: If turbines 10 and 22 utilized the GE 2.82 - 127 LNTE turbine model, the sound modeling results are as follows:

- Receptor 8: The modeled sound level would remain 43 dBA.
- Receptor 11: The modeled sound level would change from 42 dBA to 41 dBA.

A 1 dBA change in sound level is generally unperceivable to the human ear, and the cost per turbine to add LNTE technology would be \$12,000.

- 1-35) Refer to Appendix L of the Application, Sound Study, Figure 5-2. Please provide a revised Figure 5-2 with turbine locations 9, 10, 21, and 22 utilizing the GE 2.82 – 127 LNTE turbine model. Provide the expected sound level at receptors 8 and 11 with this turbine model change. Explain any challenges or additional costs from changing the turbine model at the requested locations.

Rob O’Neal and Mark Wengierski: If turbines 9, 10, 21, and 22 utilized the GE 2.82 - 127 LNTE turbine model, the sound modeling results are as follows:

- Receptor 8: The modeled sound level would change from 43 dBA to 42 dBA.
- Receptor 11: The modeled sound level would change from 42 dBA to 41 dBA.

A 1 dBA change in sound level is generally unperceivable to the human ear, and the cost per turbine to add LNTE technology would be \$12,000.

- 1-36) Refer to Appendix L of the Application, Sound Study, Figure 5-2. Please provide a revised Figure 5-2 with turbine locations 10 and 22 eliminated. Provide the expected sound level at receptors 8 and 11 with these turbine locations eliminated.

Mark Wengierski and Mollie Smith: Sweetland does not have the information requested. Such an analysis has not been completed because the sound levels at receptors 8 and 11 comply with the sound level limit specified in the Hand County Development Agreement, which is consistent with the non-participating residence sound level limit approved by the Commission in past dockets.

- 1-37) Refer to Appendix L of the Application, Sound Study, Figure 5-2. Please provide a revised Figure 5-2 with turbine locations 9, 10, 21 and 22 eliminated. Provide the expected sound level at receptors 8 and 11 with these turbine locations eliminated.

Mark Wengierski and Mollie Smith: See Response to DR 1-36.

- 1-38) Refer to Appendix L of the Application, Sound Study, Table B-1.

- a) Please confirm there are 15 participating residences with expected Project sound levels between 46 dBA and 50 dBA.

Mark Wengierski: Yes, the statement is accurate.

- b) Please explain how the Applicant has communicated the potential sound impacts associated with the Project with the property owner(s) identified in response to subpart (a) to establish the appropriate sound expectations.

Mark Wengierski: Sweetland has discussed this topic with landowners throughout the leasing process. Many of the landowners are familiar with wind farms in the region and have not expressed a concern regarding this topic. Additionally, the sound levels to

which Sweetland has committed are at or below regulatory limits in other jurisdictions, and both the participating and non-participating sound level limits are consistent with limits approved by the Commission in past dockets.

- c) Have the participating landowners identified in subpart (a) visited a nearby wind farm to experience sound levels similar to what is predicted for this Project?

Mark Wengierski: Sweetland is not aware of whether landowners have visited other wind farms. However, there are operating wind farms in the general region of the Sweetland Project, so the landowners are likely to have (at a minimum) traveled in proximity to nearby wind farms.

- d) Has Scout Clean Energy received any noise complaints from participating landowners at other wind energy facilities that it has developed or operates when the sound level exceeds 45 dBA? If yes, please provide the number of complaints and brief description of each complaint.

Mark Wengierski: No.

- e) Does Sweetland anticipate any noise complaints from participating landowners where the Project sound level is between 46 dBA and 50 dBA? Please explain.

Mark Wengierski: No. As noted above, the sound levels to which Sweetland has committed are at or below the regulatory limits in other jurisdictions, and both the participating and non-participating sound level limits are consistent with limits approved by the Commission in past dockets.

Dated this 13th day of May, 2019.

By /s/ Mollie M. Smith

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SWEETLAND WIND FARM PROJECT**

* **APPLICANT’S UPDATED RESPONSES**
* **TO STAFF’S DATA REQUESTS**
* **1-36 AND 1-37**
* **EL19-012**
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Below, please find Applicant’s updated responses to Staff’s Data Requests 1-36 and 1-37 to Sweetland Wind Farm, LLC (“Applicant”).

1-36) Refer to Appendix L of the Application, Sound Study, Figure 5-2. Please provide a revised Figure 5-2 with turbine locations 10 and 22 eliminated. Provide the expected sound level at receptors 8 and 11 with these turbine locations eliminated.

Mark Wengierski and Mollie Smith: Sweetland objects to the request on the basis that it seeks information that was not previously in the custody or control of Sweetland; specifically, Sweetland did not have the information and incurred additional cost to conduct additional modeling and provide the requested information. Such an analysis had not been completed because the sound levels at receptors 8 and 11 comply with the sound level limit specified in the Hand County Development Agreement, which is consistent with the non-participating residence sound level limit approved by the Commission in past dockets. Sweetland further objects to the request on the grounds that the requested information is not relevant in light of the information provided in Data Requests 1-34 and 1-35 and the more conservative modeling parameters utilized by Epsilon than that of Mr. Hessler, who had been engaged by Staff in prior dockets. Without waiving the foregoing objections, Sweetland states as follows:

If turbines 10 and 22 were eliminated, the sound modeling results are as follows:

- Receptor 8: The modeled sound level would change from 43 dBA to 40 dBA under the modeling parameters utilized by Epsilon (which are more conservative (by approximately 2 dBA) than those utilized by Mr. Hessler in prior dockets).
- Receptor 11: The modeled sound level would change from 42 dBA to 39 dBA under the modeling parameters utilized by Epsilon (which are more conservative (by approximately 2 dBA) than those utilized by Mr. Hessler dockets).

See also Attachment 1-36. Sweetland does not support the removal of turbines 10 and 22 because:

- If turbines 10 and 22 were eliminated, each of the currently hosting landowners would lose the opportunity for significant income (as was testified to in the Deuel Harvest docket, six figures per turbine).
- Elimination of one or more of the specified turbines may result in other turbines in the string being eliminated, as removal of a turbine has an impact on the overall Project design.
- Elimination of one or more of the specified turbines also reduces the Project's overall number of alternative turbine locations. Since cultural and tribal resource surveys are on-going, and geotechnical analyses have not yet been completed, it is important that the Project maintain as many alternative turbine locations as possible.
- The primary turbine locations have been selected not only to meet all applicable requirements and commitments, but to maximize Project efficiency and output; thus, elimination of one or more primary turbines may affect the overall Project economics.
- There have been no complaints regarding the Project's modeled sound levels (including from the owners of Receptors 8 and 11), and the Project meets the sound level agreed upon in the Hand County Development Agreement.

- 1-37) Refer to Appendix L of the Application, Sound Study, Figure 5-2. Please provide a revised Figure 5-2 with turbine locations 9, 10, 21 and 22 eliminated. Provide the expected sound level at receptors 8 and 11 with these turbine locations eliminated.

Mark Wengierski and Mollie Smith: Sweetland objects to the request on the basis that it seeks information that was not previously in the custody or control of Sweetland; specifically, Sweetland did not have the information and incurred additional cost to conduct additional modeling to provide the information. Such an analysis had not been completed because the sound levels at receptors 8 and 11 comply with the sound level limit specified in the Hand County Development Agreement, which is consistent with the non-participating residence sound level limit approved by the Commission in past dockets. Sweetland further objects to the request on the grounds that the requested information is not relevant in light of the information provided in Data Requests 1-34 and 1-35 and the more conservative modeling parameters utilized by Epsilon than that of Mr. Hessler, who had been engaged by Staff in prior dockets. Without waiving the foregoing objections, Sweetland states as follows:

If turbines 9, 10, 21, and 22 were eliminated, the sound modeling results are as follows:

- Receptor 8: The modeled sound level would change from 43 dBA to 39 dBA under the modeling parameters utilized by Epsilon (which are more conservative (by approximately 2 dBA) than those utilized by Mr. Hessler in prior dockets).
- Receptor 11: The modeled sound level would change from 42 dBA to 38 dBA under the modeling parameters utilized by Epsilon (which are more conservative (by approximately 2 dBA) than those utilized by Mr. Hessler in prior dockets).

See also Attachment 1-37. Sweetland does not support the removal of turbines 9, 10, 21, and 22 because:

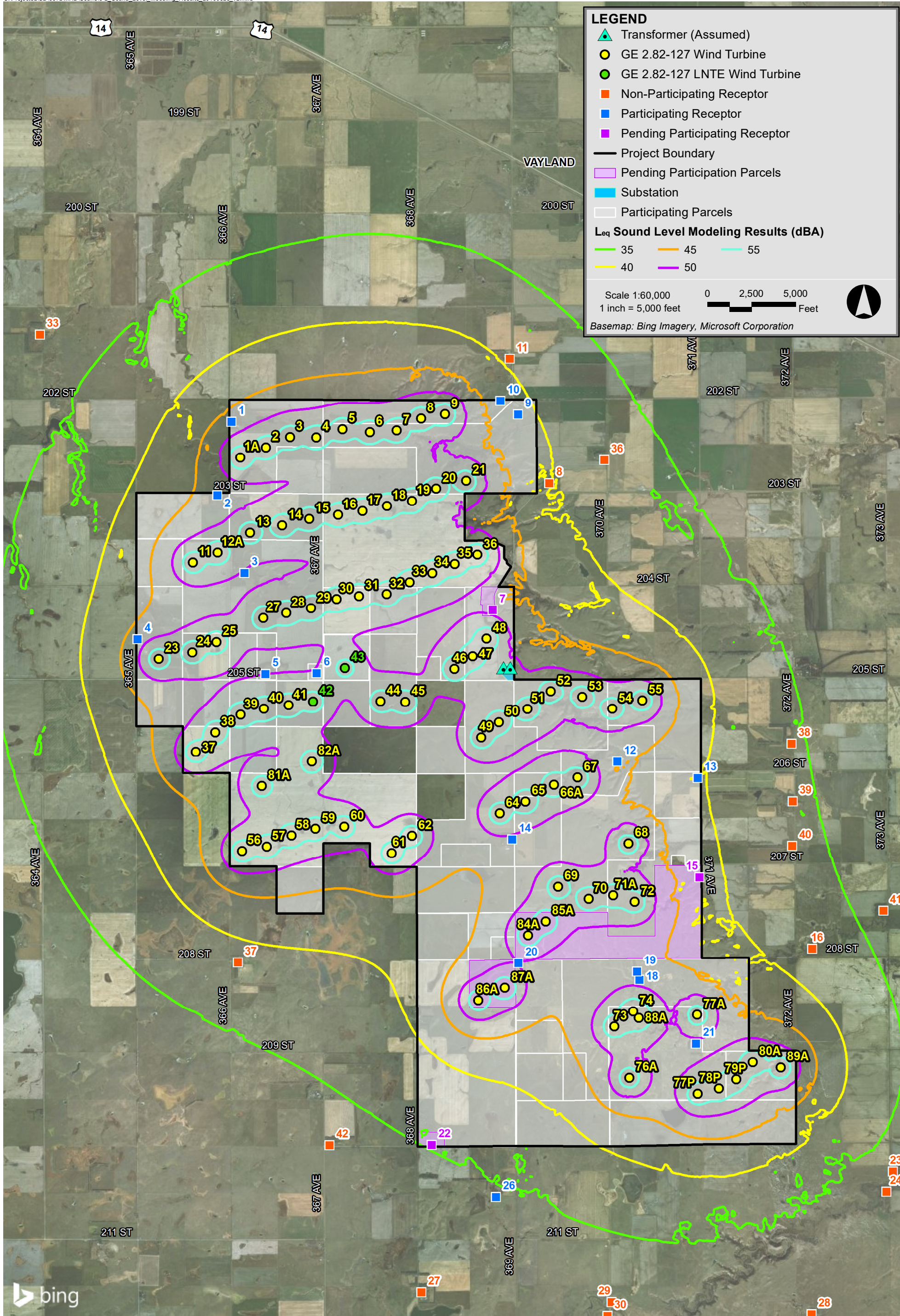
- If the turbines were eliminated, each of the currently hosting landowners would lose the opportunity for significant income (as was testified to in the Deuel Harvest docket, six figures per turbine).
- Elimination of one or more of the specified turbines may result in other turbines in the string being eliminated, as removal of a turbine has an impact on the overall Project design.
- Elimination of one or more of the specified turbines also reduces the Project's overall number of alternative turbine locations. Since cultural and tribal resource surveys are on-going, and geotechnical analyses have not yet been completed, it is important that the Project maintain as many alternative turbine locations as possible.
- The primary turbine locations have been selected not only to meet all applicable requirements and commitments, but to maximize Project efficiency and output; thus, elimination of one or more primary turbines may affect the overall Project economics.
- There have been no complaints regarding the Project's modeled sound levels (including from the owners of Receptors 8 and 11), and the Project meets the sound level agreed upon in the Hand County Development Agreement.

Dated this 3rd day of June, 2019.

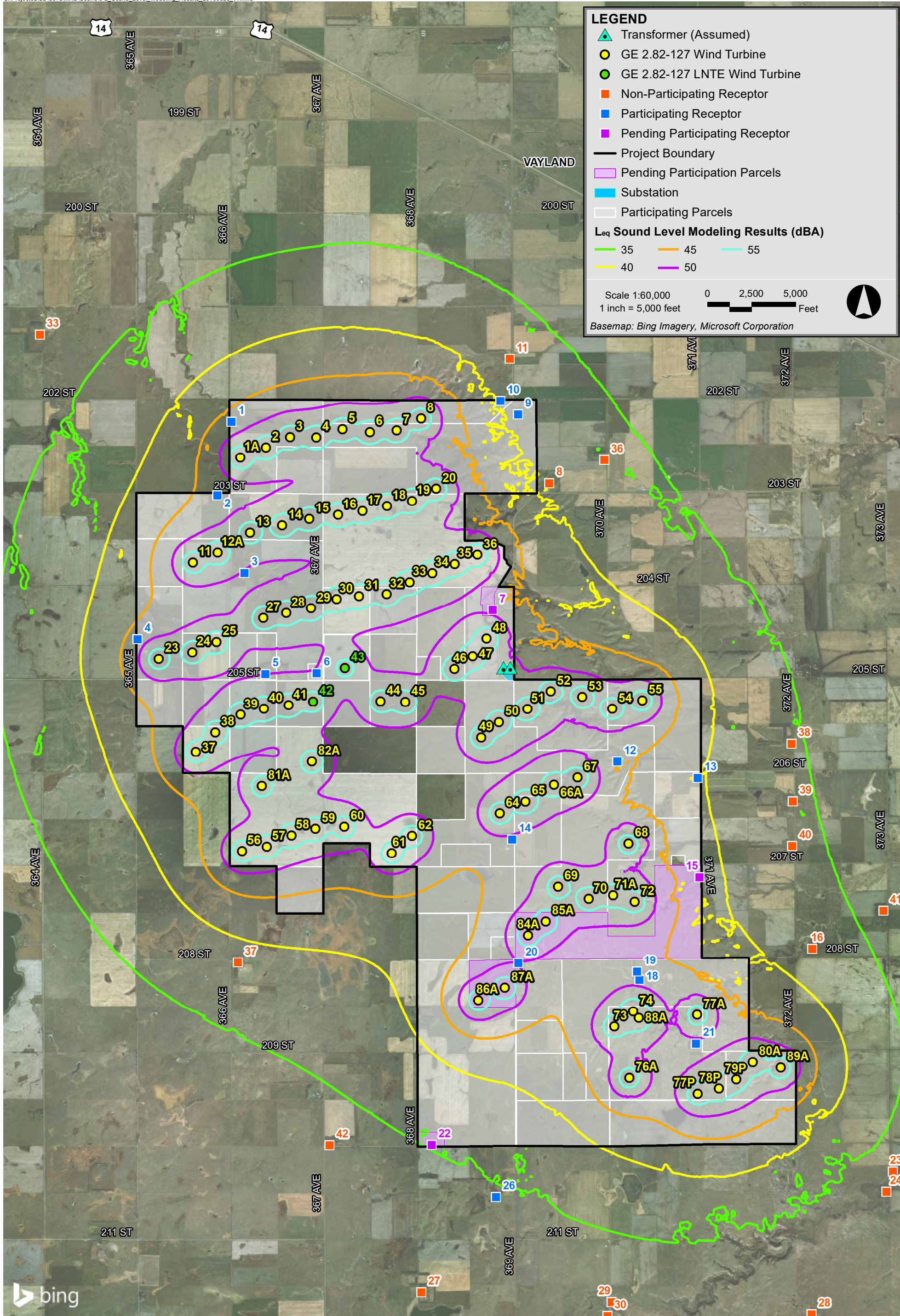
By /s/ Mollie M. Smith

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Sweetland Wind Hand County, South Dakota



Figure 5-2
Leq Sound Level Modeling Results (Wind Turbines 9, 10, 21, and 22 Removed)