#### BEFORE THE SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

#### **DOCKET NO. 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

DIRECT TESTIMONY OF DARREN KEARNEY ON BEHALF OF THE PUBLIC UTILITIES COMMISSION STAFF September 10, 2018

# **TABLE OF CONTENTS**

I.	INTRODUCTION AND QUALIFICATIONS	2
II.	PURPOSE OF TESTIMONY	4
III.	REVIEW OF THE APPLICATION	5
IV.	INTERVENOR CONCERNS	11
V.	OUTSTANDING CONCERNS AND PERMIT CONDITIONS	14

# **EXHIBITS**

Exhibit\_DK-1: Resume

Exhibit\_DK-2: Prevailing Wind Park, LLC's Responses to Staff Data Requests

Exhibit\_DK-3: Intervenors' Responses to Staff Data Requests

Exhibit\_DK-4: South Dakota Department of Health Letter

1 2		I. <u>INTRODUCTION AND QUALIFICATIONS</u>
3	Q.	State your name.
4	A.	Darren Kearney.
5		
6	Q.	State your employer and business address.
7	A.	South Dakota Public Utilities Commission, 500 E Capitol Ave, Pierre, SD, 57501.
8		
9	Q.	State your position with the South Dakota Public Utilities Commission.
10	A.	I am a Staff Analyst, which is also referred to as a Utility Analyst.
11		
12	Q.	What is your educational background?
13	A.	I hold a Bachelor of Science degree, majoring in Biology, from the University of
14		Minnesota. I also hold a Master of Business Administration degree from the
15		University of South Dakota.
16		
17	Q.	Please provide a brief explanation of your work experience.
18	A.	I began my career in the utility industry working as contract biologist for Xcel
19		Energy, where I conducted biological studies around various power plants,
20		performed statistical analysis on the data collected, and authored reports in order
21		to meet National Pollutant Discharge Elimination System (NPDES) permit
22		requirements.
23		

After two years of performing biological studies, I then transitioned into an environmental compliance function at Xcel Energy as a full-time employee of the company and became responsible for ensuring Xcel's facilities maintained compliance with the Oil Pollution Act of 1990. This involved writing Spill Prevention Control and Countermeasure (SPCC) plans and also ensuring Xcel's facilities maintained compliance with those plans. I was also responsible for the company's Environmental Incident Response Program, which involved training Xcel employees on spill reporting and response, managing spill cleanups, and mobilizing in-house and contract spill response resources.

I was in that role for approximately three years and then I transitioned to a coal-fired power plant at Xcel and became responsible for environmental permitting and compliance for the plant. Briefly, my responsibilities involved ensuring that the facility complied with all environmental permits at the plant, which included a Clean Air Act Title V Air Permit, a Clean Water Act NPDES permit, and a hazardous waste permit. I also drafted reports on the plant's operations for submission to various agencies as required by permit or law. After three years at the power plant, I left Xcel Energy to work for the South Dakota Public Utilities Commission (SD PUC).

I have been at the SD PUC for over five years now. During my employment with the PUC, I worked on a variety of matters in the telecom, natural gas, and electric industries. The major dockets that I worked on were transmission siting, pipeline

1		siting, wind energy facility siting and energy efficiency programs. I also work on
2		matters involving the Midcontinent Independent System Operator (MISO),
3		specifically wholesale electricity market issues, transmission cost allocation and
4		regional transmission planning. I also attended a number of trainings on public
5		utility policy issues, electric grid operations, regional transmission planning,
6		electric wholesale markets, and utility ratemaking.
7		
8		My resume is provided as Exhibit_DK-1.
9		
10		II. PURPOSE OF TESTIMONY
11		
12	Q.	On whose behalf was this testimony prepared?
12 13	<b>Q.</b> A.	On whose behalf was this testimony prepared?  This testimony was prepared on behalf of the Staff of the South Dakota Public
13		This testimony was prepared on behalf of the Staff of the South Dakota Public
13 14		This testimony was prepared on behalf of the Staff of the South Dakota Public
13 14 15	A.	This testimony was prepared on behalf of the Staff of the South Dakota Public Utilities Commission.
13 14 15 16	A. <b>Q.</b>	This testimony was prepared on behalf of the Staff of the South Dakota Public Utilities Commission.  What is the purpose of your direct testimony?
<ul><li>13</li><li>14</li><li>15</li><li>16</li><li>17</li></ul>	A. <b>Q.</b>	This testimony was prepared on behalf of the Staff of the South Dakota Public Utilities Commission.  What is the purpose of your direct testimony?  The purpose of my direct testimony is to discuss the Application review
13 14 15 16 17	A. <b>Q.</b>	This testimony was prepared on behalf of the Staff of the South Dakota Public Utilities Commission.  What is the purpose of your direct testimony?  The purpose of my direct testimony is to discuss the Application review performed by Commission Staff, identify any issues or concerns with the
13 14 15 16 17 18	A. <b>Q.</b>	This testimony was prepared on behalf of the Staff of the South Dakota Public Utilities Commission.  What is the purpose of your direct testimony?  The purpose of my direct testimony is to discuss the Application review performed by Commission Staff, identify any issues or concerns with the representations made in the Application or by the Applicant, identify any

1 2		III. REVIEW OF THE APPLICATION
3	Q.	When did Prevailing Wind Park, LLC file its Application for a permit to
4		construct the Prevailing Wind Park Project?
5	A.	The Application was filed on May 30, 2018.
6		
7	Q.	Did you review Prevailing Wind Park, LLC's Application for a permit to
8		construct the Prevailing Wind Park Project?
9	A.	Yes. I also reviewed the figures, appendixes, discovery responses produced by
10		all parties, Prevailing Wind's direct testimony, Prevailing Wind's supplemental
11		testimony, and comments the PUC received from the public.
12		
13	Q.	Were other Staff involved in the review of the Application?
14	A.	Yes. Staff Analyst Jon Thurber and Staff Attorney Kristen Edwards also assisted
15		in reviewing the Application.
16		
17	Q.	Explain, in your words, the main role of the SDPUC Staff in the Application
18		proceedings.
19	A.	After receiving the Application filing, Staff completed a review of the contents of
20		the Application as it relates to the Energy Facility Siting statutes, SDCL 49-41B,
21		and Energy Facility Siting Rules, ARSD 20:10:22. Staff then identified
22		information required by statute or rule that was either missing from the
23		Application or unclear within the Application and requested Prevailing Wind Park
24		to provide or clarify that information (see Exhibit_DK-2). Once interested

individuals were granted party status, Staff also issued discovery to the intervenors to understand what concerns they had with the project (see Exhibit\_DK-3).

Staff hired two consultants to assist with reviewing the Application. The first consultant, David Hessler, has expertise on noise emitted from wind turbines and noise modeling. The second consultant, David Lawrence, is a South Dakota licensed appraiser and has expertise regarding property valuation. These experts then completed their review and authored their testimony as filed in this docket.

Finally, Staff assisted intervenors and affected landowners by providing responses to numerous questions on the windfarm, the siting process at the PUC and the opportunities available for these individuals to be heard by the Commission. If the landowners had specific concerns with the wind farm, Staff often recommended that those individuals file comments in the docket for the Commission's review. Where appropriate, Staff also included some of the landowners' questions or concerns in Staff's data requests sent to Prevailing Wind Park to have them address the issue.

Α.

### Q. What is the purpose of Staff's expert witnesses in this proceeding?

Given that some of the information submitted in the Application is technical in nature, Staff sought experts within their respective fields to assess the merits and deficiencies of the Application. Staff asked the experts to review the relevant

1		portions of the Application, testimony, appendixes, data requests, and public
2		comments that fall within their areas of expertise and identify any concerns they
3		had with the material submitted.
4		
5		Ultimately, Staff requested that the experts address whether or not the
6		information submitted by Prevailing Wind Park aligns with industry best practices
7		and if they agreed with the conclusions Prevailing Wind Park made regarding
8		potential impacts from the project.
9		
10	Q.	Did Staff reach out to any other State Agencies for input?
11	A.	Yes. Staff reached out to the South Dakota Game, Fish, and Parks (SD GF&P),
12		the State Historic Preservation Office (SHPO), and the South Dakota Department
13		of Health (SD DOH).
14		
15	Q.	Did any of those agencies communicate concerns to PUC Staff specific to
16		the Prevailing Wind Park Project?
17	A.	At the time of writing this testimony, no concerns specific to the Prevailing Wind
18		Park Project were brought up by any of the agencies Staff reached out to.
19		
20	Q.	Why did PUC Staff not request SHPO and SD GF&P testify for the
21		Prevailing Wind Park Project?
22	A.	There are a few reasons why Staff did not request testimony from SHPO and SD
23		GF&P. First, an Environmental Assessment (EA) is being completed by Western

Area Power Administration (WAPA) for the entire Prevailing Wind Park Project. It is Staff's understanding that the SD GF&P and SHPO were consulted for the EA and any comments those agencies may have on the project will be considered during that process. It should be noted that in the recent wind farm siting dockets, a federal EA was either not required or required for only a small portion of the project. In those cases, the PUC's siting docket was the only process available for the consideration of SD GF&P's and SHPO's comments and recommendations. Second, the SD GF&P and SHPO have not communicated to Staff any concerns specific to the Prevailing Wind Park Project. As such, Staff is not aware of any issues or concerns that SD GF&P and SHPO have with the project that would need to be briefed. Finally, the procedural schedule in this docket allows for Staff to present rebuttal witnesses. Should any issues arise that fall in the area of expertise of SD GF&P or SHPO, Staff is planning to present the appropriate agency as a rebuttal witness. Did Commission Staff request assistance from the South Dakota Department of Health in the review of the Application?

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Q.

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Yes. SDCL 49-41B-22(3) requires the Applicant establish that the Prevailing

Wind Park will not substantially impair the health of the inhabitants. At the Public

Input Hearing and through written comments to the Commission, inhabitants have raised concerns regarding health impacts from wind facilities. Commission Staff believes the Department of Health is the appropriate State agency to assess the potential health impacts from the facility.

Α.

# Q. Has the Department of Health commented on health impacts associated with wind facilities in other dockets?

Yes. For the Crocker Wind Farm (Docket EL17-028), the Department of Health provided Commission Staff with a letter stating that the Department of Health has not taken a formal position on the issue of wind turbines and human health. Further, they referenced the Massachusetts Department of Public Health and Minnesota Department of Health studies and identified those studies generally conclude that there is insufficient evidence to establish significant risk to human health. I included the Department of Health's letter as Exhibit DK-4.

Α.

# Q. What is the Department of Health's position on the health impacts associated with the Prevailing Wind Park Project?

On August 8, 2018, the Department of Health stated that it maintains the same position for the Prevailing Wind Park Project as previously provided for the Crocker Wind Farm. Since the letter was provided for the Crocker Wind Farm, the Department of Health has not become aware of any additional studies that would cause the Department to re-evaluate their position.

1	Q.	Was Prevailing Wind Park, LLC's Application considered complete at the
2		time of filing?
3	A.	At the time of the filing, the application was generally complete. However, as
4		identified above, Staff requested further information, or clarification, from
5		Prevailing Wind Park that Staff believed was necessary to satisfy the
6		requirements of SDCL 49-41B and ARSD 20:10:22. I would note that an
7		applicant supplementing its original application with additional information as
8		requested by Staff is not unusual for siting dockets.
9		
10	Q.	Based on your review of the Application, responses to Staff's data requests
11		and Prevailing Wind Park, LLC's testimony, do you find the Application to
12		be complete?
13	A.	Yes. Staff found that Prevailing Wind Park provided information that addressed
14		the information required by ARSD Chapter 20:10:22 and SDCL 49-41B. In my
15		opinion, Prevailing Wind Park, LLC did an excellent job of preparing the
16		Application, which resulted in fewer discovery questions issued from Staff.
17		
18	Q.	Did Commission Staff receive responses to discovery from all individuals
19		granted party status?
20	A.	Yes. Staff received discovery responses from all intervenors. The following
21		section addresses a few of the requests that were made by the intervenors.
22		
23		

cerns

- Q. What is Staff's position on a 2-mile setback from non-participating
- 4 residences?
- Mhile staff acknowledges that a 2-mile setback would provide more protection to non-participating residences, at this time there is insufficient evidence presented in the record for Staff to take a position on whether the 2-mile setback distance is appropriate in this docket. A setback distance of 2-miles would reduce noise impacts on non-participants, however I will note that Prevailing Wind Park's proposed turbine layout currently meets Staff witness David Hessler's suggested noise limit of 45 dBA.

- Q. What is Staff's position on requiring a 1500 foot setback from property lines?
- A. Based on the information Staff has reviewed in the docket thus far, Staff does not feel there is adequate evidence in the record to support a 1500 foot setback from property lines. However, requiring that setback distance would provide added protection for an individual's personal property or livestock in the event of ice throw or blade malfunction.

- Q. What is Staff's position on reducing the noise limit to 35 dBA at nonparticipating residences and performing C-weighted noise modeling?
   A. Staff's noise witness, Mr. Hessler, addresses Staff's position on these
- A. Staff's noise witness, Mr. Hessler, addresses Staff's position on these recommendations made by the intervenors in his testimony. In summary, Mr.

Hessler identifies that a 35 dBA noise limit would be extremely difficult for a wind project to meet and that C-weighted sound measurements would still not capture the infrasound noise levels that the intervenors are concerned about. As such, Staff does not support a proposed noise limit of 35 dBA and requiring C-weighted sound measurements/modeling.

- Q. What is Staff's position on the health concerns associated with infrasound and low-frequency noise?
- A. Staff takes no position on the health concerns associated with infrasound and low frequency noise. This position is derived from the SD Department of Health's letter identifying that they do not have a formal position on the issue. What is clear (and would likely not be contested by either side of the debate) is that wind turbines will result in a small percentage of population residing near the turbines being annoyed by the noise from the turbines.

Q. What is Staff's position on developing an operational plan to shut down turbines, or implementing noise reducing operations of turbines, located within 2 miles of a nonparticipating residence during nighttime hours? Α. At this time, Staff does not have evidence to justify requiring such a plan. This is based on the fact that the wind turbine sound study shows that the noise from the Prevailing Wind Park Project will be within the recommended limit provided by Mr. Hessler. However, should concerns be raised in the future with noise

produced by certain turbines, implementing such a plan could be a good mitigation strategy if those turbines are found to exceed the noise limit.

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### Q. What is Staff's position on requiring a property value guarantee?

- A. Staff does not support the recommendation for a property value guarantee.
   Based on past testimony the Commission has heard during recent wind farm
- 7 siting dockets and Mr. Lawrence's direct testimony in this docket, the
- 8 implementation of a property value guarantee would be extremely difficult to do.
- 9 I will also note that a property owner who finds that the wind farm adversely
- impacted their property values can seek damages for that loss through the court
- 11 system.

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- Q. One commenter expressed concerns regarding the potential adverse economic impact to his pheasant hunting business. What is Staff's position on this concern?
- A. Staff included a question in its data requests to have Prevailing Wind Park address this concern (see Staff Data Request 2-9 in Exhibit\_DK-2). Prevailing Wind Park's approach to address this concern was to reference studies that show the impact to upland game species, including ring-necked pheasants, is not biologically significant. Based on this, Prevailing Wind Park concludes that any expected economic impact to hunting businesses is expected to be very low.

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The approach Prevailing Wind Park took is logical (where if birds are still present in the area then people continue to have the opportunity to hunt in the area). However, Staff is not entirely convinced that proves there will be no impact on hunting businesses as other factors may impact a hunter's decision to hunt in certain areas as well (e.g. scenery, quietness). A more-robust study on whether hunters are choosing to avoid hunting lodges/guiding services near turbines in favor of lodges/guides in areas without turbines would be needed. Staff is not aware of any such study and does not take a position on this issue.

Should the Commission find this potential impact to be of concern and Prevailing Wind Park's response not satisfactory, the Commission could request additional information to be produced during the hearing.

### V. Outstanding Concerns and Recommended Permit Conditions

Α.

# Q. Does Staff have any outstanding concerns at this time?

Yes. Staff has one concern regarding shadow flicker that is expected to occur at a nonparticipant (receptor REC-076). In Prevailing Wind Park's response to Staff Data Request 1-1 subpart d (see Exhibit\_DK-2), it is identified that REC-076 is expected to experience 33.93 hours of shadow flicker per year. Prevailing Wind Park committed to shadow flicker being less than 30 hours per year and/or 30 minutes per day at currently inhabited non-participating residences in Charles

1 Mix County (see Charles Mix County Letter to PUC Staff in Exhibit\_DK-3).

Based on this information, turbines 9 and 12 are not meeting the commitment

Prevailing Wind Park made to Charles Mix County. Prevailing Wind Park should

address this concern prior to the evidentiary hearing.

While Staff has identified only the one concern at the time of writing this testimony, we have not reviewed the Intervenors' testimony as exhibits. If Staff finds any of the issues the Intervenors raise have merit, Staff will address those issues either by supplementing our direct testimony, through rebuttal testimony,

Α.

### Q. Does Staff recommend any permit conditions?

or at the hearing.

Staff will be working with Prevailing Wind Park to create a list of recommended permit conditions for Commission consideration. In response to Staff Data Request 2-22 subpart b (see Exhibit\_DK-2), Prevailing Wind Park identified that they are generally willing to accept the conditions attached to the permit issued for Dakota Range (Docket EL18-003). Given this, Staff believes that we will be able to work with Prevailing Wind Park to develop permit conditions consistent with those ordered by the Commission in the past.

However, 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. In response to Staff Data Request 2-17 (see

Exhibit\_DK-2), Prevailing Wind Park stated they recommend to using the partial resale decommissioning cost estimate of \$786,000 for the entire project. Staff disagrees with using this amount and finds that the no resale decommissioning cost estimate of \$2,938,000 should be used as the basis for funding an escrow account. The no resale cost estimate would provide added assurance and be the most conservative of the two cost estimates since the market (and prices) for salvageable wind turbine components could change over the next 30 to 50 years.

- Q. Does this conclude your testimony?
- 10 A. Yes.

#### DARREN D. KEARNEY

500 E Capitol Ave · Pierre, SD 57501 · 605-773-3201 Darren.Kearney@state.sd.us

#### **EDUCATION:**

#### UNIVERSITY OF SOUTH DAKOTA, Vermillion, South Dakota

Beacom School of Business

Master of Business Administration (GPA 4.0)

June 2013 – May 2015

#### UNIVERSITY OF ST. THOMAS, Minneapolis, Minnesota

Opus College of Business

Pursued Master of Business Administration (GPA 3.95)

November 2011 – December 2012

#### UNIVERSITY OF MINNESOTA, Minneapolis, Minnesota

College of Biological Sciences

Bachelor of Science, Biology (GPA 3.347)

December 2003

#### **EXPERIENCE:**

#### SOUTH DAKOTA PUBLIC UTILITIES COMMISSION, Pierre SD

Utility Analyst

February 2013 - Present

- Ensured public utility company filings are in compliance with South Dakota statutes and regulations.
- Analyzed siting dockets, testified before the Commission, and worked on settlement agreements as appropriate.
- Analyzed energy efficiency, telecom tariff, telecom certificate of authority, electric service territory, and other electric dockets in order to form a position and make recommendations to the Commission on those dockets.
- Reviewed proposed EPA Clean Power Plan rules and authored comments in response to the proposed rules.
- Worked on MISO wholesale electric market, regional transmission planning, and cost allocation issues.
- Attended a number of trainings on electric grid operation, regional transmission planning, public utility policy issues, and ratemaking.

#### **XCEL ENERGY, Minneapolis MN**

Plant Environmental Analyst III

October 2009 – February 2013

- Reviewed power plant processes and made modifications as necessary to ensure the plant was in continued compliance with environmental permits and regulations.
- Coordinated environmental related testing (e.g. annual stack tests required by Air Permit/CAA).
- Worked on Title V Air Permit and NPDES Permit renewals/amendments.
- Reviewed plant air and water emissions data and generated compliance reports for Air and NPDES/SDS Permits.
- Performed plant compliance inspections/audits to ensure permits, policies, and procedures were properly executed.
- Provided environmental training to plant staff.
- Conducted root cause investigations on spills and permit non-compliance incidents, developed corrective actions to prevent incident reoccurrence, and then implemented the corrective actions as directed by plant management.
- Acted as point of contact during regulatory agency inspections and internal audits.
- Managed the facility's hazardous waste program for compliance with county waste rules and RCRA.

Environmental Analyst II

*August 2006 – October 2009* 

- Subject matter expert for AST/UST compliance, the Oil Pollution Act of 1990 (SPCC) and Industrial Stormwater.
- Managed an Environmental Incident Response Program that involved coordinating spill cleanups and training individuals on reporting/cleanup requirements for oil/chemical spills and power plant permit non-compliance incidents.

#### ADECCO TECHNICAL, Edina MN

Contract Biologist - Xcel Energy Environmental Analyst

June 2004 – August 2006

- Developed monitoring plans, conducted field monitoring/sampling, performed statistical analysis on data collected, and authored reports for biological studies at Xcel Energy power plants as required by State and Federal Rules.
- Established knowledge of environmental permits and Federal, State, and Local environmental regulations.

#### **ACHIEVEMENTS**

• Academic: Beta Gamma Sigma International Honor Society (Business School)

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

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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 RESPONSES TO STAFF'S FIRST SET OF DATA REQUESTS EL18-026

Below, please find Applicant's responses to Staff's First Set of Data Requests to Applicant.

- 1-1) One non-participating receptor is listed as having thirty or more hours of shadow flicker per year, and two participating receptors are listed as having thirty or more hours of shadow flicker per year.
  - a. How many hours of shadow flicker per year are expected at the participating receptors?

<u>Aaron Anderson</u>: Shadow flicker at the participating receptors is shown in the following table for the GE 3.8-137 turbine, which, as noted in response to DR 1-3 below, is the turbine PWP has selected for the Prevailing Wind Park Project ("Project").

Receptor Name	Easting [m]	Northing [m]	Flicker Duration [hour/year]	Flicker Duration [max minutes/day]	Participating Status	County Name	Caused by WTG(s)
REC-046	570,892	4,766,384	45.38	75	Participating	Charles Mix	T61, T63, T64
REC-046	570,692	4,700,304	45.56	75	Participating	Bon	T18, T46,
REC-114	580,644	4,779,066	32.07	46	Participating	Homme	T47

b. Has this information been communicated to the landowner and/or inhabitant? If so, how?

<u>Bridget Canty</u>: Prevailing Wind Park plans to discuss anticipated shadow flicker levels with the participating landowners who may have more than 30 hours of shadow flicker per year.

#### c. What mitigation will Applicant be employing or exploring?

<u>Bridget Canty</u>: Measures that may be employed to mitigate shadow flicker that exceeds 30 hours per year may include: installation of internal window coverings, external window awnings, or landscape plantings.

# d. What turbine numbers are associated with the three receptors having more than thirty hours of shadow flicker per year?

<u>Aaron Anderson</u>: For the GE 3.8-137 turbine, the turbine numbers contributing to shadow flicker at the three receptors are shown in the table below.

Receptor Name	Easting [m]	Northing [m]	Flicker Duration [hour/year]	Flicker Duration [max minutes/day]	Participating Status	County Name	Caused by WTG(s)
						Charles	T61, T63,
REC-046	570,892	4,766,384	45.38	75	Participating	Mix	T64
						Charles	
REC-076	573,024	4,775,138	33.93	51	Non-participating	Mix	T9, T12
						Bon	T18, T46,
REC-114	580,644	4,779,066	32.07	46	Participating	Homme	T47

# 1-2) Table 9-2 references shadow flicker at currently inhabited dwellings of non-participants. How was the inhabited status of a dwelling confirmed?

Bridget Canty and Jennifer Bell: In 2016, inhabited status of dwellings was determined by (1) reviewing aerial photography to determine location of residences in and around the project footprint; (2) reviewing aerials and drawing on local knowledge of the area to determine obvious occupied residences; (3) field verifying dwellings with indeterminate status; (4) contacting landowners to verify occupancy status; and (5) using tax rolls to determine ownership and addresses of residences. In 2018, the 2016 data set was updated first by reviewing aerial photography of each identified dwelling. Dwelling locations and occupancy status were then reviewed in the field during windshield surveys (i.e., observed from public roads).

#### 1-3) When does Applicant anticipate knowing which turbine model will be used?

<u>Peter Pawlowski</u>: Prevailing Wind Park has selected the GE 3.8-137 wind turbine model for the Project.

# 1-4) Provide a copy of the standard lease/easement contract. Do any of the contracts differ in a material way?

Roland Jurgens/Robert Wilson: Prevailing Wind Park has entered into three types of agreements with landowners. All three agreement forms which are provided in response to this request are confidential. One is a standard Prevailing Wind Park lease and wind easement agreement that provides full rights for Prevailing Wind Park to place turbines and facilities on the property. The second is a "no turbine" lease, which provides for an easement for associated facilities only; additional permission is required before

Prevailing Wind Park would have rights to place a turbine on the property. *See* item 3 of "Blank No Turbine Lease" form. The third type is a wind easement and setback waiver, which does not allow placement of facilities on the property.

# 1-5) In section 8-2, a 500-foot shift allowance is requested. Would this distance be from the center point of the structure?

<u>Bridget Canty</u>: Yes, the 500-foot shift allowance is requested from the center point of each proposed wind turbine location.

#### 1-6) Describe the \$4.3 million contribution received from the State of South Dakota.

#### a. Provide a copy of the agreement.

Roland Jurgens: The Prevailing Wind Park applied to the Governor's Office of Economic Development South Dakota Reinvestment Payment Program ("RPP") and was approved for a reinvestment payment of up to \$4,329,410 of sales and use taxes that the project will pay during construction. The RPP is available to assist companies in offsetting the upfront costs associated with relocating or expanding operations and/or upgrading equipment in South Dakota. The program allows for project owners to receive a reinvestment payment, not to exceed the South Dakota sales and use tax paid on project costs, for new or expanded facilities with project costs in excess of \$20,000,000, or for equipment upgrades with project costs in excess of \$2,000,000.

As noted in the enclosed meeting notes, on June 12, 2018, the Governor's Office of Economic Development approved a reinvestment payment for the Prevailing Wind Project of \$4,329,310 not to exceed 65 percent of the state sales/use tax paid on eligible project costs. There is not an agreement associated with the approval.

#### b. Was this money in the form of a grant, tax relief, or some other form?

<u>Bridget Canty</u>: The Governor's Office of Economic Development RRP payment is in the form of a tax rebate.

# c. Will Applicant be reevaluating the financial benefit to the State given this transaction?

<u>Bridget Canty</u>: Yes, the Applicant will submit the reevaluated financial benefit to the State in prefiled testimony.

# 1-7) To Applicant's knowledge, are there any existing wind turbines operating in South Dakota which are equal to or greater than the total height of the turbines that would be used for this Project?

<u>Bridget Canty</u>: Not at this time. However, it is our understanding that others within the wind development industry are or will be utilizing taller turbines for projects.

# 1-8) Does Applicant anticipate the fact that the turbines are a greater height than those in other recent applicants analyzed by the SD PUC would change or otherwise effect the ice throw analysis? Why or why not?

Bridget Canty: Ice shedding and ice throw occur under certain weather conditions that cause ice to build up on the rotor blades and/or sensors, slowing the rotational speed and potentially creating an imbalance in the weights of the individual blades. Turbine height has been shown to have a moderate impact on ice throw. In the Dakota Range docket, EL18 -003, the Commission found that with the 492-foot turbine proposed, "[t]he concern for ice shedding is typically within 300 feet of the turbine." Final Decision and Order Granting Permit to Construct Wind Energy Facility; Notice of Entry, Attachment A at 69 (July 23, 2018). This finding is consistent with a study conducted in Sweden from 2013 to 2016 (Lunden 2017), with total turbine heights of 140 meters (459 feet), found that 75% of the ice was found within one rotor diameter (90 meters) from the turbine tower, and 1% beyond 1.5 rotor diameter (140 meters).

Data collected by the Global Wind Energy Council (2014) indicate more than 268,000 turbines in operation by the end of 2014, and more have been constructed since. The lack of reported injury with this number of operational turbines is further indication that risk is low.

Prevailing Wind Park will use two methods to detect icing conditions on turbine blades: (1) sensors that will detect when blades become imbalanced or create vibration due to ice accumulation; and (2) meteorological data from on-site permanent meteorological towers, on-site anemometers, and other relevant meteorological sources that will be used to determine if ice accumulation is occurring. These control systems will either automatically shut down the turbine(s) in icing conditions (per the sensors) or Applicant will manually shut down turbine(s) if icing conditions are identified (using meteorological data). Turbines will not return to normal operation until the control systems no longer detect an imbalance or when weather conditions either remove icing on the blades or indicate icing is no longer a concern. Prevailing Wind Park will pay for any documented damage caused by ice thrown from a turbine.

1-9) Referring to Section 6.1.2 of the Application, please provide the source identifying the load growth of South Dakota and North Dakota is projected to be at least 2,100 MWs over the next 10 years.

<u>Bridget Canty</u>: The source identifying the load growth of the Dakotas is: Gotham, D.J., L. Lu, F. Wu, T.A. Phillips, P.V. Preckel, and M.A. Velastegui. 2016. 2016 MISO Independent Load Forecast. State Utility Forecasting Group, Purdue University, West Lafayette, Indiana. November. Prepared for Midcontinent Independent System Operator. Available at:

https://www.purdue.edu/discoverypark/sufg/docs/publications/MISO%202016%20Independent%20Load%20Forecast%20Final.pdf

1-10) Referring to Section 6.3 of the Application, please provide the expected impact on the procuring utility's resource plan should the project not be operational by the end of 2019.

<u>Peter Pawlowski</u>: Basin Electric Power Cooperative ("Basin") has contracted for the full output of the Prevailing Wind Park. Basin provides power to its member distribution cooperatives that include the following cooperatives in South Dakota: East River Electric Power Cooperative, Bon Homme Yankton Electric Association, Butte Electric Cooperative, and Charles Mix Electric Association. We have requested additional information from Basin regarding this question, and will provide it once received.

1-11) Referring to Section 8.2 of the Application, please identify the 2 to 6 turbine locations that are considered the alternate locations.

<u>Bridget Canty</u>: Prevailing Wind Park has not identified which turbines will be alternates at this time. The purpose of including alternate locations is to allow flexibility to choose preferred locations as information from cultural resource surveys and site-specific geotechnical analysis is completed for the Project.

1-12) Referring to Section 8.3 of the Application, how does Prevailing Wind Park define "extent practicable" in the statement: "[f]ollowing completion of construction, the temporary crane paths would be removed, and the area would be restored, to the extent practicable"?

<u>Bridget Canty</u>: The phrase "extent practicable" should be removed from the identified sentence in Section 8.3. The revised sentence should read: "Following completion of construction, the temporary crane paths would be removed, and the area would be restored."

1-13) Referring to Table 9-1 of the Application, please explain why the interconnection distance is identified as being 0 miles for Location #1 when the Application identifies a 27-mile 115 kV transmission line will be constructed to interconnect with the Utica Junction Substation.

<u>Roland Jurgens</u>: The difference is attributable to the different interconnection points. The description of Location #1 in Table 9-1 was further refined through the Southwest Power Pool ("SPP") process. Originally, the Project was proposed to interconnect to WAPA's 230-kV transmission line within the footprint of the Project Area via a 100 to 200-foot tie line from the Project substation. However, it was later determined that configuration was not feasible and the point of interconnection was move to the current configuration, which specifies a 27-mile 115-kV line interconnecting at WAPA's Utica Junction Substation.

1-14) Referring to section 15.6.5 of the Application, please provide a copy of the NTIA determination.

<u>Bridget Canty</u>: A copy of the initial NTIA determination letter is attached. Prevailing Wind Park has followed up directly with the Department of Energy ("DOE") to identify

any potential concerns it may have regarding radio frequency transmissions. If concerns remain, Prevailing Wind Park will discuss mitigation options with the DOE.

1-15) Referring to section 16.0 of the Application, please provide a copy of the Bon Homme county zoning ordinance applicable to large wind energy systems and copies of all conditional use permits received for the project.

Bridget Canty: A copy of the Bon Homme County Zoning Ordinance, including Article 17 which is specific to wind energy systems, is enclosed. Prevailing Wind Park submitted an application for a Large Wind Energy System Permit under Article 17 of the Bon Homme County Zoning Ordinance on August 2, 2018. Prevailing Wind Park expects to submit CUP applications for the Project turbines in Hutchinson County by August 15, 2018; a decision on the CUP applications is expected within 60 days of submission. Prevailing Wind Park will forward copies of CUPs for Hutchinson County following receipt. Prevailing Wind Park also received building permits from Charles Mix County, which does not have a zoning ordinance. Copies are enclosed.

1-16) Please provide GIS shape files for the project.

Jennifer Bell: Please see attached GIS shape files.

1-17) Please provide shadow flicker and noise maps that identify participating residences and non-participating residences.

<u>Aaron Anderson and Chris Howell</u>: Please see attached shadow flicker and noise maps for the GE 3.8-137, which have been updated as requested.

1-18) Please provide a revised Figure 9 that shows participating and non-participating residences.

Jennifer Bell: Please see attached figure, which has been updated as requested.

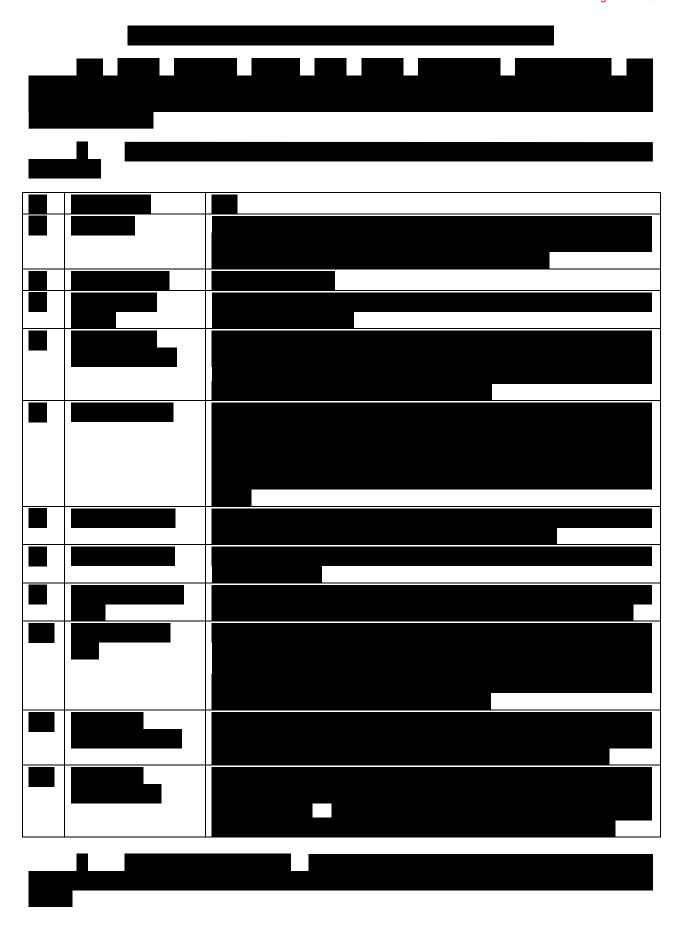
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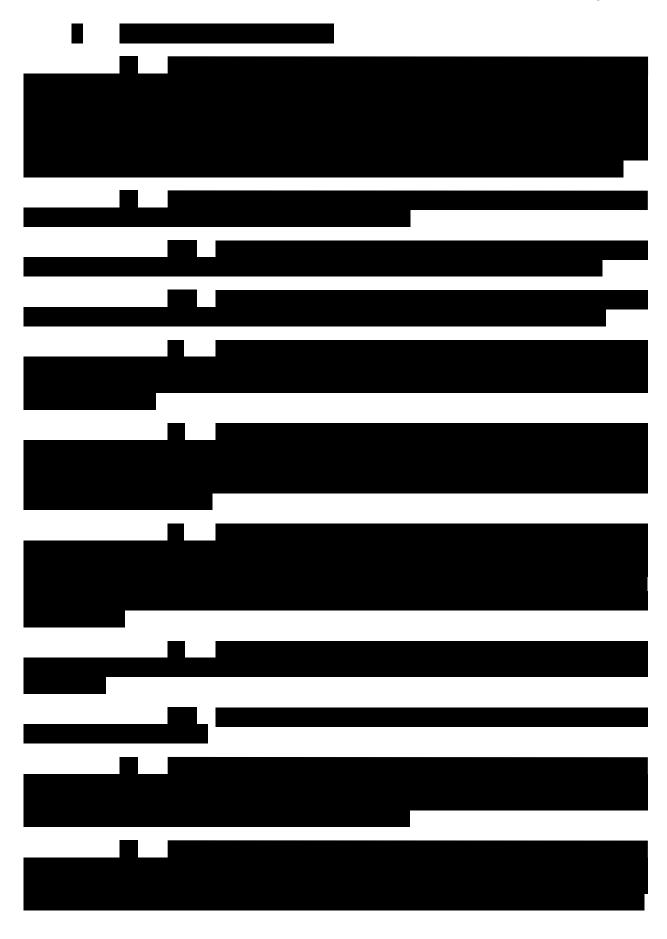
By /s/ Mollie M. Smith

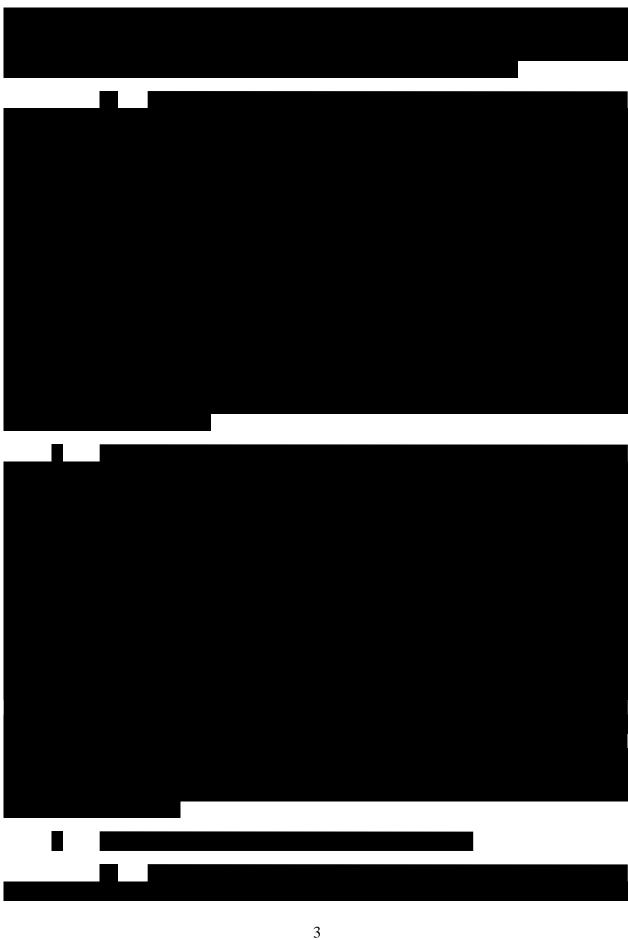
Mollie M. Smith Lisa A. Agrimonti FREDRIKSON & BYRON, P.A. Attorneys for Applicant 200 South Sixth Street, Suite 4000 Minneapolis, MN 55402

Phone: (612) 492-7270 Fax: (612) 492-7077

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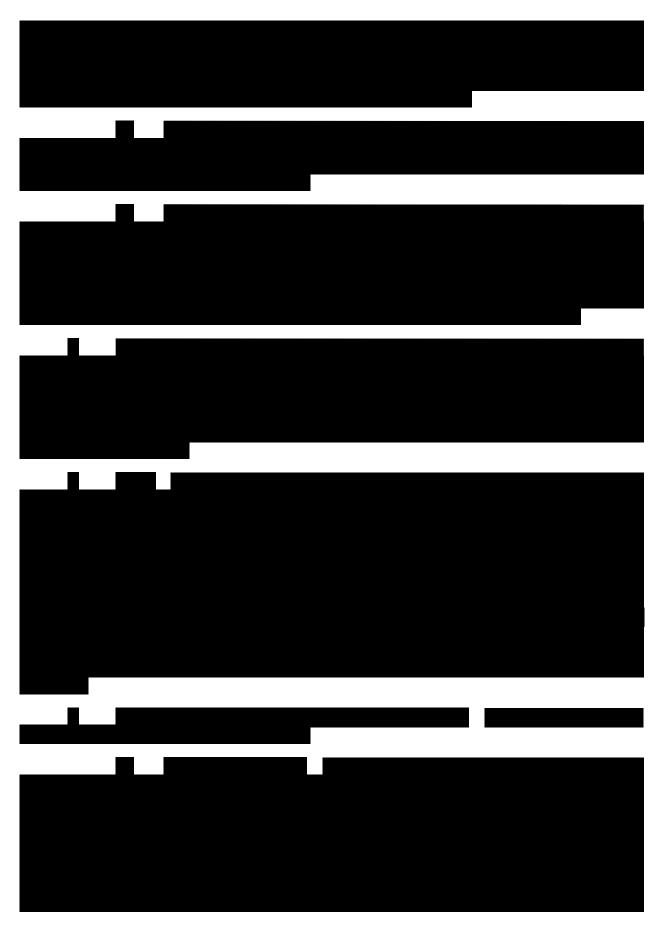








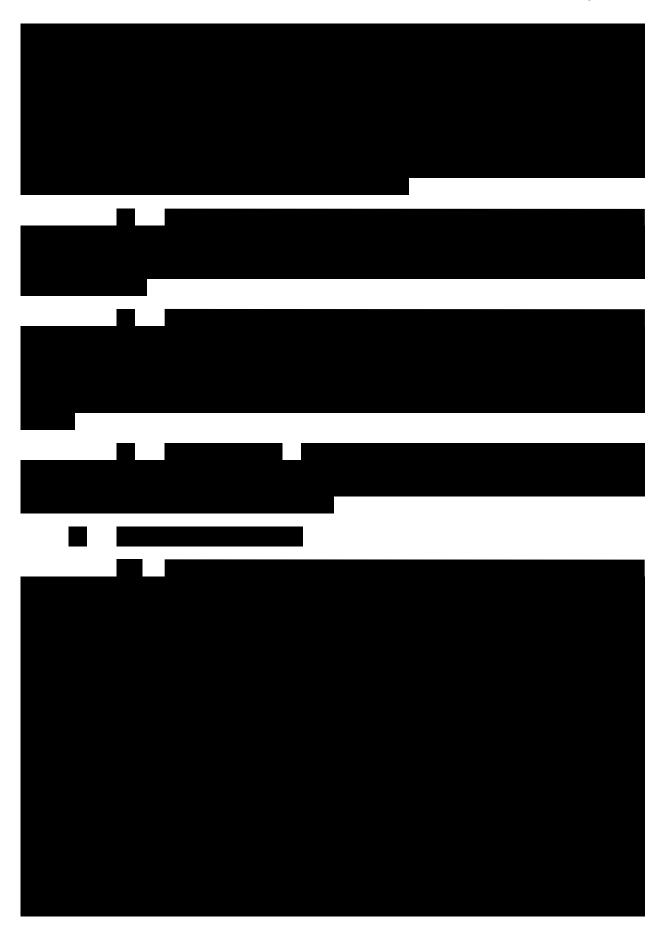


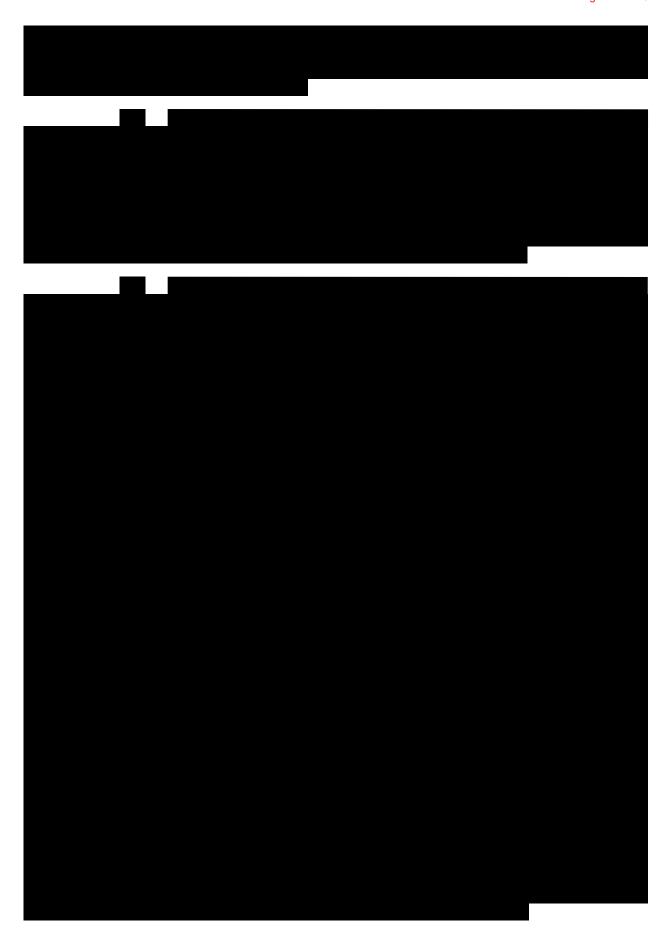




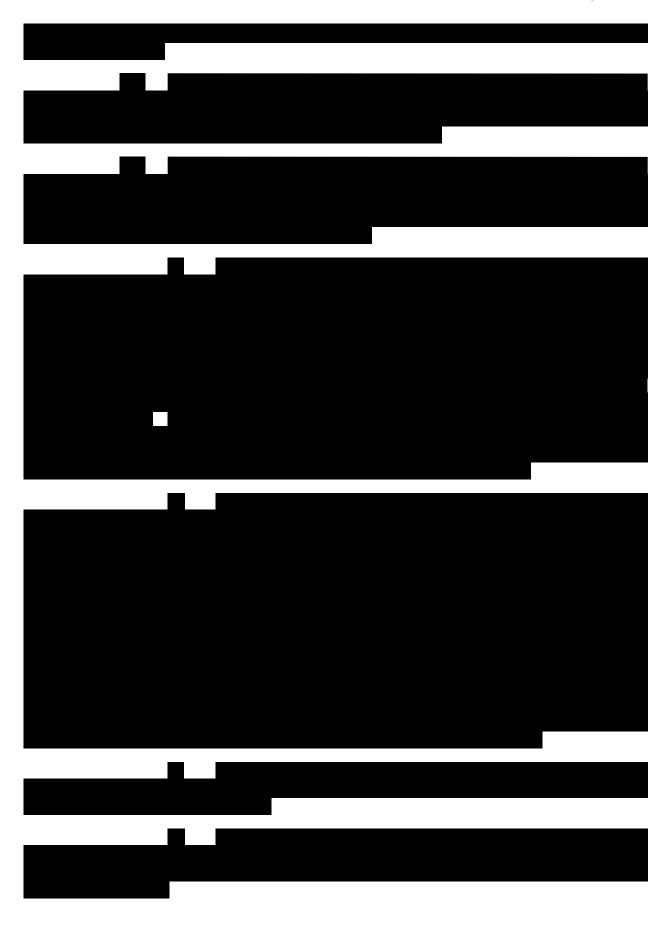


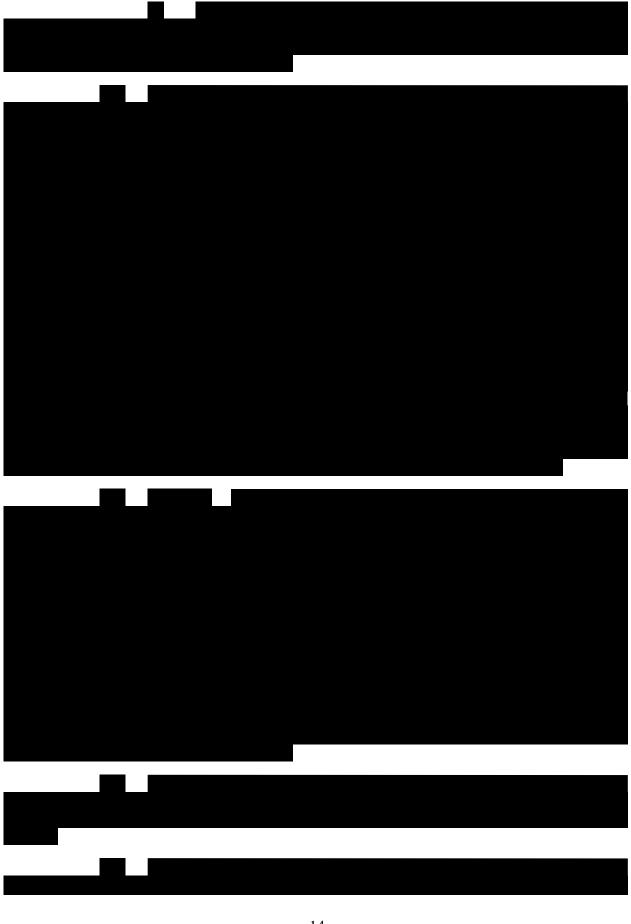


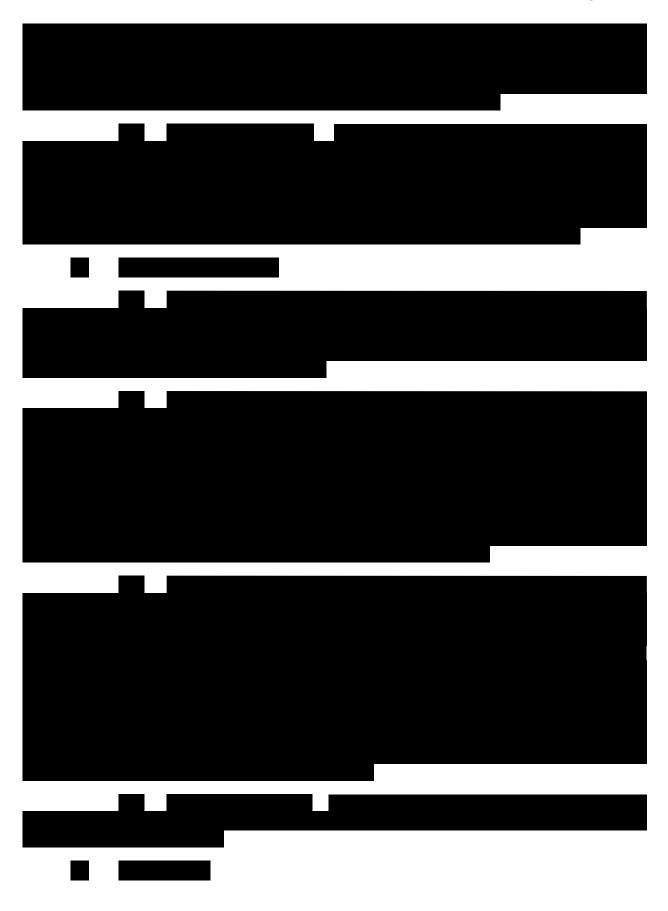






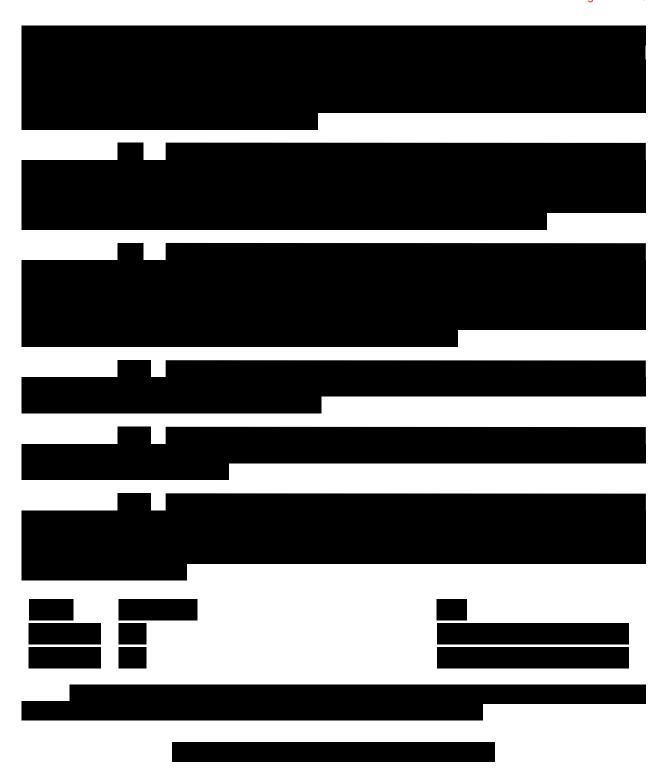








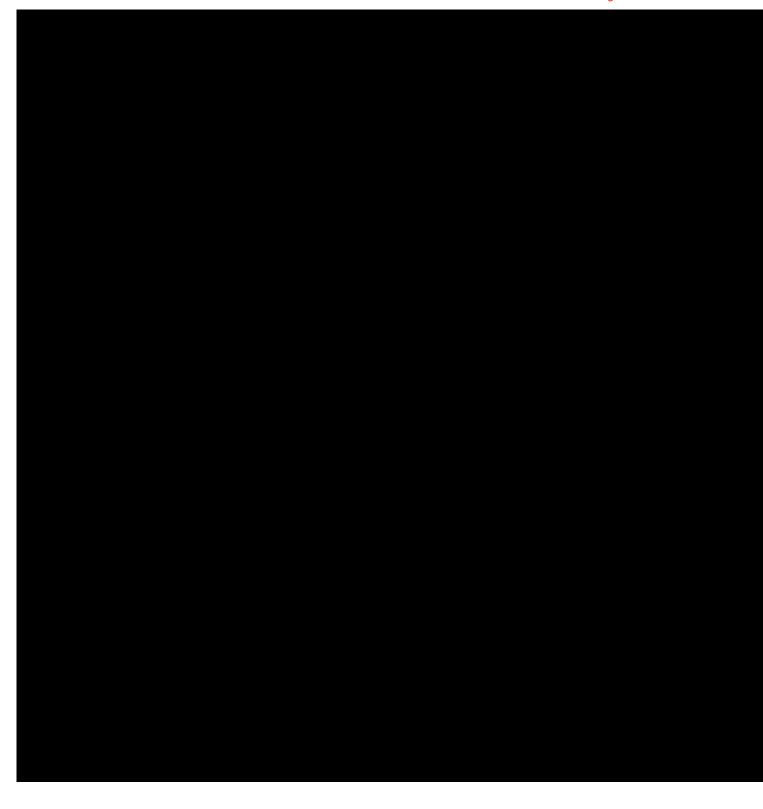


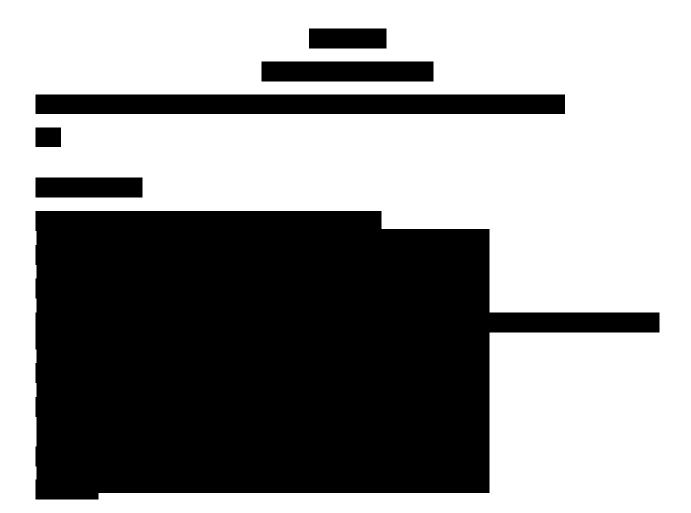


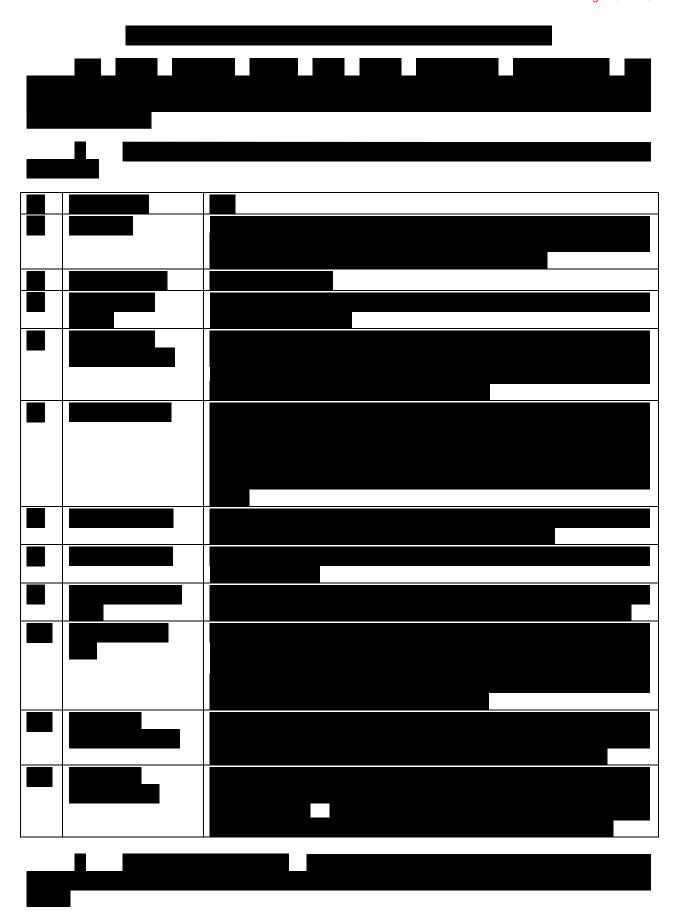




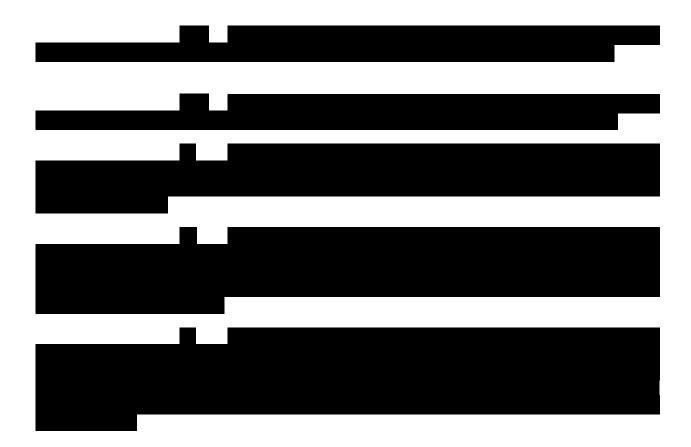


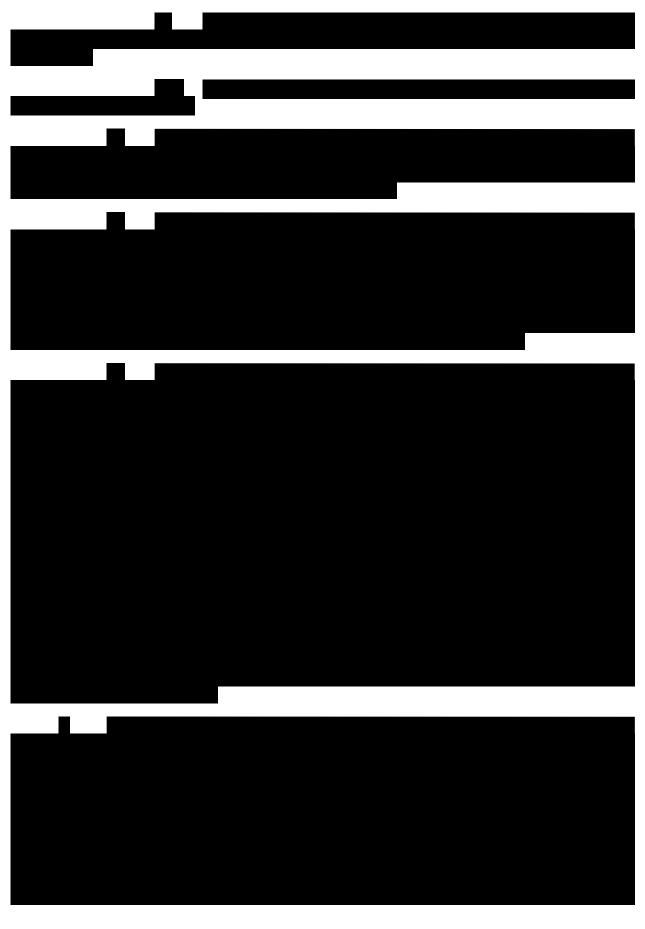


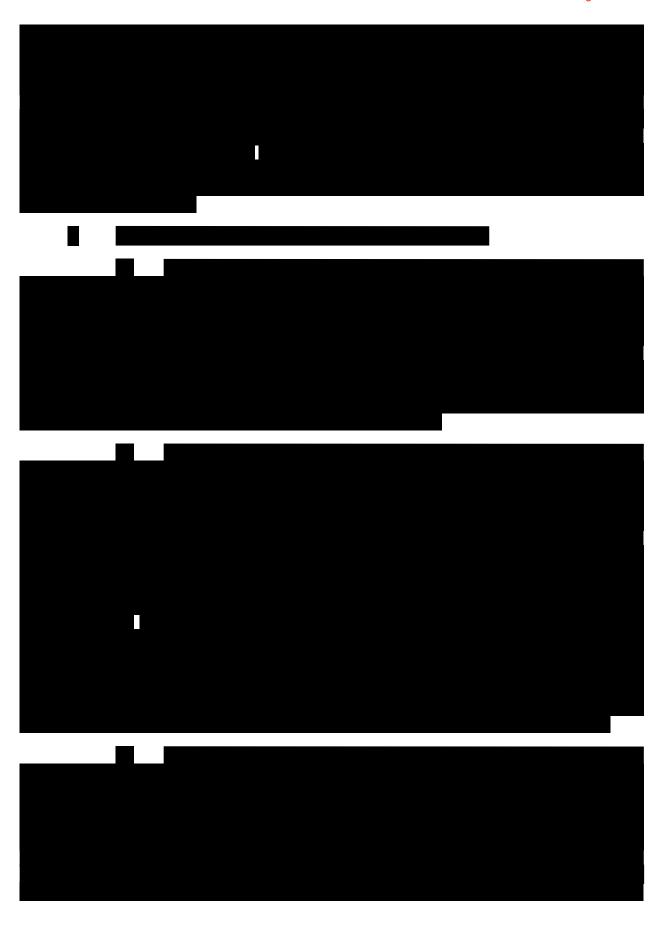










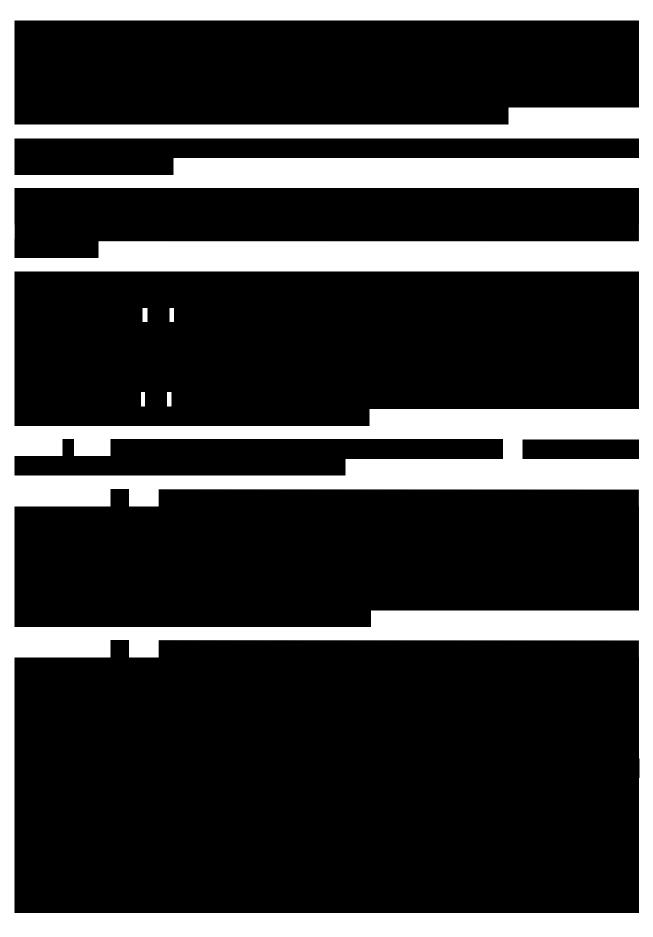








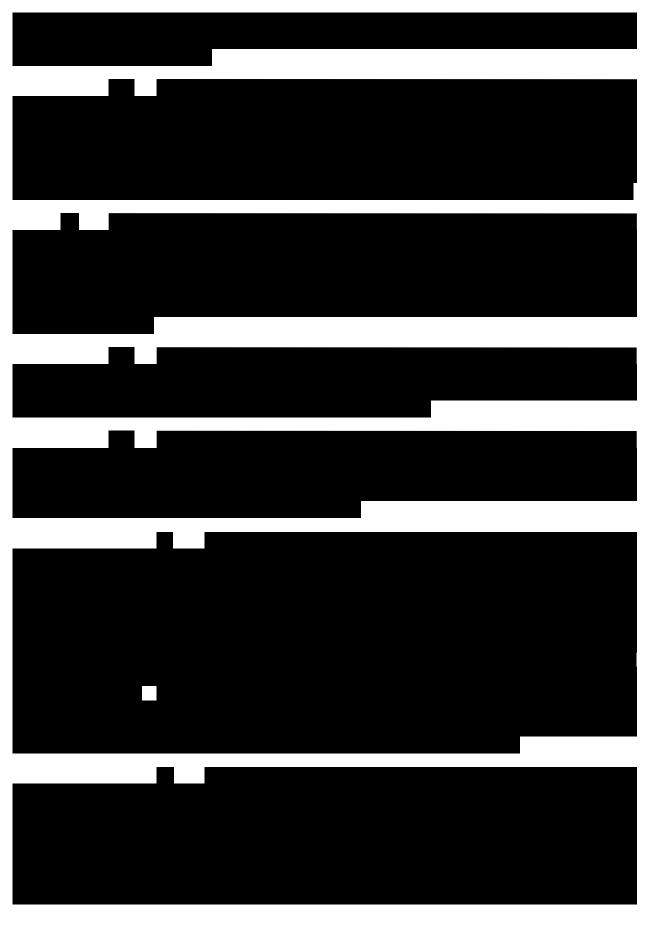


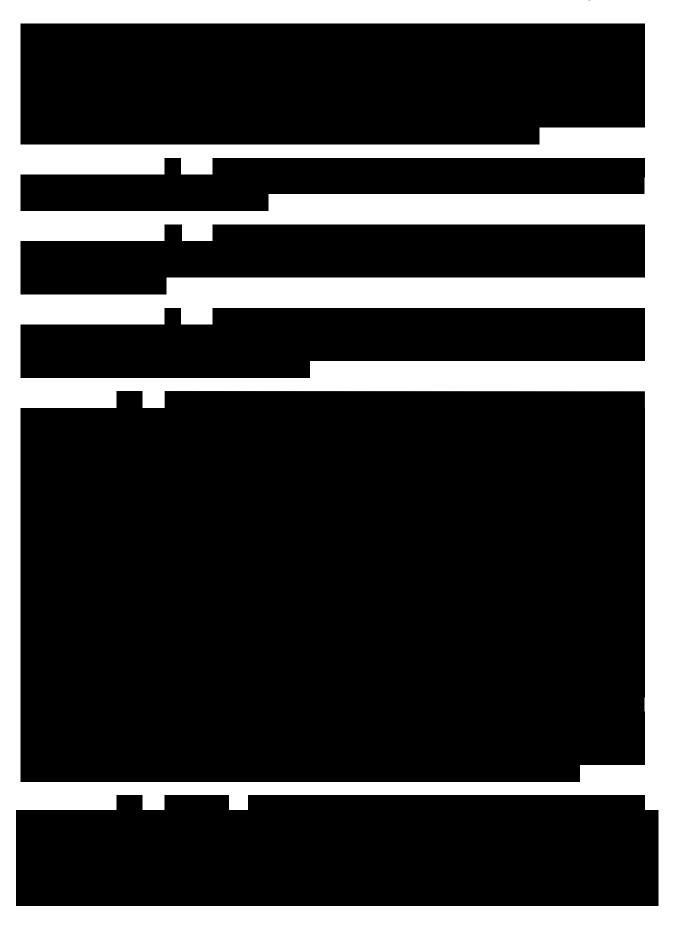


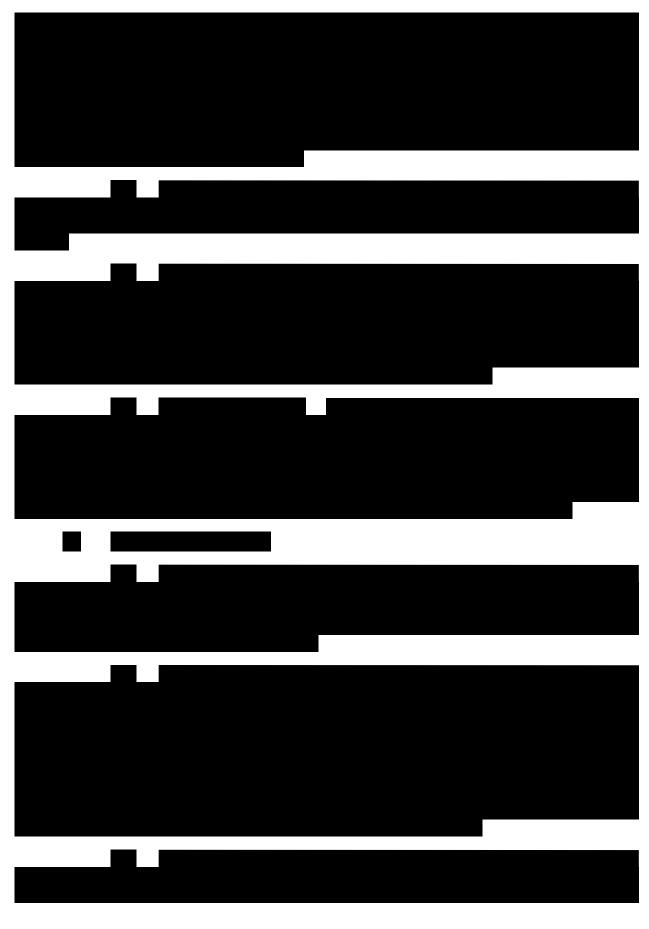




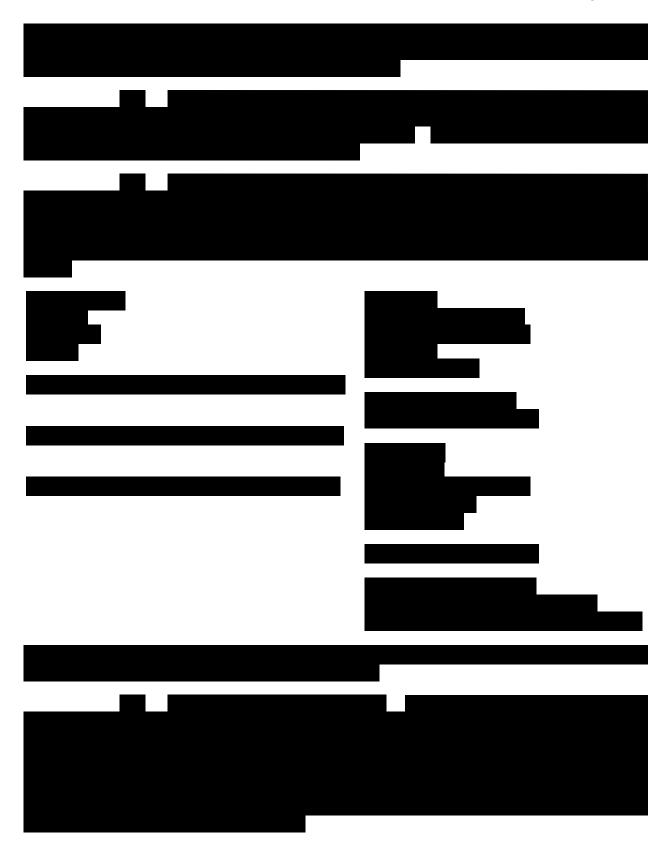










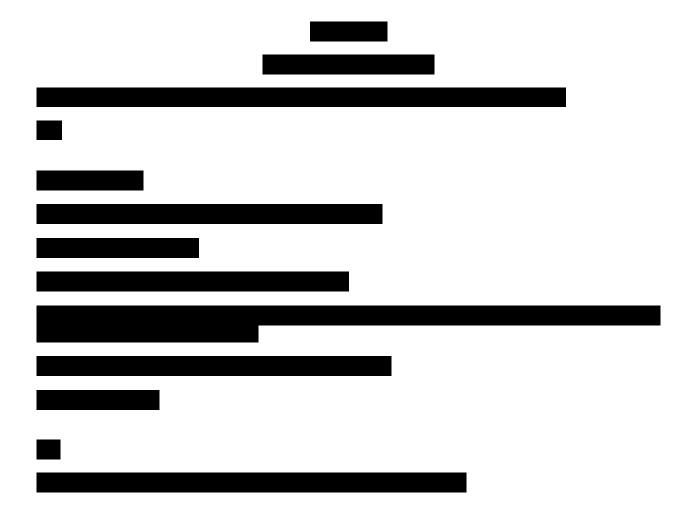




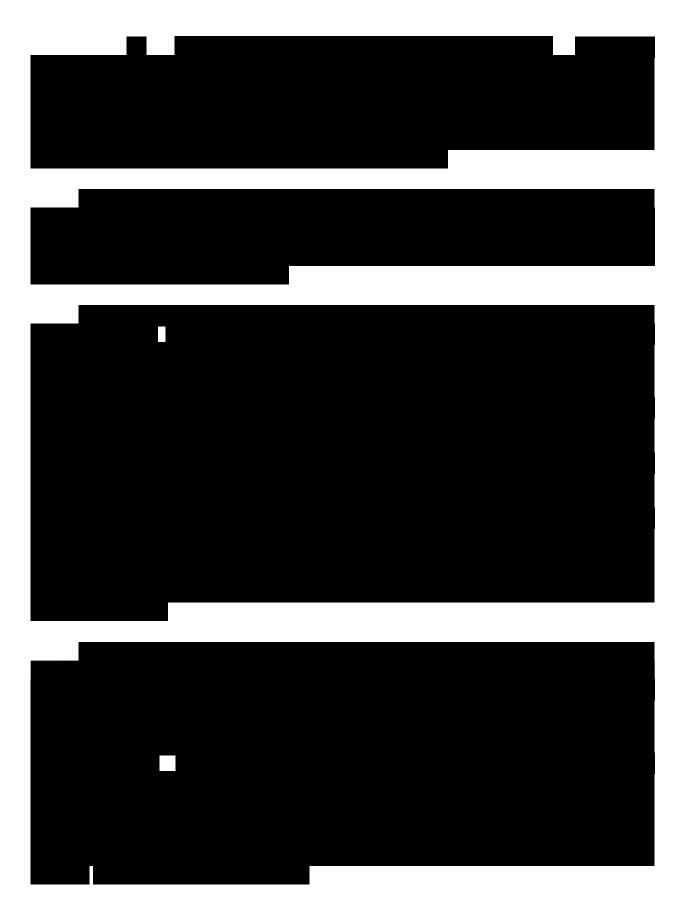








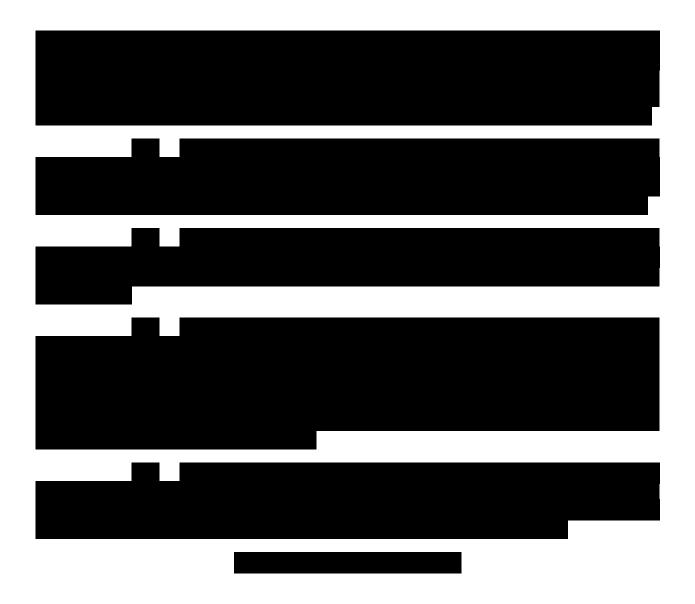




















#### UNITED STATES DEPARTMENT OF COMMERCE National Telecommunications and Information Administration Washington, D.C. 20230

JUN - 7 2018

Mr. B. Benjamin Evans, P.E. Evans Engineering Solutions, LLC 524 Alta Loma Drive Thiensville, WI 53092

> Prevailing Wind Project, Revision 1: Bon Homme, Charles Mix & Hutchinson Re:

Counties, SD

Dear Mr. Evans:

In response to your request on April 4, 2018, the National Telecommunications and Information Administration provided to the federal agencies represented in the Interdepartment Radio Advisory Committee (IRAC) the plans for the Prevailing Wind Project, Revision 1, located in Bon Homme, Charles Mix, and Hutchinson Counties, South Dakota.

After a 45+ day period of review, one Federal agency, the Department of Energy (DOE), identified concerns regarding blockage of their radio frequency transmissions. Energy's concerns are noted here:

> This project has the potential to affect operations of the DOE Western Area Power Administration, and turbine location data will be necessary for mitigation purposes. Energy requests that the developer coordinate directly with our Western Spectrum Program Manager:

Scott E. Johnson, Sr. Telecom Engineer/Spectrum Program Manager US Dept. of Energy, Western Area Power Admin Headquarters, P. O. Box 281213, Lakewood, Colorado 80228-8213

Phone: (720) 962-7380; Fax: (720) 962-4080; email: sjohnson@wapa.gov

While the other IRAC agencies did not identify any concerns regarding radio frequency blockage, this does not eliminate the need for the wind energy facilities to meet any other requirements specified by law related to these agencies. For example, this review by the IRAC does not eliminate any need that may exist to coordinate with the Federal Aviation Administration concerning flight obstruction.

Thank you for the opportunity to review these proposals.

Peter A. Tenhula

Deputy Associate Administrator Office of Spectrum Management

#### **DEFINITIONS**

## **Definitions**

For the purpose of this Ordinance, unless otherwise stated, words used in the present tense include the future; the singular number includes the plural and the plural the singular; the word <u>shall</u> means mandatory, not discretionary; the word <u>may</u> is permissive; the word <u>person</u> includes a firm, association, organization, partnership, trust, company or corporation, as well as, an individual; the word <u>lot</u> includes the word <u>plat</u> or <u>parcel</u>; and the words <u>used</u> or <u>occupied</u> include the words <u>intended</u>, <u>designed</u>, or <u>arranged to be used or occupied</u>.

#### **Terms**

For the purpose of this Ordinance, certain terms or words used herein shall be interpreted as follows:

<u>Accessory Use or Structure</u> - A use or structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal use or structure.

<u>Actual Construction</u> - Actual construction is hereby defined to include the placing of construction materials in permanent position and fastened in a permanent manner. Where excavation or demolition or removal of an existing building has been substantially commenced, preparatory to rebuilding, such excavation or demolition or removal shall be deemed to be actual construction, provided that work shall be carried on diligently.

<u>Agriculture</u> - The planting, cultivating, harvesting and storage of grains, hay or plants, fruits, or vineyards along with the raising and/or feeding of less than one thousand (1,000) animal units of livestock and/or poultry in an animal feeding operation as defined by this ordinance.

An animal feeding operation as defined by this ordinance is not considered an agricultural use. The processing and/or storage of raw agricultural products, including facilities such as grain elevators and ethanol plants, shall not be considered an agricultural use if such use constitutes the main or principal use on a lot or parcel.

<u>Agriculture Product Processing Facility</u> - A business activity customarily designed to process raw agricultural products into value added products. Agricultural processing facilities include, but are not limited to; feed mills, ethanol plants, and soy bean processing facilities.

<u>All Weather Road</u> - A roadway in which emergency vehicles and local traffic may pass at all times not to include severe weather events such as snow drifting and surface flooding. (*Amended 11/3/15*)

<u>Animal Feeding Operation</u> - A facility where more than one thousand (1,000) animal units are stabled, confined, fed, or maintained in either an open or housed lots for a total of 45 days or more in any 12-month period and the open lots do not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season. Two (2) or more facilities under common ownership are a single animal feeding operation if they adjoin each other (within one (1) mile), or if they use a common area or system for the disposal of manure. For the purpose of this ordinance animal units of differing species shall not be totaled to constitute an animal feeding operation as defined herein.

Animal Units - A unit of measure for livestock. One (1) animal unit is equivalent to:

- 1 feeder or slaughter beef animal;
- .5 horse;
- .7 mature dairy cattle;
- .27 farrow-to-finish sows;
- 2.13 swine in a production unit (breeding, gestating and farrowing);
- nursery swine less than 55 pounds;
- 2.5 finisher swine over 55 pounds;
- sheep or lambs;
- 30 laying hens or broilers;
- 5 ducks; and
- 55 turkeys.

# Animal Unit Conversion Table

A conversion table designed to integrate the definition of an animal feeding operation with the animal unit definition.

Animal Species	1,000 Animal Units
Feeder or Slaughter Beef Animal	1,000
Horses	500
Mature Dairy Cattle	700
Farrow to Finish Sows	270
Swine in a Production Unit	2,130
Nursery Swine Less than 55 Pounds	10,000
Finisher Swine Over 55 Pounds	2,500
Sheep	10,000
Laying Hens or Broilers	30,000
Ducks	5,000
Turkeys	55,000

<u>Animal Waste Facility</u> - A structure designed and constructed to store and/or process animal waste. Animal waste facilities include but are not limited to; holding basins, lagoons, pits and slurry stores.

<u>Automobile-Machinery Service Station</u> - Building and premises where motor fuel, oil, grease, batteries, tires, and parts may be supplied and dispensed at retail, and where, in addition, customary repair services may be rendered.

<u>Board</u> – The County Commission, Planning Commission, Board of Adjustment or other governmental body governing the district this ordinance refers to. (*Amended 11/3/15*)

Buildable Area - The portion of a lot remaining after required yards have been provided.

<u>Building</u> - Any structure for the support, shelter and enclosure of persons, animals, chattels, or moveable property of any kind.

Bon Homme County Adopted 04/13/99 Amended: 02/24/03, 11/3/15

<u>Campground</u> - Any premises where two (2) or more camping units are parked or placed for camping purposes, or any premises used or set apart for supplying to the public camping space for two (2) or more camping units for camping purposes, which include any buildings, structures, vehicles or enclosures, used or intended for use or intended wholly, or in part, for the accommodation of transient campers for monetary gain.

<u>Camping Unit</u> - Any vehicle, tent, trailer or portable shelter used for camping purposes.

<u>Commercial Trucking Terminal</u> - A building or structure where seven (7) or more commercially licensed trucks or tractors are rented, leased, kept for hire, or stored or parked for compensation, or from which trucks or tractors, stored or parked on the property, are dispatched for hire as common carriers, and which may include warehouse space.

<u>Conditional Use</u> - A conditional use is a use that would not be appropriate, generally or without restriction, throughout the zoning district, but which, if controlled as to number, area, location or relation to the neighborhood, would promote the public health, safety, welfare, morals, order, convenience, appearance, prosperity or general welfare.

<u>Construction</u> – Any clearing of land, excavation, or other action that would adversely affect the natural environment of the site or route but does not include changes needed for temporary use of sites or routes for non-utility purposes, or uses in securing survey or geological data, including necessary borings to ascertain foundation conditions. (*Amended 11/3/15*)

<u>Domesticated Large Animals</u> - Any animal that through long association with man, has been bred to a degree which has resulted in genetic changes affecting the temperament, color, conformation or other attributes of the species to an extent that makes it unique and different from wild individuals of its kind. For the purpose of this ordinance the definition shall include, but is not limited to, animals commonly raised on farms and ranches, such as cattle, horses, hogs, and mules.

<u>Dwelling Unit</u> - One (1) room, or rooms connected together, constituting a separate, independent housekeeping establishment for owner occupancy, or rental or lease on a weekly, monthly, or longer basis and physically separated from any other rooms or dwelling units which may be in the same structure and containing independent cooking and sleeping facilities.

<u>Dwelling</u>, <u>Multiple Family</u> - A residential building designed for, or occupied by, two (2) or more families, with the number of families in residence not exceeding the number of dwelling units provided.

<u>Dwelling</u>, <u>Single Family</u> - A detached residential dwelling unit other than a manufactured home designed for or occupied by one (1) family only.

<u>Family</u> - Any number of individuals living together as a single housekeeping unit, in which not more than four (4) individuals are unrelated by blood, marriage or adoption. This definition shall not include foster families as regulated by the State of South Dakota.

<u>Farm, Ranch, Orchard</u> - An area of twenty (20) acres or more which is used for growing usual farm products, vegetables, fruits, trees, and grain, and for the raising thereon of the usual farm poultry and farm animals such as horses, cattle, and sheep, and including the necessary accessory uses for raising, treating, and storing products raised on the premises; but excluding an Animal Feeding Operation.

Amended: 02/24/03, 11/3/15

The processing and storage of raw agricultural products, such as grain elevators and ethanol plants, shall not be considered a farm, ranch or orchard if such constitutes the main or principal use on the lot or parcel

<u>Farm Building</u> - All buildings and structures needed in agricultural operation, including dwellings for owners, operators, farm laborers employed on the farm, and other family members.

<u>Farm Occupation</u> - A business activity customarily carried out on a farm by a member of the occupant's family without structural alterations in the building or any of its rooms, without the installation or outside storage of any machinery, equipment or material other than that customary to normal farm operations, without the employment of persons not residing in the home, which does not cause the generation of additional traffic in the area. Farm occupations include, but are not limited to, seed sales and custom combining support facilities.

<u>Farmstead</u> - The area within or adjacent to the shelterbelt protecting the house and main buildings, including, the driveway and the land lying between the farmstead and the road.

<u>Farm Unit</u> - All buildings and structures needed in an agricultural operation, including dwellings for owners, operators, and other family members.

<u>Fishery</u> - As defined by South Dakota Administrative Rules, Sections 74:03:03:02 and 74:03:03:03 (August 8, 1994). Bon Homme County as described in Section 74:03:03:07. Lakes Bucholz, Clear, Cosby, Hieb, Kloucek, Schaefer and Tyndall Kids Pond (Section 74:03:03:03(6)) are warm water marginal fish life propagation waters and Lake Henry (Section 74:03:03:03(5)) is defined as warm water permanent fish life propagation waters. The Missouri River (Section 74:03:04:04 (1,4,7,8,11) domestic water supply, warm water permanent fish life propagation waters, immersion recreation waters, limited-contact recreation waters, commerce and industry waters. Choteau Creek from Lewis and Clark Lake to S34, T96N, R63W as described in 74:03:04:04 (5,8) and Emanuel Creek from Lewis and Clark Lake to S20 T94N R60W are warm water semi-permanent fish life propagation waters and warm water marginal fish life propagation waters. Dry Choteau Creek as described in 74:03:04:04 (6,8) from Choteau Creek to S.D. Highway 50 is warm water marginal fish life propagation waters and limited-contact recreation waters.

Flammable or Combustible Liquids, or Hazardous Material - Flammable material is any material that will readily ignite from common sources of heat, or that will ignite at a temperature of 600°F or less. Flammable liquid is any liquid having a flash point below 100°F and having vapor pressure not exceeding forty (40) pounds per square inch (absolute) at 100°F. Combustible liquid is any liquid having a flash point at or above 100°F. Hazardous material includes any flammable solids, corrosive liquids, radioactive materials, oxidizing materials, highly toxic materials, poisonous gases, reactive materials, unstable materials, hypergolic materials, pyrophoric materials, and any substance or mixture of substances which is an irritant, a strong sensitizer or which generates pressure through exposure to heat, decomposition or other means.

<u>Game Farm</u> - An area of five (5) acres or more which is used for producing hatchery raised game and nondomestic animals for sale to private shooting preserves.

<u>Game Lodge</u> - A building or group of two (2) or more detached, or semi-detached, or attached buildings occupied or used as a temporary abiding place of sportsmen, hunters and fishermen, who are lodged, with or without meals, and in which there are more than two (2) sleeping rooms.

Bon Homme County Adopted 04/13/99

Amended: 02/24/03, 11/3/15

Grain Elevator - Grain storage facilities, which are the principal and primary use of the lot. Said facilities are generally equipped with devices for housing and discharging significant quantities of grain. This definition does not include normal farm product storage and warehousing facilities such as grain bins and where such storage is an accessory use to the parcel.

Habitable Residential Dwelling – A structure designed and constructed for residential purposes to which utilities such as water and electrical are either active or readily accessible upon the property. Structures currently not occupied shall be able to facilitate human occupation with minor repairs or renovations as determined by the Zoning Administrator. (Amended 11/3/15)

High Voltage Transmission Line - A conductor of electric energy with a minimum voltage of 69 kilovolts and associated facilities. (Amended 11/3/15)

Hobby Farm - An activity carried out in rural residential areas which include the planting, cultivating, harvesting and storage of grains, hay or plants, fruits, or vineyards.

The raising and feeding of livestock and poultry shall be considered as part of a hobby farm if the area, in which the livestock or poultry is kept, is two (2) acres or more in area for every two (2) domesticated large animals, and if such livestock does not exceed ten (10) animals; or the raising of livestock and poultry is incidental or supplemental to the residential use and is not primarily for the growing of crops or raising of livestock.

Home Occupation - A business activity customarily carried on in the home by a member of the occupant's family without structural alterations in the building or any of its rooms, without the installation or outside storage of any machinery, equipment or material other than that customary to normal household operations, without the employment of persons not residing in the home, which does not cause the generation of additional traffic in the street.

Horticulture - The science or art of cultivating fruits, vegetables, flowers, and plants.

Junkyard - A place where non recyclable waste, having no economic value, or waste which is recyclable, but has no chance of being recycled is deposited.

Kennel - Any place where dogs, cats, or other domesticated animals are housed, groomed, bred, boarded, trained, harbored, kept or sold for commercial purposes.

<u>Large Wind Energy System or LWES</u> – All WES facilities excluding Small Wind Energy Systems. (Amended 11/3/15)

Lagoon - Any pond, basin, or other impoundment made by excavation or earthfill for storage or treatment of animal waste.

Lot - Land occupied or to be occupied by a building and its accessory building(s) having its principal frontage upon a public street or officially approved place.

Lot Depth - The average horizontal distance between the front and rear lot lines.

<u>Lot Frontage</u> - The portion of the lot nearest the street. For the purpose of determining yard requirements on corner lots and through lots, all sides of a lot adjacent to streets shall be considered frontage, and vards shall be provided as indicated under Yards in this article.

Amended: 02/24/03, 11/3/15

Lot Line - The legally defined limits of any lot.

<u>Lot Width</u> - The mean horizontal distance between the side lot lines of a lot measured at right angles to the depth or the same distance measured at the front building line.

Manufactured Home - A moveable or portable dwelling which is eight (8) feet or more in width and thirty-two (32) feet or more in length, constructed on a chassis, and which is designed to be towed, designed for year-round occupancy, primarily to be used without a permanent foundation, but which may sit on a permanent foundation, and designed to be connected to utilities. It may consist of one (1) or more units, separately transportable, but designed to be joined together into one (1) integral unit.

The following shall not be included in this definition:

- a. Travel trailers, pickup coaches, motor homes, camping trailers, or other recreational vehicles.
- b. Manufactured modular housing which is designed to be set on a permanent foundation, and which uses standard sheathing, roofing, siding, and electrical, plumbing, and heating systems.

Mobile Home - See Manufactured Home

<u>Modular Home</u> - A structure or building module that is manufactured at a location other than the site upon which it is installed and used as a residence; transportable in one or more sections on a temporary chassis or other conveyance device; and to be used as a permanent dwelling when installed and placed upon a permanent foundation system. This term includes the plumbing, heating, air conditioning, and electrical systems contained within the structure.

<u>Navigable Waters</u> - A body of water presently being used or is suitable for use for transportation and commerce, or if it has been so used or was suitable for such use in the past.

<u>Open Sales Area</u> - Any open land or area used or occupied for the purpose of displaying for sale new or secondhand merchandise, including but not limited to, passenger cars or trucks, farm machinery, construction machinery, motor scooters or motorcycles, boats, trailers, aircraft, and monuments.

Ownership Line - A line defining ownership of property under one owner of record

<u>Person</u> – An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, Municipal Corporation, government agency, public utility district, consumer's power district, or any other entity, public or private, however organized. (*Amended 11/3/15*)

<u>Private Shooting Preserves</u> - An acreage of at least one hundred and sixty (160) acres and not exceeding one thousand two hundred and eighty (1,280) acres either privately owned or leased on which hatchery raised game is released for the purpose of hunting, for a fee, over an extended season.

Property Line - The division between two (2) parcels of land, or between a parcel of land and the road.

<u>Route</u> – The location of a High Voltage Transmission Line between two end points. The route may have a variable width of up to 1.25 miles. (*Amended 11/3/15*)

<u>Salvage Yard</u> - The use of more than one (1) acre of open storage on any lot, portion of lot, or tract of land for the sale, storage, keeping, or for the abandonment, dismantling, or wrecking of automobiles or other vehicles, machines, or parts thereof.

<u>Semi-Portable Agricultural Structures</u> - Anything which requires placement on the ground for agriculture related purposes. Semi-portable agricultural structures include, but are not limited to, feed bunks, calving, lambing, or farrowing sheds, and temporary grain storage facilities.

<u>Shelterbelt</u> - A barrier consisting of trees and shrubs that reduces erosion and protects against the effects of wind and storms. For the purposes of this ordinance a shelterbelt shall include ten (10) or more trees planted in a line, separated by a distance of forty (40) feet or less.

<u>Shelterbelt Restoration</u> - The removal and replacement of two (2) or more rows of trees or of trees totaling one-half (1/2) acre or more, whichever is greater, in an existing shelterbelt.

<u>Small Wind Energy System or SWES</u> – A WES facility with a single Tower Height of less than seventy-five (75) feet used primarily for on-site consumption of power. (*Amended 11/3/15*)

Street Line - The right-of-way line of a street or road.

<u>Structure</u> - Anything constructed or erected which requires location on the ground, or attached to something having a fixed location on the ground. Among other things, structures include, but are not limited to, buildings and manufactured homes. This definition does not include semi-portable agricultural structures.

<u>Swine, Farrow-to-Finish</u> - An animal husbandry operation including all elements of an animal's life cycle and generally includes a single site operation with breeding, gestating, farrowing, nursery, feeder, and finisher stages of swine. The operation is viewed as a complete operation and is different from multi-site production methods

<u>Swine</u>, <u>Feeder</u> - A swine of an intermediate stage of growth; removed from a nursery facility at an approximate weight of fifty-five (55) pounds then sold and/or moved to a finishing unit.

<u>Swine</u>, <u>Finish</u> - A swine weighing between an approximate weight of fifty-five (55) pounds and the standard slaughter weight for the specific genetic makeup of the animal. This term shall also include replacement stock raised to an adult stage for the purposes of reproduction or show. A swine in a finishing unit may be part of either a single or multi-site production system.

<u>Swine, Nursery</u> - A young swine weaned from a sow and placed in a unit for the purpose of growth to an approximate weight of fifty-five (55) pounds. A swine in a nursery unit may be part of either a single or multi-site production system.

<u>Swine</u>, <u>Production Unit</u> - A swine unit primarily focused on the breeding, gestating, and farrowing of swine. This unit may include newly farrowed swine not yet weaned from the sow. A swine production unit may be part of either a single or multi-site production system.

<u>System Height</u> – The height above grade of the tallest point of the WES, including the rotor radius. (*Amended 11/3/15*)

Bon Homme County Adopted 04/13/99 Amended: 02/24/03, 11/3/15

<u>Tower Height</u> – The height above grade of the fixed portion of the tower, excluding the wind turbine itself. (*Amended 11/3/15*)

<u>Turbine</u> – The parts of the WES including the blades, generator and tail. (Amended 11/3/15)

<u>Used Vehicles Dealer</u> - Any person who, for commission or with intent to make a profit or gain sells, exchanges, rents with option to purchase, offers or attempts to negotiate a sale or exchange of used vehicles or who is engaged in the business of selling used vehicles; or any person who sells five (5) or more used vehicles or offers for sale five (5) or more used vehicles at the same address or telephone number in any one calendar year.

<u>Utility</u> – Any person engaged in the generation, transmission or distribution of electric energy in this state including, but not limited to, a private investor owned utility, a cooperatively owned utility, a consumers power district and a public or municipal utility. (*Amended 11/3/15*)

<u>Variance</u> - A variance is a relaxation of the terms of the zoning ordinance where such variance will not be contrary to the public interest and where, owing to conditions peculiar to the property and not the result of the actions of the applicant, a literal enforcement of the ordinance would result in unnecessary and undue hardship. As used in this ordinance, a variance is authorized only for area and size of structure or size of yards and open spaces; establishment or expansion of a use otherwise prohibited shall not be allowed by variance, nor shall a variance be granted because of the presence of nonconformities in the zoning district or uses in an adjoining district or because of conditions created by the landowner. All required setbacks are eligible for variances within the provisions of this Ordinance.

<u>Vehicle</u> - Any new or used automobile, truck, truck tractor, motorcycle, motor home, trailer, semi trailer, or travel trailer of the type and kind required to be titled and registered under Chapters 32-3 and 32-5 of SDCL, except manufactured homes, mobile homes, mopeds or snowmobiles.

<u>Vehicle Dealer</u> - Any person who, for commission or with intent to make a profit or gain, sells, exchanges, rents with the option to purchase, offers or attempts to negotiate a sale or exchange new, or new and used vehicles, or who is engaged wholly or in part in the business of selling new, or new and used vehicles.

<u>Wind Energy System or WES</u> – A commonly owned and/or managed integrated system that converts wind movement into electricity. All of the following are encompassed in this definition of system:

- a) Tower or multiple towers, including foundations;
- b) Generator(s);
- c) Blades;
- d) Power collection systems, including pad mount transformers;
- e) Access roads, meteorological towers, on-site electric substation, control building and other ancillary equipment and facilities. (*Amended 11/3/15*)

<u>Yard</u> - An open space at grade, other than a court or plaza, between a structure and the adjacent lot lines, unoccupied and unobstructed by any portion of a structure from the ground upward. All yards shall be measured from the property line or road right-of-way where applicable.

<u>Yard, Front</u> - An open, unoccupied space on a lot facing a street and extending across the front of the lot between the side lot lines. Measured from the road right-of-way to the structure.

Bon Homme County Adopted 04/13/99 Amended: 02/24/03, 11/3/15

<u>Yard, Side</u> - An open, unoccupied space on the same lot with a building situated between the building and sideline of the lot and extending through from the front yard to the required rear yard. Any lot line not the rear line or a front line shall be deemed a sideline.

<u>Yard, Rear</u> - An open, unoccupied space extending across the rear of a lot from one side lot line to the other side lot line.

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#### JURISDICTION

#### Section 101 General

This Ordinance shall be known and shall be cited and referred to as "The Zoning Ordinance of Bon Homme County, South Dakota", to the same effect as if the full title were stated.

# Section 103 Jurisdiction

The provisions of this Ordinance shall apply within the unincorporated areas of Bon Homme County, South Dakota, excluding the incorporated communities of Avon, Scotland, Springfield, Tabor, and Tyndall, as established on the map entitled "The Official Zoning Map of Bon Homme County, South Dakota".

### Section 105 Provisions of this Ordinance Declared to the Minimum Requirements

In their interpretation and application, the provisions of this Ordinance shall be held to be minimum requirements, adopted for the promotion of the public health, safety, morals, or general welfare. Whenever the provisions of this Ordinance require a greater width or size of yards, courts or other spaces, or require a greater percentage of lot to be left unoccupied, or impose other higher standards than are required, in any other Ordinance, the provisions of this Ordinance shall govern. Wherever the provisions of any other ordinance require a greater width or size of yards, courts, or other open spaces, or require a greater percentage of lot to be left unoccupied, or impose other higher standards than are required by the provisions of this Ordinance, the provisions of such Ordinance shall govern.

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# APPLICATION OF DISTRICT REGULATIONS

# Section 201 General

The regulations, set forth by this Ordinance within each district, shall be minimum regulations and shall apply uniformly to each class or kind of structure or land, except as hereinafter provided.

# Section 203 Zoning Affects Every Building and Use

No building, structure, or land shall hereafter be used or occupied, and no building or structure or part thereof shall hereafter be erected, constructed, reconstructed, moved, or structurally altered except in conformity with all of the regulations herein specified for the district in which it is located.

#### Section 205 Performance Standards

No building or other structure shall hereafter be erected or altered, without obtaining a permit, to:

- 1. accommodate or house a greater number of families;
- 2. occupy a greater area of the lot; or
- 3. have narrower or smaller rear yards, front yards, side yards, or other open spaces.

#### Section 207 Yard and Lot Reduction Prohibited

No yard or lot existing at the time of passage of this Ordinance shall be reduced in dimensions or area below the minimum requirements set forth herein. Yards or lots created after the effective date of this Ordinance shall meet at least the minimum requirements established by this Ordinance.

Amended: 02/24/03, 11/3/15

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# ESTABLISHMENT OF DISTRICTS

# Section 301 <u>Districts Created</u>

For the purpose of this Ordinance, there are hereby created four (4) types of districts by which the jurisdictional area defined in Section 103 shall be divided.

AG - Agricultural

RR - Rural Residential

PTR - Platted Town Site Residential

RC - Rural Commercial

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### OFFICIAL ZONING MAP AND BOUNDARY INTERPRETATION

# Section 401 General

The County is hereby divided into zones, or districts, as shown on the Official Zoning Map, which, together with all explanatory matter thereon, is hereby adopted by reference and declared to be a part of this Ordinance. The Official Zoning Map shall be identified by the signature of the Chairman of the County Commissioners, attested by the Auditor, and bearing the seal of the County, under the following words: "This is to certify that this is the Official Zoning Map referred to in Section 401 of Ordinance No. 99-1 of Bon Homme County, South Dakota, as amended" together with the date of the adoption of this Ordinance.

# Section 403 Zoning Map Changes

If, in accordance with the provisions of this Ordinance, changes are made in the district boundaries or other matter portrayed on the Official Zoning Map, such changes shall be entered on the Official Zoning Map promptly after the amendment has been approved by the County Commissioners, with an entry on the Official Zoning Map as follows: "on [date], by official action of the Bon Homme County Commission, the following [change] changes were made in the Official Zoning Map: [brief description of nature of change]," which entry shall be signed by the Chairman of the Commission and attested by the Auditor. No amendment to this Ordinance which involves matters portrayed on the Official Zoning Map shall become effective until after such change and entry has been made on said map.

No changes of any nature shall be made in the Official Zoning Map or matters shown thereon except in conformity with the procedures set forth in this Ordinance.

Any unauthorized change of whatever kind by any person or persons shall be considered a violation of this Ordinance and punishable as provided under Section 1503.

Regardless of the existence of purported copies of the Official Zoning Map which may, from time to time, be made or published, the Official Zoning Map which shall be located in the office of the Zoning Administrator shall be the final authority as to the current zoning status of land and water areas, buildings, and other structures in the County.

# Section 405 Zoning Map Replacement

In the event that the Official Zoning Map becomes damaged, destroyed, lost or difficult to interpret because of the nature or number of changes and additions, the Bon Homme County Commission may, by resolution, adopt a new Official Zoning Map, which shall supersede the prior Official Zoning Map. The new Official Zoning Map may correct drafting or other errors or omissions in the prior Official Zoning Map, but no such correction shall have the effect of amending the original Official Zoning Map or any subsequent amendment thereof.

The new Official Zoning Map shall be identified by the signature of the Chairman of the County Commission, attested by the Auditor, and bearing the seal of the County, under the following words:

"This is to certify that this Official Zoning Map supersedes and replaces the Official Zoning Map adopted [date of adoption of map being replaced] as part of Ordinance No. 99-1 as amended of Bon Homme County, South Dakota."

Unless the prior Official Zoning Map has been lost, or has been totally destroyed, the prior map or any significant parts thereof remaining, shall be preserved, together with all available records pertaining to its adoption or amendment.

# Section 407 Rules for Interpretation of District Boundaries

Where uncertainty exists as to the boundaries of districts as shown on the Official Zoning Map, the following rules shall apply:

- 1. Boundaries indicated as approximately following the center lines of streets, highways, or alleys shall be construed to follow such center lines;
- 2. Boundaries indicated as approximately following platted lot lines shall be construed as following such lot lines;
- 3. Boundaries indicated as approximately following city limits shall be construed as following such city limits;
- 4. Boundaries indicated as following railroad lines shall be construed to be midway between the main tracks;
- 5. Boundaries indicated as following shore lines shall be construed to follow such shore lines, and in the event of change in the shore line shall be construed as moving with the actual shore line; boundaries indicated as approximately following the center line of streams, rivers, canals, lakes, or other bodies of water shall be construed to follow such center lines;
- 6. Boundaries indicated as parallel to or extensions of features indicated in subsections 1 through 5 above shall be so construed. The scale of the map shall determine distances not specifically indicated on the Official Zoning Map; and
- 7. Where physical or cultural features existing on the ground are at variance with those shown on the Official Zoning Map, or in other circumstances not covered by subsections 1 through 6 above, the Planning Commission shall interpret the district boundaries.

# AGRICULTURAL DISTRICT (AG)

# Section 501 Intent

The intent of Agricultural Districts (AG) is to protect agricultural lands and lands consisting of natural growth from incompatible land uses in order to preserve land best suited to agricultural uses and land in which the natural environment should be continued and to limit residential, commercial, and industrial development to those areas where they are best suited for reasons of practicality and service delivery.

# Section 503 Permitted Principal Uses and Structures

The following principal uses and structures shall be permitted in an Agricultural District (AG):

- 1. agriculture;
- 2. farm;
- 3. ranch:
- 4. orchard:
- 5. farm occupations;
- 6. public parks and public recreational areas;
- 7. farm buildings;
- 8. farm drainage and irrigation systems, flood control and watershed structures and erosion control devices meeting all county, state, and soil conservation district regulations;
- 9. manufactured homes;
- 10. historic sites;
- 11. veterinary services and kennels;
- 12. off-site and on-site signs;
- 13. cemeteries:
- 14. schools public and private;
- 15. campgrounds;
- 16. single-family dwellings;
- 17. additional farm dwellings;
- 18. churches;
- 19. rodeo grounds and arenas;
- 20. shelterbelts: and
- 21. stock dams.

# Section 505 Permitted Accessory Uses and Structures

The following accessory uses and structures shall be permitted in an Agricultural District (AG):

- 1. roadside stands for sales of farm products, fish bait, and other approved products;
- 2. home occupations;
- 3. professional offices; and
- 4. accessory uses, not specifically regulated by ordinance and structures customarily incidental to permitted uses and structures when established within the space limits of this district.

# Section 507 Conditional Uses

After the provisions of this Ordinance relating to conditional uses have been fulfilled, the Board of Adjustment may permit as conditional uses in an Agricultural District (AG):

- 1. utility substations, television, radio, and telephone relay stations;
- 2. airports;
- 3. automobile and equipment sales;
- 4. fairgrounds, race tracks, and amusement parks;
- 5. golf courses, country clubs, and golf driving ranges;
- 6. amphitheaters, stadiums, arenas, and fieldhouses;
- 7. go-cart tracks, riding stables, playfields, athletic fields, bowling alleys, swimming pools, permanent automobile parking;
- 8. agricultural product processing facilities;
- 9. grain elevators;
- 10. municipal sewage disposal and/or treatment sites, animal feeding operation lagoons and holding facilities;
- 11. commercial trucking terminals;
- 12. sales and auction yards and barns;
- 13. private or commercial outdoor recreation areas;
- 14. sanitary landfills and similar facilities;
- 15. wildlife and game production areas;
- 16. fireworks stands;
- 17. animal feeding operations;
- 18. bed and breakfast commercial operations;
- 19. game farms;
- 20. private shooting preserves;
- 21. game lodges;

- Amended: 02/24/03, 11/3/15
- 22. extraction of sand, gravel, or minerals provided such uses meet requirements for conducting surface mining activities of SDCL 45-6B;
- 23. salvage yards/junk yards; and
- 24. any facility engaged in the manufacture, wholesale distribution, retail sale or storage of flammable or combustible liquids, or hazardous material.

#### Section 509 Classification of Unlisted Uses

In order to insure that the zoning ordinance will permit all similar uses in each district, the Board of Adjustment, upon its own initiative or upon written application, shall determine whether a use not specifically listed as a permitted, accessory or conditional use in a District shall be deemed a permitted, accessory or conditional use in one or more districts on the basis of similarity to uses specifically listed.

# Section 511 Prohibited Uses and Structures

All uses and structures which are not specifically permitted as principal, accessory or conditional uses or approved as such within the provisions of Section 509 shall be prohibited from an Agricultural District (AG).

# Section 513 Minimum Lot Requirements

- 1. The minimum lot area per single-family dwelling unit, manufactured or modular homes shall be five (5) acres.
- 2. The minimum lot frontage shall be two hundred and fifty (250) feet.
- 3. An additional dwelling unit may be allowed if they are to be occupied by other members of the family farm unit, the Board of Adjustment may reduce the required area following the procedures of a variance.
- 4. The Zoning Administrator may allow construction of single and multi-family dwelling units not in conformance with this provision only on those lands organized as a 501(d), non-profit religious and apostolic associations as described in the United States Tax Code. Prior to issuance of a building permit or permission to proceed said entity shall file the Articles of Incorporation and other requested documentation with the Zoning Administrator. Construction activities carried on under this provision shall be in conformance with all other provisions of this ordinance.

# Section 515 <u>Minimum Yard Requirements for Dwellings, Manufactured or Modular Homes</u>

All yards must meet the following criteria as measured from the lot lines. This Section shall apply to all buildings and structures, including but not limited to decks, patios, and garages:

- 1. There shall be a front yard of not less than a depth of seventy-five (75) feet.
- 2. There shall be a rear yard of not less than a depth of twenty (25) feet.

- 3. There shall be two (2) side yards, each of which shall not be less than twenty-five (25) feet.
- 4. The Zoning Administrator may allow construction of single and multi-family dwelling units not in conformance with this provision only on those lands organized as a 501(d); non-profit religious and apostolic associations as described in the United States Tax Code. Prior to issuance of a building permit or permission to proceed said entity shall file the Articles of Incorporation and other requested documentation with the Zoning Administrator. Construction activities carried on under this provision shall be in conformance with all other provisions of this ordinance.

# Section 517 Prohibition of View Obstruction

- 1. There shall be no obstruction, such as buildings, structures, grain bins, baled or stacked agricultural products, large rocks or rock piles, dead plant material, volunteer trees, and shelter belts that may cause view obstruction, snow build-up or safety hazards within seventy five (75) feet of the road right-of-way between the dates of November 1 and April 1.
- 2. The purpose of this Section is to keep the right-of-ways free and clear of snow build-up and, further, to promote traffic safety along road rights-of-way and at intersections.

# Section 519 Animal Feeding Operations Performance Standards

- 1. Animal Feeding Operations shall submit animal waste management system plans and specifications for review and approval prior to construction, and a Notice of Completion for a Certificate of Compliance, after construction, to the South Dakota Department of Environment and Natural Resources.
- 2. Prior to construction, such facilities shall obtain a storm water permit for construction activities from the South Dakota Department of Environment and Natural Resources. The storm water plan required by the permit must be developed and implemented upon the start of construction.
- 3. All animal feeding operation's confinement and waste facilities shall comply with the following setbacks;

Public Wells	1,000 feet
Private Wells	250 feet
Operators Well	150 feet
Property Lines delineating a change in ownership	300 feet
Road Right-of-Ways	300 feet
Lakes, Rivers, Streams Classified as Fisheries	500 feet

4. Applicants must present a nutrient management plan, with the initial application documents, which will assure offensive odors, and runoff will be kept to a minimum.

Examples of such management shall include at least:

a. Proposed maintenance of holding ponds.

- b. Nutrient transportation equipment free of leaks or spillage hazards.
- c. Land application process and/or methods
- d. Legal description and map of area to be utilized for nutrient application.
- 5. Animal waste facilities shall be located no closer than one (1) mile from any incorporated municipality or rural residential district.
- 6. Animal waste facilities shall be located no closer than one (1) mile from any residential dwelling, one dwelling unit is allowed on the facility site. The owner of a residential dwelling may request the Board of Adjustment to review the facility and the Board may, by variance, waive or decrease the required separation distance. An easement, approved by the States Attorney must then be recorded with the County Register of Deeds in order that any future owners can be informed.
- 7. Animal waste shall be transported no further than five (5) miles from the point of origination for land application.
- 8. Animal Feeding Operations shall have a minimum lot size of five (5) acres.
- 9. The Zoning Administrator will automatically transfer a conditional use permit for all land approved as a conditional use for the purpose of operating an Animal Feeding Operation if:
  - a. The current owner notifies the Zoning Administrator and Secretary of the Department of Environment and Natural Resources at least thirty (30) days in advance of the proposed transfer date;
  - b. The notice includes a written agreement between the existing and new owners containing a specific date for transfer of permit responsibility, coverage and liability between them; and
  - c. The new owner or operator submits a Certification of Applicant Form to the County and DENR.

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# RURAL RESIDENTIAL DISTRICT (RR)

### Section 601 Intent

The intent of Rural Residential Districts (RR) is to provide for residential uses of varying types and other compatible uses in a pleasant and stable environment.

# Section 603 Permitted Principal Uses and Structures

The following principal uses and structures shall be permitted in a Rural Residential District (RR):

- 1. single-family dwellings;
- 2. multi-family dwellings;
- 3. manufactured homes;
- 4. modular homes:
- 5. horticulture:
- 6. churches, synagogues, and temples;
- 7. nursery, primary, intermediate, secondary schools and day care facilities;
- 8. public recreational and park facilities;
- 9. cemeteries;
- 10. utility substations;
- 11. long term care facilities;
- 12. medical and other health facilities; and
- 13. governmental services.

# Section 605 Permitted Accessory Uses and Structures

- 1. home occupations and professional offices; and
- 2. accessory uses and structures normally appurtenant to the permitted uses and structures when established within space limits of this district.

#### Section 607 Conditional Uses

After the provisions of this Ordinance, relating to conditional uses have been fulfilled, the Board of Adjustment may permit as conditional uses in a Rural Residential District (RR):

- 1. convenience stores;
- 2. colleges and universities;

- 3. golf courses, fairgrounds, rodeo grounds, and country clubs;
- 4. campgrounds;
- 5. hobby farms;
- 6. retail sales;
- 7. automobile service stations; and
- 8. game lodges.

# Section 609 Classification of Unlisted Uses

In order to insure that the zoning ordinance will permit all similar uses in each district, the Board of Adjustment, upon its own initiative or upon written application, shall determine whether a use not specifically listed as a permitted, accessory or conditional use in a District shall be deemed a permitted, accessory or conditional use in one or more districts on the basis of similarity to uses specifically listed.

# Section 611 Prohibited Uses and Structures

All uses and structures which are not specifically permitted as principal, accessory or conditional uses or approved as such within the provisions of Section 609 shall be prohibited from Rural Residential Districts (RR).

# Section 613 Minimum Lot Requirements

- 1. The minimum lot area shall be one acre for a single-family dwelling unit, manufactured or modular homes;
- 2. The minimum lot area for a multi-family dwelling unit shall be ten thousand (10,000) square feet per unit; and
- 3. The minimum lot width shall be one hundred fifty (150) feet.

#### Section 615 Minimum Yard Requirements

All yards must meet the following criteria as measured from the lot lines. This Section shall apply to all buildings and structures, including but not limited to decks, patios, and garages:

- 1. There shall be a front yard of not less than a depth of seventy-five (75) feet;
- 2. There shall be a rear yard of not less than a depth of twenty-five (25) feet; and
- 3. Each side yard shall not be less than twenty-five (25) feet

# PLATTED TOWN SITE RESIDENTIAL (PTR)

# Section 701 Intent

The intent of Platted Town Site Residential Districts (PTR) is to provide for residential uses of all currently platted property within unincorporated town sites, such as the Apple Tree, Bon Homme, Dempster's Cove, and Running Water, and other compatible uses in a pleasant and stable environment.

# Section 703 Permitted Principal Uses and Structures

The following principal uses and structures shall be permitted in a Platted Town Site Residential District (PTR):

- 1. single-family dwellings;
- 2. multi-family dwellings;
- 3. manufactured homes;
- 4. modular homes;
- 5. horticulture:
- 6. churches, synagogues, and temples;
- 7. nursery, primary, intermediate, secondary schools and day care facilities;
- 8. public recreational and park facilities;
- 9. cemeteries;
- 10. utility substations;
- 11. convalescent, nursing, and rest homes;
- 12. medical and other health facilities;
- 13. governmental services; and
- 14. game lodges.

### Section 705 Permitted Accessory Uses and Structures

- 1. home occupations and professional offices; and
- 2. accessory uses and structures normally appurtenant to the permitted uses and structures when established within space limits of this district.

# Section 707 Conditional Uses

After the provisions of this Ordinance, relating to exceptions have been fulfilled, the Planning Commission may permit as exceptions in Platted Town Site Residential Districts (PTR):

1. convenience stores;

- 2. colleges and universities;
- 3. golf courses, fairgrounds, rodeo grounds, and country clubs;
- 4. campgrounds;
- 5. hobby farms;
- 6. retail sales;
- 7. automobile service stations; and
- 8. grain elevators.

#### Section 709 Classification of Unlisted Uses

In order to insure that the zoning ordinance will permit all similar uses in each district, the Board of Adjustment, upon its own initiative or upon written application, shall determine whether a use not specifically listed as a permitted, accessory or conditional use in a District shall be deemed a permitted, accessory or conditional use in one or more districts on the basis of similarity to uses specifically listed.

## Section 711 Prohibited Uses and Structures

All uses and structures which are not specifically permitted as principal, accessory or conditional uses or approved as such within the provisions of Section 709 shall be prohibited from Platted Town Site Residential Districts (PTR).

# Section 713 Minimum Lot Requirements

- 1. The minimum lot area shall be two thousand five hundred (2,500) square feet for single family dwelling, manufactured or modular homes;
- 2. The minimum lot width shall be twenty-five (25) feet; and
- 3. The minimum lot depth shall be one hundred (100) feet.

#### Section 715 Minimum Yard Requirements

All yards must meet the following criteria as measured from the lot lines. This Section shall apply to all buildings and structures, including but not limited to decks, patios, and garages:

- 1. There shall be a front yard of not less than a depth of twenty-five (25) feet;
- 2. There shall be a rear yard of not less than a depth of five (5) feet; and
- 3. Each side yard shall not be less than five (5) feet.

# RURAL COMMERCIAL DISTRICT (RC)

### Section 801 Intent

The intent of the Rural Commercial Districts (RC) is to provide commercial areas for those establishments which can function most satisfactorily in an area directly related to a major vehicular circulation route due to the nature of the merchandise handled and the display space required, particularly items requiring expansive display area such as motor vehicles, trailers, and farm implements; the method of transport required of the purchaser for the merchandise handled, particularly goods customarily traded in bulk such as lumber or feed requiring access for the customer to the sales area; primary dependence upon vehicular, as opposed to pedestrian, access such as drive-in facilities and all types of automotive and farm implement services; or the clientele toward which the establishments are primarily oriented.

# Section 803 Permitted Principal Uses and Structures

The following principal uses and structures shall be permitted in a Rural Commercial District (RC):

- 1. retail sales;
- 2. wholesale sales;
- 3. funeral and crematory services and supplies;
- 4. agriculture;
- 5. farm products warehousing and storage;
- 6. refrigerated warehousing;
- 7. household goods warehousing and storage;
- 8. general warehousing and storage;
- 9. automobile and machinery sales, repair and services;
- 10. veterinary services;
- 11. contract construction services;
- 12. bus garaging and equipment maintenance;
- 13. motor freight terminals, garaging, maintenance;
- 14. libraries; museums, art galleries; planetaria; aquariums; historic and monument sites; auditoriums; exhibition halls; and arcades;
- 15. miniature golf, gymnasiums and athletic clubs, swimming pools, tennis courts, ice skating, roller skating;
- 16. parks;
- 17. theaters; stadiums; drive-in movies; arenas and field houses; race tracks; fairgrounds; amusement parks, golf driving ranges; go-cart tracks; golf courses and country clubs; riding stables; playfields and athletic fields; bowling; and swimming pools;

- 18. communication and utility uses;
- 19. automobile-machinery service stations;
- 20. motels; and
- 21. off-site and on-site signs.

#### Section 805 Permitted Accessory Uses and Structures

The following accessory uses and structures shall be permitted in Rural Commercial Districts (RC):

Accessory uses normally appurtenant to the permitted principal uses and structures when established in conformance within the space limits of this district.

#### Section 808 Conditional Uses

After the provisions of this resolution relating to conditional uses have been fulfilled, the Board of Adjustment may permit as conditional uses in the Rural Commercial Districts (RC):

- 1. other trade and service uses which are similar to the permitted principal uses and which are in harmony with the intent of this district;
- 2. campgrounds;
- 3. any facility engaged in the manufacture, wholesale distribution, retail sale or storage of flammable or combustible liquids, or hazardous material; and
- 4. grain elevators.

### Section 809 Classification of Unlisted Uses

In order to insure that the zoning ordinance will permit all similar uses in each district, the Board of Adjustment, upon its own initiative or upon written application, shall determine whether a use not specifically listed as a permitted, accessory or conditional use in a District shall be deemed a permitted, accessory or conditional use in one or more districts on the basis of similarity to uses specifically listed.

### Section 811 Prohibited Uses and Structures

All uses and structures which are not specifically permitted as principal, accessory or conditional uses or approved as such within the provisions of Section 809 shall be prohibited from Rural Commercial Districts (RC).

# Section 813 Minimum Lot Requirements

- 1. The minimum lot area shall be one (1) acre.
- 2. The minimum lot width shall be one hundred and fifty (150) feet.

Amended: 02/24/03, 11/3/15

# Section 815 Minimum Yard Requirements

- 1. There shall be a front yard of not less than a depth of seventy-five (75) feet;
- 2. There shall be a rear yard of not less than a depth of twenty-five (25) feet; and
- 3. Each side yard shall be not less than twenty-five (25) feet.

Amended: 02/24/03, 11/3/15

#### **ARTICLE 9**

### SUPPLEMENTARY DISTRICT REGULATIONS

### Section 901 Accessory Buildings

No accessory building shall be erected in any required yard area and no separate accessory building shall be erected within five (5) feet of any other building.

### Section 903 Erection of More than One Principal Structure on a Lot

In any district, more than one structure, housing a permitted or permissible principal use, may be erected on a single lot, <u>provided</u>, that yard and other requirements of this Ordinance shall be met for each structure as though it were on an individual lot.

#### Section 905 Shelterbelts

All shelterbelts shall be seventy-five (75) feet from the road right-of-way to the first row of trees.

# Section 907 Recording of Conditions

All zoning agreements including conditions prescribed by the Board of Adjustment must be recorded at the Register of Deeds Office prior to issuance of a building permit.

### Section 909 Signs

All land lying within one (1) mile of an incorporated municipality and adjoining a designated primary roadway or lying on the same side of the road and within one (1) mile of a currently established business located within the rural areas shall be designated rural commercial for the sole purpose of the construction and placement of signs, displays, and devices. Placement of said signs shall comply with SDCL 31-29 and ARSD 70:04:03.

### Section 911 Right-of Way Obstructions

It shall be unlawful for any person to place any obstruction in a road right-of-way without prior written permission from the Bon Homme County Highway Superintendent. Said obstacles may include but are not limited to signs, fences, and trees. Temporary obstacles may be placed within six (6) feet of the traveled surface upon written authorization of the Highway Superintendent.

### **ARTICLE 10**

# ADMINISTRATIVE PROCEDURE AND ENFORCEMENT

### Section 1001 Bon Homme County Zoning Administrator

An administrative official who shall be known as the Zoning Administrator and who shall be designated by the Bon Homme County Commission shall administer and enforce this ordinance. They may be provided with the assistance of such other persons as the County Commission may direct.

If the Zoning Administrator shall find that any of the provisions of this Ordinance are being violated, they shall notify in writing the person responsible for such violations, indicating the nature of the violation and ordering the action necessary to correct it. They shall order discontinuance of illegal use of land, buildings or structures; removal of illegal buildings or structures or of illegal additions, alterations, or structural changes; discontinuance of any illegal work being done; or shall take any other action authorized by the Ordinance to insure compliance with or to prevent violation to its provisions.

### Section 1003 Right of Entry

Whenever necessary to make an inspection to enforce any of the provisions of this ordinance, or whenever the Zoning Administrator or an authorized representative has reasonable cause to believe that there exists in any building or upon any premises an ordinance violation, the Zoning Administrator or an authorized representative may enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon the Zoning Administrator by this ordinance, provided that if such building or premises be occupied, they shall first present proper credentials and request entry; and if such building or premises be unoccupied, they shall first make an reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. If such entry is refused, the Zoning Administrator or an authorized representative shall have recourse to every remedy provided by law to secure entry.

When the Zoning Administrator or an authorized representative shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care or control of any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Zoning Administrator or an authorized representative for the purpose of inspection and examination pursuant to this ordinance.

# Section 1005 Bon Homme County Planning Commission

The Bon Homme County Commission shall appoint a Planning Commission of five (5) members; the total membership of which shall be an uneven number and at least one (1) member shall be a county commissioner. The term of each of the appointed members of the Planning Commission shall be for three to five years. When the Planning Commission is first appointed the lengths of the terms shall be varied so that no more than one-third (1/3) of the terms shall expire in the same year. Meetings shall be scheduled and held at the call of the Chairman, at such other times as the Planning Commission may determine. The Chairman, or in their absence, the Acting Chairman, may administer oaths and compel the attendance of witnesses. All meetings shall be open to the public.

Upon notification of a proposed revision, modification, change or amendment to the zoning ordinance or any part thereof the Planning Commission shall schedule a public hearing. Said public hearing shall not be less than ten (10) days after notice has been published in the County's legal newspapers. Any person may appear and request or protest the proposed change.

The Planning Commission shall keep a record of all proceedings, including minutes, showing the vote of each member upon each question, or if absent or failure to vote indicating such fact, and shall keep records of its examinations and other official actions, all of which shall be a public record and be immediately filed with the Zoning Administrator. The Planning Commission shall adopt from time to time, subject to the approval of the County Commission, rules and regulations, as it may deem necessary for the conduct of its affairs and to carry the appropriate provisions of this Ordinance into effect.

### Section 1007 Bon Homme County Board of Adjustment

The Bon Homme County Planning Commission shall serve as the Board of Adjustment. The Board of Adjustment is hereby designated to hear all requests for variances, conditional uses and zoning appeals. The Board of Adjustment may, in specific cases to avoid unwarranted hardship which constitutes an unreasonable deprivation of use as distinguished from the mere grant of a privilege, make upon an affirmative vote of two-thirds (2/3) of the full membership of the Board of Adjustment, conditional uses or grant variances to the terms of the regulations or controls, subject to appropriate conditions or safeguards being adopted by the Board of County Commissioners.

The Zoning Administrator shall act as secretary to the Board of Adjustment when acting in zoning cases, but shall take no part in the deliberations. Meetings of the Board of Adjustment acting in zoning cases shall be held at the call of the Chairperson and at such other times, as the Board shall determine. Such Chairperson, or in his/her absence, the Acting Chairperson, may administer oaths and compel the attendance of witnesses.

All meetings of the Board of Adjustment shall be open to the public. The Board, acting in zoning appeal cases, shall keep minutes of its proceedings, showing the vote of each member upon each question, or if absent or failing to vote, indicating such fact, and shall keep records of its examinations and other official actions, all of which shall be immediately filed in the office of the Zoning Administrator and shall be a public record. The Board of Adjustment, acting in zoning appeals cases, shall adopt from time to time, subject to the approval of the County Commission, such rules and regulations as it may deem necessary to carry the appropriate provisions of this Ordinance into effect.

# Section 1009 Bon Homme County Commission

The Bon Homme County Commission may amend, supplement, change, modify, or repeal any regulation, restriction, boundary, or enforcement provision established in the comprehensive plan or adjuncts thereto. The County Commission shall forward a copy of the proposed changes to the Planning Commission for public review. Upon receipt of the comments from the Planning Commission the County Commission shall publish a notice of public hearing no less than ten (10) days in advance in the County's legal newspapers. The Board of County Commissioners shall thereafter either adopt or reject such amendment, supplement, change, modification, or repeal. If adopted the Board of County Commissioners shall direct the Planning Commission to prepare a summary of the action. Upon completion of the summary the States Attorney shall review the same and direct the County Auditor to have said summary published once in the legal newspapers.

# Section 1011 Building Permits Required

No building or other structure shall be erected, moved, added to, removed, demolished, burned, or use changed without a permit issued by the Zoning Administrator. No building permit shall be issued by the Zoning Administrator except in conformity with the provisions of this Ordinance unless they received a written order from the Board of Adjustment in the form of an administrative review, conditional use, or variance as provided by this Ordinance.

Concrete flatwork of less than five hundred (500) square feet shall be exempt from obtaining a building permit provided such work is done at or immediately above grade.

### Section 1013 Applications for Building Permits, Conditional Uses and Variances

All applications for building permits, conditional uses and variances must be signed or approved in writing by the owner of record. In the event the owner of record has a binding purchase agreement contingent on the approval of the application, the potential purchaser may submit and sign all documents required for application. All building permit, conditional use and variance applications shall be accompanied by a site plan including but not limited to the following items; drawn to scale, including a north arrow, showing the property lines, actual dimensions and shape of the lot to be built upon, the exact sizes and locations on the lot of buildings already existing, if any; and the location and dimensions of the proposed building or alteration. Refer to document entitled Site Plan Requirements for a detailed example of site plan requirements.

The application shall include such other information as may be lawfully required by the Zoning Administrator, including: existing or proposed building or alterations; existing or proposed uses of the building and land; the number of families, housekeeping units, rental units, or animal units the building is designed to accommodate; conditions existing on the lot; and such other matters as may be necessary to determine conformance with, and provide for the enforcement of, this Ordinance.

One copy of the plans shall be returned to the applicant by the Zoning Administrator after they shall have marked such copy either as approved or disapproved and attested to the same by their signature on such copy. If a building permit is refused, the Zoning Administrator shall state the reasons for such refusal in writing. The Zoning Administrator shall retain the original and one copy of the plans, similarly marked. The issuance of a building permit, shall, in no case, be construed as waiving any provisions of this Ordinance.

### Section 1015 Expiration of Building Permit, Conditional Uses and Variances

If the work described in any building permit, conditional use or variance application has not begun within one hundred and eighty (180) days or has not been substantially completed within two (2) years of the date of issuance thereof, said permit shall expire; it shall be canceled by the Zoning Administrator and written notice thereof shall be given to the persons affected. The notice shall state that further work as described in the canceled permit or application shall not proceed unless, and until, a new building permit, conditional use or variance application has been approved and all required fees have been paid.

# Section 1017 Construction and Use to be as Provided in Application, Plans, Permits, and Application for Zoning Compliance

Building permits issued on the basis of plans and applications approved by the Zoning Administrator authorize only the use, arrangement, and construction set forth in such approved plans and applications,

Amended: 02/24/03, 11/3/15

and no other use, arrangement or construction. Use arrangement, or construction at variance with that authorized shall be deemed a violation of this Ordinance, and punishable as provided by Section 1503 of this ordinance.

### Section 1019 Schedule of Fees, Charges, and Expenses

The Bon Homme County Commission shall establish a schedule of fees, charges, and expenses and a collection procedure for variances, conditional uses amendments, appeals and other matters pertaining to this Ordinance. The schedule of fees shall be posted in the office of the Zoning Administrator and may be altered or amended only by the Bon Homme County Commission. Until all application fees, charges, and expenses have been paid in full, no action shall be taken on any application or appeal.

# Section 1021 Building Permit in a Conspicuous Place

All building permits issued by the Zoning Administrator must be placed in a conspicuous location on the building site for the duration of the construction of work described.

# Section 1023 Bad Actor Legislation

The Bon Homme County Commission may reject an application for any permit filed for a variance, conditional use or otherwise for the reasons and on the grounds set forth in SDCL 1-40-27, as revised and amended. Such rejection shall be based upon a specific finding by the Commission that the applicant has engaged in the activity identified in the aforesaid statute. The burden on the Commission to make the specific finding provided for herein shall be by a preponderance of the evidence.

### **ARTICLE 11**

# BOARD OF ADJUSTMENT APPEALS, VARIANCES AND CONDITIONAL USES

### Section 1101 Members, Terms, Meetings, Rules

The Bon Homme County Planning Commission shall serve as the Board of Adjustment. The Board of Adjustment is hereby designated to hear all requests for variances, conditional uses, and zoning appeals. The Zoning Administrator shall act as secretary to the Board of Adjustment when acting in zoning cases, but shall take no part in the deliberations. Meetings of the Board of Adjustment shall be held at the call of the Chairperson and at such other times as the Board shall determine. Such Chairperson, or in his/her absence, the Acting Chairperson, may administer oaths and compel the attendance of witnesses.

All meetings of the Board of Adjustment shall be open to the public. The Board shall keep minutes of its proceedings, showing the vote of each member upon each question, or if absent or failing to vote, indicating such fact, and shall keep records of its examinations and other official actions, all of which shall be immediately filed in the office of the Zoning Administrator and shall be a public record. The Board of Adjustment shall adopt from time to time, subject to the approval of the County Commission, such rules and regulations, as it may deem necessary to carry the appropriate provisions of this Ordinance into effect.

# Section 1103 Appeals to Board of Adjustment, Record of Appeals, Hearing, and Stays

Any decision rendered by the Zoning Administrator may be appealed to the Board of Adjustment. An appeal stays all proceedings in furtherance of the action appealed from, unless the officer from whom the appeal is taken certifies to the Board of Adjustment after the notice of appeal shall have been filed with them, that by reason of facts stated in the certificate a stay would, in their opinion, cause imminent peril to life or property. In such case, proceedings shall not be stayed otherwise than by a restraining order which may be granted by the Board of Adjustment or by a court of record on application or notice to the officer for whom the appeal is taken and on due cause shown.

# Section 1105 Board of Adjustment Hearings and Notice

Each session of the Board of Adjustment at which a hearing is held shall be a public meeting with notice of hearing to be published at least ten (10) days prior to the date of the hearing in the legal newspapers of the County.

# Section 1107 Powers and Duties

The Board of Adjustment shall have the following powers and duties:

#### APPEALS:

A. The Board of Adjustment shall have the power to hear and decide appeals where it is alleged there is error in any order, requirement, decision or determination made by an administrative official or agency based on or made in the enforcement of any zoning

regulation or any regulation relating to the location or soundness of structures or to interpret any map. An appeal will not be heard until:

- 1. The applicant or any other person aggrieved by the decision of an administrative official or agency shall file a written appeal with the Zoning Administrator within five working days of the decision.
- 2. The administrative official or agency from whom the appeal is taken shall forthwith transmit to the Board of Adjustment all the papers constituting the record upon which the action appealed was taken.
- 3. Written notice shall be given to the appellant seven days prior to meeting.
- 4. The appellant or an authorized agent shall be present at the meeting. Failure to provide a representative may constitute grounds for a denial.
- 5. The administrative official or agency shall present their decision to the Board of Adjustment for review.
- 6. The Board of Adjustment shall either uphold, overrule or amend the decision of the Zoning Administrator.

### **CONDITIONAL USES**

- B. The Board of Adjustment shall have the power to hear and decide, in accordance with the provisions of this ordinance, requests for conditional uses or for decisions upon other special questions upon which the Board of Adjustment is authorized by this ordinance to pass; to decide such questions as are involved in determining whether conditional uses should be granted; and to grant conditional uses with such conditions and safeguards as are appropriate under this ordinance, or to deny conditional uses when not in harmony with the purpose and intent of this ordinance. A conditional use shall not be granted by the Board unless and until:
  - 1. A written application for a conditional use is submitted, indicating the section of this ordinance under which the conditional use is sought and stating the grounds on which it is requested.
  - 2. Notice of public hearing shall be given at least ten (10) days in advance by publication in the legal newspapers of the County. The owner of the property for which conditional use is sought or his agent shall be notified by mail.
  - 3. A notice shall be posted in a conspicuous place on or near the property upon which action is pending. Such notice shall be not less than seventeen (17) inches in height and eleven (11) inches in width with a white background and black letters not less than one (1) inch in height. Such posted notice shall be so placed upon such premises that it is easily visible from the road and shall be so posted at least seven (7) days before the date of such hearing. It shall be unlawful for any person to remove, mutilate, destroy or change such posted notice prior to such hearings.

Amended: 02/24/03, 11/3/15

- 4. The public hearing shall be held. Any party may appear in person, or by agent or attorney.
- 5. The applicant or an authorized agent shall be present at the hearing. Failure to provide a representative may constitute grounds for a denial.
- 6. The Board of Adjustment shall make a finding that it is empowered under the section of this ordinance described in the application to grant the conditional use, grant with conditions, or deny the conditional use, and that the granting of the conditional use will not adversely affect the public interest.
- 7. Before any conditional use is granted, the Board of Adjustment shall make written findings certifying compliance with the specific rules governing individual conditional uses and that satisfactory provision and arrangement has been made concerning the following, where applicable:
  - a. ingress and egress to property and proposed structures thereon with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire or catastrophe;
  - b. off-street parking and loading areas where required; with particular attention to the items in (a) above and the economic, noise, glare, odor or other effects of the conditional use on adjoining properties and properties generally in the district;
  - c. refuse, waste and service areas, with particular reference to the items in (a) and (b) above;
  - d. utilities, with reference to locations, availability, and compatibility;
  - e. screening and buffering with reference to type, dimensions, and character;
  - f. signs, if any, and proposed exterior lighting with reference to glare, traffic safety, economic effect and compatibility and harmony with properties in the district;
  - g. required yards and other open spaces; and
  - h. general compatibility with adjacent properties and other property in the district;

#### **VARIANCES**

- C. The Board of Adjustment shall have the power to hear requests for variances from this Ordinance in instances where strict enforcement would cause unnecessary hardship, and to grant such variances only when the following provisions apply:
  - 1. No such variance shall be authorized by the Board of Adjustment unless it finds that the strict application of the ordinance would produce undue hardship; such hardship is not shared generally by other properties in the same zoning district

and the same vicinity; the authorization of such variance will not be of substantial detriment to adjacent property and the character of the district will not be changed by the grant of the variance; and the granting of such variance is based upon reasons of demonstrable and exceptional hardship as distinguished from variations for purposes of convenience, profit, and caprice.

- 2. No variance shall be authorized unless the Board of Adjustment finds that the condition or situation of the property concerning or the intended use of the property concerned, or the intended use of the property is not of so general or recurring a nature as to make reasonably practicable the formulation of a general regulation to be adopted as an amendment of this ordinance.
- 3. A variance from the terms of this ordinance shall not be granted by the Board of Adjustment unless and until a written application for a variance is submitted demonstrating that special conditions and circumstances exist which are peculiar to the land, structure, or building involved and which are not applicable to other lands, structures, or buildings, in the same district; that literal interpretation of the provisions of this ordinance would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this ordinance; that the special conditions and circumstances do not result from the actions of the applicant; and that granting the variance requested will not confer on the applicant any special privilege that is denied by this ordinance to other lands, structure, or buildings in the same district.
- 4. No non-conforming use of neighboring lands, structures, or buildings in the same district, and no permitted or non-conforming use of lands, structures or buildings in other districts shall be considered grounds for the issuance of a variance.
- 5. Notice of public hearing shall be given, as in Section 1107 (B)(2), (B)(3) above; the public hearing shall be held. Any party may appear in person or by agent or by attorney; the Board of Adjustment shall make findings that the requirements of this Section have been met by the applicant for a variance; the Board shall further make a finding that the reasons set forth in the application justify the granting of the variance, and the variance is the minimum variance that will make possible the reasonable use of the land, building, or structure; the Board of Adjustment shall further make a finding that the granting of the variance will be in harmony with the general purpose and intent of this ordinance, and will not be injurious to the neighborhood, or otherwise detrimental to the public welfare.
- 6. The applicant or an authorized agent shall be present at the hearing. Failure to provide a representative may constitute grounds for a denial.
- 7. In granting any variance, the Board of Adjustment may prescribe appropriate conditions and safeguards in conformity with this ordinance. Violation of such conditions and safeguards, when made a part of the terms under which the variance is granted, shall be deemed a violation of this ordinance and punishable under Section 1503 of this ordinance.
- 8. Under no circumstances shall the Board of Adjustment grant a variance to allow a use not permissible under the terms of this ordinance in the district involved, or

any use expressly or by implication prohibited by the terms of this ordinance in said district.

D. The Board of Adjustment has the powers of a Zoning Administrator on Appeals and Reversing Decision of the Zoning Administrator.

In exercising the above-mentioned powers, the Board of Adjustment may reverse or affirm, wholly or partly, or may modify the order, requirement, decision or determination appealed from, and may make such order, requirement, decision, or determination as ought to be made, and to that end shall have all the powers of the officer from whom the appeal is taken.

The concurring vote of two-thirds (2/3) of the full membership of the Board of Adjustment shall be necessary to reverse any order, requirement, decision or determination of any such officer, or to decide in favor of the applicant on any matter upon which it is required to pass under this Ordinance or to effect any variation in this Ordinance.

E. Any persons, jointly or severally aggrieved by a decision of the Board of Adjustment, or any taxpayer, or any officer, department, board, or bureau of the County, may appeal to the Board of County Commissioners and by a majority vote reverse any decision of the Board of Adjustment. The applicant or any other person aggrieved by the decision of the Board of Adjustment shall file a written appeal with the County Auditor within five (5) working days of the Board of Adjustment decision. The County Auditor shall present the Board of Adjustment's decision to the Board of County Commissioners for review. Notice of the meeting shall be given as required by Section 1107 B(2) B(3). Review may be sought by a court of record of such decision, in a manner provided by the laws of the State of South Dakota.

ARTICLE 12

# DUTIES OF THE ZONING ADMINISTRATOR, BOARD OF COUNTY COMMISSIONERS AND COURTS ON MATTERS OF APPEAL

Section 1201 <u>Duties of Zoning Administrator, Board of Adjustment, County Commission and Courts on Matters of Appeal</u>

It is the intent of this Ordinance that all questions of interpretation and enforcement shall be first presented to the Zoning Administrator, and that such questions shall be presented to the Board of Adjustment only on appeal from the decision of the Zoning Administrator, and that such questions shall be presented to the County Commission only on appeal from the decision of the Board of Adjustment and that recourse from the decisions of the County Commission shall be to the courts as provided by law.

#### **ARTICLE 13**

### **AMENDMENTS**

## Section 1301 Regulations

The regulations, restrictions, and boundaries set forth in this Ordinance may from time to time be amended, supplemented, changed, or repealed, provided that such modification or repeal in each instance be proposed in an Ordinance presented to the governing body for adoption in the same manner and upon the same notice as required for the adoption of the original Ordinance.

Prior to consideration of amending, supplementing, changing, modifying or repealing this Ordinance by the governing body, notice of public hearings shall be provided as follows:

- 1. If the proposed changes affect a particular piece of property a notice shall be posted in a conspicuous place on or near the property upon which action is pending. Such notice shall be not less than seventeen (17) inches in height and eleven (11) inches in width with a white background and black letters not less than one and one-half (1.5) inches in height. Such posted notice shall be so placed upon such premises that it is easily visible from the road and shall be so posted at least seven (7) days before the date of such hearing. It shall be unlawful for any person to remove, mutilate, destroy or change such posted notice prior to such hearings.
- 2. At least ten (10) days before the date of the Planning Commission hearing, the County shall have published in the County's legal newspapers a notice of the time, place, and subject matter of such hearing.
- 3. The Planning Commission shall hold the Public Hearing, review the proposed amendment(s) and make recommendations to the County Commission.
- 4. The applicant or an authorized agent shall be present at the meeting. Failure to provide a representative may constitute grounds for a denial.
- 5. At least ten (10) days before the date of the County Commission hearing, the County shall have published a notice of the time, place, and subject matter of such hearing in the County's legal newspapers.
- 6. The County Commission shall hold the Public Hearing, review the proposed amendment(s) and by Ordinance deny or pass the recommendations.
- 7. The applicant or an authorized agent shall be present at the meeting. Failure to provide a representative may constitute grounds for a denial.
- 8. If the changes are adopted the Planning Commission shall prepare a summary of the changes.
- 9. Once the summary is prepared the States Attorney shall review the changes and forward the changes to the County Auditor for publishing.
- 10. The summary of changes must be published once in the in the County's legal newspapers. The changes will take effect twenty (20) days after publication.

Exhibit\_DK-2
Page 107 of 213
Bon Homme County Adopted 04/13/99 Amended: 02/24/03, 11/3/15

### **ARTICLE 14**

### **NON-CONFORMANCE**

### Section 1401 General

Within the districts established by this Ordinance or amendments that may later be adopted, there exists (a) lots, (b) structures, (c) uses of land and structures, and (d) characteristics of use which were lawful before this Ordinance was passed or amended, but which would be prohibited, regulated, or restricted under the terms of this Ordinance or future amendment; it is the intent to permit these nonconformities to continue until they are removed, but not to encourage their survival. It is further the intent that nonconformities shall not be enlarged upon, expanded, or extended, nor be used as grounds for adding other structures or uses prohibited elsewhere in the same district.

Nonconforming uses are declared to be incompatible with permitted uses in the districts involved. A nonconforming use of a structure, a nonconforming use of land, or a nonconforming use of structure and land in combination shall not be extended or enlarged after passage of this revised Ordinance by attachment on a building or premises of additional signs intended to be seen from off the premises, or by the addition of other uses, of a nature which would be prohibited generally in the district involved.

To avoid undue hardship, nothing in this Ordinance shall be deemed to require a change in the plans, construction, or designated use of any building on which actual construction was lawfully begun prior to the effective date of adoption or amendment of this Ordinance and upon which actual building construction has been carried on diligently. Actual construction is hereby defined to include the placing of construction materials in permanent position and fastened in a permanent manner. Where excavation or demolition or removal of an existing building has been substantially begun preparatory to rebuilding, such excavation or demolition or removal shall be deemed to be actual construction, provided that work shall be carried on diligently.

### Section 1403 Nonconforming Lots of Record

In any district in which single-family dwellings are permitted, single-family dwelling and customary accessory buildings may be erected on any single lot of record at the effective date of adoption or amendment of this Ordinance, not withstanding limitations imposed by other provisions of this Ordinance. Such lots must be in separate ownership and not of continuous frontage with other lots in the same ownership. This provision shall apply even though such lots fail to meet requirements for area or width, or both, that are generally applicable in the district, provided that yard dimensions and requirements other than those applying to area or width, or both, of the lot shall conform to the regulations for the district in which such lot is located.

Variance of other yard requirements shall be obtained only through action of the Board of Adjustment.

# Section 1405 Nonconforming Uses of Land or Land with Minor Structures Only

Where at the time of passage of this revised Ordinance lawful use of land exists, which would not be permitted by the regulations imposed by this Ordinance, and where such use involves no individual structure with a replacement cost exceeding one thousand (1,000) dollars, the use may be continued so long as it remains otherwise lawful, provided:

Amended: 02/24/03, 11/3/15

No such nonconforming use shall be enlarged or increased, nor extended to occupy a
greater area of land than was occupied at the effective date of adoption or
amendment of this Ordinance;

- 2. No such nonconforming use shall be moved, in whole or in part, to any portion of the lot or parcel other than that occupied by such use at the effective date of adoption or amendment of this Ordinance;
- 3. If any such nonconforming use of land ceases, for any reason, for a period of more than one (1) year, any subsequent use of such land shall conform to the regulations specified by this Ordinance for the district in which such land is located; and
- 4. No additional structure, not conforming to the requirement of this Ordinance, shall be erected in connection with such nonconforming use of land.

### Section 1407 Nonconforming Structures

Where a lawful structure exists at the effective date of adoption or amendment of this Ordinance, that could not be built under the terms of this Ordinance by reason of restrictions on area, lot coverage, height, yards, its location on the lot, or other requirements concerning the structure, such structure may be continued so long as it remains otherwise lawful, subject to the following provisions:

- 1. No such nonconforming structure may be enlarged or altered in any way, which increases its nonconformity, but any structure or portion thereof, may be altered to decrease its nonconformity;
- 2. Should such nonconforming structure, or nonconforming portion of structure, be destroyed by any means, to an extent of more than seventy-five (75) percent of its replacement cost at the time of destruction, it shall not be reconstructed except in conformity with the provisions of this Ordinance; and
- 3. Should such structure be moved for any reason for any distance whatever, it shall thereafter conform to the regulations for the district in which it is located after it is moved.

### Section 1409 Nonconforming Uses of Structures or of Structures and Premises in Combination

If the nonconforming use involving individual structures with a replacement cost of one thousand (1,000) dollars or more, or of structure and premises in combination, exists at the effective date of adoption or amendment of this Ordinance that would not be allowed in the district under the terms of this Ordinance, the nonconforming use may be continued so long as it remains otherwise lawful, subject to the following provisions:

1. No existing structure devoted to a use not permitted by this Ordinance in the district in which it is located shall be enlarged, extended, constructed, reconstructed, moved or structurally altered except in changing the use of the structure to a use permitted in the district in which it is located;

Amended: 02/24/03, 11/3/15

- 2. Any nonconforming use may be extended throughout any part of a building which was manifestly arranged or designed for such use at the time of adoption or amendment of this Ordinance, but no such use shall be extended to occupy any land outside such building;
- 3. If no structural alterations are made, any nonconforming use of a structure or structure and premises may, as a conditional use, be changed to another nonconforming use provided that the Board of Adjustment, either by general rule or by making findings in the specific case, shall find that the proposed use is equally appropriate or more appropriate to the district than the existing nonconforming use. In permitting such change, the Board of Adjustment may require appropriate conditions and safeguards in accordance with the provisions of this Ordinance;
- 4. Any structure, or structure and land in combination, in or on which a nonconforming use is superseded by a permitted use, shall thereafter conform to the regulations for the district, and the nonconforming use may not thereafter be resumed;
- 5. When a nonconforming use of a structure, or structure and premises in combination, is discontinued or abandoned for a period of more than one (1) year (except when government action impedes access to the premises), the structure, or structure and premises in combination, shall not thereafter be used except in conformity with the regulations of the district in which it is located; and
- 6. Where nonconforming use status applies to a structure and premises in combination, removal or destruction of the structure shall eliminate the nonconforming status of the land.

#### 

Any use, which is permitted as a conditional use in a district, under the terms of this Ordinance, shall be deemed a conforming use in such district without further action. A nonconforming use can never be allowed in a defined district without a change in the district definition or boundaries.

Permitted Principal Uses	Conditional Uses	Nonconforming
Allowed within defined district.	Allowed within defined district AFTER Board grants permission.	Never allowed within defined district without change in district definitions or boundaries.

Exhibit\_DK-2
Page 111 of 213
Bon Homme County Adopted 04/13/99 Amended: 02/24/03, 11/3/15

### **ARTICLE 15**

## VIOLATIONS, COMPLAINTS, PENALTIES, AND REMEDIES

### Section 1501 Complaints Regarding Violations

Whenever a violation of this Ordinance occurs, or is alleged to have occurred, any person may file a complaint. Such complaint stating fully the causes and basis thereof shall be filed with the Zoning Administrator. The Zoning Administrator shall record properly such complaint with the Board of Adjustment and investigate and take action thereon as provided by this Ordinance.

If the Zoning Administrator shall find that any of the provisions of this Ordinance are being violated, they shall notify, in writing by certified mail with return receipt, the person responsible for such violations, indicating the nature of the violation and ordering the action necessary to correct it. The party responsible for the violation shall respond within seven (7) working days from receipt of the letter; otherwise, they will be considered in violation and punishable under Section 1503.

### Section 1503 Penalties for Violations

The owner or agent of a building or premises in or upon which a violation of any provisions of this Ordinance has been committed or shall exist, or lessee or tenant of an entire building or entire premises in or upon which such violation shall exist, shall be guilty of a Class II misdemeanor and shall be punished by a fine not to exceed two hundred (200) dollars or imprisonment for not more than thirty (30) days in the County jail, or both, and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be a separate offense.

Any architect, engineer, builder, contractor, agent or other person who commits, participates in, assists in or maintains such violation may each be found guilty of a separate offense and suffer the penalties herein provided.

In case any building or structure is erected, constructed, reconstructed, altered, repaired, converted, or maintained, or any building, structure or land is used in violation of this Ordinance, appropriate authorities of the county may institute any appropriate action or proceedings to prevent such unlawful erection, construction, reconstruction, alteration, repair, conversion, maintenance, or use; to restrain, correct or abate such violation; to prevent the occupancy of said building, structure or land; or to prevent any illegal act, conduct, business or use in or about such premises.

Amended: 02/24/03, 11/3/15

### **ARTICLE 16**

## LEGAL STATUS PROVISIONS

# Section 1601 Separability

Should any article, section, or provisions of this Ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of this Ordinance as a whole, or any part thereof other than the part so declared to be unconstitutional or invalid.

# Section 1603 Purpose of Sub-Titles

The sub-titles appearing in connection with the foregoing sections are inserted simply for convenience, to serve the purpose of any index and they shall be wholly disregarded by any person, officer, court or other tribunal in construing the terms and provisions of this Ordinance.

# Section 1605 Repeal of Conflicting Ordinances

All ordinances or parts of resolutions in conflict with this Ordinance, or inconsistent with the provisions of this Ordinance, are hereby repealed to the extent necessary to give this Ordinance full force and effect.

# Section 1607 Effective Date

This Ordinance shall take effect and be in force from and after its adoption

### **ARTICLE 17**

# WIND ENERGY SYSTEMS (WES)

(Amended 11/3/15)

# Section 1701 Intent

The intent of this ordinance is to ensure that the placement, construction and modification of a Wind Energy System (WES) facility is consistent with the Bon Homme County's land use policies, to minimize the impact of WES facilities, to establish a fair and efficient process for review and approval of applications, to assure a comprehensive review of environmental impacts of such facilities, and to protect the health, safety and welfare of the County's citizens.

## **Section 1703** Authority and Jurisdiction

South Dakota Codified Law 11-2-2 delegates the responsibility to the Board of County Commissioners of each county to adopt and enforce regulations designed for the purpose of promoting health, safety, and general welfare of the county.

### **Section 1705** Federal and State Requirements

All WES facilities shall meet or exceed standards and regulations of the Federal Aviation Administration and South Dakota State Statutes and any other agency of federal or state government with the authority to regulate WES facilities.

### Section 1707 Requirements for Siting Small Wind Energy Systems

A Small Wind Energy System shall be a permitted use in all zoning districts subject to the following requirements:

- a) Setbacks. The minimum setback distance between each wind turbine tower and all surrounding property lines, overhead utility or transmission lines, other wind turbine towers, electrical substations, public roads and **habitable residential dwellings** shall be equal to no less than one point one (1.1) times the system height, unless written permission is granted by each affected person.
- b) Access. All ground mounted electrical and control equipment shall be labeled or secured to prevent unauthorized access, and the tower shall be designed and installed so as to not provide step bolts or a ladder readily accessible to the public for a minimum height of eight (8) feet above the ground.

- c) Lighting. A SWES shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration.
- **d**) Noise. SWES facilities shall not exceed <u>forty-five (45)</u> dBA, as measured at the closest neighboring **habitable residential dwelling**. The level, however, may be exceeded during short-term events such as utility outages or wind storms.
- e) Shadow Flicker. When determined appropriate by the County, a Shadow Flicker Control System shall be installed upon all turbines which will cause a perceived shadow effect upon a habitable residential dwelling. Such system shall limit blade rotation at those times when shadow flicker exceeds thirty (30) minutes per day or thirty (30) hours per year at perceivable shadow flicker intensity as confirmed by the Zoning Administrator are probable.

The permittees shall submit a report of predicted shadow flicker levels at habitable residential dwellings within one and one-half miles of proposed tower locations to the Board no less than forty five (45) days prior to commencing construction.

- f) Appearance, Color, Finish. The SWES shall remain painted or finished the color or finish that was originally applied by the manufacturer, unless approved in the building permit.
- g) Signs. All signs, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification on a wind generator, tower, building, or other structure associated with a SWES visible from any public road shall be prohibited.
- h) Code Compliance. A SWES shall comply with all applicable state construction and electrical codes, and the National Electrical Code.
- i) Utility Notification. No SWES shall be installed until evidence has been given that the utility company has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

### **Section 1709 Permit Requirements**

- a) A building permit shall be required for the installation of a SWES.
- b) The building permit shall be accompanied by a plot plan which includes the following:
  - 1. Property lines and physical dimensions of the property;
  - 2. Location, dimensions, and types of existing major structures on the property;
  - Location of the proposed SWES;
  - 4. The right-of-way of any public road that is contiguous with the property;

- 5. Any overhead utility lines;
- 6. Wind system specifications, including manufacturer and model, rotor diameter, tower height, and tower type (monopole, lattice, guyed);
- 7. Tower foundation blueprints or drawings;
- 8. Tower blueprint or drawing;
- 9. Proof of notification to the utility in the service territory in which the SWES is to be erected, consistent with the provisions of 5(3)(h) herein; and
- 10. The status of all necessary interconnection agreements or studies.
- c) Expiration. A permit issued pursuant to this ordinance shall expire if:
  - 1. The SWES is not installed and functioning within twenty-four (24) months from the date the permit is issued; or
  - 2. The SWES is out of service or otherwise unused for a continuous 12-month period.

### Section 1711 Abandonment

A SWES that is out-of-service for a continuous 12-month period will be deemed to have been abandoned. The Board may issue a Notice of Abandonment to the owner of a SWES that is deemed to have been abandoned. The owner shall have the right to respond to the Notice of Abandonment within thirty (30) days from Notice receipt date. The Board shall withdraw the Notice of Abandonment and notify the owner that the Notice has been withdrawn if the owner provides information that demonstrates the SWES has not been abandoned.

If the SWES is determined to be abandoned, the owner of the SWES shall remove the wind generator from the tower at the Owner's sole expense within three (3) months of receipt of Notice of Abandonment. If the owner fails to remove the wind generator from the tower, the Board may pursue legal action to have the wind generator removed at the owner's expense.

### **Section 1713 Building Permit Procedure**

- a) An owner shall submit an application to the Board for a building permit for a SWES. The application must be on a form approved by the Board and must be accompanied by two (2) copies of the plot plan identified.
- b) The Board shall issue a permit or deny the application within one month of the date on which the application is received.
- c) The Board shall issue a building permit for a SWES if the application materials show that the proposed SWES meets the requirements of this ordinance.
- d) If the application is approved, the Board will return one signed copy of the application with the

permit and retain the other copy.

- e) If the application is rejected, the Board will notify the applicant in writing and provide a written statement of the reason why the application was rejected. The applicant may reapply if the deficiencies specified by the Board are resolved.
- f) The owner shall conspicuously post the building permit on the premises so as to be visible to the public at all times until construction or installation of the SWES is complete.

### **Section 1715 Violations**

It is unlawful for any person to construct, install, or operate a SWES that is not in compliance with this ordinance or with any condition contained in a building permit issued pursuant to this ordinance. SWES facilities installed prior to the adoption of this ordinance are exempt.

### Section 1717 Severability

The provisions of this ordinance are severable, and the invalidity of any section, subdivision, paragraph, or other part of this ordinance shall not affect the validity or effectiveness of the remainder of the ordinance.

### **Section 1719 Requirements for Siting Large Wind Energy Systems**

A Large Wind Energy System as defined herein shall be a permitted use in all zoning districts subject to the standards identified within the following sections.

### **Section 1721** Mitigation Measures

- a) Site Clearance. The permittees shall disturb or clear the site only to the extent necessary to assure suitable access for construction, safe operation and maintenance of the LWES.
- b) Topsoil Protection. The permittees shall implement measures to protect and segregate topsoil from subsoil in cultivated lands unless otherwise negotiated with the affected landowner.

- c) Compaction. The permittees shall implement measures to minimize compaction of all lands during all phases of the project's life and shall confine compaction to as small an area as practicable.
- d) Livestock Protection. The permittees shall take precautions to protect livestock on the LWES site from project operations during all phases of the project's life.
- e) Fences. The permittees shall promptly replace or repair all fences and gates removed or damaged by project operations during all phases of the project's life unless otherwise negotiated with the fence owner.

#### f) Roads

- 1. Public Roads. Prior to commencement of construction, the permittees shall identify all state, county or township "haul roads" that will be used for the WES project and shall notify the state, county or township governing body having jurisdiction over the roads to determine if the haul roads identified are acceptable. The governmental body shall be given adequate time to inspect the haul roads prior to use of these haul roads. Where practicable, existing roadways shall be used for all activities associated with the WES. Where practicable, all-weather roads shall be used to deliver concrete, turbines, towers, assemble nacelles and all other heavy components to and from the turbine sites.
- 2. The permittees shall, prior to the use of approved haul roads, make satisfactory arrangements with the appropriate state, county or township governmental body having jurisdiction over approved haul roads for construction of the WES for the maintenance and repair of the haul roads that will be subject to extra wear and tear due to transportation of equipment and WES components. The permittees shall notify the County Zoning Office of such arrangements.
- 3. Turbine Access Roads. Construction of turbine access roads shall be minimized. Access roads shall be low profile roads so that farming equipment can cross them and shall be covered with Class 5 gravel or similar material. Access roads shall avoid crossing streams and drainage ways wherever possible. If access roads must be constructed across streams and drainage ways, the access roads shall be designed in a manner so runoff from the upper portions of the watershed can readily flow to the lower portion of the watershed.
- 4. Private Roads. The permittees shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the site, unless otherwise negotiated with the affected landowner.
- 5. Control of Dust. The permittees shall utilize all reasonable measures and practices of

construction to control dust during construction.

(g) Soil Erosion and Sediment Control Plan. The permittees shall develop a Soil Erosion and Sediment Control Plan prior to construction and submit the plan to the County Zoning Office no less than forty five (45) days prior to commencing construction. The Soil Erosion and Sediment Control Plan shall address the erosion control measures for each project phase, and shall at a minimum identify plans for grading, construction and drainage of roads and turbine pads; necessary soil information; detailed design features to maintain downstream water quality; a comprehensive re-vegetation plan that uses native plant species to maintain and ensure adequate erosion control and slope stability and to restore the site after temporary project activities; and measures to minimize the area of surface disturbance. Other practices shall include containing excavated material, protecting exposed soil, stabilizing restored material and removal of silt fences or barriers when the area is stabilized. The plan shall identify methods for disposal or storage of excavated material.

### Section 1723 Setbacks

- a) Distance from currently occupied off-site residences, business and public buildings shall be not less than one thousand (1,000) feet. Distance from the residence of the landowner on whose property the tower(s) are erected shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater. For the purposes of this section only, the term "business" does not include agricultural uses.
- b) Distance from right-of-way (ROW) of public roads shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater.
- c) Distance from any property line shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater, unless appropriate easement has been obtained from adjoining property owner.

# Section 1725 Electromagnetic Interference

The permittees shall not operate the LWES so as to cause microwave, television, radio, or navigation interference contrary to Federal Communications Commission (FCC) regulations or other law. In the event such interference is caused by the LWES or its operation, the permittees shall take the measures necessary to correct the problem.

# Section 1727 Lighting

Towers shall be marked as required by the Federal Aviation Administration (FAA). There shall be no lights on the towers other than what is required by the FAA.

This restriction shall not apply to infrared heating devices used to protect the monitoring equipment.

# **Section 1729 Turbine Spacing**

The turbines shall be spaced no closer than is allowed by the turbine manufacturer in its approval of the turbine array for warranty purposes.

### **Section 1731 Footprint Minimization**

The permittees shall design and construct the WES so as to minimize the amount of land that is impacted by the WES. Associated facilities in the vicinity of turbines such as electrical/electronic boxes, transformers and monitoring systems shall to the extent practicable be mounted on the foundations used for turbine towers or inside the towers unless otherwise allowed by the landowner on whose property the LWES is constructed.

### **Section 1733 Electrical Cables**

The permittees shall place electrical lines, known as collectors, and communication cables underground when located on private property except when total distance of collectors from the substation require an overhead installation due to line loss of current from an underground installation. This paragraph does not apply to feeder lines.

### Section 1735 Feeder Lines

The permittees shall place overhead electric lines, known as feeders, on public rights-of-way if a public right-of-way exists or immediately adjacent to the public right-of-way on private property. Changes in routes may be made as long as feeders remain on public rights-of-way or immediately adjacent to the public right-of-way on private property and approval has been obtained from the governmental unit responsible for the affected right-of-way. If no public right-of-way exists, the permittees may place feeders on private property. When placing feeders on private property, the permittees shall place the feeder in accordance with the easement(s) negotiated. The permittees shall submit the site plan and engineering drawings for the feeder lines to the Board no less than forty five (45) days prior to commencing construction.

# **Section 1737 Height from Ground Surface**

The minimum height of blade tips at their lowest possible point shall be twenty-five (25) feet above grade.

### Section 1739 Towers

- a) Color and finish shall be as required by State and Federal regulations to include those of the Federal Aviation Administration
- b) All towers shall be singular tubular design, unless approved by the Board.

### Section 1741 Noise and Shadow Flicker

Noise level produced by the LWES shall not exceed forty five (45) dBA, average A-weighted sound pressure at the perimeter of occupied residences existing at the time the permit application is filed, unless a signed waiver or easement is obtained from the owner of the residence.

The permittees shall submit a report of predicted noise levels at habitable residential dwellings within one mile of proposed tower locations to the Board no less than forty five (45) days prior to commencing construction.

When determined appropriate by the County a Shadow Flicker Control System shall be installed upon all turbines which will cause a perceived shadow effect upon a habitable residential dwelling. Such system shall limit blade rotation at those times when shadow flicker exceeds thirty (30) minutes per day or thirty (30) hours per year at perceivable shadow flicker intensity as confirmed by the Zoning Administrator are probable.

The permittees shall submit a report of predicted shadow flicker levels at habitable residential dwellings within one and one-half miles of proposed tower locations to the Board no less than forty five (45) days prior to commencing construction.

### **Section 1743 Permit Expiration**

The permit shall become void if no substantial construction has been completed within three (3) years of issuance.

### **Section 1745** Required Information for Permit Application

- a) Boundaries of the site proposed for LWES and associated facilities on United States Geological Survey Map or another map as appropriate.
- b) Map of easements for LWES.
- c) Map of occupied residential structures, business and public buildings within one half mile of the proposed LWES site boundaries.
- d) Preliminary map of sites for LWES, access roads and utility lines. Location of other LWES within five (5) miles of the proposed LWES site.
- e) Project-specific environmental and cultural concerns (e.g. native habitat, rare species, and migratory routes). This information shall be obtained by consulting with the following agencies with evidence of such consultation included within the application
  - 1. South Dakota Department of Game, Fish and Parks;
  - 2. U.S. Fish and Wildlife Service; and
  - 3. South Dakota State Historical Society
- f) Project schedule
- g) Mitigation measures
- h) Status of interconnection studies/agreements.

### Section 1747 Decommissioning

- a) Cost Responsibility. The owner or operator of a LWES is responsible for decommissioning that facility and for all costs associated with decommissioning that facility and associated facilities. The decommissioning plan shall clearly identify the responsible party.
- b) Useful Life. A LWES is presumed to be at the end of its useful life if the facility generates no electricity for a continuous period of twelve (12) months. The presumption may be rebutted by submitting to the Board for approval of a plan outlining the steps and schedule for returning the LWES to service within twelve (12) months of the submission.

- c) Decommissioning Period. The facility owner or operator shall begin decommissioning a LWES facility within eight (8) months after the time the facility or turbine reaches the end of its useful life, as determined in 14(b). Decommissioning must be completed with eighteen (18) months after the facility or turbine reaches the end of its useful life.
- d) Decommissioning Requirements. Decommissioning and site restoration includes dismantling and removal of all towers, turbine generators, transformers, overhead and underground cables, foundations, buildings and ancillary equipment to a depth of forty-two (42) inches; and removal of surface road material and restoration of the roads and turbine sites to substantially the same physical condition that existed immediately before construction of the LWES. To the extent possible, the site must be restored and reclaimed to the topography and topsoil quality that existed just prior to the beginning of the construction of the commercial wind energy conversion facility or wind turbine. Disturbed earth must be graded and reseeded, unless the landowner requests in writing that the access roads or other land surface areas be retained.
- e) Decommissioning Plan. Prior to commencement of operation of a LWES facility, the facility owner or operator shall file with the Board the estimated decommissioning cost per turbine, in current dollars at the time of the application, for the proposed facility and a decommissioning plan that describes how the facility owner will ensure that resources are available to pay for decommissioning the facility at the appropriate time. The Board shall review a plan filed under this section and shall approve or disapprove the plan within six (6) months after the decommissioning plan was filed. The Board may at any time require the owner or operator of a LWES to file a report describing how the LWES owner or operator is fulfilling this obligation.
- f) Financial Assurance. After the tenth (10<sup>th</sup>) year of operation of a LWES facility, the Board may require a performance bond, surety bond, letter of credit, corporate guarantee or other form of financial assurance that is acceptable to the Board to cover the anticipated costs of decommissioning the LWES facility.
- g) Failure to Decommission. If the LWES facility owner or operator does not complete decommissioning, the Board may take such action as may be necessary to complete decommissioning, including requiring forfeiture of the bond. The entry into a participating landowner agreement shall constitute agreement and consent of the parties to the agreement, their respective heirs, successors, and assigns, that the Board may take such action as may be necessary to decommission a LWES facility and seek additional expenditures necessary to do so from the facility owner.

# **Section 1749 Pre-construction Filing**

At least forty-five (45) days prior to commencement of construction, the applicant/permittee shall submit reports of predicted noise levels, predicted shadow flicker levels, soil erosion and control plan, final maps depicting the approximate location of the proposed wind turbines, access roads and collector and feeder lines. Upon completion, the applicant shall also supply an "as-built" ALTA survey indicating that the proposed facilities are in compliance with the setbacks in the permit.

Permit No. 2499 issued by

Charles Mix County, South Dakota

on 7-25-18 Signed: 211 2018

Director of Equalization Office

Permit No. <u>2498</u> issued by

Charles Mix County, South Dakota

Signed: Director of Equalization Office

Permit No. 2497 issued by

Charles Mix County, South Dakota

on 1-25-18

Signed: Director of Equalization Office

Permit No. <u>2496</u> issued by

Charles Mix County, South Dakota

on 1-25

Signed:

Director of Equalization Office

Permit No. 2495 issued by

Charles Mix County, South Dakota

on

Signed:

Director of Equalization Office

Permit No. 2494 issued by

Charles Mix County, South Dakota

on 1-25-8
Signed Lia Rougel
Director of Equalization Office

Permit No. 2493 issued by Charles Mix County, South Dakota

on <u>1-25-18</u>
Signed <u>Signed Powell</u>
Director of Equalization Office

Permit No. 2492 issued by

Charles Mix County, South Dakota

on 7-25-/8
Signed County Agricult
Director of Equalization Office

Permit No. 249 issued by

Charles Mix County, South Dakota

on 1-25-18
Signed Control
Director of Equalization Office

Permit No. 2490 issued by

Charles Mix County, South Dakota

on 7-25-18
Signed Line Towns Office
Director of Equalization Office

Permit No. <u>2489</u> issued by

Charles Mix County, South Dakota

on 1-25-18
Signed Mula (Mula (Line of Equalization Office)

Permit No. 2488 issued by

Charles Mix County, South Dakota

on 1-25-18

Signed: Director of Equalization Office

Permit No. 2487 issued by

Charles Mix County, South Dakota

on 1-25-18
Signed June 10 Towns of Equalization Office

Permit No. 2+86 issued by

Charles Mix County, South Dakota

on 1-25-18

Signed Director of Equalization Office

Permit No. 2485 issued by

Charles Mix County, South Dakota

Signed January Director of Equalization Office

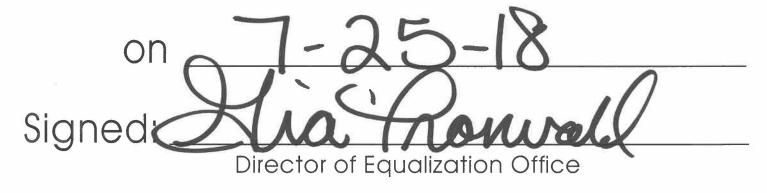
Permit No. 2484 issued by

Charles Mix County, South Dakota

on 1-25-18
Signed: Director of Equalization Office

Permit No. <u>2483</u> issued by

Charles Mix County, South Dakota



Permit No. 2482 issued by

Charles Mix County, South Dakota

on <u>J-25-18</u>
Signed: <u>Amurall</u>
Director of Equalization Office

Permit No. 248 issued by

Charles Mix County, South Dakota

on 7-25-8
Signed Control
Director of Equalization Office

Permit No. 2480 issued by Charles Mix County, South Dakota on 1-25-18
Signed: Director of Equalization Office

Permit No. 2479 issued by

Charles Mix County, South Dakota

on <u>1-25-18</u>
Signed: <u>Janualization Office</u>

Permit No. 2478 issued by

Charles Mix County, South Dakota

on  $\sqrt{-25}$ 

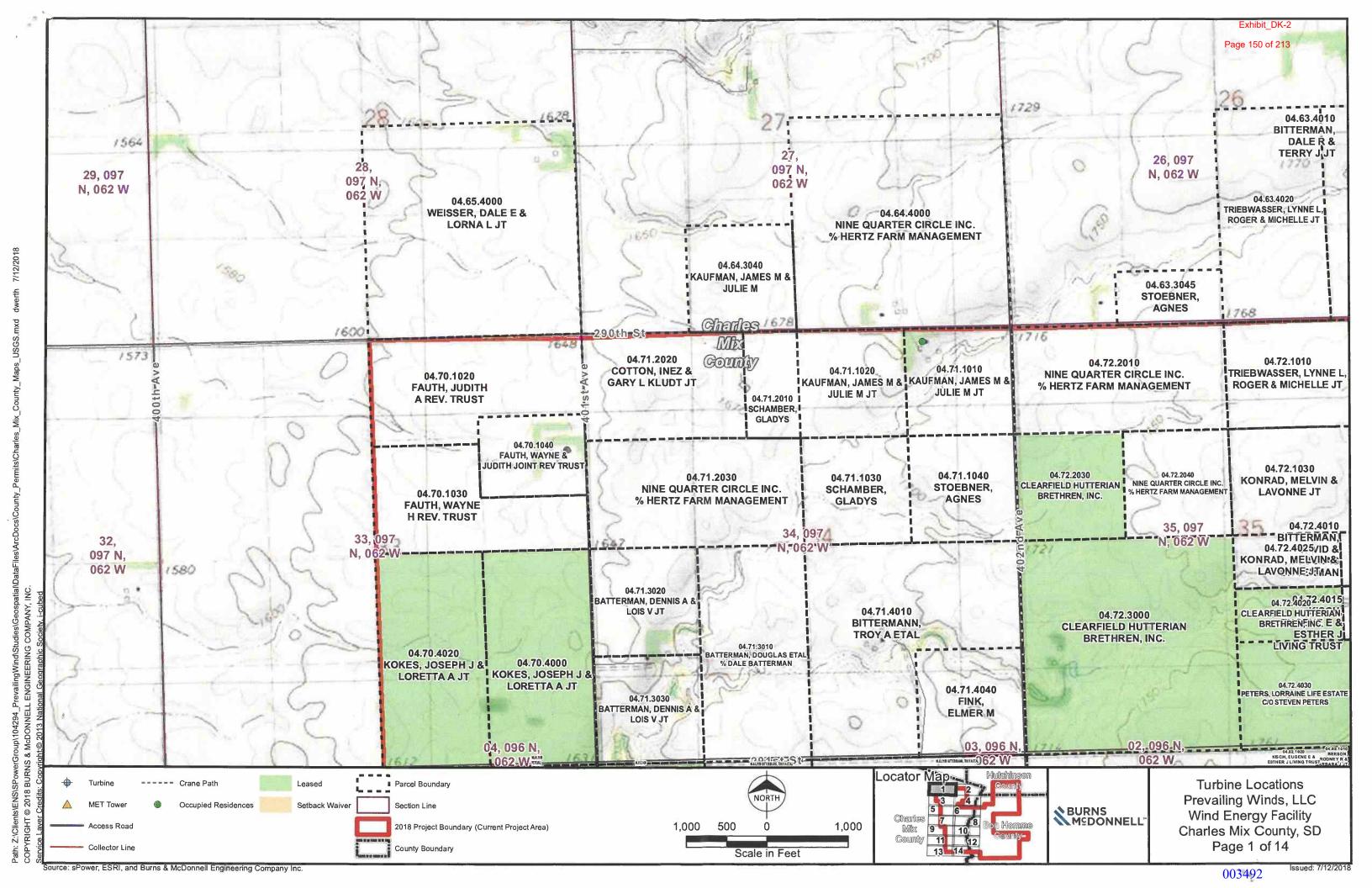
Signed:

Director of Equalization Office

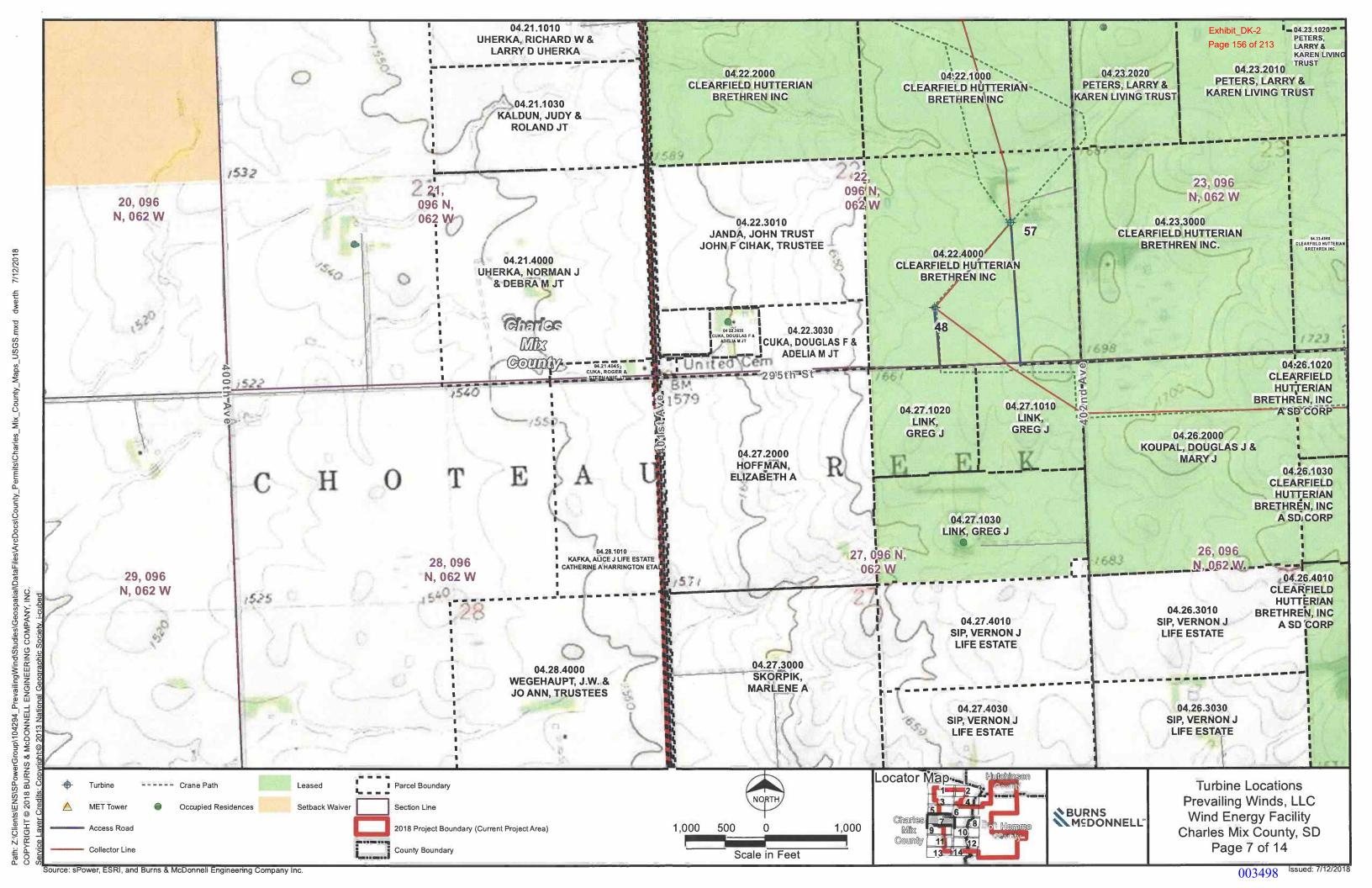
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on 7-25-18
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Director of Equalization Office

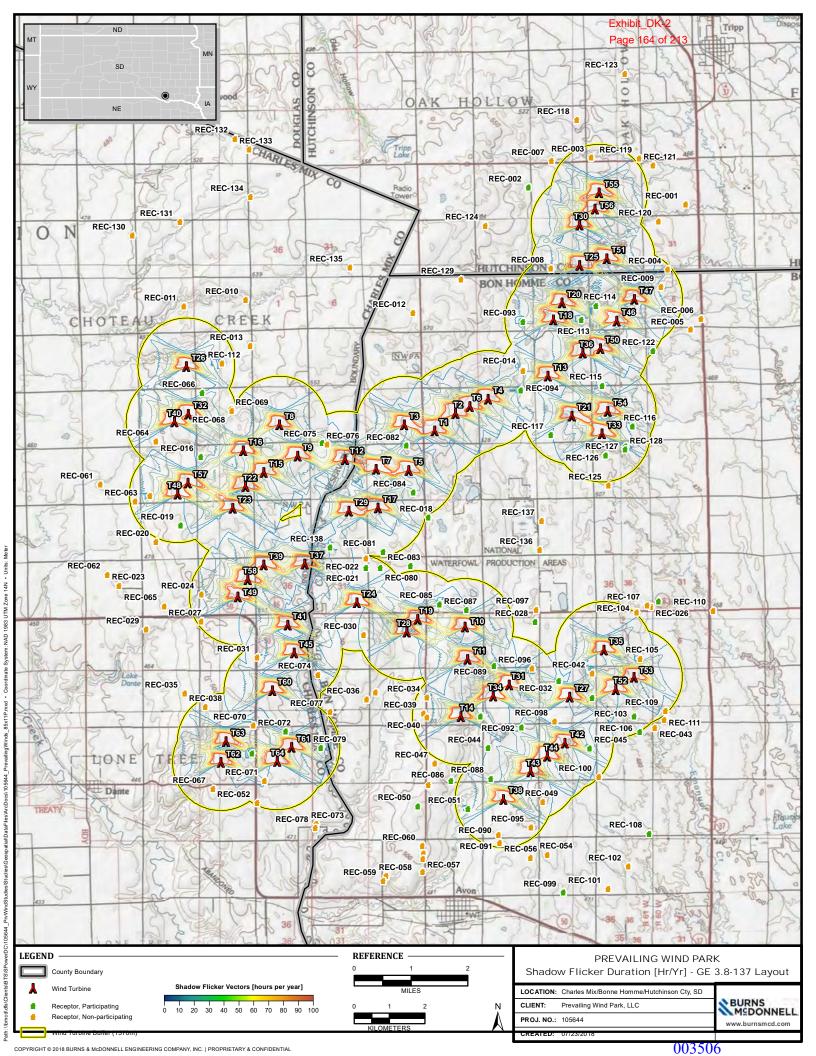


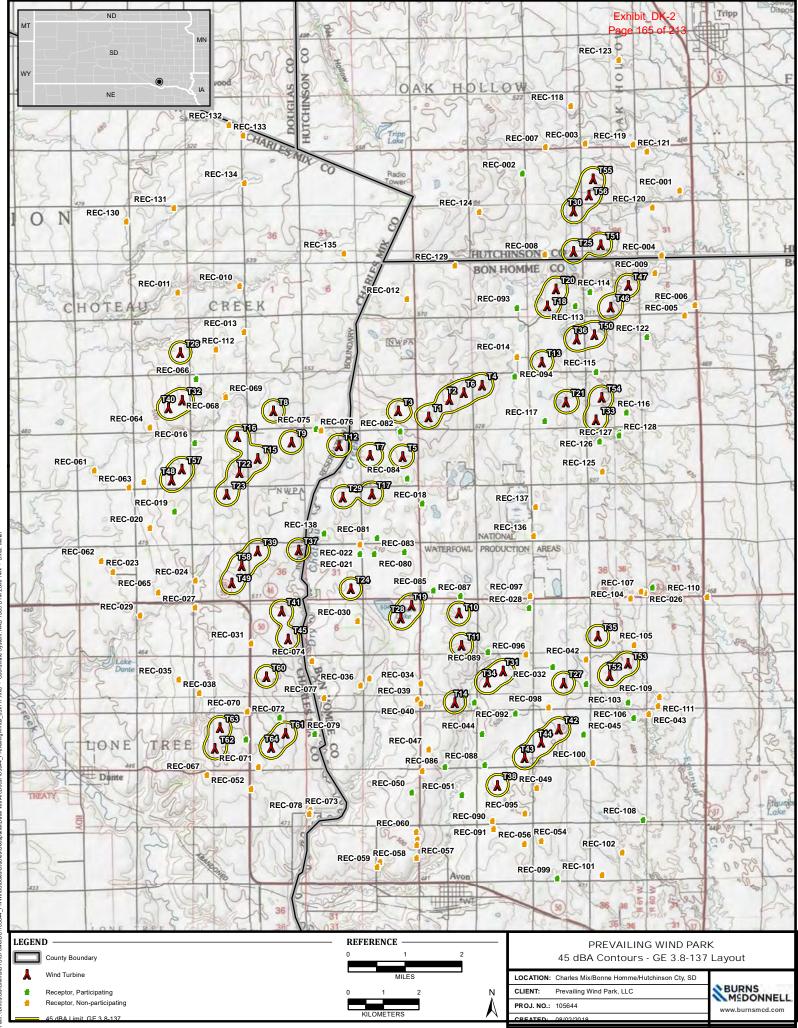
003493



Source: sPower, ESRI, and Burns & McDonnell Engineering Company Inc.

003503





## PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY PREVAILING WIND PARK, LLC, FOR A WIND ENERGY FACILITY PERMIT FOR THE PREVAILING WIND PARK PROJECT

CERTIFICATE OF SERVICE

EL18-026

\*

\*

Lisa Agrimonti, of Fredrikson & Byron, P.A., hereby certifies that on the 3rd day of August, 2018, a true and correct copy of Applicant's Responses to Staff's First Set of Data Requests and this Certificate of Service were served electronically on the persons listed below:

Ms. Amanda Reiss	Ms. Kristen Edwards
Staff Attorney	Staff Attorney
South Dakota Public Utilities Commission	South Dakota Public Utilities Commission
500 E. Capitol Ave.	500 E. Capitol Ave.
Pierre, SD 57501	Pierre, SD 57501
Amanda.reiss@state.sd.us	Kristen.edwards@state.sd.us

/s/ Lisa Agrimonti

Lisa Agrimonti

### 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 RESPONSES TO STAFF'S SECOND SET OF DATA REQUESTS

EL18-026

Below, please find Applicant's Responses to Staff's Second Set of Data Requests to Applicant.

2-1) Provide copies to Staff of all data requests served on Intervenors at the time of service, as well as the responses at the time of receipt.

<u>Lisa Agrimonti</u>: Prevailing Wind Park will provide Staff with the requested copies.

2-2) Provide copies to Staff of all of your answers to data requests from Intervenors at the time they are served on Intervenors.

<u>Lisa Agrimonti</u>: Prevailing Wind Park will provide Staff with the requested copies.

2-3) Refer to the Company's response to Staff Data Request 1-6c. Did the Applicant provide the revaluated financial benefit to the State in testimony submitted on August 10, 2018? If yes, please provide the reference. If no, please provide the evaluation of financial benefit to the State.

<u>Bridget Canty</u>: Prevailing Wind Park estimates that the net financial benefit to the state, minus the \$4,329,410 in reinvestment funds granted from the Governor's Office of Economic Development ("GOED"), would total approximately \$6.7 million. The reinvestment funds were granted through the Reinvestment Payment Program which is funded by the contractor excise taxes on the projects that the GOED brings to the State.

2-4) Refer to the Company's response to Staff Data Request 1-11. To promote transparency in this siting process, please provide the alternate turbine numbers if the Company was able to successfully construct GE 3.8-137 turbines in the preferred locations with the information the Company has available at this time.

<u>Bridget Canty</u>: Prevailing Wind Park recently identified potential alternate turbines: T38, T60, T61, T62, T63, and T64. The identification of alternate turbines is based on the best available information, and may change as additional information becomes available, e.g. site-specific soil conditions.

2-5) Refer to the Company's response to Staff Data Request 1-14. Please provide Western Area Power Administration's (WAPA) concerns, if any, once known.

<u>Bridget Canty</u>: In a letter dated August 21, 2018, WAPA identified a single turbine (T40) in Hutchinson County as potentially conflicting with radio transmission. PWP is surveying the specific radio transmission tower locations to determine what, if any, remedial action may be required.

2-6) Refer to the Company's response to Staff Data Request 1-15. Does the Applicant anticipate receiving a CUP from Hutchinson County prior to the evidentiary hearing in this proceeding on October 9, 2018? Please explain.

Bridget Canty: Yes. Prevailing Wind Park applied for CUPs for all properties with a turbine and/or other project facilities in Hutchinson County on August 14, 2018. Prevailing Wind Park expects Hutchinson County to issue a decision in early September 2018.

2-7) Refer to the Application, Section 3.1. Provide an update on the status of the Environmental Assessment, and a copy of the Environmental Assessment if it is available. Does the Company still anticipate WAPA will approve a final EA in fourth quarter 2018?

<u>Jennifer Bell</u>: The Environmental Assessment is being developed. Prevailing Wind Park now anticipates that WAPA approval of the final Environmental Assessment may occur in either 4th quarter 2018 or 1st quarter 2019.

- 2-8) Refer to the Application, Section 15.5, Shadow Flicker.
  - a. Provide the Applicant's definition and interpretation of a "Shadow Flicker Control System" in Section 1741 of the Bon Homme County ordinance.

<u>Bridget Canty</u>: Prevailing Wind Park interprets a "Shadow Flicker Control System" as mechanical and/or electrical measures that direct curtailment of turbines during predetermined atmospheric conditions associated with shadow flicker.

b. Provide the Applicant's definition and interpretation of the following phrase in Section 1741 of the Bon Homme County ordinance: "When determined appropriate by the County ...". When does the Applicant believe the County would determine it is appropriate to require a Shadow Flicker Control System? Will the County notify the Applicant through the conditional use permit whether the County will enforce Section 1741?

Bridget Canty: Prevailing Wind Park submitted an application for approval of a Large Wind Energy System with Bon Homme County on August 1, 2018 ("Application"). In the Application, Prevailing Wind Park committed to limit shadow flicker at non-participating residences to 30 hours per year. The County Board of Commissioners on August 21, 2018 determined that the Project was a permitted use and that the Project met the requirements in Bon Homme's Zoning Ordinance, Article 17, for a large wind energy system as proposed, without installation of a Shadow Flicker Control System.

c. Does Section 1741 apply to both habitable non-participating and participating dwellings? Explain.

<u>Lisa Agrimonti</u>: Section 1741 does not expressly distinguish between non-participating and participating dwellings. Regardless of its scope, the Bon Homme County Commission determined on August 21, 2018 that the Project as proposed was in compliance with Article 1741 of the Ordinance

d. Please explain why the discussion regarding mitigation focuses primarily on one non-participating receptor that exceed 30 hours per year, instead of all receptors that exceed 30 hours per year (3) and all receptors that exceed 30 minutes per day (25) for the GE 3.8-137 turbine, to comply with Section 1741 of the Bon Homme County ordinance.

Lisa Agrimonti: See response to 2-8(b).

e. Referring to the Shadow Flicker Study (Appendix N), please explain how receptors 009, 014, 015, 017, 032, 040, 041, 042, 045, 051, 082, 089, 093, 094, 096, 113, and 114, which have maximum expected shadow flicker duration greater than 30 minutes per day and/or greater than 30 hours per year, will comply with Section 1741 of the Bon Homme County Zoning Ordinance.

<u>Lisa Agrimonti</u>: See response to 2-8(b).

2-9) Refer to the Application, Section 20.1.2.1, Economic Impacts. What is the economic impact of the proposed Project on the hunting industry, specifically hunting guides? Provide studies to support for your response.

Bridget Canty: No impacts to upland game species are expected during construction. Collisions of game birds with wind turbines are typically quite low, relative to songbirds, and this effect is not expected to be significant either biologically or economically. If post-construction monitoring surveys determine that avian fatalities are significantly higher than predicted, Prevailing Wind Park will work with the United States Fish and Wildlife Service ("USFWS") and South Dakota Game Fish & Parks ("GF&P") to develop adaptive management measures to reduce impacts to an acceptable level. Studies of post-construction displacement of upland gamebirds in the Midwest indicate the impact for some species, including ring-necked pheasant, is not biologically significant; therefore the economic impact, if any, is expected to be very low. <sup>1</sup>, <sup>2</sup> Big game may be temporarily displaced during construction, but are expected to return to the site during operations due to the abundance of suitable habitat; therefore, effects to big game are expected to be limited to the construction phase.<sup>3</sup>

2-10) Referring to Section 3.1 of the Bird and Bat Conservation Strategy, would Prevailing Wind Park be willing to conduct 2-years of post-construction fatality monitoring? If no, please explain why.

Bridget Canty: Yes.

2-11) Referring to Section 5.1 of the Bird and Bat Conservation Strategy, please explain the process for deciding what additional adaptive management measures should be implemented, if needed, and who decides what the appropriate measures are.

<u>Bridget Canty</u>: If needed, Prevailing Wind Park would determine the appropriate adaptive management measures to be implemented in coordination with the GF&P and the USFWS.

2-12) Referring to the Bird and Bat Conservation Strategy, is Prevailing Wind Park willing to provide results from all studies to the SD GF&P and the PUC? Further,

<sup>1</sup> Dupuie, J.N. 2018. Ring-necked Pheasant Responses to Wind Energy in Iowa. Graduate Theses and Dissertations. Iowa State University. Available at: <a href="https://lib.dr.iastate.edu/etd/16346/">https://lib.dr.iastate.edu/etd/16346/</a>

<sup>&</sup>lt;sup>2</sup> Vodenhall, W.B. 2011. Location of Sharp-tailed Grouse and Greater Prairie Chicken Display Grounds in Relation to NPPD Ainsworth Wind Energy Facility, 2006-2011. Nebraska Game and Parks Commission. Available at: <a href="https://wind-energy-wildlife.unl.edu/download/Vodehnal\_et\_al\_2011.pdf">https://wind-energy-wildlife.unl.edu/download/Vodehnal\_et\_al\_2011.pdf</a>

<sup>&</sup>lt;sup>3</sup> The Wildlife Society. 2007. Impacts of Wind Energy Facilities on Wildlife and Wildlife Habitat. Technical Review Committee on Wind Energy Facilities and Wildlife. Technical Review 07-2. Available at: http://wildlife.org/wp-content/uploads/2014/05/Wind07-2.pdf

will Prevailing Wind Park also coordinate with the SD GF&P to determine if adaptive management measures are needed and what measures should be implemented if necessary?

<u>Bridget Canty</u>: Prevailing Wind Park intends to provide copies of all studies to GF&P; copies of all studies were previously provided to the PUC as Appendices B through K to the PUC application. Yes, Prevailing Wind Park will coordinate with both USFWS and GF&P to develop adaptive management measures, if needed.

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.

<u>Chris Howell</u>: 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.

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.

<u>Aaron Anderson</u>: 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.

2-15) Referring to page 18 of the RF Study (Appendix O), please identify if Prevailing Wind Park contacted the operators of the three point-to-multipoint microwave MAS facilities (NorthWestern Corporation and East River Electric Power Coop) to confirm the turbines will not adversely impact those facilities. If so, please provide documentation regarding those contacts.

<u>Bridget Canty</u>: Yes. Prevailing Wind Park sent a letter to the three MAS facilities on August 23, 2018. A copy of the letter is provided as Attachment 2-15.

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?

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

<u>Aaron Anderson</u>: 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.

2-17) In supplemental testimony, Peter Pawlowski represented that the Company is willing to establish an escrow account for decommissioning based upon costs provided in the testimony of Daniel Pardo. Provide the Company's estimate of the total amount that will be available in the account after thirty years of operation.

<u>Bridget Canty</u>: Prevailing Wind Park's consultant, Daniel Pardo/DNV GL provided an estimate for a "partial resale" value. Based on his calculations, the net cost of decommissioning would be approximately \$786,000. Thus, the amount available in the escrow account after 30 years would equal \$786,000, plus interest, unless the annual amount deposited were adjusted by the Commission.

2-18) What capacity factor did Applicant assume when calculating the tax benefits? How did Applicant determine this was the appropriate capacity factor?

<u>Bridget Canty</u>: Tax benefits resulting from both the Nameplate Capacity Tax and the Electric Production Tax were calculated based on the total generation capacity (in kilowatt hours) of the turbines. The preliminary calculations were based on use of 61 Vestas 3.6 MW turbines. Updated tax benefit calculations based on Prevailing Wind Park's decision to install 57 GE 3.8 MW turbines are shown in the following edited text from Section 6.1.3 of the application (footnotes omitted).

The Project's use of only 45 acres within the larger Project Area would generate approximately \$1.2 million annually in new income for landowners; approximately \$742,500 \( \frac{\pi}{2733,800} \) in new annual tax revenues for Bon Homme, Charles Mix, and Hutchinson counties, schools and townships[]; and approximately \$\frac{\pi}{11.1} \) \( \frac{\pi}{211} \) million in new tax revenues for State government[] from Project operations.

2-19) Refer to Ms. Canty's Supplemental Direct Testimony, Page 3, lines 65 – 82. Please discuss the Company's internal controls to ensure the Company has identified all residences in and around the study area for the applicable studies required in the Application.

Bridget Canty: As described in my Direct Testimony provided on August 10, 2018, a multi-step process of identifying occupied residences was conducted in 2016 and updated in 2018. After Prevailing Wind Park became aware that the Schoenfelder residence was missed during the 2018 review, the Company began an additional analysis, which includes review of the most current aerial photography to be followed by field verification of any residences. Prevailing Wind Park will update this response when this additional review is complete.

2-20) Refer to Mr. Pawlowski's supplemental testimony, Section III. Local Permitting Update. Provide the affidavit accepted by Charles Mix County, and documentation that supports the statement that commitments were responsive to the county's concerns.

Lisa Agrimonti: See enclosed Attachment 2-20.

- 2-21) Refer to Mr. Pawlowski's supplemental testimony, Section V. Aircraft Detection Lighting System.
  - a. Explain why the Company is installing ADLS when there is no County ordinance requiring the system.

<u>Peter Pawlowski</u>: sPower, after installing the first commercial system in the United States on its Pioneer Wind Park located in Converse County Wyoming, determined that where feasible sPower would include the ADLS system in their wind farm design. sPower, as a long-term owner and operator, prides itself in applying best practices for tower lighting and not just what may be required.

b. Is the Company aware of any circumstances where the FAA did not approve ADLS technology for a wind project? Provide examples and explain.

<u>Peter Pawlowski</u>: No. The Company is not aware of any such denial. However, the technology is new and, with sPower installing it for the first time in Wyoming, we are not sure how many (if any) applications have been made by companies other than sPower.

c. Explain why ADLS is considered a new technology by the Company. Does the FAA consider ADLS a new technology?

<u>Peter Pawlowski</u>: The FAA approved the first radar-based ADLS system for a wind farm in 2016 for the sPower Pioneer Wind Park in Converse County Wyoming, making this technology new for the implementation on a commercial basis for wind parks. *See* 

https://www.intelligent-aerospace.com/articles/2017/01/laufer-wind-radar-based-aircraft-detection-lighting-system-operational-on-wind-farm.html

d. What potential risks does ADLS present as a new technology? Explain and provide documentation.

<u>Peter Pawlowski</u>: The risk ADLS presents as a new technology is limited to two primary issues (1) the system growing unreliable over time and/or (2) the company making the equipment going out of business. The first can increase operational cost or cause the system to not function resulting in red blinking lights at night and wasted capital cost investment during construction. With respect to the second issue, sPower did in fact have the original manufacturer go out of business after installation and operation of the Pioneer Wind Park ADLS; however, the system functions to this day and sPower ensured contractually that sPower had the necessary rights to continue to maintain the ADLS system.

e. When was an ADLS implemented at the Pioneer Wind Park? Has sPower had any issues with the ADLS? If yes, please explain.

<u>Peter Pawlowski</u>: The ADLS system began operations shortly after October 27, 2016 at the Pioneer Wind Park when the FAA issued approval for the ADLS to operate. sPower has had some issue with the system involving failures at individual lights, resulting in the light turning on at night. The ADLS system has from time to time also experienced issues that have caused the system to go down; however, it is important to note that if the ADLS fails, then the original equipment manufacturer system operates as the default. sPower's experience has been such that we believe that ADLS is a good investment to make in our wind parks.

- 2-22) Refer to Mr. Pawlowski's supplemental testimony, Section VI. Other Project Commitments.
  - a. Is the Company willing to accept 250 feet, rather than the requested 500 feet, for turbine location flexibility? Please explain.

Peter Pawlowski: Yes.

b. Identify the permit conditions from Docket EL18-003 that the Company is unwilling to accept and explain why.

<u>Peter Pawlowski</u>: Prevailing Wind Park is generally accepting of all conditions that would apply to Prevailing Wind Park. For example, Condition 38 regarding

decommissioning is specific to the off-taker in Docket EL18-003. Prevailing Wind Park is proposing some revisions to the conditions to reflect the specific circumstances relating to the Prevailing Wind Park and will provide a draft set of conditions to Staff for consideration.

2-23) Provide a map that shows the proposed turbines within 2 miles from the residence of Mr. Greg C. Hubner and Mrs. Marsha Hubner. Please provide a map similar to Page 88 of 156 of Staff Exhibit\_JT-1 in Docket EL18-003 for Ms. Teresa Kaaz (http://puc.sd.gov/commission/dockets/electric/2018/EL18-003/exhibits/staff/s1.pdf).

Jennifer Bell: See enclosed Attachment 2-23.

2-24) Provide a map that shows the proposed turbines within 2 miles from the residence of Mr. Paul M. Schoenfelder and Mrs. Lisa A. Schoenfelder. Please provide a map similar to Page 88 of 156 of Staff Exhibit\_JT-1 in Docket EL18-003 for Ms. Teresa Kaaz (<a href="http://puc.sd.gov/commission/dockets/electric/2018/EL18-003/exhibits/staff/s1.pdf">http://puc.sd.gov/commission/dockets/electric/2018/EL18-003/exhibits/staff/s1.pdf</a>).

Jennifer Bell: See enclosed Attachment 2-24.

2-25) Provide a map that shows the proposed turbines within 2 miles from the residence of Mr. Sherman Fuerniss. Please provide a map similar to Page 88 of 156 of Staff Exhibit\_JT-1 in Docket EL18-003 for Ms. Teresa Kaaz (http://puc.sd.gov/commission/dockets/electric/2018/EL18-003/exhibits/staff/s1.pdf).

Jennifer Bell: See enclosed Attachment 2-25A (North) and Attachment 2-25B (South).

2-26) Provide a map that shows the proposed turbines within 2 miles from the residence of Ms. Karen D. Jenkins. Please provide a map similar to Page 88 of 156 of Staff Exhibit\_JT-1 in Docket EL18-003 for Ms. Teresa Kaaz (http://puc.sd.gov/commission/dockets/electric/2018/EL18-003/exhibits/staff/s1.pdf).

Jennifer Bell: See enclosed Attachment 2-26.

2-27) Refer to Docket EL17-055, Pre-filed Exhibits filed by Crocker Wind Farm, LLC, Exhibit A15-7. Please provide a similar constraints map for the Prevailing Wind Park Project.

Bridget Canty: Please see enclosed Attachment 2-27.

2-28) At the public input hearing, Ms. Kelly Pazour voiced concerns that noise from wind turbines may adversely impact her daughter's bone anchored hearing aid (BAHA). Please provide an analysis as to whether or not the noise profile of wind turbines could interfere with the BAHA and include all supporting materials.

<u>Dr. Mark Roberts</u>: Based on my review of the human physiology and anatomy associated with the application of bone anchored hearing aids ("BAHA"), there is no scientific evidence that sounds generated by wind turbines would be perceived in any other manner than the sounds of everyday experience. There also is no evidence in the peer reviewed, published literature that the noise generated by wind turbines would cause adverse effects in individuals fitted with BAHA. Low frequency sounds are a normal part of our everyday experience and they have not been reported in the scientific literature as a problem for BAHA wearers. Testing of BAHA apparatus starts at 500 Hz, which is considerably higher than the 20 Hz and lower range that is often spoken of as a concern.

#### Dated this 30th day of August 2018.

#### By /s/ Lisa M. Agrimonti

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#### **Memorandum**



Date: August 28, 2018

To: Prevailing Wind Park, LLC

From: Chris Howell, Burns & McDonnell

Subject: Prevailing Wind Park Sound Modeling with Beethoven Turbines

Prevailing Wind Park, LLC (Developer) is proposing to construct the Prevailing Wind Park near Avon, South Dakota, in Bon Homme, Hutchinson, and Charles Mix Counties (Project). The Project will consist of 57 to 61 wind turbines with a maximum nameplate capacity of up to 219.6 megawatts (MW), although output at the point of interconnection will be limited to a maximum of 200 MW. The wind turbine sites were analyzed for the proposed turbine model: General Electric (GE) 3.8-137. Directly north of the Project, NorthWestern Energy operates 43, 1.85-MW GE 1.85-87 wind turbines as part of the Beethoven Wind Farm. This sound assessment was completed to model sound levels of the Project, in combination with the existing wind farm.

#### **Sound Modeling**

Predicted sound levels were modeled using industry-accepted sound modeling software. The program used to model the turbines was the Computer Aided Noise Abatement (CadnaA), Version 2018, published by DataKustik, Ltd., Munich, Germany. The program is a scaled, three-dimensional program that takes into account air absorption, terrain, ground absorption, and ground reflection for each piece of noise-emitting equipment and predicts downwind sound pressure levels. The model calculates sound propagation based on International Organization for Standardization (ISO) 9613-2:1996, General Method of Calculation. ISO 9613-2, and therefore CadnaA, assesses the sound pressure levels based on the Octave Band Center Frequency range from 31.5 to 8,000 Hz. Compliance with the regulations for all turbines operating should ensure compliance for any combination of the turbines operating. Predictive modeling was conducted to determine the impacts from the new and existing turbines at the nearest occupied residences.

Acoustical modeling was conducted for the Project. Wind turbine nacelle heights and acoustical emissions were input into the model. The nacelles of the Project wind turbines are 110 meters high. The nacelles for the existing Beethoven turbines are 80 meters high. The sound emissions data supplied by GE was developed using the International Electrotechnical Commission (IEC) 61400-11 acoustic measurement standards. The expected sound power levels for the Project and representative sound levels for Beethoven turbines are displayed in Table 1.

#### Memorandum (cont'd)



August 28, 2018 Page 2

**Table 1: Maximum Sound Power Levels** 

			Sound Power Level (dBA)								
Turbine	Height	31.5	63	125	250	500	1000	2000	4000	8000	dBA
GE 3.8-137	110 m	78.5	86.8	92.6	96.4	99.4	102.1	102.0	93.7	79.2	107.0
GE 1.85-87*	80 m	69.3	81.4	91.0	99.0	102.3	101.1	96.8	88.1	74.0	106.5

<sup>\*</sup>Actual specifications for the Beethoven Wind Farm turbines are unknown. Generic, representative GE data for similar turbines were used in this analysis.

#### Results

The maximum model-predicted cumulative  $L_{eq}$  sound pressure levels at each receiver (the logarithmic addition of sound levels from each frequency from every turbine) are included in Attachment 1. These values represent only the cumulative noise emitted by all wind turbines (Project turbines and Beethoven turbines) and do not include any extraneous noises (traffic, etc.) that could be present during physical noise measurements.

Beethoven Wind Farm was modeled based on conservative vendor data for GE 1.85-87 wind turbines. It is unknown if any of the Beethoven wind turbines have noise mitigation applied to them. Based on the conservative modeling assumptions, there is the potential for one receptor to exceed the 45-dBA limit, REC-129. At this receptor, the modeled existing sound level for the Beethoven Wind Farm by itself is 46.2 dBA. This level is directly attributable to the two Beethoven wind turbines near the receptor. When the two wind farms are modeled together, the sound level at REC-129 is predicted to be 46.3 dBA, showing that the Project would contribute only 0.1 dBA of additional sound. This added amount is acoustically negligible. The model results for the assumed Beethoven Wind Farm operating without the Project are shown in Attachment 1.

**CJH** 

Attachment 1 – Predicted Sound Pressure Levels

### Memorandum



Attachment 1 – Predicted Sound Pressure Levels



GE 3.8-137, 110 m

GL 3.0-137, 110 III	Coord	linates		Modeled	Exceed 45 dBA?
Receiver	Easting (m)	Northing (m)	Base Elevation (m)	LAeq	(Y/N)
REC-001	583178.93	4781949.36	473.94	24.7	N
REC-002	578731.00	4782428.97	540.99	36.9	N
REC-003	580506.89	4783273.92	505.27	34.0	N
REC-004	582678.66	4780104.52	480.03	32.4	N
REC-005	583326.78	4778396.84	476.81	27.5	N
REC-006	583615.28	4778695.43	471.94	26.2	N
REC-007	579386.45	4783171.84	519.65	34.2	N
REC-008	579364.54	4780122.78	515.18	38.6	N
REC-009	582485.70	4779597.03	481.47	34.3	N
REC-010	570706.40	4779232.69	531.85	30.6	N
REC-011	568954.92	4779049.93	516.88	23.0	N
REC-012	575450.96	4778869.67	571.47	43.8	N
REC-013	570834.43	4777923.92	539.22	34.9	N
REC-014	578568.31	4777265.47	526.35	38.3	N
REC-015	578578.94	4777228.45	526.13	38.5	N
REC-016	569437.95	4774776.35	523.53	38.9	N
REC-017	567999.72	4773683.50	489.60	36.8	N
REC-018	575893.85	4773069.05	525.25	32.5	N
REC-019	568870.35	4772837.61	510.51	36.3	N
REC-020	568170.58	4772373.09	491.63	30.5	N
REC-021	574122.73	4771641.66	507.46	35.0	N
REC-022	574117.98	4771913.43	508.31	34.7	N
REC-023	567115.19	4771132.04	470.89	-	N
REC-024	569455.79	4770885.60	499.55	34.2	N
REC-025	582409.59	4770691.28	486.10	26.3	N
REC-026	582205.90	4770538.43	489.18	27.7	N
REC-027	569450.78	4770122.57	499.25	32.0	N
REC-028	578915.96	4770106.59	519.65	30.5	N
REC-029	567890.47	4769896.98	472.42	19.1	N
REC-030	574057.84	4769738.20	530.58	35.9	N
REC-031	571038.40	4769099.63	510.51	36.6	N
REC-032	579594.58	4768433.69	507.46	40.2	N
REC-033	574388.42	4768112.11	502.26	29.5	N
REC-034	575856.91	4767968.51	509.35	34.3	N
REC-035	568988.11	4768088.17	487.50	27.6	N
REC-036	574139.54	4767903.27	507.06	28.6	N
REC-037	580534.75	4767955.77	497.42	40.6	N
REC-038	569570.52	4767693.73	493.87	33.1	N
REC-039	575753.59	4767511.52	511.25	33.5	N
REC-040	575853.92	4767408.85	513.56	34.3	N
REC-041	577365.54	4767429.45	496.85	41.4	N
REC-042	580534.93	4768649.62	501.93	40.0	N
REC-043	582314.18	4767105.01	476.98	30.8	N
REC-044	577581.91	4766535.38	501.37	35.6	N
REC-045	580459.53	4766528.35	495.27	37.9	N
REC-046	570892.00	4766384.10	500.34	39.9	N
REC-047	576071.91	4766099.10	511.58	28.5	N
REC-048	575888.47	4765484.03	507.46	26.2	N
REC-049	579136.06	4765003.57	501.37	36.3	N
REC-050	575594.26	4764877.78	513.56	22.9	N
REC-051	577014.96	4764806.12	483.08	32.6	N
REC-052	571034.71	4764976.49	483.08	32.4	N
REC-053	575751.76	4763553.72	504.89	18.1	N
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GE 3.8-137, 110 m

GE 3.8-13/, 110 m	Coord	linates		Modeled	Exceed 45 dBA?
Receiver	Easting (m)	Northing (m)	Base Elevation (m)	Modeled LAeq	(Y/N)
REC-054	579261.02	4763508.83	493.92	26.2	N
REC-055	575738.19	4763383.18	501.37	18.7	N
REC-056	578784.40	4763423.45	495.27	26.8	N
REC-057	575728.70	4763020.56	496.19	-	N
REC-058	574689.98	4762905.51	489.18	_	N
REC-059	574608.88	4762765.31	484.23	_	N
REC-060	575719.36	4763758.78	507.46	19.6	N
REC-061	566590.17	4774005.26	470.89	25.5	N
REC-062	566794.52	4771446.01	467.84	-	N
REC-063	567575.59	4773523.26	480.49	32.1	N
REC-064	568169.85	4775221.75	493.83	37.5	N
REC-065	568402.45	4770548.21	483.08	24.8	N
REC-066	569474.73	4776605.15	525.75	39.1	N
REC-067	569782.41	4765373.88	493.98	36.1	N
REC-068	570301.18	4776152.11	533.82	36.3	N
REC-069	570320.63	4776086.07	530.62	36.4	N
REC-070	570930.65	4767169.47	502.79	37.7	N
REC-071	571246.87	4765598.42	488.81	38.5	N
REC-072	571847.73	4767001.23	507.46	41.7	N
REC-073	572712.41	4764371.30	476.98	25.2	N
REC-074	572760.45	4768609.65	494.96	35.3	N
REC-075	572875.14	4775183.93	528.80	39.5	N
REC-076	573023.77	4775137.74	528.80	39.9	N
REC-077	573104.39	4767558.79	488.61	31.1	N
REC-078	572689.83	4764269.58	472.84	24.7	N
REC-079	572840.24	4766532.05	483.08	35.8	N
REC-080	574527.24	4771635.20	508.86	34.0	N
REC-081	574606.23	4772084.46	513.56	34.0	N
REC-082	575265.41	4775117.32	552.59	41.9	N
REC-083	575384.42	4771695.61	513.56	32.3	N
REC-084	575459.57	4773771.95	533.47	39.2	N
REC-085	576210.31	4770611.18	524.57	38.1	N
REC-086	576537.52	4765598.06	498.89	30.2	N
REC-087	576971.43	4770447.24	531.85	40.8	N
REC-088	577659.69	4765661.22	489.18	38.1	N
REC-089	577747.37	4768859.92	513.80	40.5	N
REC-090	577878.24	4764078.53	490.80	32.8	N
REC-091	577915.85	4763844.06	489.18	30.5	N
REC-091	578531.67	4767119.28	501.56	37.6	N
REC-093	578575.67	4778618.52	525.75	37.4	N
REC-094	578514.65	4776677.36	519.65	38.0	N
REC-095	578804.05	4764274.93	501.37	32.8	N
REC-095	578827.98	4768793.31	520.74	37.4	N
REC-097	578943.49	4770454.51	519.65	29.0	N
REC-098	579475.34	4767289.07	507.32	40.3	
REC-099	579720.64	4762441.83	480.38	-	N N
REC-100	580720.17	4765706.10	480.38 489.18	32.2	N N
REC-100	580720.17	4762540.89	489.18 476.98	32.Z -	N
REC-101				-	
	581560.41 581721.12	4763175.20 4767420.32	470.14 484.05		N N
REC-103	581721.12	4767420.32	484.05	35.9 20.1	N
REC-104	581794.35	4770381.50	494.21	30.1	N
REC-105	581890.50	4769063.10	495.27	40.1	N
REC-106	581882.94	4766984.50	478.66	32.1	N





# Attachment 1 - Modeling Results GE 3.8-137, 110 m

Coordinates					Exceed 45 dBA?
Receiver	Easting (m)	Northing (m)	Base Elevation (m)	Modeled LAeq	(Y/N)
REC-107	582089.90	4770568.08	488.75	27.9	N
REC-108	582148.44	4764102.27	470.89	-	N
REC-109	582609.65	4767582.94	483.08	31.6	N
REC-110	583963.39	4770430.23	460.42	18.2	N
REC-111	582577.80	4767332.36	480.99	30.7	N
REC-112	570034.28	4777428.88	531.85	34.8	N
REC-113	580225.65	4778670.25	516.61	41.3	N
REC-114	580643.69	4779065.86	510.51	40.5	N
REC-115	580812.98	4776797.89	507.54	39.5	N
REC-116	581676.22	4775653.66	495.49	37.4	N
REC-117	579367.75	4775404.23	525.75	36.8	N
REC-118	580095.28	4784336.60	507.46	29.1	N
REC-119	581867.73	4783246.46	489.52	29.7	N
REC-120	582410.57	4781467.20	486.13	30.9	N
REC-121	582256.16	4783054.99	483.20	28.4	N
REC-122	582261.38	4777793.15	487.45	33.8	N
REC-123	581460.71	4785645.95	483.97	-	N
REC-124	577505.30	4781336.06	557.16	44.0	N
REC-125	580995.88	4773976.31	501.99	29.4	N
REC-126	580915.69	4774830.29	502.29	38.6	N
REC-127	581473.61	4775075.61	495.27	37.0	N
REC-128	581468.21	4774997.26	495.27	36.4	N
REC-129	576815.58	4779814.18	556.23	46.3	Υ
REC-130	567502.00	4781060.00	502.37	-	N
REC-131	568850.00	4781446.00	523.04	-	N
REC-132	570408.00	4783811.00	527.44	22.5	N
REC-133	570806.00	4783497.00	538.25	24.9	N
REC-134	570845.00	4782153.00	543.29	30.2	N
REC-135	573665.00	4780153.00	564.37	42.6	N
REC-136	579049.00	4772150.00	519.65	-	N
REC-137	579104.00	4772978.00	519.65	17.9	N
REC-138	573105.45	4772224.12	513.56	37.1	N
Schoenfelder House	569781.24	4772133.60	510.51	35.5	N
Gramkow-Vesper Cemetery	580689.30	4768952.27	507.46	43.2	N

<sup>&</sup>quot;-" represents no expected impacts at the receiver location



#### **Beethoven Only**

beethoven only	Coore	dinates		Modeled	Evened 45 dBA2
Receiver	Easting (m)	Northing (m)	Base Elevation (m)	Modeled LAeq	Exceed 45 dBA? (Y/N)
REC-001	583178.93	4781949.36	473.94	-	N
REC-002	578731.00	4782428.97	540.99	36.1	N
REC-003	580506.89	4783273.92	505.27	22.3	N
REC-004	582678.66	4780104.52	480.03	-	N
REC-005	583326.78	4778396.84	476.81	_	N
REC-006	583615.28	4778695.43	471.94	_	N
REC-007	579386.45	4783171.84	519.65	32.3	N
REC-008	579364.54	4780122.78	515.18	27.6	N
REC-009	582485.70	4779597.03	481.47	-	N
REC-010	570706.40	4779232.69	531.85	30.2	N
REC-011	568954.92	4779049.93	516.88	-	N
REC-012	575450.96	4778869.67	571.47	43.8	N
REC-013	570834.43	4777923.92	539.22	34.0	N
REC-014	578568.31	4777265.47	526.35	25.7	N
REC-015	578578.94	4777228.45	526.13	25.7	N
REC-016	569437.95	4774776.35	523.53	-	N
REC-017	567999.72	4774770.33	489.60	-	N
REC-017	575893.85	4773069.05	525.25	-	N N
				-	
REC-019 REC-020	568870.35 568170.58	4772837.61	510.51	-	N
REC-020 REC-021		4772373.09	491.63	-	N
	574122.73	4771641.66	507.46	-	N
REC-022	574117.98	4771913.43	508.31	-	N
REC-023	567115.19	4771132.04	470.89	-	N
REC-024	569455.79	4770885.60	499.55	-	N
REC-025	582409.59	4770691.28	486.10	-	N
REC-026	582205.90	4770538.43	489.18	-	N
REC-027	569450.78	4770122.57	499.25	-	N
REC-028	578915.96	4770106.59	519.65	-	N
REC-029	567890.47	4769896.98	472.42	-	N
REC-030	574057.84	4769738.20	530.58	-	N
REC-031	571038.40	4769099.63	510.51	-	N
REC-032	579594.58	4768433.69	507.46	-	N
REC-033	574388.42	4768112.11	502.26	-	N
REC-034	575856.91	4767968.51	509.35	-	N
REC-035	568988.11	4768088.17	487.50	-	N
REC-036	574139.54	4767903.27	507.06	-	N
REC-037	580534.75	4767955.77	497.42	-	N
REC-038	569570.52	4767693.73	493.87	-	N
REC-039	575753.59	4767511.52	511.25	-	N
REC-040	575853.92	4767408.85	513.56	-	N
REC-041	577365.54	4767429.45	496.85	-	N
REC-042	580534.93	4768649.62	501.93	-	N
REC-043	582314.18	4767105.01	476.98	-	N
REC-044	577581.91	4766535.38	501.37	-	N
REC-045	580459.53	4766528.35	495.27	-	N
REC-046	570892.00	4766384.10	500.34	-	N
REC-047	576071.91	4766099.10	511.58	-	N
REC-048	575888.47	4765484.03	507.46	-	N
REC-049	579136.06	4765003.57	501.37	-	N
REC-050	575594.26	4764877.78	513.56	-	N
REC-051	577014.96	4764806.12	483.08	-	N
REC-052	571034.71	4764976.49	483.08	-	N
REC-053	575751.76	4763553.72	504.89	-	N
REC-054	579261.02	4763508.83	493.92	-	N

#### **Beethoven Only**

Receiver Easting (m) Northing (m) Base Elevation (m) LAeg (Y/N)  REC 055	Coordinates				Modeled	Exceed 45 dBA?
REC-056	Receiver			Base Elevation (m)		
REC-057   577/28-70   4763020.56   496.19   -     N   REC-058   574689.88   4762/05.31   489.18   -   N   REC-059   574680.88   4762/05.31   489.23   -   N   N   REC-060   575719.36   4763758.78   507.46   -   N   N   REC-061   566590.17   4774005.26   470.89   -   N   REC-062   566794.52   4771446.01   467.84   -   N   REC-063   56757.59   477352.2.6   480.49   -   N   REC-064   581169.85   4775221.75   493.83   -   N   REC-064   581169.85   4775221.75   493.83   -   N   REC-066   568402.45   4770548.21   433.08   -   N   REC-066   569474.73   477605.15   525.75   23.0   N   REC-066   569474.73   477605.15   525.75   23.0   N   REC-068   57030.11.8   4776152.11   533.82   26.7   N   REC-068   57030.11.8   4776152.11   533.82   26.7   N   REC-069   570320.63   477608.67   530.62   26.5   N   REC-070   57099.05   4767168.47   502.79   -   N   REC-071   571246.87   476598.42   488.81   -   N   REC-072   571247.37   4767001.23   507.46   -   N   REC-073   572712.41   4764371.30   476.98   -   N   REC-073   572712.41   4764371.30   476.98   -   N   REC-075   572875.14   4775183.93   528.80   28.7   N   REC-076   57300.39   4767558.79   488.61   -   N   REC-077   573104.39   4767558.79   488.61   -   N   REC-079   57280.40   476558.79   488.61   -   N   REC-086   576537.52   477171.73   525.29   N   N   REC-082   57526.41   4775117.32   525.59   N   N   REC-083   57656.31   477611.18   524.57   -   N   N   REC-083   57659.59   476566.22   489.18   -   N   N   REC-089   577850.40   477619.50   476566.22   489.18   -   N   N   REC-099   57880.00   476666.23   477619.32   47656	REC-055	575738.19	4763383.18	501.37	-	N
REC.058   574689.98   4762905.51   489.18   -     N   REC.050   574690.88   4762765.51   489.23   -     N   REC.060   575719.36   4763758.78   507.46   -     N   REC.061   566590.17   4774005.26   470.89   -     N   REC.062   566794.52   4771446.01   467.84   -     N   REC.063   567575.59   4773523.26   480.49   -     N   REC.063   567575.59   4773523.26   480.49   -     N   REC.065   568402.45   4770548.21   483.08   -     N   REC.065   568402.45   4770548.21   483.08   -     N   REC.066   569474.73   4776605.15   525.75   23.0   N   REC.066   569474.73   477608.61   533.82   26.7   N   REC.067   569782.41   4765373.88   493.98   -     N   REC.069   570320.63   4776086.07   530.62   26.5   N   REC.070   57030.65   4767169.47   502.79   -     N   REC.071   571246.87   476596.42   488.81   -     N   REC.071   571246.87   476596.42   488.81   -     N   REC.072   571847.73   4767001.23   507.46   -     N   REC.072   571847.73   4767001.23   507.46   -     N   REC.073   572712.41   4764371.30   476598   -     N   REC.073   572712.41   4764371.30   476598   -     N   REC.074   572760.45   4768609.65   494.96   -     N   REC.075   57300.377   4775137.74   528.80   28.7   N   REC.077   573101.39   476758.79   488.61   -     N   REC.079   57280.377   4775137.74   528.80   28.7   N   REC.079   57280.24   477605.20   488.61   -     N   REC.079   57280.24   477655.20   483.61   -     N   REC.086   574527.24   477655.20   483.61   -     N   REC.086   574527.24   477655.20   483.61   -     N   REC.086   575255.57   477861.73   470647.24   531.56   -     N   REC.086   57555.59   477861.50   47686.59   47686.59   47686.59   57697.30   N   REC.086   575537.52   476656.12   489.18   -     N   REC.086   575537.52   47666.1	REC-056	578784.40	4763423.45	495.27	-	N
REC-059   \$74608.88   4762765.31   484.23   -     N   REC-060   \$75719.36   4763758.78   \$507.46   -     N   REC-061   \$56590.17   4774005.26   470.89   -     N   REC-062   \$66794.52   4771446.01   467.84   -     N   REC-063   \$567575.59   477352.3.26   480.49   -     N   REC-064   \$68169.85   4775221.75   493.83   -     N   REC-066   \$68402.45   4770548.21   483.08   -     N   REC-066   \$69474.73   4776605.15   525.75   23.0   N   REC-066   \$69474.73   4776605.15   525.75   23.0   N   REC-066   \$69474.73   4776605.15   525.75   23.0   N   REC-068   \$70301.18   4776152.11   533.82   26.7   N   REC-069   570302.063   4767086.07   530.62   26.5   N   REC-069   570302.063   4767086.07   530.62   26.5   N   REC-071   571246.87   4765598.42   488.81   -     N   REC-072   571847.73   4767001.23   507.46   -     N   REC-073   572760.45   476860.05   476860.05   47698.00   47	REC-057	575728.70	4763020.56	496.19	-	N
REC-060   575/19.36   4763758.78   507.46   -   N   REC-061   565901.7   4774005.26   470.89   -   N   REC-062   566794.52   4771446.01   467.84   -   N   REC-063   567575.59   4773522.26   480.49   -   N   REC-064   568169.85   4775221.75   493.83   -   N   REC-065   568402.45   4770548.21   483.08   -   N   REC-066   56947.47   4776605.15   525.75   23.0   N   REC-067   569782.41   4765373.88   493.98   -   N   REC-068   570301.18   4776152.11   533.82   26.7   N   REC-069   570320.63   477698.07   530.62   26.5   N   REC-069   570320.63   477698.07   530.62   26.5   N   REC-071   571246.87   4765598.42   488.81   -   N   REC-072   571247.73   4766501.5   50.746   -   N   REC-073   572712.41   4764371.30   476.98   -   N   REC-074   572760.45   4768609.65   494.96   -   N   REC-075   572875.14   475138.93   528.80   28.4   N   REC-076   573023.77   4775137.74   528.80   28.4   N   REC-077   573104.39   4767558.94   488.81   -   N   REC-078   572888.83   4764289.88   472.84   -   N   REC-079   572840.24   4766532.05   483.08   -   N   REC-079   572888.83   4764289.88   472.84   -   N   REC-079   572888.83   4764289.58   472.84   -   N   REC-080   574527.74   4771635.20   508.86   -   N   REC-081   574606.23   4772084.66   513.56   -   N   REC-083   575384.42   4771695.51   513.56   -   N   REC-086   576575.57   4773771.95   533.47   -   N   REC-088   57620.31   477611.18   524.57   -   N   REC-089   577878.4   4771695.51   513.56   -   N   REC-089   577878.4   4771695.51   513.56   -   N   REC-089   577878.4   477611.28   501.56   -   N   REC-090   577878.24   477695.51   513.66   -   N   REC-090   577878.24   477695.51   513.66   -   N   REC-090   577878.24   477695.51   513.66   -   N   REC-090   577878.24   477695.51   510.65   -   N   REC-090   577878.24   476677.36   519.65   20.9   N   REC-090   577878.24   476679.36   519.65   20.9   N   REC-090   57787.24	REC-058	574689.98	4762905.51	489.18	-	N
REC-061   566590.17	REC-059	574608.88	4762765.31	484.23	-	N
REC-062   566794.52   4771446.01   467.84   -   N   REC-063   567575.59   4773523.26   480.49   -   N   N   REC-064   5618169.85   4775221.75   493.83   -   N   N   REC-065   568402.45   4770548.21   483.08   -   N   N   REC-066   569474.73   477605.15   525.75   23.0   N   REC-067   569782.41   47605.15   525.75   23.0   N   REC-067   569782.41   4765373.88   493.98   -   N   REC-069   570320.63   477608.60   7   330.62   26.5   N   REC-069   570320.63   477608.60   7   330.62   26.5   N   REC-070   570930.65   4767169.47   502.79   -   N   REC-070   570930.65   4767169.47   502.79   -   N   REC-071   571246.87   476598.42   488.81   -   N   N   REC-072   571847.73   4767001.23   507.46   -   N   REC-074   572760.45   4765806.65   494.96   -   N   REC-074   572760.45   4768509.65   494.96   -   N   REC-075   573023.77   4775137.74   528.80   28.7   N   REC-076   573023.77   4775137.74   528.80   28.4   N   N   REC-077   573104.39   4767558.79   488.61   -   N   REC-079   572840.24   4766532.05   483.08   -   N   REC-081   572668.83   476429.58   472.84   -   N   N   REC-081   574506.23   4772084.46   513.56   -   N   N   REC-081   574506.23   4772084.46   513.56   -   N   N   REC-084   575450.72   477365.20   508.86   -   N   N   REC-084   575450.72   4775137.32   552.59   -   N   N   REC-086   576537.22   477565.25   498.89   -   N   N   N   REC-081   575450.73   4773771.95   533.47   -   N   N   REC-088   57620.31   4776011.18   524.57   -   N   N   REC-089   577457.43   4765598.06   498.89   -   N   N   N   REC-089   577457.43   4776818.52   525.75   29.5   N   N   REC-089   577457.43   4766859.92   513.80   -   N   N   N   REC-089   577457.34   4766859.92   513.80   -   N   N   N   REC-089   577877.34   4768859.92   513.80   -   N   N   N   REC-089   577877.34   4768859.92   513.80   -   N   N   N   REC-093   57878.24   476698.52   476679.33   490.80   -   N   N   N   REC-093   57878.24   476698.59   476561.22   4891.8   -   N   N   N   REC-093   57878.24   476698.35   476699.31   509.52   -   N   N   REC-	REC-060	575719.36	4763758.78	507.46	-	N
REC-063	REC-061	566590.17	4774005.26	470.89	-	N
REC-064	REC-062	566794.52	4771446.01	467.84	-	N
REC-066	REC-063	567575.59	4773523.26	480.49	-	N
REC-066   569474/73   4776605.15   525.75   23.0   N   REC-067   569782.41   4765373.88   493.98   -	REC-064	568169.85	4775221.75	493.83	-	N
REC.067	REC-065	568402.45	4770548.21	483.08	-	N
REC.068   \$70301.18   4776152.11   \$33.82   26.7   N   REC.070   \$7032.063   4776086.07   \$30.62   26.5   N   REC.071   \$71246.87   4765598.42   488.81   -	REC-066	569474.73	4776605.15	525.75	23.0	N
REC.068   \$70301.18   4776152.11   \$33.82   26.7   N   REC.070   \$7032.063   4776086.07   \$30.62   26.5   N   REC.071   \$71246.87   4765598.42   488.81   -	REC-067	569782.41	4765373.88	493.98	-	N
REC-069         \$70320.63         4776086.07         \$30.62         26.5         N           REC-070         \$70930.65         4767169.47         502.79         .         N           REC-071         \$71246.87         4765598.42         488.81         .         N           REC-072         \$71847.73         4767001.23         507.46         .         N           REC-073         \$72712.41         4764371.30         476.98         .         N           REC-074         \$727760.45         4768609.65         494.96         .         N           REC-075         \$72875.14         4775183.93         \$28.80         28.7         N           REC-076         \$7300.37         4775137.74         528.80         28.4         N           REC-077         \$73104.39         4767558.79         488.61         .         N           REC-078         \$72840.24         4776532.05         483.08         .         N           REC-078         \$75280.23         4771635.20         508.86         .         .         N           REC-080         \$74527.24         4771635.20         508.86         .         .         N           REC-081         \$75620.34	REC-068				26.7	N
REC.070   \$70930.65						
REC-071         \$71246.87         4765598.42         488.81         -         N           REC-072         \$73847.73         4767001.23         \$07.46         -         N           REC-073         \$72712.41         4764971.30         476.98         -         N           REC-074         \$72760.45         4768609.65         494.96         -         N           REC-075         \$72875.14         4775183.93         \$28.80         28.4         N           REC-076         \$73023.77         4775137.74         \$28.80         28.4         N           REC-077         \$73104.39         476558.79         488.61         -         N           REC-078         \$72689.83         476659.59         488.61         -         N           REC-079         \$72840.24         4766532.05         483.08         -         N           REC-080         \$74527.24         4771635.20         508.66         -         N           REC-081         \$74606.23         4772084.46         513.56         -         N           REC-082         \$75265.41         4775117.32         \$52.59         -         N           REC-083         \$75394.42         4771695.61         513.56<						
REC-072         \$71847.73         4767001.23         507.46         -         N           REC-073         \$72712.41         4764371.30         476.98         -         N           REC-074         \$72760.45         4768609.65         494.96         -         N           REC-075         \$72875.14         4775183.93         \$28.80         28.7         N           REC-076         \$73023.77         477513.774         \$28.80         28.4         N           REC-077         \$73104.39         4767558.79         488.61         -         N           REC-078         \$72689.83         4764269.58         472.84         -         N           REC-079         \$72840.24         4766532.05         483.08         -         N           REC-081         \$74606.23         4771695.20         508.86         -         N           REC-082         \$75265.41         4775117.32         552.59         -         N           REC-082         \$75384.42         4771695.61         513.56         -         N           REC-082         \$75495.57         4773771.95         533.47         -         N           REC-083         \$76571.43         4770471.24         531.8					_	
REC-073         \$72712.41         4764371.30         476.98         -         N           REC-074         \$72760.45         4768609.65         494.96         -         N           REC-075         \$72875.14         4775133.74         528.80         28.7         N           REC-076         \$73023.77         4775137.74         528.80         28.4         N           REC-077         \$73104.39         4767558.79         486.61         -         N           REC-079         \$72840.24         4766532.05         483.08         -         N           REC-080         \$74527.24         4771635.20         508.86         -         N           REC-081         \$74606.23         4772084.46         513.56         -         N           REC-082         \$75565.41         4775117.32         552.59         -         N           REC-083         \$75384.42         4771695.61         513.56         -         N           REC-084         \$755459.57         4773771.95         533.47         -         N           REC-085         \$76210.31         4770611.18         524.57         -         N           REC-086         \$76691.43         4770447.24         531.					_	
REC-074         \$72760.45         4768609.65         494.96         -         N           REC-075         \$72875.14         4775133.73         \$28.80         28.7         N           REC-076         \$73023.77         4775137.74         \$28.80         28.4         N           REC-077         \$73104.39         4767558.79         488.61         -         N           REC-078         \$72689.83         47665532.05         483.08         -         N           REC-080         \$74527.24         4771635.20         508.86         -         N           REC-081         \$74606.23         4772084.46         513.56         -         N           REC-082         \$75265.41         4775117.32         \$52.59         -         N           REC-083         \$75384.42         4771695.61         513.56         -         N           REC-084         \$75459.57         4773771.95         533.47         -         N           REC-085         \$67621.31         4770611.18         \$24.57         -         N           REC-086         \$76537.52         4765598.06         498.89         -         N           REC-087         \$76971.43         4770447.24         531.					_	
REC-075         572875.14         4775183.93         528.80         28.4         N           REC-076         573023.77         4775137.74         528.80         28.4         N           REC-077         573104.39         4767558.79         488.61         2.         N           REC-079         572840.24         4766532.05         483.08         -         N           REC-080         574527.24         4771635.20         508.86         -         N           REC-081         574606.23         4772084.46         513.56         -         N           REC-082         575265.41         4775117.32         552.59         -         N           REC-083         575384.42         4771695.61         513.56         -         N           REC-083         575384.42         477117.32         552.59         -         N           REC-083         576510.31         477611.18         524.57         -         N           REC-085         576210.31         477051.18         524.57         -         N           REC-086         57657.52         4765598.06         498.89         -         N           REC-086         577659.69         4765691.22         489.18 </td <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td>					_	
REC-076         573023.77         4775137.74         528.80         28.4         N           REC-077         573104.39         4767558.79         488.61         -         N           REC-078         572689.83         4764269.58         472.84         -         N           REC-080         572840.24         4766532.05         483.08         -         N           REC-080         574527.24         4771635.20         508.86         -         N           REC-081         574606.23         4772084.46         513.56         -         N           REC-082         575265.41         4775117.32         552.59         -         N           REC-083         575384.42         4771695.61         513.56         -         N           REC-084         575459.57         4773771.95         533.47         -         N           REC-085         576210.31         4770611.18         524.57         -         N           REC-086         576537.52         4765598.06         498.89         -         N           REC-087         576971.43         4770447.24         531.80         -         N           REC-088         577629.69         4765561.22         489.18 </td <td></td> <td></td> <td></td> <td></td> <td>28.7</td> <td></td>					28.7	
REC-077         573104.39         4767558.79         488.61          N           REC-078         572689.83         4764269.58         472.84          N           REC-079         572840.24         4766532.05         483.08          N           REC-080         574577.24         4771635.20         508.86          N           REC-081         574606.23         4772084.46         513.56          N           REC-082         575265.41         477517.32         552.59          N           REC-083         575384.42         4771695.61         513.56          N           REC-084         575495.57         4773771.95         533.47          N           REC-085         576210.31         4770611.18         524.57          N           REC-087         576537.52         476598.06         498.89          N           REC-088         5766971.43         477047.24         531.85          N           REC-088         577659.69         476561.22         489.18          N           REC-098         577743.3         476819.92						
REC-078         572689.83         4764269.58         472.84         -         N           REC-079         572840.24         4766532.05         483.08         -         N           REC-080         574527.24         4771635.20         508.86         -         N           REC-081         574606.23         4772084.46         513.56         -         N           REC-082         575265.41         4775117.32         552.59         -         N           REC-083         575384.42         4771695.61         513.56         -         N           REC-084         575495.57         477377195         533.47         -         N           REC-085         576210.31         4770611.18         524.57         -         N           REC-086         576537.52         4765598.06         498.89         -         N           REC-087         576971.43         477047.24         531.85         -         N           REC-088         577659.69         4765661.22         489.18         -         N           REC-089         577747.37         4768859.92         513.80         -         N           REC-090         57788.24         476078.53         490.80						
REC-079         572840.24         4766532.05         483.08         -         N           REC-080         574527.24         4771635.20         508.86         -         N           REC-081         574606.23         4772084.46         513.56         -         N           REC-082         575265.41         4775117.32         552.59         -         N           REC-083         575384.42         4771695.61         513.56         -         N           REC-084         575459.57         4773771.95         533.47         -         N           REC-085         576210.31         4770611.18         524.57         -         N           REC-086         576537.52         4765598.06         498.89         -         N           REC-087         576971.43         4770447.24         531.85         -         N           REC-088         576597.94         4765661.22         489.18         -         N           REC-089         577747.37         4768859.92         513.80         -         N           REC-090         577878.24         4764078.53         490.80         -         N           REC-091         577853.14         4764078.53         490.80					_	
REC-080         574527.24         4771635.20         508.86         -         N           REC-081         574606.23         4772084.46         513.56         -         N           REC-082         575265.41         4775187.45         552.59         -         N           REC-083         575384.42         4771695.61         513.56         -         N           REC-084         575459.57         4773771.95         533.47         -         N           REC-085         576210.31         4770611.18         524.57         -         N           REC-086         576537.52         4765598.06         498.89         -         N           REC-087         576971.43         4770447.24         531.85         -         N           REC-088         577659.69         4765661.22         489.18         -         N           REC-089         577747.37         4768859.92         513.80         -         N           REC-090         577878.24         4764078.53         490.80         -         N           REC-091         57915.85         4763844.06         489.18         -         N           REC-092         578514.65         4776671.92         501.56						
REC-081         574606.23         4772084.46         513.56         -         N           REC-082         575265.41         4775117.32         552.59         -         N           REC-083         575384.42         4771695.61         513.56         -         N           REC-084         575389.57         4773771.95         533.47         -         N           REC-085         576210.31         4770611.18         524.57         -         N           REC-086         576537.52         4765598.06         498.89         -         N           REC-087         576971.43         4770447.24         531.85         -         N           REC-088         577659.69         4765661.22         489.18         -         N           REC-089         577747.37         4768859.92         513.80         -         N           REC-090         577878.24         4764078.53         490.80         -         N           REC-091         577878.24         4764078.53         490.80         -         N           REC-092         578531.67         4767119.28         501.56         -         N           REC-093         57851.65         4776119.28         501.56					_	
REC-082         575265.41         4775117.32         552.59         -         N           REC-083         575384.42         4771695.61         513.56         -         N           REC-084         575459.57         4773771.95         533.47         -         N           REC-085         576210.31         4770611.18         524.57         -         N           REC-086         576537.52         4765598.06         498.89         -         N           REC-087         57691.43         4770412.24         531.85         -         N           REC-088         577659.69         4765661.22         489.18         -         N           REC-089         577747.37         4768859.92         513.80         -         N           REC-090         577878.24         4764078.53         490.80         -         N           REC-091         577915.85         4763844.06         489.18         -         N           REC-092         578514.65         4776619.28         501.56         -         N           REC-093         578574.65         4776619.28         501.56         -         N           REC-094         578524.65         4776677.36         519.65					_	
REC-084         575384.42         4771695.61         513.56         -         N           REC-084         575459.57         4773771.95         533.47         -         N           REC-085         576210.31         4770611.18         524.57         -         N           REC-086         576537.52         4765598.06         498.89         -         N           REC-087         576971.43         4770447.24         531.85         -         N           REC-088         577659.69         4765661.22         489.18         -         N           REC-089         577747.37         4768859.92         513.80         -         N           REC-090         577878.24         4764078.53         490.80         -         N           REC-091         577878.24         47664078.53         490.80         -         N           REC-092         578531.67         4767119.28         501.56         -         N           REC-093         578575.67         4778618.52         525.75         29.5         N           REC-093         578544.65         4776677.36         519.65         20.9         N           REC-094         578814.65         4762747.33         501.					-	
REC-084         575459.57         4773771.95         533.47         -         N           REC-085         576210.31         4770611.18         524.57         -         N           REC-086         576537.52         4765598.06         498.89         -         N           REC-087         576971.43         4770447.24         531.85         -         N           REC-088         577659.69         4765661.22         489.18         -         N           REC-089         577747.37         4768859.92         513.80         -         N           REC-099         577878.24         4764078.53         490.80         -         N           REC-091         577915.85         4763844.06         489.18         -         N           REC-092         578531.67         4767119.28         501.56         -         N           REC-093         578575.67         4778618.52         525.75         29.5         N           REC-094         578814.65         4776677.36         519.65         20.9         N           REC-095         578804.05         47664274.93         501.37         -         N           REC-096         578827.98         4766879.31         520.					-	
REC-085         576210.31         4770611.18         524.57         -         N           REC-086         576537.52         4765598.06         498.89         -         N           REC-087         576971.43         4770447.24         531.85         -         N           REC-088         577659.69         4765661.22         489.18         -         N           REC-089         577747.37         4768859.92         513.80         -         N           REC-090         577878.24         4764078.53         490.80         -         N           REC-091         577871.85         4763844.06         489.18         -         N           REC-092         578531.67         4767119.28         501.56         -         N           REC-093         578575.67         4776618.52         525.75         29.5         N           REC-094         578514.65         4776677.36         519.65         20.9         N           REC-095         578804.05         476677.36         519.65         20.9         N           REC-096         578827.98         4768793.31         520.74         -         N           REC-097         578943.49         4770454.51         519					-	
REC-086         576537.52         4765598.06         498.89         -         N           REC-087         576971.43         4770447.24         531.85         -         N           REC-088         577659.69         4765661.22         489.18         -         N           REC-089         577747.37         4768859.92         513.80         -         N           REC-090         577878.24         4764078.53         490.80         -         N           REC-091         577915.85         4763844.06         489.18         -         N           REC-092         578531.67         4767119.28         501.56         -         N           REC-093         578575.67         4778618.52         525.75         29.5         N           REC-094         578514.65         4776677.36         519.65         20.9         N           REC-095         578804.05         476677.36         519.65         20.9         N           REC-096         578827.98         4768793.1         520.74         -         N           REC-097         578943.49         47704728.97         507.32         -         N           REC-1098         579475.34         476278.90         570					-	
REC-087       576971.43       4770447.24       531.85       -       N         REC-088       577659.69       4765661.22       489.18       -       N         REC-089       577747.37       4768859.92       513.80       -       N         REC-090       577878.24       4760478.53       490.80       -       N         REC-091       577915.85       4763844.06       489.18       -       N         REC-092       578531.67       4767119.28       501.56       -       N         REC-093       578575.67       4778618.52       525.75       29.5       N         REC-094       578514.65       4776677.36       519.65       20.9       N         REC-095       578804.05       4764274.93       501.37       -       N         REC-096       578827.98       4768793.31       520.74       -       N         REC-097       578943.49       47607289.07       507.32       -       N         REC-098       579475.34       4767289.07       507.32       -       N         REC-100       580720.17       4765706.10       489.18       -       N         REC-101       580991.94       4762540.89       <					-	
REC-088       577659.69       4765661.22       489.18       -       N         REC-089       577747.37       4768859.92       513.80       -       N         REC-090       577878.24       4764078.53       490.80       -       N         REC-091       577915.85       4763844.06       489.18       -       N         REC-092       578531.67       4767119.28       501.56       -       N         REC-093       578575.67       4778618.52       525.75       29.5       N         REC-094       578514.65       4776677.36       519.65       20.9       N         REC-095       578804.05       4764274.93       501.37       -       N         REC-095       578827.98       4768793.31       520.74       -       N         REC-096       578827.98       4768793.31       520.74       -       N         REC-097       578943.49       4770454.51       519.65       -       N         REC-098       579720.64       4762498.07       507.32       -       N         REC-100       580720.17       4765706.10       489.18       -       N         REC-101       580991.94       476240.89 <td< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td></td<>					-	
REC-089       577747.37       4768859.92       513.80       -       N         REC-090       577878.24       4764078.53       490.80       -       N         REC-091       577915.85       4763844.06       489.18       -       N         REC-092       578531.67       4767119.28       501.56       -       N         REC-093       578575.67       4778618.52       525.75       29.5       N         REC-094       578514.65       4776677.36       519.65       20.9       N         REC-095       578804.05       4766274.93       501.37       -       N         REC-096       578827.98       4768793.31       520.74       -       N         REC-097       578943.49       4770454.51       519.65       -       N         REC-098       579475.34       4767289.07       507.32       -       N         REC-099       579720.64       4762441.83       480.38       -       N         REC-100       580720.17       4765706.10       489.18       -       N         REC-101       580991.94       4762240.32       470.14       -       N         REC-102       581560.41       4763175.20 <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td></t<>					-	
REC-090       577878.24       4764078.53       490.80       -       N         REC-091       577915.85       4763844.06       489.18       -       N         REC-092       578531.67       4767119.28       501.56       -       N         REC-093       578575.67       4778618.52       525.75       29.5       N         REC-094       578514.65       4776677.36       519.65       20.9       N         REC-095       578804.05       4764274.93       501.37       -       N         REC-096       578827.98       4768793.31       520.74       -       N         REC-097       578943.49       4770454.51       519.65       -       N         REC-098       579475.34       4767289.07       507.32       -       N         REC-099       579475.34       4762498.07       507.32       -       N         REC-101       580720.17       4765706.10       489.18       -       N         REC-102       580720.17       4765706.10       489.18       -       N         REC-101       581560.41       4763175.20       470.14       -       N         REC-102       581560.41       4767420.32 <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td></t<>					-	
REC-091       577915.85       4763844.06       489.18       -       N         REC-092       578531.67       4767119.28       501.56       -       N         REC-093       578575.67       4778618.52       525.75       29.5       N         REC-094       578514.65       4776677.36       519.65       20.9       N         REC-095       578804.05       4764274.93       501.37       -       N         REC-096       578827.98       4768793.31       520.74       -       N         REC-097       578943.49       4770454.51       519.65       -       N         REC-098       579475.34       4767289.07       507.32       -       N         REC-099       579720.64       4762441.83       480.38       -       N         REC-100       580720.17       4765706.10       489.18       -       N         REC-101       580991.94       4762540.89       476.98       -       N         REC-102       581560.41       4763175.20       470.14       -       N         REC-103       581721.12       4767420.32       484.05       -       N         REC-104       581890.50       4769063.10 <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td></t<>					-	
REC-092       578531.67       4767119.28       501.56       -       N         REC-093       578575.67       4778618.52       525.75       29.5       N         REC-094       578514.65       4776677.36       519.65       20.9       N         REC-095       578804.05       4764274.93       501.37       -       N         REC-096       578827.98       4768793.31       520.74       -       N         REC-097       578943.49       4770454.51       519.65       -       N         REC-098       579475.34       4767289.07       507.32       -       N         REC-099       579720.64       4762441.83       480.38       -       N         REC-100       580720.17       4765706.10       489.18       -       N         REC-101       580991.94       4762540.89       476.98       -       N         REC-102       581560.41       4763175.20       470.14       -       N         REC-103       581721.12       4767420.32       484.05       -       N         REC-104       581890.50       4769063.10       495.27       -       N         REC-105       581882.94       4766984.50 <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td></t<>					-	
REC-093       578575.67       4778618.52       525.75       29.5       N         REC-094       578514.65       4776677.36       519.65       20.9       N         REC-095       578804.05       4764274.93       501.37       -       N         REC-096       578827.98       4768793.31       520.74       -       N         REC-097       578943.49       4770454.51       519.65       -       N         REC-098       579475.34       4767289.07       507.32       -       N         REC-099       579720.64       4762441.83       480.38       -       N         REC-100       580720.17       4765706.10       489.18       -       N         REC-101       580991.94       4762540.89       476.98       -       N         REC-102       581560.41       4763175.20       470.14       -       N         REC-103       581721.12       4767420.32       484.05       -       N         REC-104       581890.50       4769063.10       495.27       -       N         REC-105       581882.94       4766984.50       478.66       -       N         REC-107       582089.90       4770568.08 <t< td=""><td></td><td></td><td></td><td></td><td>-</td><td></td></t<>					-	
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REC-107 582089.90 4770568.08 488.75 - N					-	
					-	
REC-108 582148.44 4764102.27 470.89 - N					-	
	REC-108	582148.44	4764102.27	470.89	-	N



#### **Beethoven Only**

	Coord	linates		Modeled	Exceed 45 dBA
Receiver	Easting (m)	Northing (m)	Base Elevation (m)	LAeq	(Y/N)
REC-109	582609.65	4767582.94	483.08	-	N
REC-110	583963.39	4770430.23	460.42	-	N
REC-111	582577.80	4767332.36	480.99	-	N
REC-112	570034.28	4777428.88	531.85	28.3	N
REC-113	580225.65	4778670.25	516.61	-	N
REC-114	580643.69	4779065.86	510.51	-	N
REC-115	580812.98	4776797.89	507.54	-	N
REC-116	581676.22	4775653.66	495.49	-	N
REC-117	579367.75	4775404.23	525.75	-	N
REC-118	580095.28	4784336.60	507.46	26.8	N
REC-119	581867.73	4783246.46	489.52	-	N
REC-120	582410.57	4781467.20	486.13	-	N
REC-121	582256.16	4783054.99	483.20	-	N
REC-122	582261.38	4777793.15	487.45	-	N
REC-123	581460.71	4785645.95	483.97	-	N
REC-124	577505.30	4781336.06	557.16	44.0	N
REC-125	580995.88	4773976.31	501.99	-	N
REC-126	580915.69	4774830.29	502.29	-	N
REC-127	581473.61	4775075.61	495.27	-	N
REC-128	581468.21	4774997.26	495.27	-	N
REC-129	576815.58	4779814.18	556.23	46.2	Υ
REC-130	567502.00	4781060.00	502.37	-	N
REC-131	568850.00	4781446.00	523.04	-	N
REC-132	570408.00	4783811.00	527.44	22.5	N
REC-133	570806.00	4783497.00	538.25	24.9	N
REC-134	570845.00	4782153.00	543.29	30.2	N
REC-135	573665.00	4780153.00	564.37	42.6	N
REC-136	579049.00	4772150.00	519.65	-	N
REC-137	579104.00	4772978.00	519.65	-	N
REC-138	573105.45	4772224.12	513.56	-	N
Schoenfelder House	569781.24	4772133.60	510.51	-	N
Gramkow-Vesper Cemetery	580689.30	4768952.27	507.46	-	N

<sup>&</sup>quot;-" represents no expected impacts at the receiver location

#### Attachment 2-15

From: Ben Evans

To: <u>mark.maroney@northwestern.com</u>; <u>kirt.mayson@northwestern.com</u>

Subject: MAS Stations WNEY412 & WQON219

Date: Tuesday, August 28, 2018 2:05:43 PM

Attachments: WNEY412-WQON219 Google Maps.pdf

Re: Proposed Prevailing Wind Park Project in Southeast South Dakota

Dear FCC Licensee,

This letter is written in order to comply with a request from the South Dakota Public Utilities Commission (SD PUC) to contact FCC licensees of Multiple Address System (MAS) radio station transmitters located in or near a planned wind energy facility. Your MAS station master sites, call signs WNEY412 and WQON219, have been determined to be located roughly in the center of a wind turbine farm to be constructed by Prevailing Wind Park, LLC.

An application was recently submitted to the SD PUC for a facility permit for the Prevailing Wind Park project to be constructed between the communities of Tripp and Dante, in southeast South Dakota. The center of the project area is near the point where the counties of Bon Homme, Charles Mix and Hutchinson meet. It is proposed to construct 57 wind turbines, each with a maximum capacity of up to 3.8 megawatts. The turbine height will be 110 meters from ground to the blade hub and the length of the blades will be 68.5 meters (178.5 meters total height with one blade pointing straight upward).

The WNEY412 and WQON219 master sites, according to the FCC license, are 8.4 miles north of the community of Avon, on 294th Street, 0.33 mile east of 406th Avenue. Attached are two Google Earth maps showing the two MAS master sites and planned turbines surrounding them.

In addition to the turbines, the project will involve the construction of access roads, power generation collection lines and a collector substation.

As you may be aware, only the location of the master site of an MAS system is specified in the FCC license. The remote sites are not so specified. Thus, we were only able to ascertain the location of the master sites relative to the planned turbine sites. Although, interference to point-to-multipoint systems by wind turbines has generally not been a significant problem, it is appropriate to ascertain whether there would be turbine blockage between the master sites and any of the remote sites.

Regarding your FCC-licensed microwave paths in the area, we are aware that these paths need to be clear of planned turbines. We have plotted the Fresnel Zones of those paths on a GIS overlay to be used for turbine siting. If you would like a copy of the microwave impact report which shows no impact to your microwave paths, please contact me.

If you are concerned about potential harmful effects to your MAS system, please contact me (contact information below) to conduct a due diligence review. For this review, our due diligence team will require the geographic locations of all of the remote sites, which I trust you are willing to provide.

#### Attachment 2-15

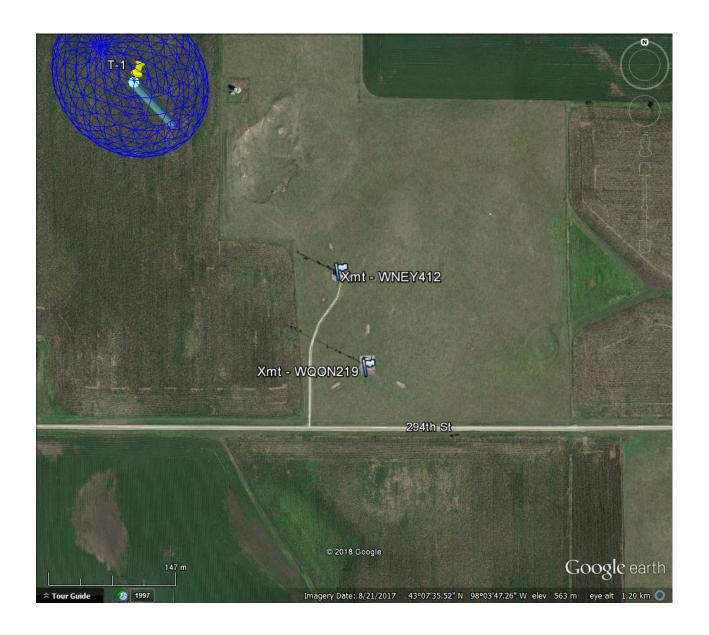
Thank you.

Regards,

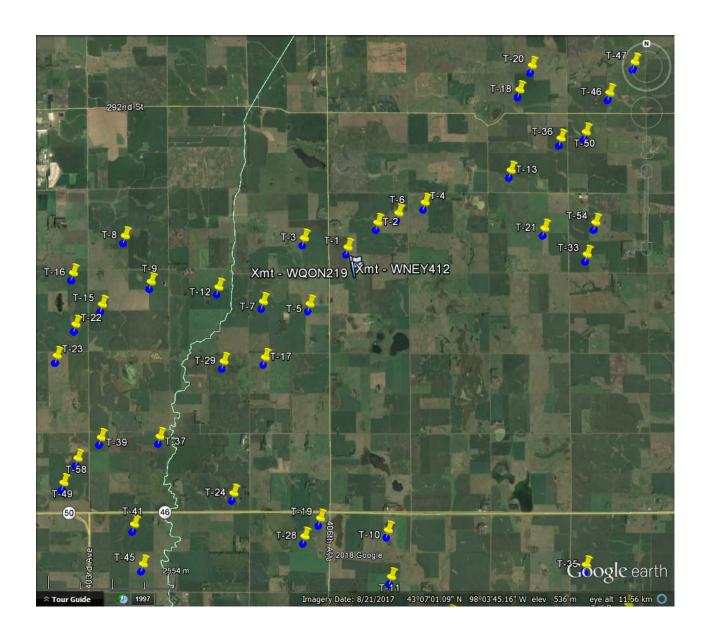
#### B. Benjamin Evans

Engineering Consultant Evans Engineering Solutions, LLC 524 Alta Loma Drive Thiensville, WI, 53092 (262) 518-0178

# Google Map of WNEY412 & WQON219 MAS Sites and Planned Nearby Turbine 1



# Google Map of WNEY412 & WQON219 MAS Sites and Planned Surrounding Nearby Turbines



#### Attachment 2-15

From: Ben Evans

To: <u>fcc-licensing@eastriver.coop</u>
Subject: MAS Station WPND588

**Date:** Tuesday, August 28, 2018 2:30:57 PM

Attachments: WPND588 Google Maps.pdf

Re: Proposed Prevailing Wind Park Project in Southeast South Dakota

Dear FCC Licensee,

This letter is written in order to comply with a request from the South Dakota Public Utilities Commission (SD PUC) to contact FCC licensees of Multiple Address System (MAS) radio station transmitters located in or near a planned wind energy facility. Your MAS station master site, call sign WPND588, has been determined to be located roughly in the center of a wind turbine farm to be constructed by Prevailing Wind Park, LLC.

An application was recently submitted to the SD PUC for a facility permit for the Prevailing Wind Park project to be constructed between the communities of Tripp and Dante, in southeast South Dakota. The center of the project area is near the point where the counties of Bon Homme, Charles Mix and Hutchinson meet. It is proposed to construct 57 wind turbines, each with a maximum capacity of up to 3.8 megawatts. The turbine height will be 110 meters from ground to the blade hub and the length of the blades will be 68.5 meters (178.5 meters total height with one blade pointing straight upward).

The WPND588 master site, according to the FCC license, is 8.4 miles north of the community of Avon, on 294th Street, 0.33 mile east of 406th Avenue. Attached are two Google Earth maps showing the WPND588 master site and planned turbines surrounding it.

In addition to the turbines, the project will involve the construction of access roads, power generation collection lines and a collector substation.

As you may be aware, only the location of the master site of an MAS system is specified in the FCC license. The remote sites are not so specified. Thus, we were only able to ascertain the location of the master site relative to the planned turbine sites. Although, interference to point-to-multipoint systems by wind turbines has generally not been a significant problem, it is appropriate to ascertain whether there would be turbine blockage between the master site and any of the remote sites.

Regarding your FCC-licensed microwave paths in the area, we are aware that these paths need to be clear of planned turbines. We have plotted the Fresnel Zones of those paths on a GIS overlay to be used for turbine siting. If you would like a copy of the microwave impact report which shows no impact to your microwave paths, please contact me.

If you are concerned about potential harmful effects to your MAS system, please contact me (contact information below) to conduct a due diligence review. For this review, our due diligence team will require the geographic locations of all of the remote sites, which I trust you are willing to provide.

#### Attachment 2-15

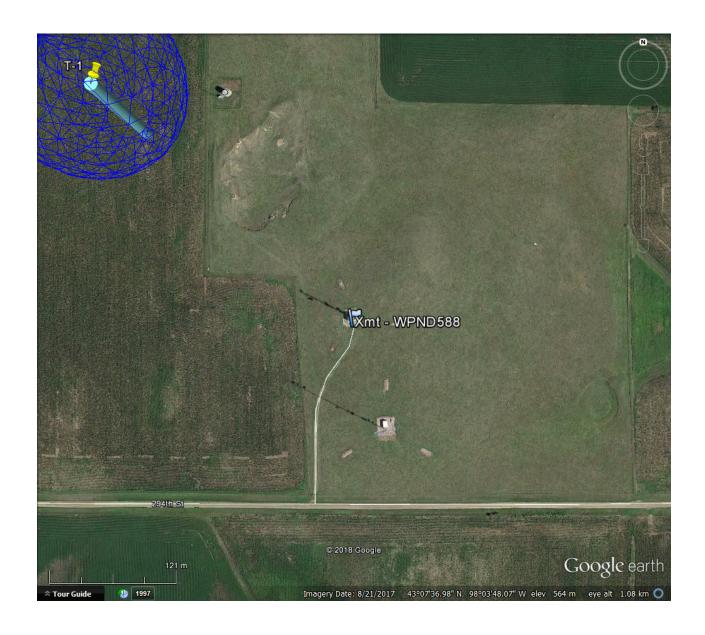
Thank you.

Regards,

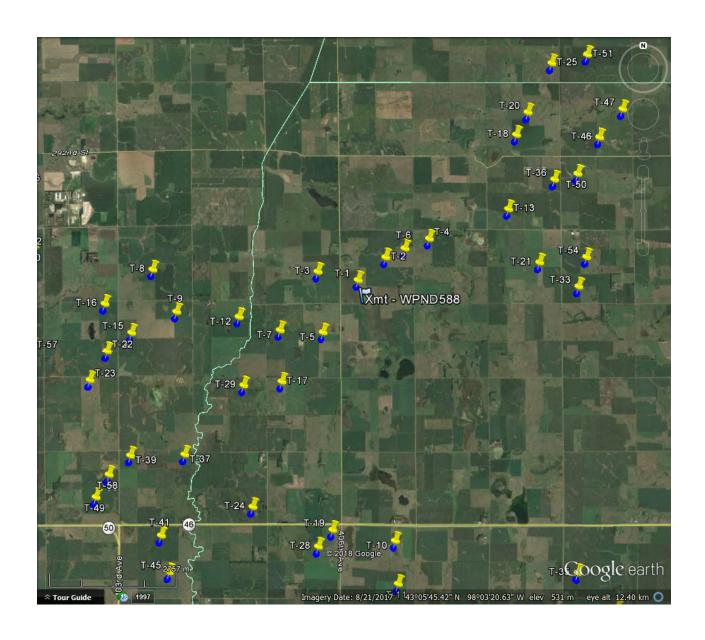
#### B. Benjamin Evans

Engineering Consultant Evans Engineering Solutions, LLC 524 Alta Loma Drive Thiensville, WI, 53092 (262) 518-0178

# Google Map of WPND588 MAS Site and Planned Nearby Turbine 1



# Google Map of WPND588 MAS Site and Planned Surrounding Nearby Turbines



Attachment 2-20

# CHARLES MIX COUNTY STATES ATTORNEY PO BOX 370 LAKE ANDES, SOUTH DAKOTA 57356 605-487-7441

August 22, 2018

South Dakota Public Utilities Commission 500 East Capital Ave. Pierre, SD 57501

RE: APPLICATION BY PREVAILING WIN PARK, LLC FOR A PERMIT OF WIND ENERTY FACILITY IN BON HOMME COUNTY, CHARLES MIX COUNTY AND HUTCHINSON COUNTY, SOUTH DAKOTA FOR THE PREVAILING WIND EL 18-026

Dear SDPUC Commission:

This letter is to follow up the phone conversation we had concerning Charles Mix County, SD, and Keith Mushitz's notice of intervening party and the STATE'S FIRST SET OF DATA REQUESTS TO CHARLES MIX COUNTY

As I stated during that phone conversation, Charles Mix County by and through its Commission Chairman, Keith Mushitz, sought to be an intervening party in the above entitled action. In hind sight, I am not sure that was necessary. Applicant has met with the Charles Mix County Commission concerning its project and the concerns of that board Charles Mix County is presently not zoned. In these meetings, the Applicant listened to the county's concerns about parameters of the project. In the end, Applicant agreed to build the project in Charles Mix County in a manner that reflects the Commission's wishes, i.e., Tower Setbacks, Tower Noise (DB level), Shadow Flickering, etc.. The Applicant signed an Affidavit and provided the Commission with that document which outlines these commitments. A copy of that Affidavit is attached hereto.

Given that, the County's request to intervene was only to provide the SDPUC with notice this agreement, to provide the SDPUC with the parameters of the agreement and to request that the SDPUC consider implementing Charles Mix County parameters in the final permit, if given, to the Applicant.

Thus, Charles Mix County does not plan to take depositions, testify or present witnesses during the application process of Applicant. In fact, Charles Mix County has no intention of attending any of the hearings unless called upon.

Thank you very much for your office's guidance in helping Charles Mix County better understand the Application process.

Sincerely,

Scott J. Podhradsky

Deputy State's Attorney

Charles Mix County

#### Attachment 2-20

In the Matter of the Prevailing	Wind Park Project in	Charles Mix County, South Dakota
---------------------------------	----------------------	----------------------------------

State of South Dakota	)
	) SS
County of Charles Mix	)

#### Affidavit of Peter Pawlowski

Peter C. Pawlowski, Vice President, Wind, Sustainable Power Group, LLC ("sPower") of the City of Salt Lake City, County of Salt Lake, State of Utah, being duly sworn on oath, deposes and states that the proposed Prevailing Wind Park will comply with the following requirements in Charles Mix County, South Dakota ("County"):

- 1. Prevailing Wind Park, LLC ("Prevailing Wind Park") is proposing to construct a wind energy system and associated facilities in Bon Homme, Charles Mix, Hutchinson and Yankton counties, South Dakota. As noted on its website, Basin Electric Power Cooperative has contracted to purchase the 200 megawatts of energy to be generated by the Project. Up to 23 of the proposed turbines and associated facilities ("Project") would be located in Charles Mix County.
- 2. Prevailing Wind Park has been working cooperatively with the County to address questions regarding the Project.
- 3. Prevailing Wind Park is a wholly-owned subsidiary of sPower. In my position as Vice President, Wind, sPower, I am authorized to make commitments on behalf of Prevailing Wind Park.
- 4. Prevailing Wind Park hereby commits to the County Board of Commissioners that the Project will adhere to the following requirements:

#### Setbacks.

- (a) Turbine tower distance from currently inhabited rural residence of a nonparticipating landowner shall be not less than three and a half (3.5) times the system height or two thousand feet (2,000) feet, whichever is greater. Turbine tower distance from the residence of the landowner on whose property the tower(s) are erected shall be not less than one thousand (1,000) feet.
- (b) Turbine tower distance from right-of-way of public roads shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater.

<sup>&</sup>lt;sup>1</sup> https://www.basinelectric.com/About-Us/Organization/At-a-Glance/.

(c) Turbine tower distance from any property line shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater, unless a waiver has been obtained from adjoining property owner.

Noise. Noise from the wind turbines will not exceed 43 dBA at any existing nonparticipating residences and 45 dBA at existing participating residences, unless a signed waiver is obtained from the owner of the residence.

**Shadow Flicker.** Shadow flicker produced by the wind turbines will not exceed 30 hours per year and/or 30 minutes per day at currently inhabited residences of non-participants.

Lighting. The towers shall be lit using an Aircraft Detection Lighting System ("ADLS"), pending Federal Aviation Administration approval. The ADLS is designed to mitigate the impact of nighttime lights by deploying a radar-based system around a windfarm, turning lights on only when low-flying aircraft are detected nearby. The ADLS sends a signal to keep the light off until a plane is detected, then it stops sending the signal and the lights operate normally until the plane leaves the area and the off signal resumes.

Ice Detection. Prevailing Wind Park will use two methods to detect icing conditions on turbine blades: (1) sensors that will detect when blades become imbalanced or create vibration due to ice accumulation; and (2) meteorological data from on-site permanent meteorological towers, on-site anemometers, and other relevant meteorological sources that will be used to determine if ice accumulation is occurring. These control systems will either automatically shut down the turbine(s) in icing conditions (per the sensors) or Prevailing Wind Park will manually shut down turbine(s) if icing conditions are identified (using meteorological data). Turbines will not return to normal operation until the control systems no longer detect an imbalance or when weather conditions either remove icing on the blades or indicate icing is no longer a concern. Prevailing Wind Park will pay for any documented damage caused by ice thrown from a turbine

5. Prevailing Wind Park further commits to submitting this affidavit in the proceeding currently pending at the South Dakota Public Utilities Commission, In the Matter of the Application by Prevailing Wind Park, LLC for a permit of a Wind Energy Facility in Bon Homme, Hutchinson and Charles Mix Counties, Docket EL18-026.

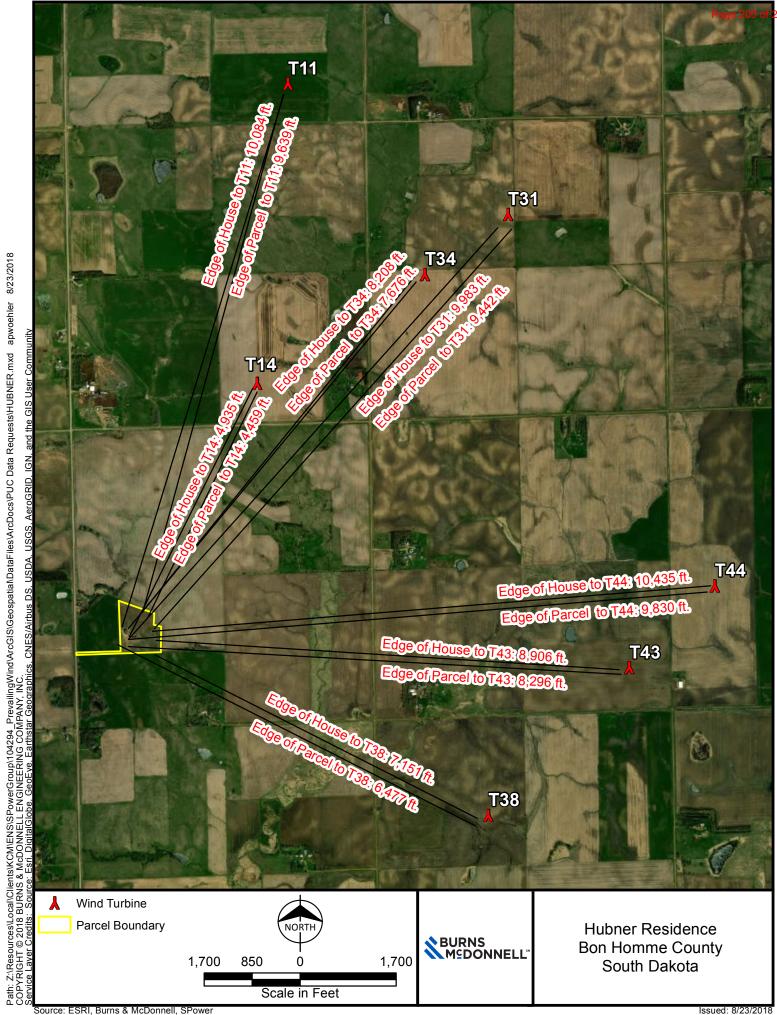
Peter C. Pawłowski

Subscribed and sworn to before me this 9<sup>th</sup> day of August, 2018

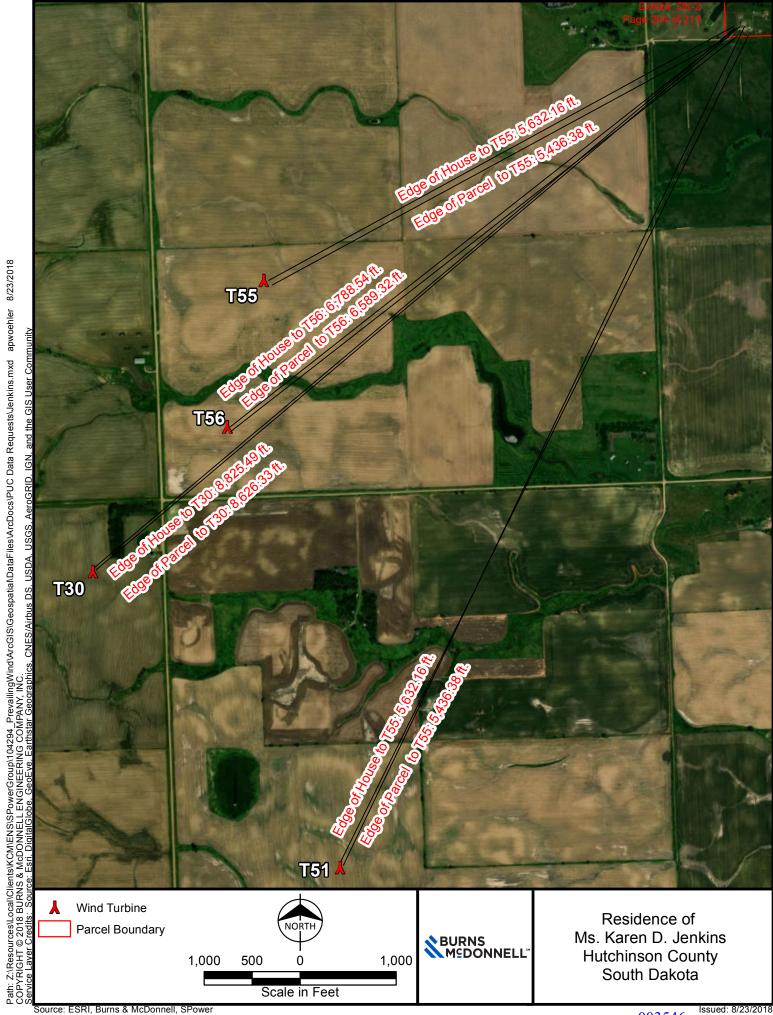
Notary Public

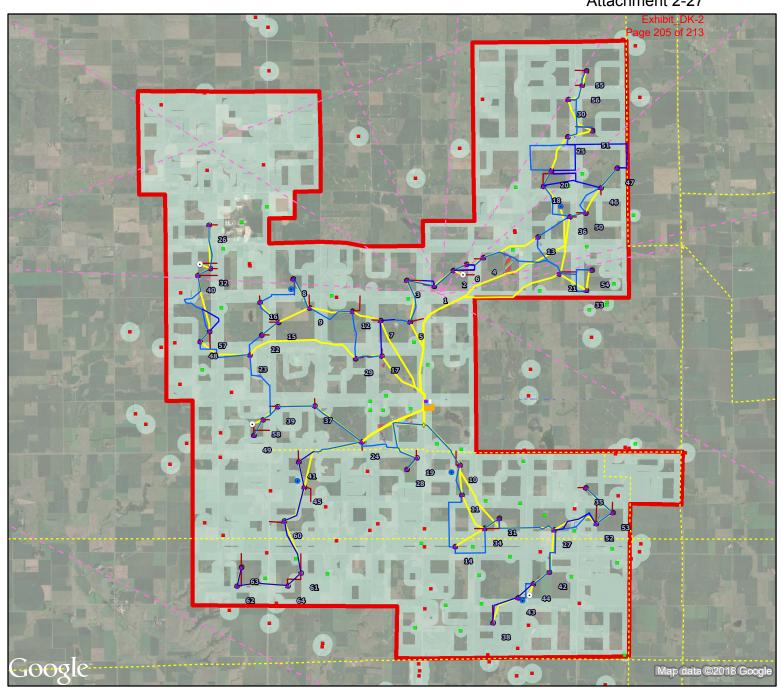
3xpires 4-49-2023

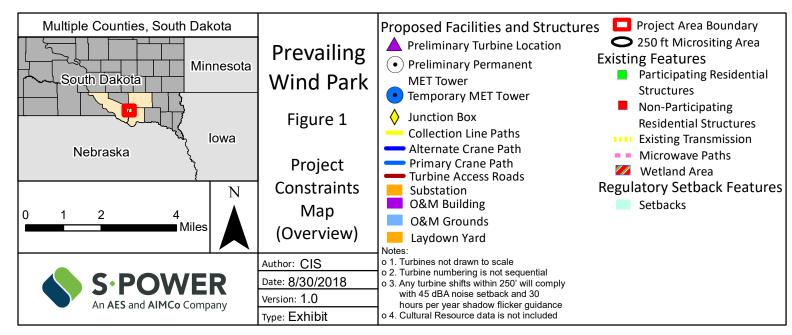
SEAL SARA CLAYTON Notary Public SOUTH DAKOTA

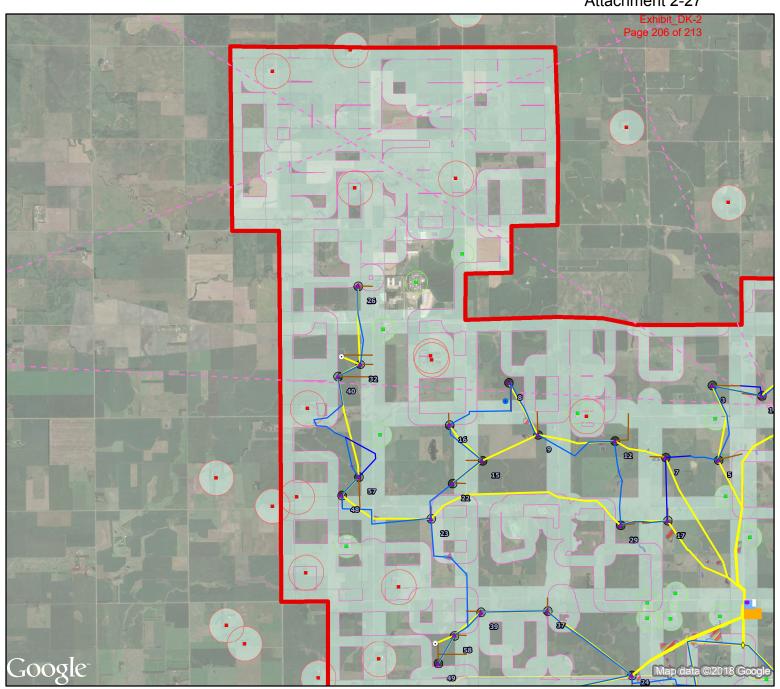


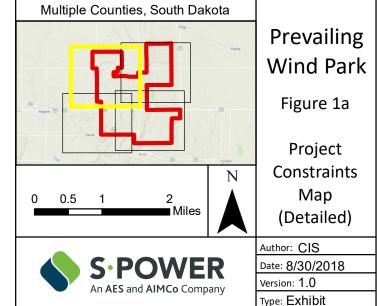
Scale in Feet











**Proposed Facilities and Structures** 

Preliminary Turbine Location Preliminary Permanent

**MET Tower** 

**Temporary MET Tower** 

Junction Box

Collection Line Paths

Alternate Crane Path

**Primary Crane Path Turbine Access Roads** 

Substation

**O&M** Building

**O&M** Grounds

Laydown Yard

Notes:

- o 1. Turbines not drawn to scale
- o 2. Turbine numbering is not sequential o 3. Any turbine shifts within 250' will comply with 45 dBA noise setback and 30 hours per year shadow flicker guidance o 4. Cultural Resource data is not included

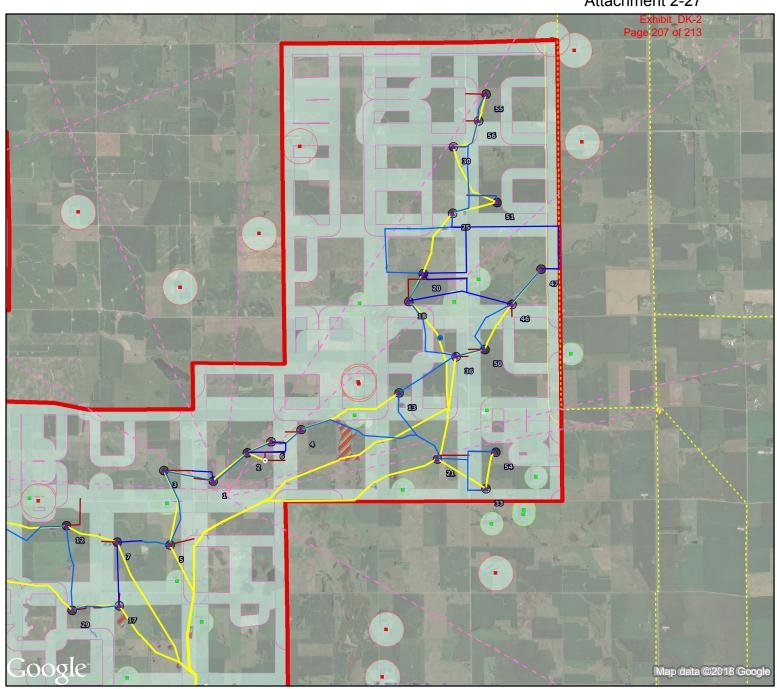
- Project Area Boundary
- 250 ft Micrositing Area

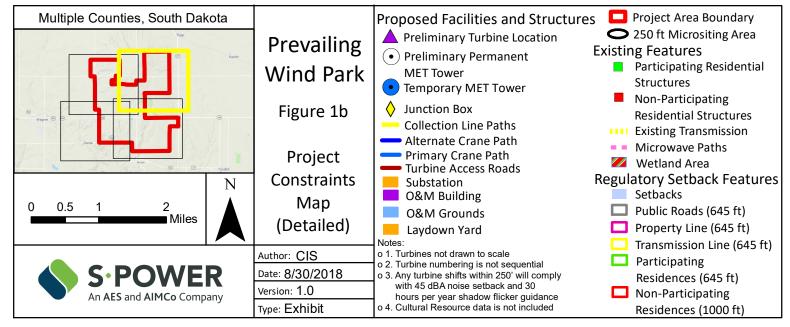
#### **Existing Features**

- Participating Residential Structures
- Non-Participating **Residential Structures**
- Existing Transmission
- Microwave Paths
- Wetland Area

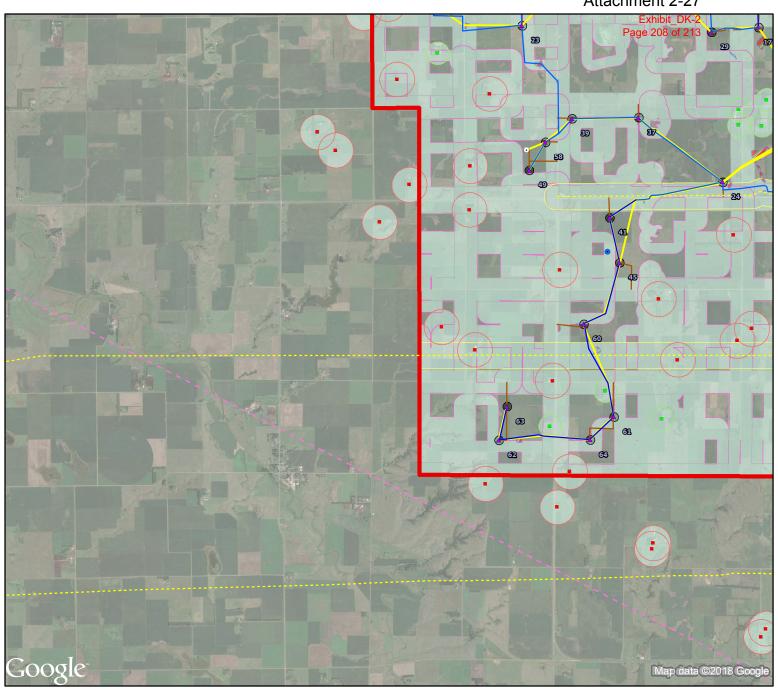
#### **Regulatory Setback Features**

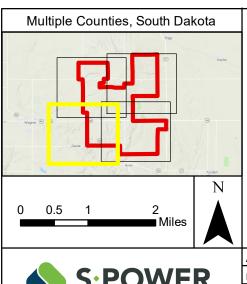
- Setbacks
- Public Roads (645 ft)
- Property Line (645 ft)
- Transmission Line (645 ft)
- Participating
  - Residences (645 ft)
- Non-Participating Residences (1000 ft)





#### Attachment 2-27





An AES and AIMCo Company

# Prevailing Wind Park

Figure 1c

Project Constraints Map (Detailed)

Author: CIS

Date: 8/30/2018

Version: 1.0

Type: Exhibit

Proposed Facilities and Structures

Preliminary Turbine Location

- Preliminary Permanent MET Tower
- Temporary MET Tower
- Junction Box
  - Collection Line PathsAlternate Crane Path
- Primary Crane PathTurbine Access Roads
- Substation
- O&M Building
  O&M Grounds
  - Laydown Yard
- Notes:
- o 1. Turbines not drawn to scale
- o 2. Turbine numbering is not sequential o 3. Any turbine shifts within 250' will comply with 45 dBA noise setback and 30
- with 45 dBA noise setback and 30 hours per year shadow flicker guidance o 4. Cultural Resource data is not included

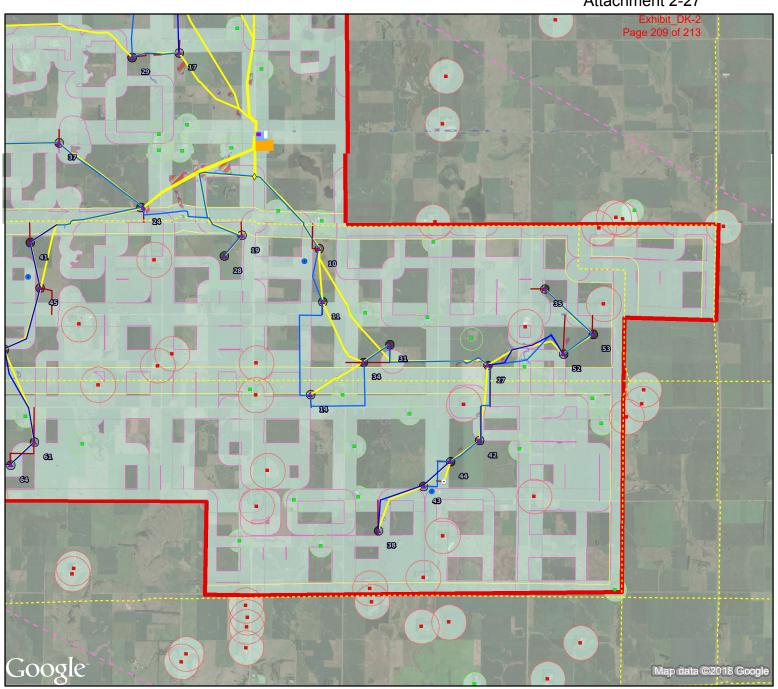
- Project Area Boundary
- 250 ft Micrositing Area

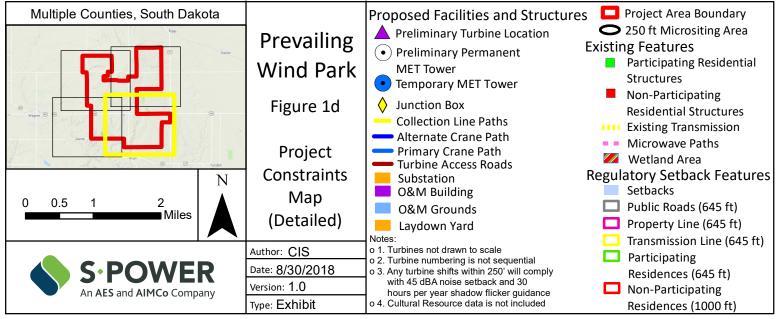
### **Existing Features**

- Participating Residential Structures
- Non-Participating Residential Structures
- Existing Transmission
- Microwave Paths
- Wetland Area

#### **Regulatory Setback Features**

- Setbacks
- Public Roads (645 ft)
- Property Line (645 ft)
- Transmission Line (645 ft)
- Participating
- Residences (645 ft)
  Non-Participating
- Non-Participating
  Residences (1000 ft)





## PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY PREVAILING WIND PARK, LLC, FOR A WIND ENERGY FACILITY PERMIT FOR THE PREVAILING WIND PARK PROJECT

CERTIFICATE OF SERVICE

EL18-026

\*

\*

\*

Lisa Agrimonti, of Fredrikson & Byron, P.A., hereby certifies that on the 30th day of August, 2018, a true and correct copy of Applicant's Responses to Staff's Second Set of Data Requests to Applicant and this Certificate of Service were served electronically on the persons listed below:

Ms. Kristen Edwards	Ms. Amanda Reiss
Staff Attorney	Staff Attorney
South Dakota Public Utilities Commission	South Dakota Public Utilities Commission
500 E. Capitol Ave.	500 E. Capitol Ave.
Pierre, SD 57501	Pierre, SD 57501
Kristen.edwards@state.sd.us	amanda.reiss@state.sd.us
	Ms. Mollie Smith - Representing: Prevailing
	Wind Park, LLC
	Fredrikson & Byron, P.A.
	200 S. 6th St., Ste. 4000
	Minneapolis, MN 55402
	msmith@fredlaw.com

/s/ Lisa Agrimonti Lisa Agrimonti

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### 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 RESPONSES TO STAFF'S THIRD SET OF DATA REQUESTS

EL18-026

Below, please find Applicant's Responses to Staff's Third Set of Data Requests to Applicant.

- 3-1) Refer to Mr. Pawlowski's supplemental testimony, Section VI. Other Project Commitments, lines 135 through 138.
  - a. Which specific decommissioning cost estimate provided by Mr. Daniel Pardo, including page and line references to his testimony, should the Commission use to base the funding of the escrow account. Provide explanation and support for why this estimate is appropriate.

<u>Peter Pawlowski:</u> Reference Supplemental Direct Testimony of Daniel Pardo, page 2, lines 40 to 43. In his testimony, Mr. Pardo provides the results of his analysis in a partial resale scenario. Under that scenario, the estimated decommissioning cost is \$13,790 per turbine. Further support for this estimate is provided in Exhibit 2, specifically information relating to "Scenario 2".

b. Provide the specific and complete escrow account condition that the Company is recommending.

<u>Peter Pawlowski:</u> 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 funded by the Applicant annually at a rate of \$460 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.

3-2) Is the Company aware of any jurisdictions that require seller of real estate to disclose whether there are plans to construct wind turbines on an adjacent parcel of land? Please explain.

<u>Peter Pawlowski:</u> No, the company is not aware of any such requirement. However, the company records its leases in the applicable county recorder's office and, as such, they are publicly available and should be identified during a title search.

3-3) If Applicant or its contractor were to damage drain tile on a participant's property and the damage resulted in flooding and crop loss to a non-participating landowner's crop, how would the crop loss be remedied?

Mollie Smith/Peter Pawlowski: This request is a legal question, the analysis of which is highly dependent on the facts. Prevailing Wind Park will repair any damage to drain tile the Project causes on participants' land. Prevailing Wind Park has not had experience with any damages being asserted by non-participants' land due to drain tile damage on a participants' parcel and believes such damages are very unlikely to occur. However, should the Project cause flooding and crop loss damages on a non-participant's parcel, Prevailing Wind Park will fairly compensate the affected landowner.

Dated this 6th day of September, 2018

By /s/ Mollie Smith

Mollie M. Smith
Lisa A. Agrimonti
FREDRIKSON & BYRON, P.A.
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## PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY PREVAILING WIND PARK, LLC, FOR A WIND ENERGY FACILITY PERMIT FOR THE PREVAILING WIND PARK PROJECT

CERTIFICATE OF SERVICE

EL18-026

\*

Roxanne Gangl, of Fredrikson & Byron, P.A., hereby certifies that on the 6th day of September, 2018, a true and correct copy of Applicant's Responses to Staff's Third Set of Data Requests and this Certificate of Service were served electronically on the persons listed below:

Ms. Kristen Edwards	Ms. Amanda Reiss
Staff Attorney	Staff Attorney
South Dakota Public Utilities Commission	South Dakota Public Utilities Commission
500 E. Capitol Ave.	500 E. Capitol Ave.
Pierre, SD 57501	Pierre, SD 57501
Kristen.edwards@state.sd.us	amanda.reiss@state.sd.us
Mr. Darren Kearney	Mr. Jon Thurber
Staff Analyst	Staff Analyst
South Dakota Public Utilities Commission	South Dakota Public Utilities Commission
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/s/ Roxanne Gangl
Roxanne Gangl

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