

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

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**IN THE MATTER OF THE  
APPLICATION BY DEUEL HARVEST  
WIND ENERGY LLC FOR A PERMIT  
OF A WIND ENERGY FACILITY AND  
A 345-kV TRANSMISSION LINE IN  
DEUEL COUNTY**

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**INTERVENOR CHRISTINA KILBY  
RESPONSES TO STAFF’S SECOND  
SET OF DATA REQUESTS**

**EL18-053**

Below, please find Intervenor Christina Kilby’s Responses to Staff’s Second set of Data Requests.

2-1) Referring to the response of Christina Kilby to Staff Data Request 1-3, you state “I ask that setbacks for nonparticipating landowners be set at two miles with the option of a waiver. This is because of the characteristics of and problems caused by infrasound that turbines are known to produce.”

a) Please provide documentation that supports a two mile setback is appropriate to alleviate problems caused by infrasound.

**I do not think that a two-mile setback is sufficient to alleviate problems from infrasound. However, it is better than what is proposed and something I believe is reasonable to help mitigate effects.**

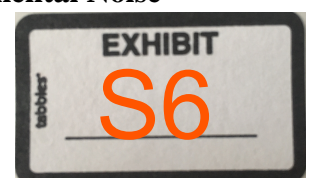
b) Is the recommended setback from the residence or property line?

**I believe all setbacks should be from property lines. Non-participating properties should be protected in their entirety. I do not think there is any justification for inflicting any harms on non-participating property.**

2-2) Referring to the response of Christina Kilby to Staff Data Request 1-3, you state “As an alternative to two-mile setbacks, sound levels should not be allowed to exceed any level that can cause sleep disturbance, annoyance, or stress. Non-participating landowners should not be forced to sacrifice their enjoyment, comfort, or health for the profits of the applicant.”

a) What is your recommendation for the sound level to avoid sleep disturbance for non-participating landowners? Please provide any documentation to support the recommendation.

**I believe under 30dB is required to avoid any impact on sleep from noise. This is based on the attached study, Kenneth Hume et. al, Effects of Environmental Noise**



**on Sleep, Noise & Health, November-December 2012, Volume 14:61, 297-30, p. 297. (Att. 1) The study reports 30dB is the level under which no substantial biological effects are observed. (Id., p. 299)**

b) What is your recommendation for the sound level to avoid annoyance for non-participating landowners? Please provide any documentation to support the recommendation.

**I would also suggest a noise limit of 30dB to mitigate annoyance from noise. My reasoning is based on the study cited above.**

c) What is your recommendation for the sound level to avoid stress for non-participating landowners? Please provide any documentation to support the recommendation.

**I would also suggest a noise limit of 30dB to mitigate stress from noise. My reasoning is based on the study cited above.**

**These limits however do not necessarily prevent any of these issues from occurring if they are caused by infrasound.**

2-3) Referring to the response of Christina Kilby to Staff Data Request 1-3, you state “I feel upon any reliable complaint made to a PUC liaison, Deuel Harvest should be required to shut down the possibly offending turbine until an independent test done at Deuel Harvest’s expense can prove no violation exists.”

a) In the last four wind energy dockets (Docket EL17-055, EL18-003, EL18-026, and EL18-046) the public liaison condition stated “the public liaison services shall terminate 90 days after the Project commences commercial operations, unless the appointment is extended by order of the Commission.” What is your recommendation for the duration of service of a public liaison?”

**I request public liaison services for at least one year because of the variance in sound propagation during different seasons. In addition, there is some evidence that people become more sensitive over time to the noise produced by wind turbines. Ideally there would be permanent liaison services covering all operational wind energy facilities. There must also be sufficient remedial measures and enforcement provisions for any nuisance or harm created. I believe the Commission should retain authority to modify the Project if in its opinion the Project is found to create a nuisance.**

b) Is it lawful to require the shutdown of a possibly offending turbine until an independent test can prove no permit violation exists? Please explain why a permit violation would not need to be ruled on by the Commission before a turbine be required to shut down.

**According to 49-41B-25, the Commission has authority to impose such terms, conditions, or modifications of the construction, operation, or maintenance of the project as the commission deems appropriate. This would allow the commission to include the requirement that Deuel Harvest be required to shut down the possibly offending turbine upon a reliable complaint made to a public liaison until an independent test done at Deuel Harvest's expense can prove no violation exists.**

**Further, SDCL 49-13-16 provides that if any action or proceeding or order of the commission comes into question, the validity of the order is presumed. It is not necessary to allege or prove any fact upon which the validity of the order depends, but the burden is upon the party claiming the order to be invalid to plead and prove the facts establishing the invalidity.**

**The potential harm to people from a possibly offending turbine outweighs the benefit of allowing the potentially offending turbine to continue operation.**

c) Regarding the PUC liaison, please explain why the PUC complaint process established by administrative rule will not be able to address the potential permit violations during operations.

**The majority of SDCL 49-13, Procedure on Complaints to Public Utilities Commission, only applies to complaints regarding telecommunications companies or motor carriers. As such, there is no complaint process established to effectively address permit violations of the Deuel Harvest project.**

**I believe a process for should be imposed that prevents a significant burden on complainant. For example, how would a landowner prove non-compliance with a shadow flicker limit when the limit is annual? Not only would it take at least a year to prove non-compliance, but the cost of this testing should be the responsibility of Deuel Harvest, part of the cost of doing business. Stating any flicker limit as a monthly limit would also be beneficial.**

**Based on Invenergy's past actions in Williams v. Invenergy, I believe Deuel Harvest will force any complainant to endure lengthy and costly litigation, while Invenergy or Deuel Harvest attempts to evade enforcement of regulations. Meanwhile people are subjected to years of violations. This is why I strongly believe that upon any reliable complaint to a public liaison the possibly offending turbine be**

**shut down until independent testing is done to determine the turbine is in compliance.**

**I believe there should be recourse for potential complaints of noise, and annoyance, not requiring a claim of damages, nor even proof of any violation. This would help create goodwill on behalf of the project. However, I feel this would also require a public liaison officer to mediate.**

**And because of continuing research into the effects of noise and infrasound on people, I believe any permit granted to Deuel Harvest should contain a condition that if the project is determined at any time to pose a threat to human health, the Commission can require any modification to the construction or operation of the project to prevent such harm.**

2-4) Referring to the response of Christina Kilby to Staff Request 1-3(a), you state “Long term and continuous harassment and health effects from turbine noise, flicker and infrasound is unjustified and a serious harm.” Is your position that shadow flicker causes health effects? If yes, please explain in detail and provide any supporting documentation.

**My position is that flicker causes annoyance and/or stress which can result in negative effects to one’s health. See Testimony of Christina Kilby for studies discussing health effects from annoyance and stress.**

2-5) Referring to the response of Christina Kilby to Applicant Data Request 1-7, you state “The size, number and location of turbines in close proximity to our property will destroy the peace, and quiet we currently enjoy at the property. The size, number, and location of the turbines in close proximity will prevent the safe use and enjoyment of the property, because of shadow flicker, noise, infrasound, and risk of ice throw, component liberation and fire.”

a) Please explain and describe the risk of ice throw stated above. Please provide documentation to support the response. Do you have a setback recommendation for ice throw? Please support such recommendation with documentation.

**Under the right conditions ice can form on turbine blades. There is then the potential that if or when the turbine is operating, the ice can be thrown from the blades. This poses a significant risk of injury or death to people and damage to property. Please see study cited below regarding blade and fragment throw, showing a 10% fragment of a blade can be thrown 4796 ft. I am assuming ice throw would be similar to blade fragment throw and I would suggest a setback of 4796 ft to prevent injury, death, or damage from ice throw.**

b) Please explain and describe component liberation stated above. Please provide documentation to support the response. Do you have a setback recommendation for component liberation? Please support such recommendation with documentation.

**Component liberation is another name for blade throw.**

**I am attaching a report regarding the estimation of impact probabilities of a full or partial blade loss from a wind turbine based upon mathematical modelling techniques. (Numerical Modelling of Wind Turbine Blade Throw Report Number ESS/2006/27, p. 1) (Att. 2) The model discussed indicates full blades may be thrown up to 203m, (666 feet), and a 10% blade fragment may be thrown up to 1462m (4796 ft). (Id. p. 8) However, according to the report, lift, spinning, gliding and bouncing effects were not accounted for. (Id. p.20) The model does not address the distance smaller pieces can be thrown.**

**To prevent injury, death or damage from the throw of a 10% blade fragment, it appears a setback of at least 4796 feet would be required.**

2-6) Referring to the response of Christina Kilby to Applicant Data Request 1-7, you state “I am concerned about disturbance from the construction and operation of the turbines polluting the aquifer and other bodies of water.”

a) Please describe and explain the disturbance from the construction and operation of the turbines that would pollute the aquifer and other bodies of water.

**My concern is that the weight of trucks, cranes, equipment, and turbine components will disrupt the shallow aquifers underlying portions of the project and areas surrounding the project, whether from weight or vibrations. Portions of the project are located in Aquifer Zone B described in the Deuel County Ordinances.**

b) Please provide documentation that supports the claim that the construction and operation of wind energy facilities pollute aquifers and other bodies of water.

**I am not claiming this will happen, but it is a concern of mine. I do not have documentation regarding this at this time.**

2-7) Referring to the response of Christina Kilby to Applicant Data Request 1-8, you state “Because of the distance infrasound can travel, I request a two-mile setback for non-participating landowners, with the option of a waiver.” How far can infrasound travel? Please provide documentation to support the claim.

**I am attaching a study finding that “Infrasound from a 60-turbine windfarm was found to propagate to distances up to 90km under nighttime atmospheric conditions.” (Marcillo, O., S. Arrowsmith, P. Blom, and K. Jones (2015), On infrasound generated by wind farms and its propagation in low-altitude tropospheric waveguides, J. Geophys. Res. Atmos., 120, 9855–9868, doi:10.1002/2014JD022821, Abstract) (Att. 3).**

**The long distance infrasound from wind projects is able to travel may explain some of the results of the Health Canada study submitted by Dr. Ellenbogen.**

2-8) Referring to the response of Christina Kilby to Applicant Data Request 1-11, you state “I believe the market value of all residences located in and around the project will decrease. I do not believe anyone would choose to live near an industrial wind project if given a choice, especially if wanting to live in a quiet rural area. I know the project will negatively affect the value of our family property. No formal appraisals have been done that I am aware of at this time. But the property will no longer have the desired characteristics it has now.”

a) Are you aware of any market sales near a wind tower that supports that assertion that the market value of all residences located in and around wind turbines will decrease? If yes, please provide all information you are aware of, including address, of the market transaction.

**I believe George and Ruby Holborn sold their home at a significant loss because of the planned Deuel Harvest project, however, I do not have specifics on the sale.**

b) Do you think the market value of a participating landowner will decrease, even if the wind turbine lease payments are transferred in the property sale? Please explain and provide any evidence you have.

**I think it will, yes. According to Mr. Lawrence: “The most common issues farmers cited about wind towers is the limitation of aerial spraying, poor reclamation, and compaction issues after the installation of the towers, possible yield loss due to the inability to plant straight rows and the difficulties associated with working around the towers during planting and harvest.” (Marous Testimony 12-15) As people become more aware of these issues, I believe the values of all properties close to turbines will decrease.**

**I think decommissioning costs are underestimated. Once possible buyers of participating land become aware of the financial liability for decommissioning in the event the wind companies walk away and decommissioning funds are not adequate, I believe property values of even participating land will be negatively affected. This may not be reflected yet because potential buyers are not yet aware of these issues.**

**I believe people get more bothered by turbines the longer they live by them. Many buyers may not think the turbines will bother them when they purchase the property.**

**Here are some of the interviews from Mr. Lawrence's report:**

**"Own & lease farmland with wind towers. Live in proximity to wind towers. Noisy. Poor reclamation after construction of towers; compaction & loss of yields. Difficult to farm around towers."**

**"Some buyers won't look at home near wind towers."**

**"The towers sound like jet planes when you are working in the yard. But paid the same, even though they don't like the noise."**

**"Got tired of the annoying noise. Decided to sell. We thought it would effect the value; but it didn't matter to the buyer. Glad to not be living next to wind towers."**

**(Marous, Testimony, p. 11)**

**"Trying to sell a house within the proposed project area. Currently listed on MLS. Had an offer on the property, but believes the disclosure of the proposed wind project near the property ended the deal."**

**"Purchased home prior to the wind project. There are periods of the day when there is a shadow effect depending on the angle of the sun. Best way to describe it is like a camera flash. The curtains in the house have to be closed during the flicker times. The flash scares the horses. The red lights, light up the night sky and destroy star gazing. The house was listed for sale and most potential buyers drove away when they saw how close the towers are to the house. The wind company over promised and under delivered."**

**"Built retirement home prior to the wind project. Towers within 1,000 ft of property on all sides. Noisy. Shadow and flicker effect during certain times of the day. Have to deal with constant noise. Some days louder than others, depending of direction on the wind. Believes the towers are effecting his ability to sell the property."**

**"Trying to sell a house within the proposed project area. Currently listed on MLS. Had an offer on the property, but believes the disclosure of the proposed wind project near the property ended the deal."**

**(Marous Testimony, p.12)**

**As Mr. Lawrence stated, "the interview and site analysis support the presumption that proximity to a wind tower could influence the property owner's bundles of rights, such as**

**the right to quiet enjoyment. (Lawrence 17-19) The interviews summarized by Mr. Lawrence corroborate many problems cited regarding the proximity of people to wind turbines. (Marous Testimony p. 11) As turbines continue to spread across the county and state, more and more people will become aware of these issues and will not want to buy property near turbines.**

Dated: March 18, 2019

/S/ Christina Kilby

Intervenor

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**GARRETT HOMAN’S RESPONSE TO  
STAFF’S SECOND SET OF DATA  
REQUESTS**

**EL18-053**

Below, please find Garrett Homan’s response to Staff’s Second Set of Data Requests to Garrett Homan. The original request is restated and followed by my response to that request.

2-1) Referring to the response of Garret Homan to Staff Data Request 1-3(1): Does FAA order JO 7400.2L and 14 CFR 77 apply to private-use airstrips? If no, please explain why it is appropriate to apply these standards to private-use airstrips for safety purposes.

**Since private landing strips are not regulated by the FAA, these do not apply as Federal Law to private airstrips without instrument approaches. However, FAA regulations, orders, and guidance material (such as Advisory Circulars) associated with airports, airspace, etc. constitute the de facto standards to use in matters such as these (definition of and dimensioning of airspace) in an absence of other more conservative standards applied by state or local authorities (which South Dakota does not have). These standards are reflective of physics, industry expected safety margins, how aircraft operate, and how pilots are trained to fly – so deviating from these standards would be eroding safety away from the effected operations. FAA regulations and standards are typically established as minimums, and state and local authorities may establish more conservative standards with a higher level of safety in matters such as these.**

**(Note that a newer revision of JO 7400.2”M” was released on February 28, 2019, which I was not aware of previously. But from my review, no content related to my previous statements has been changed.)**

2-2) Referring to the response of Garret Homan to Staff Data Request 1-3(2):

- a) Please provide the “safety manual” recommendation for ice throw as it applies to the turbines proposed in this Application?

**I have provided this in my pre-filed testimony. The safety manual is titled “GE Power and Water, Technical Documentation, Wind Turbine Generator Systems 1&2MW Platform, Safety Manual.” In the Seneca Wind Farm project application made to the Ohio Power Siting Board made in July 2018 (provided as an exhibit in my pre-filed testimony). The Seneca Wind Farm project proposes GE turbine models GE 2.3-116 and GE 2.5-127 (see page S-2 of the application). And the Deuel Harvest Wind Application is proposing to use an identical model, GE 2.3-116, and a similar 2MW platform model, GE 2.82-127. Therefore, the safety manual applies to the Deuel Harvest Wind project as well.**

- b) Have you requested the safety manual from the Applicant through discovery?

**Yes, I have, but I have not received their response at this time.**

2-3) Referring to the response of Garret Homan to Staff Data Request 1-3(3):

- a) Regarding the “state-managed 24-7 hotline and response department”, please explain why the PUC complaint process established by administrative rule will not be able to address the concerns listed.

**The first issue with this is public knowledge and access. When I received this request, I first had to research what it was referencing since I didn’t know such a thing existed. As such, I’d expect most of the general public did not know either. With my following response, I’m assuming you’re referring to the process described on <https://puc.sd.gov/consumer/consumercomplaints.aspx>.**

**The second issues with this is that the PUC website <https://puc.sd.gov/consumer/statutes.aspx> provides the Administrative Rules regarding consumer complaints with utility providers. The relationship between the proposed Project and residents and landowners is not one of consumer and utility provider. So, it would seem that his process does not apply, or at least be confusing to the general public on what steps are appropriate, who they should contact, and how to proceed.**

The third issue is that if this process does apply in this example, it does not provide details on how the developer should proceed to address the complaint, or how that is paid for. The concern I have is that in an example where a complaint is made that the Project is polluting a sensitive area on neighboring property, affecting neighboring birds or wildlife, or exceeding noise or shadow flicker allowances, the Project operator is disincentivized in doing a thorough and proper investigation into the matter in a timely fashion. However, they are incentivized to do nothing and wait out with hope that the complaints stop (due to frustration, the party filing the complaint has moved, etc.), or higher the cheapest bidder that may or may not spend the necessary time to research the issue properly before providing a report and closing the issue. How the detailed work is done to research an issue and render findings should be executed by the State as a neutral party who's only objective is to determine the truth in the matter and whether or not the conditions of the project are being met in practice.

- b) Regarding the “safety issues (such as oil leaks and other pollution, ...”:
  - i. Please describe the specific “other pollution” you are referring to in the response, and explain what aspects of the construction, operation, and maintenance of a wind energy facility would cause the pollution.

Without full knowledge of the materials used in the turbines, it's impossible for me to say what specific other pollution may cause environmental or human safety issues we need to be concerned about. Are there sources of lead or heavy metals used in the turbines that may leech into the ground from rain during operation or a failure? What chemicals and coatings are used in or when pouring the foundations? What other fluids or chemicals (other than oil?) are present in the turbines that could be a source of concern? What are the specific maintenance requirements – everything from replenishing oils or greases to paints or epoxies used? The Application provides almost no details about the various materials that will be used or handled during construction, operation, maintenance, or decommissioning to determine the risks associated with pollution. Without providing the PUC with all of these details it is impossible to decide that the Applicant has met their burden of proving significant harm to the environment or human safety will not happen. I recommend the Commission requires a full accounting of all materials and processes used in the construction, operation, maintenance, and decommissioning and undertake independent research into the pollution that may be associated with this project over its entire life.

- ii. Please provide documentation that supports the claim that wind energy facilities causes the other pollution identified in 1-3)b)i).

**It is not my burden to prove that this project WILL cause pollution affecting the local environment or human safety. Rather, it is the burden of the Applicant to prove that the project WILL NOT cause this. Again, without full knowledge of the materials used in the turbines, it's impossible to say what specific pollution we need to be concerned about.**

**However, I have included evidence of significant oil leaks in other wind farms in my pre-filed testimony. Also, another news article from Michigan sheds light on oil spills associated with wind turbines (see attached, from**

**[https://www.michigansthumb.com/news/article/Oil-leaks-at-wind-turbines-in-the-Thumb-not-a-9150402.php?utm\\_campaign=CMS+Sharing+Tools+%28Desktop%29&utm\\_source=facebook.com&utm\\_medium=referral&fbclid=IwAR2NMUsepDXuu7VE37WXzs6jQDsvuFDEUmrXLTGyhSwO99JJYmTOwmN4H5o](https://www.michigansthumb.com/news/article/Oil-leaks-at-wind-turbines-in-the-Thumb-not-a-9150402.php?utm_campaign=CMS+Sharing+Tools+%28Desktop%29&utm_source=facebook.com&utm_medium=referral&fbclid=IwAR2NMUsepDXuu7VE37WXzs6jQDsvuFDEUmrXLTGyhSwO99JJYmTOwmN4H5o)**).

**The Application doesn't address risks of pollution like these in their environmental studies, and as such haven't met their burden of proof. I recommend the Commission requires the Applicant to conduct expanded environmental studies addressing the impacts of oil leaks from operations, catastrophic oil leaks from failures or malfunctions, and any other pollutants present and all associated impacts on ground water, wells, livestock, vegetation, wildlife, and inhabitants with this Project over its entire life.**

c) Regarding the "ground water contamination":

- i. Please describe the specific ground water contamination you are referring to in the response, and explain what aspects of the construction, operation, and maintenance of a wind energy facility would cause the pollution.

**See responses above.**

- ii. Please provide documentation that supports the claim that wind energy facilities cause the ground water contamination identified in 1-3)c)i).

See responses above.

- 2-4) Referring to the response of Garret Homan to the Applicant Data Request 1-9, you cited a recommendation for ice throw that the German Wind Institute made in 1999. Is this recommendation applicable to the turbines proposed in this 2018 filing? Please explain.

**The GE safety manual that cited the German Wind Institute source is applicable to the turbine models in this project. See response to 2-2 above.**

- 2-5) Referring to the response of Garret Homan to the Applicant Data Request 1-11, you asserted that “the project will negatively affect the property value of my parents’ property, both monetary and the intrinsic value.” Are you aware of any market sales near a wind tower that supports that assertion? If yes, please provide all information you are aware of, including address, of the market transaction.

**I am not aware of any market sales near a wind tower at this time. However, I will continue to research the issue and provide any information I can find.**

**However, in discussions with friends, coworkers, acquaintances, etc. it is apparent that the general public supports wind turbines in theory but would never want to live with them nearby and put up with the constant sound, shadow flicker, blinking lights at night, etc. – people wouldn’t want to live with those issues if they could help it. Since there is a general preference to not live with the issues associated with wind turbines, then logically there is a reduced value (monetary or intrinsic) of property experiencing those issues due to proximity of wind turbines. This is simply the same issue that devalues urban property near freeways or trains (apartments, hotels, etc.) if given the choice, a consumer would choose not to live next to these issues, therefore the value is reduced.**

- 2-6) Referring to the response of Garret Homan to the Applicant Data Request 1-13, you stated that you “look forward to flying much more often in the future because of the availability of our airstrip.” Please explain the advantages and benefits of using a private airstrip compared to the local public airstrips. In other words, how is the private airstrip going to allow you fly more often in the future than current available options?

**My statement was meant as we will enjoy flying into the airstrip at our farm and therefore will choose to fly more often in the future. Where my family is in our life now, and with my**

soon to be complete instrument rating, we will be able to fly ourselves more often. Having an airstrip on our property provides a great benefit in that it is easier and quicker to land directly at our destination, allowing us more time to enjoy the property - no need to rent a car or coordinate ground transportation, no need to pay for tie downs or a hangar, etc. Aside from travel, the airstrip will also provide a great benefit by allowing us to potentially base a small plane, ultralight, powered parachute, etc. on our own property for pleasure flying around the area. And the airstrip provides a benefit to public safety as a charted airstrip that can be used as a visual navigation aid and another safe landing site for general aviation emergencies.

2-7) Referring to the response of Garret Homan to the Applicant Data Request 1-18:

a) Please provide a copy of the Special Exception Permit from Deuel County.

**The Special Exception Permit for the airstrip was granted to John Homan, and it is attached to my responses.**

b) Did you request the setbacks as described in the response of Garret Homan to the Applicant Data Request 1-8 as part of the Special Exception Permit? What setbacks were granted by Deuel County for the private airstrip?

**Yes, I brought up our concerns regarding safety during the Special Exception Permit hearing, provided research and the SMS / COPA expert panel determinations for setbacks. No setbacks were granted, and the Deuel County Board of Adjustment never expressed concern for the safety of users of our airstrip. I submitted a written testimony to the record of the SEP hearing, which I've attached here, "Deuel Harvest Proposal's Impact to Homan Field Airport." I was allowed only 3 minutes to present my case, which is grossly insufficient for the board to hear and understand the details of my concerns. I was not asked any questions regarding my statement by the board. After I presented, the board noted that John Homan had signed a Letter of Assurance regarding his landing strip, to which I asked if I could explain how that didn't apply to the safety concerns I was addressing, at which time I was forcibly told to "sit down." It was clear from the hearing and the Board's behavior that they had largely made up their mind regarding the outcome before the hearing started, by statements like "we've been talking about wind turbines for a long time now" (this was the first public hearing regarding the proposed project) and "we want to make a decision tonight" (it took many public meetings for the board to render a**

decision regarding our airstrip's SEP, and where the public had unlimited time to challenge the permit). They were negligent in their duties in that no written findings were made for statements provided to the public record before the board voted to grant the Deuel Harvest project permits, so I have no confidence my submittal was considered or even read by the Deuel County Board of Adjustment. They have not acted in a manner that would make a reasonable person believe they were interested in the safety of those using our airstrip.

2-8) Did you receive a letter from the FAA titled "Notice of Airport Airspace Analysis Determination Establish Private Use Airport" similar to letter available via the following link: <https://puc.sd.gov/commission/dockets/electric/2017/el17-055/testimony/crocker/Rebuttal/Morrisexhibit1.PDF> ? If yes, please provide.

**The FAA provided this to John Homan, and it is attached to my responses.**

2-9) Are you aware of any state governmental agency in other states that is regulating setbacks from private airstrips? If yes, please provide with supporting documentation.

**Kevin Elwood has provided pre-filed testimony regarding a case in Ontario, Canada, where the Environmental Review Tribunal decided to revoke the renewable energy approval for the Fairview Wind Project near Collingwood, Ontario. The decision was based on the determination that the wind project would have posed a risk of serious harm to human health because of the proximity of the proposed eight 500-foot-tall turbines to the public Collingwood Regional Airport and the private Clearview Aerodrome. Mr. Elwood's testimony includes supporting evidence. Aviation operations are very similar in the US and Canada, pilots in one are able to fly in the other with only minor differences (radio licensing, etc.), but the fundamental attributes of aviating are the same (airmanship, training, procedures, etc.), as are the physics and risks related to flying. In this regard, the safety assessments regarding the Fairview Wind Farm and the COPA / SMS report I provided in my testimony are directly applicable to the situation of the proposed Deuel Harvest wind turbines near Homan Field and the serious risk of injury or death they pose. I ask that this matter be closely reviewed and considered as precedent.**

**I am not aware of any agencies in other US states formally regulating wind turbine setbacks from private airstrips. I will continue to research this and provide information in the future if found. However, I believe SDCL Title 50 Aviation includes provisions for**

preventing the creation or establishment of airport hazards which apply to both private and public airports by the Definitions provided in SDCL 50-1-1, which I have included in my testimony.

Date 3/17/19

A handwritten signature in black ink, appearing to read "Garrett Homan", written over a horizontal line.

Garrett Homan

Intervenor

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\*  
\* **INTERVENOR JOHN HOMAN'S**  
\* **RESPONSES TO STAFF'S**  
\* **SECOND SET OF DATA**  
\* **REQUESTS**

EL18-053

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Below please find John Homan's responses to staffs second set of data request.

2-1) b. Yes, and I would add that the Deuel County ordinances require that any special exception permit shall have no negative affect on the health and well being, or on the property value of the existing residents and property of the county.

2-2) a. My concern is that the construction of the massive foundations for the wind turbines has the potential to disturb or even destroy the flow of some of the springs in the area or contaminate them.

b. I have no documentation. I believe the burden of proof should be on the applicant to prove that there would be no damage to the springs or aquifers of the area or Monighan creek or the existing dams.

2-3) a. Not that I know of at this time. I believe that the county zoning laws would require that a permitted landing strip be protected by safe operational setbacks. It is, I believe, left up to the states or local government.

- b. It was a Deuel County permit, issued by the zoning board. Copy of permit included.
- c. No, they did not. For the reasons that I feel were covered in my direct testimony. At that time, there were no obstructions or permitted structures to be concerned about.

2-4 ). Not at this time, but no regulations have ever been in place until the first ones were implemented.

2-5 ). Sales of homes by the Holborns, Collins, and Overbys. I do not have the information right now, but will try to provide soon.

2-6 ).

- a. i The possible affects of the massive foundations and the long term affects the operations of 500' tall structures would have on the surrounding soils, and aquifers, and springs, due somewhat to the compaction factor of the soils.

- ii There would be multiple tower positioned upstream and on both sides of Monighan creek and its drainages. The springs in this area all feed into our dams as well as the creek.

- iii I am not aware of one at this time but would request time to research.

- iv. A qualified independent entity or a university.

- v. Not at this time. The time frame does not allow us to do the research and compile such data.

- vi. I have none at this time. I would ask that some SD state agencies could provide these assessments before granting permits as these.

- b. I. I would answer the same as the above geological studies to provide somewhat the same results.

- ii. Same as above.

- iii I don't know at this time.

- iv. Same answer as above.



v. Not at this time.

vi. Same answer as a. vi above.

c. From materials used during construction as form coatings and leeching from the cement, the chemicals used in concrete, especially in freezing conditions. These problems would not be only related to wind energy facilities, but because they are wind energy projects, they would certainly not be exempt..

d. i. The same as previously addressed, from the construction process and possible contaminations, and damage to springs and aquifers.

ii. None at this time.

e. i. The continuous ground vibrations from the operations of the turbines, the affects it may have on birds and animals that are far more sensitive to sounds and vibrations.

ii. None at this time.

2-7 )

a. The location and depths of the aquifers, their interaction to the surrounding creeks, wells, and springs.

b. Same as above answers.

c. Unknown at this time.

d. Not at this time.

e. I am not aware of any studies, but I feel that the DENR should be involved because of the massive excavations required for these foundations.

2-8 ).

a. Not at this time.

b. An area that supports a large number of various species of wildlife. Support that is due to the value of the types of terrain, the cover and habitat it provides, and the many water sources, and forested areas.

c. A great many. I will provide as soon as I can as a follow up. Many portions of the project area would be sensitive due to the many lakes, sloughs, and streams.

d. The two mile is a distance that I believe is needed as a do no harm, preventative distance.

2-9 )

a. The one and one half mile setback would reduce the problems and issues caused by noise, infrasound, and shadow flicker. That would reduce the probability of lawsuits by residents due to health and welfare concerns. The commission has heard a lot of testimony on the many negative affects of wind turbines on people and residents well over a mile from the nearest turbines, I refer to Vicki May as one example. It should not be necessary to resubmit testimony already presented to the commission.

b. Other towns and communities in the county have been granted farther setbacks than individual residents, for example Altamont, Brandt, and the lake areas. Areas with multiple homes in a concentrated area should be allowed at least the same protections as a fairness issue.

2-10 ). For safety reasons, and that closer setbacks infringe upon the continued use of existing properties in the way that it is now, without any detrimental affects.

2-11 ). So as not to allow disturbances to be projected on surrounding properties. These disturbances would not be allowed from other sources or developments. Neither should it be allowed from wind energy projects.

2-12 ). Yes, I am relying on the testimony and technical information provided by Garrett Homan, who is a licensed pilot in the process of getting his instrument rating. He has worked in the aviation industry as a design engineer for over 12 years, with his degree in aerospace engineering.

2-13 ).

a. I believe that GE manuals suggest a greater setback than the current county ordinance. I believe that 1500' would provide an additional safety cushion that would not greatly impact the project.. I would like to rely on Garrett Homan to provide additional documentation.

b. Ice throw for one. I am concerned about the danger to persons using their own property, as they do now, without being concerned about the weather conditions at the time, and how it may cause the possibilities of danger from ice throw. Also the danger from an industrial structure that could cause fires, which could not be put out by any local fire



departments. The extra distance from properties is needed to control potential fires from affecting neighboring properties.

Date: \_\_\_\_\_

3-18-19

John Homan

John Homan

Intervenor

4114 12<sup>th</sup> Avenue NE

Watertown, SD 57201

Homan1971@gmail.com

EL18-053 In the matter of Application of Deuel Harvest Wind Energy LLC for a permit of a Wind Energy Facility and a 345 kv Transmission Line in Deuel County

Applicant Second Set of Data Requests  
Will Stone

2.1) I have read hundreds of pages of testimony referring to the decline of wildlife in wind complexes due to the migration of wildlife away from these areas. I have also listened to oral testimony ( via u-tube) given at public hearings that were recorded.. I have not secured these documents and recordings as I did not know it would be incumbent on me to provide documentation what I have read and listened to.

2.2) a)I have provided safety zones for Nordex and Vesta turbines under 250 feet tall. Common sense tells me a 500 to 600 foot turbines would certainly carry a longer distance of safety protection with it.

b) When I presented the afore mentioned safety zones at public hearing, it was disputed but offered no current figures. Ms. Kilby is requesting this information.

2.3) a)When mentioned at the breakfast table, hunters were appalled at the possibility of hunting in a wind complex. Most said the hunting was only part of it. They stated they enjoyed the beauty and the atmosphere the property offers. One statement that stands out is :while hunting, a hunter said “wow did you hear that”? I said “what, that meadowlark”. He said “ya, I live near a wind complex and haven't heard a meadowlark chirp in years”. I am a common person offering an opportunity for individuals to get away from work and life for awhile and just enjoy a relaxing time. I did not know I would need an affidavit and why would I spoil their relaxing time with that request. Hunting is considered tourism by the state of South Dakota. A 2016 Study by NC University indicates 80% of tourists would not come back to an area with wind turbines.

b) Of course I have receipts, it is a business. If I get affidavits from 20 hunters. 10 say they wouldn't come and 10 said they would and then after hunting by the turbines 5 decide not to come back, what good is the affidavit. Receipts from the past don't pay for the future. My concerns of loss of revenue come from a study by US Travel Association prepared for the North Carolina Division of Tourism.

2.4) a) b) Preserves need a special exception permit to operate a preserve. Every acre used in the operation needs the special exception. Page 40 No. 20 under Ag beginning on page 37. Zoning regulations adopted for Deuel County state that a turbine will not be located within 2000 feet of a business.

c) I should be 112

2.4.1.1. ii These turbines are too close to right of ways according to the afore mentioned manual.

iii I understood the question to be what the wind company could do to mitigate issues with turbines 109,110,111 not the PUC. If E

2.4.1.1.1.1. Invenergy will not remove the turbines then I request denying the permit all together.

2.5) I have witnessed many testimonials at public meeting and read articles written by

experts who have studied the problems. I have drawn the conclusion based on what I have read and testimonials I have heard that it will have a negative effect on our property.

2.6) The fact that Invenergy would not put a clause in my contract guaranteeing our income is admission by default that the turbines will affect our gross income. Can I prove it? No. Can they disprove it? No.

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

**IN THE MATTER OF THE  
APPLICATION OF DEUEL HARVEST  
WIND ENERGY LLC FOR A PERMIT  
OF A WIND ENERGY FACILITY AND  
A 345-KV TRANSMISSION LINE IN  
DEUEL COUNTY**

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**STAFF'S SECOND SET OF DATA  
REQUESTS TO HEATH STONE**

**EL18-053**

Below, please find Staff's Second Set of Data Requests to Mr. Heath Stone. Please submit responses within 10 business days, or promptly contact Staff to discuss an alternative arrangement.

- 2-1) Referring to the response of Heath Stone to Staff Data Request 1-3, you recommend the following mitigation measure: "I recommend the Commission to order the applicant to adhere to the 2-mile buffer given to the eagle nests outside of the project area to be the same for the eagle nest that has been monitored the past two years, north of Lake Alice a half mile."
- a) Please explain the basis for the two-mile buffer for the bald eagle nest north of Lake Alice, and provide documentation to support the recommendation.
  - b) In the Applicant Supplemental Testimony of Andrea Giampoli, Ms. Giampoli stated Deuel Harvest will voluntarily apply an 800-meter (2,625 feet) setback from the nest to the nearest turbine based on the South Dakota Bald Eagle Management Plan. Do you believe this setback is unreasonable? If yes, please explain and provide support.
- 2-2) Referring to the response of Heath Stone to Staff Data Request 1-3, you requested the following mitigation measure: "I recommend the Commission to review the placement of turbines that are in close proximity of bird movement corridors and concentrated bird and/or bat use areas. Set back of 1 mile to these areas. Provide property value guarantees for nonparticipants in the siting area."
- a) Please define "bird movement corridors" and "concentrated bird and/or bat use areas."
  - b) Please provide a map that identified these corridors and areas within the Project area and up to 1 mile outside the project area.
  - c) Please explain the basis for a 1-mile set back from these corridors and areas, and include supporting documentation.
  - d) Are you aware if the referenced corridors or areas are defined by other agencies in and around other wind energy facilities? If yes, please provide.



2-3) Referring to the response of Heath Stone to Staff Data Request 1-3, you requested the following mitigation measure: "I recommend the Commission to study the impact that turbine placement will have on future development of non-participating landowners. Currently, if the project was completed to today, future development on my property at the old homestead would be within the setback established in the Deuel County Ordinance B2004-01 Section 1215.03 Section 2a."

- a) What would the study requested assess? Please provide specific details.
- b) Have you requested the Company implement a voluntary setback from the old homestead consistent with the Deuel County Ordinance B2004-01 Section 1215.03 Section 2a? If yes, please provide the Company's rational for not implementing the setback.

2-4) Referring to the response of Heath Stone to Staff Data Request 1-3, you requested the following mitigation measure: "I recommend the Commission to reevaluate turbine placements next to ecological sensitive areas and give them a 2 mile setback."

- a) Are you aware of agencies that have defined an "ecological sensitive area" in and around other wind energy facilities? If yes, please provide supporting documentation with setback information. If no, please provide your definition with supporting documentation.
- b) How many ecological sensitive areas are in and around the Deuel Harvest North Wind Farm? Please provide support for your answer.
- c) Please explain the basis for the 2-mile setback recommendation.

2-5) Referring to the response of Heath Stone to Staff Data Request 1-3, you requested the following mitigation measure: "I recommend the commission to review turbine replacements next to non-participating landowners and give them a setback of 4 times the height of a tower."

- a) Is the setback from the property line or residence? Please provide support for the recommendation.
- b) If the setback is from the residence, please explain how the setback is different than Deuel County Ordinance B2004-01 Section 1215.03 Section 2a.

Dated this 4<sup>th</sup> day of March 2019.

*Amanda M. Reiss*

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Amanda M. Reiss  
Kristen Edwards  
Staff Attorneys  
South Dakota Public Utilities Commission  
500 East Capitol Ave.  
Pierre, SD 57501

EL18-053 - In the Matter of the Application of Deuel Harvest Wind Energy LLC for a Permit of a Wind Energy Facility and a 345-kV Transmission Line in Deuel County

Response to Staff's second set of data requests to Heath Stone

2-1)

a) The 2 mile buffer for the bald eagle nest North of Lake Alice is taken directly from the applicants own 2 mile buffer they provided for the eagle nests that are located near the project as noted on the Environmental Constraints Map (Appendix A Figure A-3). Andrea states in her testimony, "On Figure A-3 of the Application, we showed a two-mile buffer around eagle nests to illustrate the distance between the nests known at the time and the Project Area." This is an inadequate statement. On the map that is provided in Exhibit 1, it states in the legend, "2-mile Bald Eagle Nest Buffer". This statement clearly identifies Deuel Harvests intentions on providing a 2-mile buffer to all eagle nests.

b) The set back that is stated in Andrea Giampoli testimony is not reasonable. The nest in question was obviously overlooked by the applicant. Now that the nest was pointed out at this location, Deuel Harvest is retracting on the 2-mile buffer they were providing an eagle nest due to the limitation this will pose on the project. Andrea states, "Deuel Harvest surveyed the Project Area and a ten-mile buffer by helicopter for eagle nests in 2016 and conducted a follow-up ground-based survey in the Project Area in 2017. No eagle nests were detected near Lake Alice or in the Project Area during either survey." However, Andrea goes on to state "In February 2018, the USFWS shared with us that a landowner had brought to their attention that there may be an eagle nest north of Lake Alice. We reviewed the SDGFP Natural Heritage Program response, and the results of our two years of nest surveys and noted that while there were medium sized raptor nests observed north of Lake Alice, none was considered large enough to be an eagle nest, so no further due diligence was conducted at that time." This statement reiterates how Deuel Harvest did not adequately follow up on conducting any surveys about the eagle nest located north of Lake Alice. They looked at their information on paper, but did not do an onsite follow up with the new information provided by the USFWS. This blatantly shows the cover up that Deuel Harvest new about this nest before 2018 and only did their due diligence once they were called out on it in 2019. How is it, the company does 2 years of surveys and does not notice this nest, even as an unknown raptor nest, or do any further investigation or follow up in February of 2018 to confirm if there was a nest at that location describe by USFWS? The map provided in the Bird and Bat Conservation Strategy, shows all the known locations of nests. This is why these surveys are conducted, even if the USFWS and SDGFP do not have a nest listed in their data bases, does not mean they are not present. However, there is documentation from SDGFP that this nest has been active since 2016. (See Documentation below) The setback should stay two miles as shown in the Environmental Constraints map provided by Deuel Harvest (Appendix A Figure A-3).

2-2)

- a) As a lifelong resident of Deuel County, I have observed this area since I started at age 12. My main interest is waterfowl. I mentioned bird movement corridors and concentrated use areas which are terms I use to describe the area that I have observed for 20 years. Corridors are defined as the areas between wetlands that birds typically fly from spot to spot and the

areas they use going from water to fields. Over 20 years of observation, has led to successful knowledge of traditional flights paths. Towers within these corridors will disrupt their patterns and may lead to collision or avoidance from the area.

Concentrated use areas are defined as where waterfowl roost, breed, and nest. Both the corridor and use areas I have defined have numerous wind turbines that will disrupt the areas waterfowl population and cause avoidance. Even if recommendations for siting energy development outside of intact landscapes suggested by Kiesecker et al. (2011) are implemented by the wind industry, millions of wetlands occur in agricultural landscapes and our results indicate that wind energy development will likely reduce their use by breeding duck pairs (Loesch et al. 2013).

- b) The map provided, is based off of 20 years of observations in the areas highlight. The red lines indicate the most common flight paths use with each dead end of the red line indicating a stop in flight. The yellow circles indicate high use and concentrations of waterfowl for roosting, feeding, breeding, nesting and loafing.
- c) A one mile setback will allow waterfowl to continue using this vital area. As stated earlier.....wind energy development will likely reduce their use by breeding duck pairs (Loesch et al. 2013).
- d) I am not aware of any agency that specifically used the same terms I did. As for the map I submitted, no other agency has done a map detailing the movement of waterfowl in this area. I have the knowledge and history of knowing the migration routes and patterns used from 20 year of experience. I did not map the whole project, since I cannot attest to those areas not highlighted. The area I did highlight is where I have spent most of my time. As the map indicates, this area is heavily used by waterfowl and given the number of wetlands in the vicinity attest to why this is a vital area to waterfowl. One can assume, the rest of the project, when in close proximity to permanent bodies of water, is going to mirror what I have mapped out.

2-3)

a) The study would be a survey to non-participating landowners and residents to determine what the planned development would be for the future. The survey should ask questions such as:

1. In the near future, what is the likely hood development would happen on your property?
2. What kinds of development would most likely happen on your property?
3. What development will be restricted on your property if turbines are placed within 1 mile of your property? Half mile?

These questions, will help the commission better understand the negative impact Deuel Harvest will have on non-participating landowners and residences development of their property.

b) No request has been made to Deuel Harvest.

2-4) The definition of an ecological sensitive area is: An area of environmental importance having natural resources which if degraded may lead to significant adverse, social, economic or ecological consequences. These could be areas in or adjacent to aquatic ecosystems, drinking water sources, unique or declining species habitat, and other similar sites. The whole project is an ecological sensitive area. The tallgrass prairie is an endangered ecosystem that is described in detail in a press release by the USFWS. Precautions should be made to protect this area.

2-5) a) The setback is from the property line as I stated in my corrected version of the first data set sent to PUC staff. My concern is zoning trespass by the company that will be on my property and Stone's Conservation Acres LLP. In the Vestas Mechanical Operating and Maintenance Manual (Exhibit 4), it states, "Do not stay within a radius of 400m (1300ft) from the turbine unless it is necessary. If you have to inspect an operating turbine from the ground, do not stay under the rotor plane but observe the rotor from the front." (p.3) Also, "In case of a fire during an uncontrolled operation, do under no circumstances approach the turbine. Evacuate and rope off the turbine in a radius of minimum 400m (1300ft)" (p.17). Since Deuel Harvest is not using Vestas, I am curious to what is stated in GE's operating and maintenance manual.

The company does not have the right to impose their danger zone on our property therefore utilizing our property for the project. If a turbine fails while workers are present and the only way to get away from the turbine is to come through our property, this is trespassing buy the company. Also, we host many hunters every fall and are out their everyday hunting. I should not have to worry if my clients or family are in danger.

Fire is a huge concern for this area. If a turbine catches fire, there is a greater threat it will do more damage than just the location it sits on. Deuel Harvest is located in an area where grassland is prominent. Our pheasant hunting operation is a mixture of grass, trees and cattails, and adjacent to our property is grassland. If a turbine catches fire and it spreads on to our land and burns up our entire habitat, habitat that has taken 50 years to establish, where are we suppose to take our clients. This would have a direct impact on our operation. As I have stated before, tower 109 is only 550 ft from our property and is all grass in between. Tower 103 is NW of my property and is only 620ft from grass that could start and continue on to my property. A tower that is 500 ft tall and is on fire will have the capability of creating spot fires which is defined as-a fire ignited outside the perimeter of the main fire by flying sparks or embers. These embers, once air borne, can travel from a quarter to a mile away and start new fires when conditions are right. A wind turbine sparked a grass fire near Arlington, OR that burned about 2000 acres (see article below) This danger is very real and poses a significant risk to this area with it expanse parcels of grasslands, heavy fuel loadings, and lack of access to these areas. The only way I see zoning trespass to be mitigated is more distance between a non-participants property line and the tower. Vestas states 1,300ft from the radius of the turbine for the safety of their workers. I am stating a minimum distance of 4 times the height of the tower from the property line. This will protect all property owners from any model of turbine that is erected. Keep the danger of a malfunction turbine and the danger zone on the lease holder's property, not a non-participants land.

- a) Set back is from the Property Line as stated in my amendment to my first set of data answers.

### Bald Eagle Nest Survey Form

Ideally, the nest should be checked two to three times, once in late March to determine if bald eagles are using the nest, once in early June to count the number of nestlings (this check is the least important), and once in late June just before fledging. Nest checks after major storms could also be useful. Choose a spot where you can see the nest well, but far enough away that you do not disturb the parents. If they are circling overhead or "barking" at you, you are too close, and you may cause the parents to abandon the nest site or the young to fledge too early. After the family has left in late August, try to make a final visit to the nest tree to take a GPS location and identify any food remains under the nest. Approach the nest only after the birds have gone and only if you have express landowner permission to be on the property. The most important information is: **Is the site occupied by a pair of eagles? Did the pair attempt to nest? How many young survived to fledge from the nest?**

Thank you very much for your help. If you have any questions, please feel free to call Corey Huxoll at 605-773-4195. Please return the completed survey forms to **Corey Huxoll, SD Game, Fish & Parks, 523 East Capitol Ave. Pierre, SD 57501**. E-mail: [Corey.Huxoll@state.sd.us](mailto:Corey.Huxoll@state.sd.us)

Site Name: North Lake Alice County: Deuel Year: 2016

Location/Directions: North side of 172<sup>nd</sup> Street, ½ mile east of 478<sup>th</sup> Avenue in large "L shaped" tree belt

Legal Description: T 117N R 48W Section 31 1/4 1/4

Contact/Landowner: Terry Brandenburg Phone:

Observation Time			# Eagles		Nesting Activity/Comments	Observer
Date	Start	End	Adults	Young		
4/4/16	3:00pm	3:10pm	2	0	1 eagle on nest. 1 eagle sitting in nearby tree	Behnke
4/29/16	6:00pm	6:15pm	2	0	1 eagle on nest. 1 eagle flying around area	Behnke
6/15/16	12:30p	12:45p	1	1	1 adult on nearby tree. 1 eaglet in nest	Behnke
7/8/16	8:45am	9:00am	0	1	No adult visible. 1 young in nest	Behnke

### PLEASE COMPLETE THE FOLLOWING SUMMARY AT THE END OF MONITORING

Territory: X Occupied  Unoccupied  Unknown

Nest: X Active  Inactive  Unknown  GPS Lat/Long:

Outcome: 1 # Chicks 1 # Fledged young  Nesting attempt failed  Unknown

Nest condition at end of season:  New nest X Intact  Not intact  Unknown

Photographs:  Yes X No (We would appreciate any photographs)

Possible Threats/disturbances to nest site and associated habitat: (describe in detail)

Outcome Comments (i.e. suspected cause of failure):

### Bald Eagle Nest Survey Form

Ideally, the nest should be checked two to three times, once in late March to determine if bald eagles are using the nest, once in early June to count the number of nestlings (this check is the least important), and once in late June just before fledging. Nest checks after major storms could also be useful. Choose a spot where you can see the nest well, but far enough away that you do not disturb the parents. If they are circling overhead or "barking" at you, you are too close, and you may cause the parents to abandon the nest site or the young to fledge too early. After the family has left in late August, try to make a final visit to the nest tree to take a GPS location and identify any food remains under the nest. Approach the nest only after the birds have gone and only if you have express landowner permission to be on the property. The most important information is: **Is the site occupied by a pair of eagles? Did the pair attempt to nest? How many young survived to fledge from the nest?**

Thank you very much for your help. If you have any questions, please feel free to call Corey Huxoll at 605-773-4195. Please return the completed survey forms to **Corey Huxoll, SD Game, Fish & Parks, 523 East Capitol Ave. Pierre, SD 57501**. E-mail: [Corey.Huxoll@state.sd.us](mailto:Corey.Huxoll@state.sd.us)

Site Name: Lake Alice County: Deuel Year: 2017

Location/Directions: ¼ mile N of Lake Alice to the north of 172<sup>nd</sup> Street; E of 478<sup>th</sup> Avenue

Legal Description: T 117N R 48W Section 31 1/4 SW 1/4

Contact/Landowner: Terry Brandenburg Phone: \_\_\_\_\_

Observation Time		# Eagles		Nesting Activity/Comments	
Date	Start	End	Adults	Young	Observer
6/9/17	9:30am	9:45am	1	3	Behnke
6/21/17	10:00am	10:10am	0	3	Behnke

### PLEASE COMPLETE THE FOLLOWING SUMMARY AT THE END OF MONITORING

Territory: X Occupied        Unoccupied        Unknown

Nest: X Active        Inactive        Unknown GPS Lat/Long: \_\_\_\_\_

Outcome:        # Chicks 3 # Fledged young        Nesting attempt failed        Unknown

Nest condition at end of season:        New nest X Intact        Not intact        Unknown

Photographs:        Yes X No (We would appreciate any photographs)

Possible Threats/disturbances to nest site and associated habitat: (describe in detail)

Outcome Comments (i.e. suspected cause of failure):



**Bald Eagle Nest Survey Form**

Ideally, the nest should be checked two to three times, once in late March to determine if bald eagles are using the nest, once in early June to count the number of nestlings (this check is the least important), and once in late June just before fledging. Nest checks after major storms could also be useful. Choose a spot where you can see the nest well, but far enough away that you do not disturb the parents. If they are circling overhead or "barking" at you, you are too close, and you may cause the parents to abandon the nest site or the young to fledge too early. After the family has left in late August, try to make a final visit to the nest tree to take a GPS location and identify any food remains under the nest. Approach the nest only after the birds have gone and only if you have express landowner permission to be on the property. The most important information is: **Is the site occupied by a pair of eagles? Did the pair attempt to nest? How many young survived to fledge from the nest?**

Thank you very much for your help. If you have any questions, please feel free to call Corey Huxoll at 605-773-4195. Please return the completed survey forms to **Corey Huxoll, SD Game, Fish & Parks, 523 East Capitol Ave. Pierre, SD 57501. E-mail: Corey.Huxoll@state.sd.us**

Site Name: Lake Alice County: Deuel Year: 2018

Location/Directions: ¼ mile N of Lake Alice to the north of 172<sup>nd</sup> Street; E of 478<sup>th</sup> Avenue

Legal Description: T 117 R 48 Section 31 1/4 SW 1/4

Contact/Landowner: Terry Brandenburg Trust Phone: \_\_\_\_\_

Date	Observation Time		# Eagles		Nesting Activity/Comments Courtship, incubation, hatching, fledged young, nest destroyed, etc.	Observer
	Start	End	Adults	Young		
5/17/18	11:00am	11:05am	1	2		Behnke
6/12/18	1:30pm	1:35pm	1	2		Behnke
7/12/18	3:00pm	3:10pm	0	2		Behnke

**PLEASE COMPLETE THE FOLLOWING SUMMARY AT THE END OF MONITORING**

Territory: X Occupied        Unoccupied        Unknown

Nest: X Active        Inactive        Unknown GPS Lat/Long: \_\_\_\_\_

Outcome:        # Chicks 2 # Fledged young        Nesting attempt failed        Unknown

Nest condition at end of season:        New nest X Intact        Not intact        Unknown

Photographs:        Yes X No (We would appreciate any photographs)

Possible Threats/disturbances to nest site and associated habitat: (describe in detail)

Outcome Comments (i.e. suspected cause of failure):



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

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**IN THE MATTER OF THE  
APPLICATION OF DEUEL HARVEST  
WIND ENERGY LLC FOR A PERMIT  
OF A WIND ENERGY FACILITY AND  
A 345-KV TRANSMISSION LINE IN  
DEUEL COUNTY**

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\* **RESPONSE TO STAFF’S SECOND SET**  
\* **OF DATA REQUESTS TO JON**  
\* **HENSLIN**  
\* **EL18-053**  
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Below, please find Staff’s Second Set of Data Requests to Mr. Jon Henslin. Please submit responses within 10 business days, or promptly contact Staff to discuss an alternative arrangement.

- 2-1) Referring to the response of Jon Henslin to Applicant Data Request 1-11, you state “I am concerned that this project will negatively impact my property.” Are you aware of any market sales that supports the assertion that there is adverse effects on the selling price of rural residential properties in proximity to a wind turbine? If yes, please provide all information you are aware of, including address, of the market transaction.
- 2-2) Referring to the response of Jon Henslin to Applicant Data Request 1-8, you requested the following mitigation measure: “Provide property value guarantees for nonparticipants in the siting area.”
- a) Can you provide any examples of how a property value guarantee has been implemented for any other wind energy facilities? If yes, please provide supporting documentation.

Yes, the following Property Value Guarantee Agreement was proposed by Invenenergy for its “Pleasant Ridge” project in Livingston County Illinois. I contacted Chuck Schopp with the counties zoning (815-844-7741). He informed me that the Pleasant Ridge project was not approved, however the agreement is a Document of Record.

**PLEASANT RIDGE EXHIBIT  
11C**

**Property Value Guarantee Agreement**

This Property Value Guarantee Agreement (“Agreement”) made and entered into on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, by and between Pleasant Ridge Energy LLC (“Pleasant Ridge”), having its principal offices at One South Wacker Drive, Suite

1900, Chicago, Illinois 60606 ("Guarantor") and \_\_\_\_\_, residing at \_\_\_\_\_, Illinois ("Property Owners").

## **R E C I T A L S**

**WHEREAS**, Property Owners own certain real property ("Property"), legally described as follows:

[INSERT LEGAL DESCRIPTION OF NON-PARTICIPATING RESIDENTIAL PROPERTY WITH A RESIDENCE WITHIN ½ MILE RADIUS OF ANY WIND TURBINE, AS MEASURED FROM THE POINT OF THE RESIDENCE FOUNDATION CLOSEST TO THE WIND TURBINE TO THE CENTER OF THE WIND TURBINE FOUNDATION]

**WHEREAS**, "Property" means real property with a permanent dwelling, provided, however that Property shall not include any real property owned by a person that has entered into a wind easement or neighbor agreement with Guarantor for such Property in connection with the Project; and

**WHEREAS**, Guarantor has been granted a Special Use Permit by Livingston County Ordinance No. \_\_\_\_\_, for the construction and operation of a wind energy project consisting of up to 136 wind turbines on properties located in unincorporated Pleasant Ridge, Forrest, Fayette, Eppards Point, Indian Grove, Chatsworth, Charlotte, Belle Prairie and Avoca Townships in Livingston County, Illinois (the "Project"); and

**WHEREAS**, Guarantor desires to alleviate concerns about the preservation of values of residential Property located in proximity to the Project, specifically residences within one-half mile of any wind turbine; and

**WHEREAS**, Property Owners are desirous of preserving equity in the Property, by ensuring that if the Property described herein is sold at a price less than the ASKING PRICE as a result of proximity to the Project, as determined by the procedures contained herein, the Guarantor will guarantee payment to the Property Owners of such difference

## **IT IS HEREBY AGREED AS FOLLOWS:**

1. **EFFECTIVE DATE OF AGREEMENT.** This Agreement shall become effective and binding on Guarantor upon the Commercial Operation Date. "Commercial Operation Date" means the date on which Developer begins selling electrical energy generated by substantially all of the wind turbines to be included in the Project to a third party power purchaser, excluding, however, electric energy delivered to such third party power purchaser in connection with any testing, start-up or commissioning.

2. **ELIGIBILITY: EXERCISE OF GUARANTEE.** Property containing a permanent dwelling that is within one-half mile of the foundation of any wind turbine that is part of the Project, as measured from the point of the dwelling foundation closest to the wind turbine to the center of the wind turbine foundation, is covered by this Guarantee, to the extent the dwelling was constructed and occupied as a dwelling

on \_\_\_\_\_, 2015, the date Livingston County signed Ordinance No. \_\_\_\_\_ approving the Project ("Ordinance Date"). Owners of such Property who were owners of record as of the Ordinance Date ("Property Owners"), or their legitimate heirs, are eligible to exercise this Guarantee. In the event that the Property Owners wish to sell their eligible Property, and exercise the Guarantee set out in this Agreement, they shall notify Guarantor of same in writing by certified mail and thereafter they shall make a good faith effort to sell said Property by entering into a listing contract with a licensed real estate broker pursuant to the terms herein. Provided, however, that a person that has entered into a wind easement or a neighbor agreement for such Property in connection with the Wind Project shall not be eligible for a property value pursuant to this Agreement.

3. QUALIFIED PROFESSIONAL APPRAISER. For the purposes of this Agreement, a "qualified professional appraiser" shall mean a person who is licensed by the State of Illinois, not related to the Property Owners, who has not previously taken a position or testified either for or against a wind energy project, who is not an employee or contractor of Pleasant Ridge or its affiliates and does not otherwise have a business relationship with Pleasant Ridge or its affiliates, and who holds either the MAI, SRA or SRPA designation from the Appraisal Institute. All appraisal reports shall conform to the Code of Professional Ethics and Uniform Standards of Professional Appraisal Practice of the Appraisal Institute.

4. AGREED TO ASKING PRICE. The ASKING PRICE is the fair market value of the Property at the time the Property Owner decides to sell. The ASKING PRICE of the Property may be mutually agreed to in writing by the Property Owners and the Guarantor. The ASKING PRICE may also be amended by mutual written agreement of the Property Owners and Guarantor at any time.

5. DETERMINATION OF ASKING PRICE BY APPRAISAL. If the parties are unable to agree on the ASKING PRICE of the Property prior to the Property Owner listing the Property for sale, then the Guarantor shall hire, at its expense, a qualified professional appraiser, and shall notify Property Owner of such appraiser. If the Property Owner objects to the Guarantor's choice of appraisers, it shall state those objections, in writing, within thirty (30) days of the notification of the choice of appraiser, to Guarantor. In the event Property Owner reasonably objects, the Guarantor shall retain another qualified professional appraiser, and proceed as described below.

When a qualified professional appraiser is hired pursuant to this Paragraph 5, he or she shall be instructed to determine the fair market value (which will become the ASKING PRICE) of the Property as follows

:

a. Assume that no wind energy project or commercial wind turbine was located within ½ mile of the Property, measured as set forth in paragraph 2 above;

b. Utilize comparable property, developed as the Property was developed as of the Ordinance Date and located a sufficient distance away from the Project so that, in the opinion of the appraiser, the selling price of that property was not influenced by the presence of the Project;

c. Utilize comparable property, located approximately the same distance from major population centers (such as Pontiac) so that in the opinion of the appraiser the selling price of the comparable property was not influenced by its closer proximity to new or existing population centers.

d. Establish a fair market value which is based upon the Property as developed on the Ordinance Date (without considering any development or improvements, including new structures, after the Ordinance Date);

e. Prepare a full appraisal utilizing the form attached hereto as Attachment A, and which conforms to the Code of Professional Ethics and Uniform Standards of Professional Appraisal Practice of the Appraisal Institute;

f. Prepare the appraisal in full compliance with any and all state standards and state regulations which pertain to the preparation of an appraisal of the Property except those standards and regulations which conflict with these instructions; and

If Property Owner and Guarantor accept the appraised value, then such value shall constitute the ASKING PRICE, and the Property Owners shall offer the above described Property for sale at no less than that price.

If either the Property Owner or the Guarantor does not accept the appraised fair market value, the non-accepting party may retain a second qualified professional appraiser, of its choice and at its expense, who shall not be made aware of the first appraised value and who shall determine the fair market value of the Property on the basis of Paragraph 4 (a) through (g) above. If both parties do not accept the original appraisal, they shall agree to the second qualified professional appraiser and split the costs. In the event a second appraised value obtained pursuant to this paragraph is within fifteen percent (15%) of the first appraisal, the ASKING PRICE shall be the arithmetic average of the original appraised value and the second appraised value, unless the Guarantor is unsatisfied with such value.

In such latter event, the first two appraisers shall hire a third qualified professional appraiser, at the sole expense of the Guarantor, who shall not be made aware of either the first or second appraised values, and who shall determine the fair market value of the above-described Property on the basis of Paragraph 4 (a) through (g) above. The ASKING PRICE will then be the arithmetic average of the three appraised values within fifteen percent (15%) of each other and if none are within fifteen percent (15%) of each other the third appraisal shall conclusively determine the ASKING PRICE for the purpose of this Agreement.

6. LISTING WITH BROKER. Property Owners shall utilize the services of a real estate broker who shall be licensed in Illinois, shall not be related to the Property Owners and, unless waived by the Guarantor, shall be a member of the Board of Realtors Multiple Listing Exchange. Property Owners shall give Guarantor notice of the

broker with whom they wish to contract and shall obtain Guarantor's approval of said broker. Guarantor will not unreasonably withhold such approval. If the Guarantor objects to the Property Owners' choice of brokers, it shall state those objections, in writing, to Property Owners. In the event Guarantor reasonably objects, the Property Owners shall choose another broker, and proceed as described above. As sellers of the Property, Property Owners shall be responsible for the broker's fee. Nothing herein shall prevent the Property Owner from marketing the Property at a value higher than the ASKING PRICE as determined herein.

7. TERM OF LISTING. Property Owners shall list the Property, at the ASKING PRICE as determined in Paragraphs 4 or 5 above, or at a higher value. During the listing term, Property Owners shall accept any offer of purchase for the ASKING PRICE, or any offer of purchase otherwise acceptable to the Guarantor. Property Owners shall maintain the Property in good and marketable condition during the listing period.

Said listing contract shall provide: (a) that the broker shall list the Property in the multiple listing exchange; (b) that the Property will be so listed until the occurrence of either the (i) sale of the Property or (ii) expiration of a period of 270 days; (c) that the broker shall hold an open house periodically for the Property; (d) that the broker shall report the marketing efforts undertaken to the Guarantor; and (e) that the broker shall not be entitled to any commission after the expiration of the listing contract.

The Property Owners shall cooperate with the broker in obtaining a purchaser pursuant to the terms set forth in the listing agreement and shall make, in good faith, all reasonable efforts necessary to conclude a sale pursuant to the said terms.

8. OFFERS TO PURCHASE. The Property Owners shall accept any offer of purchase for the ASKING PRICE and, in such event, Guarantor will have no liability to Property Owners. Property Owners shall provide the Guarantor with written notification of every Offer to Purchase that they receive for the Property and agree, for a period of 270 days, not to accept any offer below the ASKING PRICE without the express written approval of the Guarantor. In no event shall the Property Owners entertain anything other than good faith, bona fide offers of purchase.

9. GUARANTOR'S CONSENT TO PURCHASE. Guarantor shall have the right to make counter offers on any offers of purchase which are below the ASKING PRICE. In the event the purchaser accepts any such counter offer made or requested by the Guarantor, or in the event the Guarantor otherwise consents to a sale of the Property below the ASKING PRICE, the Guarantor shall pay the Property Owners, at closing, the difference between the ASKING PRICE and the gross sales price (without deduction of any broker's commission) so established.

10. SALE WITHOUT GUARANTOR'S CONSENT. If the Property Owners have not received an offer of purchase at the ASKING PRICE within 270 days of listing the Property for sale, or the Guarantor has not consented to the sale of the Property below the ASKING PRICE, the Property Owners may sell the Property at the highest offer of purchase still pending or at the next good faith bona fide offer to purchase. It shall notify the Guarantor, in writing, of its intention to accept such offer.

11. **PROPERTY OWNER'S CLAIM.** After closing, if the Property has sold for less than the ASKING PRICE, as determined herein, and Property Owner reasonably believes that the reason for such lowered value is because of the Property's proximity to the Project, it shall make a claim to the Guarantor, requesting payment for the difference between the ASKING PRICE and the gross sales price (without deduction of any broker's commission). Within thirty days of such request, Guarantor shall pay the Property Owner the difference unless Guarantor, within that time, has invoked the procedures set forth in Paragraph 12.

12. **GUARANTOR APPEAL.** Within thirty (30) days of receipt of any claim from Property Owner pursuant to Paragraph 11 above, if Guarantor has a reasonable good faith belief that the difference in value between the ASKING PRICE and purchase price was not attributable to the Property's proximity to the Project, it shall notify the Property Owners, by certified letter. Within thirty days of the Property Owner's receipt of such notice, the Guarantor shall initiate mediation via an independent third-party neutral, at Guarantor's expense, for the purpose of making a determination of whether (and to what extent) the difference in value between the ASKING PRICE and the actual sales price is caused by factors other than the Project, which determination shall be binding. To the extent the difference in value is determined to be caused by other than the Project, the difference between the ASKING PRICE and the sales price which is guaranteed shall be reduced.

13. **TERMINATION OF GUARANTOR'S OBLIGATIONS.** This Agreement shall terminate and Guarantor shall have no obligations hereunder from and after the fifth anniversary of the Project's Commercial Operation Date.

14. **ASSIGNMENT OR TRANSFER.** Neither this Agreement nor the rights under it may be assigned, conveyed, or otherwise transferred by Property Owners. This Agreement shall only apply to a "first sale" by the Property Owners, and not to any second or subsequent sales of the Property. The guarantee given by Guarantor to guarantee the Property value and to purchase the Property is personal, and does not run with the land; however, said Agreement shall inure to the benefit of the Property Owners, their personal representatives, trustees, guardians, custodians or their heirs; but, in all events, shall terminate as described in Paragraph 13.

15. **APPLICATION OF LAW; DISPUTES.** This Agreement shall be construed in accordance with and governed by the laws of the State of Illinois. Disputes concerning the application or terms of this Agreement shall be subject to the jurisdiction of the Circuit Court of Livingston County.

**GUARANTOR:**

**ATTEST:**

Pleasant Ridge Energy LLC

By

Its:

DATE:

Its:

**PROPERTY OWNERS:**

**WITNESS:**

DATE:



- b) In response to a request for a property value guarantee condition for the Prevailing Wind Park permit (Docket EL18-026), Commission Staff witness David Lawrence stated the following:

“While I understand the goal of a property value guarantee, I have concerns about how to properly manage the valuation process for consistent results before the project and after the installation of the wind project. Many variables can influence the criteria to establish value or to reestablish value at a later date. For example, who is qualified to provide a value opinion? What will be the scope of work for establishing the market value before, and the market value after the installation of the wind project? How will changes in a property’s condition such as a well-maintained property versus a poorly maintained property be measured for value differences in contrast to the operational date of the wind project? I would be more supportive of the idea of a property value guarantee if there were a way to consistently define and measure the valuation process for a property’s market value in proximity to a wind project.”

Please provide responses to the questions and concerns posed by David Lawrence in Docket EL18-026 regarding a property value guarantee.

I spoke with David Lawrence on March 14<sup>th</sup> 2019. We discussed Property Value Guarantee Agreements. He told me had not seen an actual proposed agreement. Would you please forward the Pleasant ridge Exhibit to David Lawrence for his review. It should answer most if not all of his questions and concerns.

The following is another example of a property value guarantee.  
It is for properties located within a two-mile radius of a wind tower.

**RESIDENTIAL PROPERTY VALUE GUARANTEE AGREEMENT  
TO BE INCLUDED IN ANY INDUSTRIAL WIND TURBINE  
PERMIT ISSUED BY THE TOWN OF HAMMOND AND SHALL  
BECOME A PART OF THE TOWN OF HAMMOND WIND LAW.**

This Residential Property Value Guarantee Agreement (“Agreement”) made and entered into on this \_\_\_\_day of \_\_\_\_\_, 20\_\_\_\_, by and between

\_\_\_\_\_ State of New York and any successors in interest or ownership in part or in whole to any Industrial Wind Turbine Project within the Town of Hammond, hereinafter referred to as the ("Guarantor") and \_\_\_\_\_ and \_\_\_\_\_ residing at \_\_\_\_\_, Hammond, New York, ("Property Owner/Owners")

## **RECITALS**

**WHEREAS**, Property Owners own eligible Property as described herein ("Property"). That property having a legal description located in the Town of Hammond, St. Lawrence County, New York, and being described as follows:

**SAID PROPERTY BEING LOCATED WITHIN A TWO (2) MILE RADIUS OF ANY WIND TOWER, AS MEASURED FROM THE BASE OF THE WIND TOWER AT GROUND LEVEL TO THE NEAREST PROPERTY LINE OF THE RESIDENCE EXISTING AT THE TIME THIS PROPERTY VALUE GUARANTEE AGREEMENT IS ENTERED INTO.**

**WHEREAS**, Guarantor has been granted a Permit by the Town of Hammond, St. Lawrence County, for the construction and operation of the \_\_\_\_\_, consisting of Wind Turbines on properties located in the Town of Hammond, St. Lawrence County, State of New York.

**WHEREAS**, Guarantor agrees to alleviate any concerns to the Citizens of Hammond, regarding the preservation of Property Values in the Town of Hammond, and in consideration of the Town of Hammond granting to the Guarantor the right to construct and operate the \_\_\_\_\_ with Industrial Wind Turbines within the Guidelines of the Hammond Wind Law, and

**WHEREAS**, Property Owners are desirous of preserving the equity that they have in their Residential Properties prior to the construction and operation of the \_\_\_\_\_ Wind Farm that if the Property described herein is sold at a price less than the Asking Price as a result of proximity to the Wind Turbine, as determined by the Procedures contained herein, and the Guarantor will guarantee payment to the Property Owner/Owners of such difference.

## **IT IS AGREED AS FOLLOWS:**

**1. EFFECTIVE DATE OF THE AGREEMENT:** This agreement shall become effective and binding on the Guarantor when signed by both parties, which must be entered into within **ONE HUNDRED EIGHTY (180) DAYS** from the Town of Hammond issuing a permit to a Wind Development Company referred to above as the Guarantor. A list of all potential Lease Agreements have been made known between the Land Owner and the Guarantor, however, the actual placement has not been determined by the



Guarantor. If any new Lease Agreements are entered into by the Guarantor with any new property owner, then the neighboring property owner within a TWO (2) MILE radius of that landowner, will be notified by Certified Mail by the Guarantor. The Property Owner shall have **NINETY (90) DAYS** after receipt of said letter, to give notice to the Guarantor of their intent to enter into a Property Value Guarantee Agreement.

**2. ELIGIBILITY: EXERCISE OF GUARANTEE:** Any Individual, Sole Proprietorship, Corporation, Partnership, or Limited Liability Company, owning property that is within a TWO (2) mile radius of the base of any wind tower that is part of the Hammond Wind Project is covered by this Guarantee and described in Paragraph one above. This Guarantee is limited only to Real Property owners that own property in the Town of Hammond at the time that the Town of Hammond issues a Permit to any Wind Developer. A further definition of Property Owners shall include heirs and immediate family members of the Property Owner on the effective date above stated.

**3. QUALIFIED PROFESSIONAL APPRAISER and PROPERTIES TO BE USED AS COMPARABLES:** For the purpose of this Agreement, a Qualified Professional Appraiser shall mean a person who is licensed by the State of New York, not related to the Property Owner, who is not an employee or contractor of the Property Owner or Guarantor, and does not have a business relationship with the Property Owner or the Guarantor, and who is a member of at least one National Appraisal Association. All appraisal reports shall conform to the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institutes. All Real Estate Comparables used in any Appraisal shall not be from the Town of Hammond, but shall be from the neighboring Town of Alexandria, where there are no Wind Farms due to the proximity of the local Maxon Air Field. Sales of like or similar properties sold up to 3 years prior to the date of the Appraisal can be used after taking into consideration an inflationary factor. If there are no Comparable Values in the Town of Alexandria, then the Appraiser can use land transfers from within a 50 mile radius of the Town of Hammond.

**4. AGREED TO ASKING PRICE:** The Asking Price is the value of the Property at the time that the Property Owner decides to sell, however, the listing of the real property, must take place within a **FIVE (5) YEAR PERIOD** from the entering into this Property Value Guarantee Agreement. The Asking Price of the property may be mutually agreed to by the Property Owners and the Guarantor. The Asking Price can be mutually amended by the Property Owners and the Guarantor at any time, subject to their mutual agreement.

**5. DETERMINATION OF ASKING PRICE BY APPRAISAL:** If the Parties are unable to agree upon the Asking Price of the Property prior to the Property Owner listing the Property for sale, then the Guarantor shall hire, at their expense a qualified professional appraiser presently doing business in Jefferson or Onondaga County, and shall notified the Property Owner of such appraiser. If the Property Owner objects to the Guarantor's choice of appraisers, it shall so state those objections, in writing, within **THIRTY (30)**

DAYS of the notification of the choice of the appraisal, to Guarantor. In the event Property Owner reasonably objects, the Guarantor shall select an Appraiser with MAI Certifications and all selected Appraisers shall adhere to the following guidelines:

When a qualified professional appraiser is selected pursuant to Paragraph 5 above, he or she shall be instructed to determine the fair market value, which will become the ASKING PRICE, of the Property as follows:

- a. Assume that no wind energy center or commercial wind tower was located within a FIVE (5) mile radius.
- b. Utilize comparable properties, developed as the Property was developed as of the date of this Guarantee and located sufficient distance away from the Hammond Wind Project, within the Town of Alexandria, so that in the opinion of the appraiser, the selling price of that property was not influenced by the presence of the Hammond Wind Farm.
- c. Use both the Comparable Sale Method and the Cost Replacement Method in determining a Fair Market Value. If there is wide difference between the Fair Market Value at the time of listing and the Cost Replacement Method, then the Cost Replacement Method shall be the controlling method, and shall be used as an Asking Price. The Standard Depreciation rates established by the Standards of Professional Appraisals Practice of the Appraisal Institute shall be used.
- d. Establish a fair market value, which is based upon the Property as developed on the date that the Town of Hammond issues a permit for a Hammond Wind Farm.
- e. Prepare a full narrative appraisal, which conforms to the Code of Professional Ethics and Standards of Professional Appraisals Practice of the Appraisal Institute.
- f. Prepare the Appraisal in full compliance with any and all state standards and state regulations which pertain to the preparation of an appraisal of the Property except those standards and regulations which conflict with these instructions, and
- g. The Appraiser shall note the condition of the premises, both interior and exterior, at the time of the appraisal.

If the Property Owner and the Guarantor accept the appraisal value, then such appraisal shall constitute the ASKING PRICE, and the Property Owners shall offer the above defined property for sale at no less than the agreed upon price. If either the Property Owner or the Guarantor does not accept the appraisal value, then the non-accepting party may retain a second qualified professional appraiser, of its

choice, to be paid for by the Guarantor. The second appraiser shall be given a copy of the first appraisal, and check said appraisal for accuracy, and then shall submit their appraisal for consideration by the parties. If the second appraiser shall be within 5 percent of the first appraiser, then the higher appraisal shall be the agreed upon ASKING PRICE. If the Guarantor or the Property Owner is unsatisfied with the value, then the party who is still unsatisfied with the ASKING PRICE, shall hire at its own expense, an MAI certified Appraiser to establish a value. In the event that the other party shall hire his or her own MAI certified Appraiser to establish a value, then the ASKING PRICE shall be the average between the two (2) Appraisals and the MAI certified appraisal. There shall be NO APPEAL from the value determined by the MAI Appraisals. There shall be no requirement for Discovery or Interrogatories by either party. There shall be no requirement for cost receipts by the Property Owner. The Property Owner shall give open inspection of the property within reasonable time periods, for any appraiser to inspect the property. Any request for inspections must be complied within 72 hours of the requested time period.

**TIME LIMITS:** The first and second appraisals shall be completed within 30 days of the property owner notifying the Guarantor of their intent to list their property for sale. The MAI appraisal must be completed within 75 days of the property owner notifying the Guarantor or Guarantor notifying the Property Owner of their dissatisfaction with the first two appraisals. The second appraisal can be eliminated if a MAI Appraiser is used for the second appraisal, at which time the ASKING PRICE shall be the average between the first appraisal and the MAI Appraisal.

**6. LISTING WITH BROKER:** Property Owners shall utilize the services of a New York State certified Real Estate Broker, with membership with the St. Lawrence County and Jefferson County Board of Realtors with access to the Multiple Listing Service for the St. Lawrence and Jefferson Counties. The selection of the Realtor shall be at the sole discretion of the Property Owner for the first SIX (6) months. If the property has not sold within that period, then the Guarantor shall have the option of selecting a Realtor for the balance of the time period, which shall be for THREE (3) MONTHS. The total number of days that a property shall be listed for prior to the Guarantor being obligated under this Property Value Guarantee Agreement shall be **270 DAYS**. The Realtor shall be paid the normal rate as established within St. Lawrence County and the commission rate shall not exceed 6% for residential properties. All commissions shall be paid by the Property Owner.

**7. TERM OF LISTING:** The Property Owner shall list the Property, at the ASKING PRICE, as determined in Paragraphs 4 or 5, or at a higher value. During the listing term, the Property Owners shall accept any offer of purchase for the ASKING PRICE, or any offer of purchase otherwise acceptable to the Guarantor. If the accepted price includes any concessions to the Buyer, i.e.: Payment of up to \$8,000.00 for Buyers costs for securing a mortgage or closing costs, then those costs shall be added to the ASKING PRICE and shall be reimbursed by the then Guarantor. (In this current market, it is a common procedure to add the Buyers costs to a contract so as to allow the Buyer to purchase the property with no money down.) If the \$8,000 is added to the ASKING PRICE, then the Guarantor shall not be responsible for the Buyers costs.

Said listing contract shall include: (a) that the Broker shall list the Property in the multiple listing exchange; (b) that the property will be so listed until the occurrence of either the (i) sale of the Property or (ii) expiration of a period of 270 days; (c) that the Broker shall not be entitled to any commission after the expiration of the listing contract, unless a Buyer that the Broker showed the property to, shall enter into a Contract with the Property Owner, within 180 days after the expiration of said listing.

The Property Owner shall cooperate with the Broker in obtaining a purchase offer pursuant to the terms set forth in the listing agreement and shall make, in good faith, all reasonable efforts necessary to conclude a sale pursuant to the said terms. **UNDER NO CIRCUMSTANCES SHALL THERE BE ANY VERBAL COMMUNICATION BETWEEN THE PROPERTY OWNER AND THE POTENTIAL PURCHASER.** There will be no anti-wind signs on the property listed for sale. Any requests for information regarding Wind shall be referred to the Guarantor for release of information.

**8. OFFERS TO PURCHASE:** If the Property Owner accepts any offer of Purchase for the ASKING PRICE then in that event, Guarantor will have no financial liability to the Property Owner. No Furniture or items at the property shall be included in the Sales Contract other than appliances, drapes, and items attached to the dwelling. The Guarantor may be notified by telephone of any and all offers so that they will be able to make counter offers as listed in paragraph 9 below. The Guarantor shall also be notified in writing within 48 hours confirming any telephone communications with the Realtor or Property Owner.

**9. GUARANTOR'S CONSENT TO PURCHASE:** Guarantor shall have the right to make counter offers on any offers of purchase which are below the ASKING PRICE, said counter offer being made within 48 hours of the submitted original offer or counter offers. In the event the purchaser accepts any such counter offer, or counter offers, made or requested by the Guarantor, or in the event the Guarantor otherwise consents to the sale of the Property below the ASKING PRICE, the Guarantor shall pay to the Property Owners, at closing, the difference between the ASKING PRICE and the sales price so established.

**10. SALE WITH OR WITHOUT GUARANTOR'S CONSENT:** If the Property Owners have not received an offer of purchase at the ASKING PRICE within 270 days of listing the property for sale, or the Guarantor has not consented to the sale of the Property below the ASKING PRICE, the Property Owner may sell the Property at the highest offer of Purchase still pending or at the next good faith bona fide offer to purchase. The Property Owner shall notify the Guarantor, in writing of its intention to accept such offer. The Guarantor has 72 hours to notify the Property Owner of their intent to either accept the terms of the offer or to Purchase the Property at the ASKING PRICE. If the Guarantor elects to purchase the property, then said closing must take place within 30 days with the presentment of a Warranty Deed with lien covenant. If there should be a title defect, then the Guarantor

shall give the Property Owner sufficient time to cure the defect or to Purchase Title Insurance, with said Title Insurance cost paid for by the Property Owner.

**11. PROPERTY OWNER'S CLAIM:** If the property has sold for less than the ASKING PRICE, as determined herein, it shall make a claim to the Guarantor, requesting payment for the difference between the ASKING PRICE and the SALES PRICE, after deducting Real Estate Commissions and normal costs associated with sale of real estate in St. Lawrence County. If the Guarantor does not make payment within 10 days of the sale, then the PROPERTY OWNER is shall be paid interest on said monies owed by the Guarantor at the rate of ONE (1) PERCENT PER MONTH, and shall be liable to the Property Owner for all costs incurred in collection, plus normal Attorney Fees incurred by the Property Owner. There is **NO APPEAL FROM THIS PROPERTY VALUE GUARANTEE AGGREEMENT BY EITHER PARTY.**

**12. GOOD NEIGHBOR AGREEMENT:** If any Property Owner should enter into a so-called Good Neighbor Agreement, wherein they allow the placement of a Wind Turbine closer than 2 miles and/or if they should receive any compensation from the Wind Turbine Company, then they shall be excluded from this PROPERTY VALUE GUARANTEE PROGRAM unless the Guarantor waives this provision and allows the neighbor to enter into this Guarantee binding the Guarantor.

**13. EXCLUSIVE OPTION OF ANY RESIDENTIAL PROPERTY OWNER LIVING WITHIN ANY CLOSE PROXIMITY TO A WIND TURBINE:** If any Property Owner lives within TWO (2) MILES of any Wind Turbine Leaseholder or under consideration for a Wind Turbine Lease, now or in the future, and if that Property Owner desires to move from the Town of Hammond because a Wind Turbine is to be located within TWO (2) miles of his or her residence, measured from the corner of the Property Owner's residence to the wind turbine measured from the base of the turbine, then that Property Owner has a once in a lifetime right to be reimbursed for his real property and 5 acres surrounding that residence, at the then Appraised Value under the below described procedures, HOWEVER, this option cannot be used in conjunction with any future Guarantee of the Sale of a Residence:

**a.** The Property Owner must notify the Guarantor within 90 days of the issuance of a permit for an Industrial Wind Farm, that they do not wish to live in the Town of Hammond with the existence of a Wind Turbine located on an existing leaseholder's property within a TWO MILE RADIUS of their dwelling.

**b.** If the Guarantor should at any time later, decide to enter into any additional leases with neighboring landowners and to place a Wind Turbine closer than TWO (2) MILES to any Property Owners Residence, then this Property Owner shall have the same absolute right to claim under this Paragraph 13, regardless of whether they gave a previous notice to the Guarantor. The Guarantor is required to serve notice by Certified Mail to all Property Owners residing within a TWO

(2) MILE RADIUS of any new Potential Leaseholders. The Property Owner must give notice by Certified Mail to the Guarantor within 90 days of receipt of their Certified Letter, stating that they desired to exercise this Exclusive Option.

c. The Property Owner must have been the legal owner of the real property at the time that the Town of Hammond issued a permit to an Industrial Wind Turbine Developer.

d. Prior to this **EXCLUSIVE OPTION TAKING PLACE**, the Property Owner and the Guarantor shall enter into 30 day cooling off period wherein the property owner is obligated to meet with the Guarantor, to discuss the entering into a Good Neighbor Program wherein the property owner would receive a monthly/annual payment and/or share in the revenue that the landowner with the industrial wind turbine would receive, making the adjoining landowner a recipient of the financial rewards of the industrial wind turbine program. If an agreement cannot be reached within this 30 day period, then the Property Owner and the Guarantor shall proceed to sub-paragraph e below.

e. The Guarantor shall then consider the relocating of the proposed Wind Turbine so as not to be within a TWO (2) mile radius of the Property Owners residence. If the Turbine is moved so that it is not within a TWO (2) mile radius of the Property Owners Residence, then the Property Owner would no longer qualify under the Residential Property Value Guarantee Agreement. The Guarantor shall have 30 days in which to make this decision.

f. If the Property Owner and the Guarantor are still unable to reach a mutually satisfactory resolution within 60 days of the Property Owner serving a Certified Letter to the Guarantor, then the Property Owner, at his sole expense, shall order ONE (1) MAI Appraisal from a Qualified Appraisal Company certified to prepare Trial Ready Appraisals within the State of New York to be completed within 90 days after the Property Owner and the Guarantor are unable to reach a resolution. The Value determined by the Appraisal Company shall be the cost replacement value after taking into consideration any depreciation under standard guidelines for Appraisals.

g. If the Guarantor should not agree with the value, then the Guarantor has the right to order a second MAI Appraisal to be completed within 45 days of receiving the Property Owner's MAI Appraisal. These 2 Appraisals are to be added together, to be divided by 2, to determine an average value. If the Property Owner is not satisfied with the Guarantor's Appraisal, then he has the right to order a Third MAI Appraisal, at which time all THREE (3) Appraisals are to be added together, divided by 3, for an average value. The cost of the third appraisal shall be shared between the Property Owner and the Guarantor. This is the final value, and shall be the controlling value.



There is no Appeal from this value. The Property Owner is to then present the Guarantor with a Warranty Deed with Lien Covenant, 40-Year Abstract and 10-year Tax Search. If there should be any defect in Title, then the Property Owner has the option of curing the defect under normal New York State Bar Association standards or to provide Title Insurance against said defect. A closing date is to be set 30 days after the title is cured. The Property Owner is to vacate the property at closing and to leave the property in a broom clean condition. The Payment shall be made in Certified Funds at closing. If the Guarantor refuses to make this payment, then the Property Owner is entitled to interest at the rate of ONE (1) PERCENT per month from the date that the closing is scheduled, and to all reasonable Attorney Fees to enforce collection. There is **NO APPEAL FROM THIS PROVISION BY EITHER THE PROPERTY OWNER OR THE GUARANTOR.**

**14. ASSIGNMENT OR TRANSFER:** Neither this Agreement nor the rights under it may be assigned, conveyed, or otherwise transferred by the Property Owner. The Guarantee given by the Guarantor to guarantee the Property Value and to purchase the Property, is personal, and does not run with the land, however, said Agreement shall inure to the benefit of the Property Owners, their personal representatives, trustees, guardians, custodians or their heirs, but in all events, shall terminate after an arms length sale to a 3<sup>rd</sup> party. The Guarantee given by the Guarantor, shall continue and obligate any future transferee, assignee, purchaser or successor in interest or Bankruptcy.

**15. APPLICATION OF LAW DISPUTES:** This Agreement shall be construed consistent with the Law of New York. Disputes concerning the application or terms of this Agreement, include enforceability and collection, shall be subject to the Supreme Court of the State of New York.

Signed this \_\_\_\_ day of \_\_\_\_\_, 2011, between:

**GUARANTOR:**

By: \_\_\_\_\_

**PROPERTY OWNER:**

\_\_\_\_\_  
**Property Address:**

STATE OF NEW YORK )  
COUNTY OF ST. LAWRENCE ) SS:

On this \_\_\_\_\_ day of \_\_\_\_\_, 2011, before me, the undersigned, a Notary Public in and for said State, personally appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the

individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

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Notary Public

STATE OF NEW YORK )  
COUNTY OF ST. LAWRENCE ) SS

On this \_\_\_\_\_ day of \_\_\_\_\_, 2011, before me, the undersigned, a Notary Public in and for said State, personally appeared \_\_\_\_\_ and \_\_\_\_\_, husband and wife, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledge to me that they executed the same in their capacity, and that their signatures on this instrument, the individual or individuals, or the persons upon behalf of which the individuals acted, executed the instrument.

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Notary Public

2-3) Referring to the response of Jon Henslin to Applicant Data Request 1-8, you requested the following mitigation measure: "Provide two-mile radius safety zone for all bald eagle nests, including the nest identified at the PUC public hearing held in Clear Lake on this project."

- a) Please explain the basis for the two-mile radius safety zone for all bald eagle nests, and provide documentation to support the recommendation.

Note: In my earlier response I should have used buffer instead of safety zone).

Initially the basis for the 2-mile buffer was Figure A-3 found in the Application. This figure entitled "Environmental Constraints Map" identified bald eagle nests and provided a 2-mile buffer. A buffer by definition is an area of land designated for environmental protection. See part b) for information related to this recommendation.

- b) In the Applicant Supplemental Testimony of Andrea Giampoli, Ms. Giampoli stated Deuel Harvest will voluntarily apply an 800-meter (2,625 feet) setback from the nest to the nearest turbine based on the South Dakota Bald Eagle Management Plan. Do you believe this setback is unreasonable? If yes, please explain and provide support.

I believe it is unreasonable.



Invenergy's application included an Environmental Constraint Map (Figure A-3). The map showed two bald eagle nests.

At the January 24<sup>th</sup> 2019 PUC hearing an additional bald eagle nest was identified north of Lake Alice (Garry Ehlebracht's presentation of article prepared by Jon Henslin). The additional nest was documented in SDGFP's Bald Eagle Nest Survey Forms for 2016, 2017 and 2018. Note: There are only three active bald eagle nests identified in Deuel County.

Ms Giampoli's Supplemental Testimony (February 24<sup>th</sup>, 2019) provided a substantial change to the Environmental Constraint Map (Figure A-3). The 2-mile bald eagle buffer was removed. It was explained that the 2-mile buffer was not a buffer but an illustration to show "the distance between the nests known at the time and the Project Area". Using a labeled "buffer zone" in such a manner is deceiving or at least confusing to the public.

The 2-mile buffer was removed and a 2,625 ft. "setback" was added for the bald eagle nest north of Lake Alice. Note: If you compare a 2-mile buffer with a 2,625 ft. buffer/setback, it will show that the 2,625 ft. buffer/setback contains only 6.2 % of the area contained in the 2-mile buffer.

The Supplemental Testimony discussed recommended disturbance setbacks. The Supplemental Testimony stated: "The National Bald Eagle Management Guidelines (USFWS – 2007) recommend that human activities visible from bald eagle nests be kept at least 201 meters (660 feet) away to minimize disturbance to nesting eagles. That recommendation is found under the section titled "Temporary Impacts", such as constructing a 1 or more story building. They apply only to the actual construction event. The recommendations are irrelevant to large wind turbines, with motion, noise and flashing lights. However, the guidelines do state: "To avoid collisions, site wind turbines, communication towers, and high voltage transmission power lines away from nests, foraging areas, and communal roost sites."

The Supplemental Testimony also identified the South Dakota Bald Eagle Management Plan. The plan recommended that a ½-mile mile buffer zone around active bald eagle nests during the nesting season on SDGFP managed land (February-August). The Buffers and Use Restrictions in this document were for SDGFP managed lands and are seasonal in nature.

I was unable to locate information that recommended acceptable turbine setbacks distances from bald eagle nests, forage areas and communal roost sites. This may

be due to a lack of research or the numerous variables (size and type of turbine, terrain, surrounding land use etc.).

Without further information the guidance is: "To avoid collisions, site wind turbines, communication towers, and high voltage transmission power lines away from nests, foraging areas, and communal roost sites."

The problem:

A bald eagle nest has been identified north of Lake Alice near the proposed project. To further identify the problem, there are approximately 18 turbines within a 2-mile radius of the nest. The foraging area associated with this nest is unknown.

The solution:

The solution is proper siting of the wind turbines.

Applicant recommends minor adjustment to two turbines to provide 2,625 ft. setback from nest. This still results in 18 turbines within a 2-mile radius of the nest. The 2,625 ft setback has already been addressed.

Other options:

Provide a 1-mile buffer.

If the applicant would relocate 5 turbines on this project a 1-mile buffer would be provided for the nest. Considering that the applicant will have to remove about three turbines in order to not exceed their Deuel County Special Exception Permit, only two turbines would have to be relocated. The removal/relocation of five sites will also reduce a line of turbines that extend across the north end of Lake Alice. The removal of those 5 turbines will improve the north migration flight path to the lake.

Provide a 1 ½ -mile buffer.

Relocating another 4 turbines would provide a 1 ½- mile buffer and eliminate the line of turbines, that extended across the north end of Lake Alice (refer to the 1-mile buffer discussion). In their application for a special exception permit, Invenergy provided Deuel County three different layouts that showed possible turbine locations. Layout 1 (Exhibit 1) shows turbine locations, in the northeast corner of the project footprint, where the removed turbines could be relocated. In fact, using those locations and some other minor adjustment the 2-mile eagle nest buffer could be provided a 2-mile (refer to the 1 1/2-mile buffer discussion).

Conclusion:

There are only 3 documented active eagle nests in Deuel County.

The applicant was made aware of the possible presence of this nest over a year ago and failed to adequately investigate.

There are numerous options for moving turbine locations. Since these options do exist the applicant should strive to utilize these options to increase the buffer provided to the eagle nest and foraging area. The slight adjustment of two turbines is unacceptable solution to this situation.

My recommendation is still that the applicant should provide a 2-mile buffer around the eagle nests. I also recommend that the PUC staff discuss these recommendations with SDGFP.



# Layout 1

