

Agency Meetings & Correspondence



MINNESOTA DEPARTMENT OF NATURAL RESOURCES

Division of Ecological and Water Resources 261 Highway 15 South, New Ulm, MN 56073 Phone: 507-359-6073 Email: kevin.mixon@state.mn.us

March 18, 2015

Ms. Andrea Giampoli Invenergy LLC One South Wacker Drive, Suite 1900 Chicago, IL 60606

Subject: Freeborn Large Wind Energy Conversion System

DNR Preliminary Review Freeborn County, MN

Dear Ms. Giampoli:

The Minnesota Department of Natural Resources (DNR) appreciates the opportunity to review and comment on the proposed Freeborn Large Wind Energy Conversion System. Please review the "DNR Guidance for Commercial Wind Energy Projects" and "Avian and Bat Survey Protocols For Wind Energy Projects" for our standard commercial wind project recommendations. Both documents can be located at the following link: (http://www.dnr.state.mn.us/eco/ereview/additional_resources.html).

The DNR Guidance For Commercial Wind Energy Projects should be reviewed and considered throughout project development. The following specific sections are known to pertain to this project area: Rare Species and Native Plant Communities, Native Prairie, State Game Refuge, State Trails and Recreational Trail Corridors, Properties in Government Programs or With Conservation Easements, and Lakes, Wetlands, Streams, and Rivers.

The Blazing Star State Trail is being expanded in the northwest corner of the project boundary from Myre Island State Park to Hayward. Recommended setbacks for state trails are evaluated on a trail-by-trail basis due to the wide diversity of locations of the trails. Minnesota State Trails have numerous user groups including hiking, biking, skiing, and horseback riding. State trails occur in both very remote areas and highly developed parts of the state, and the quality of the area in terms of existing disturbance and recreational uses varies substantially. The safety of trail users, and possible risk from ice throw and equipment failure, will be a key component of a DNR review. The Public Utilities Commission considers trail setbacks on a trail-by-trail basis. The turbine layout should provide a significant setback from the State Trail to ensure the safety of trail users. This issue should be discussed further with the DNR when a preliminary turbine layout is available. Further information on Minnesota State Trails and snowmobile trails can be obtained from the DNR Data Deli at: http://deli.dnr.state.mn.us/.

A State Game Refuge exists in the northwest corner of the project boundary. Based on the Invenergy presentation on March 3, 2015, no turbines will be placed in close proximity to the State Game Refuge. The DNR will review the preliminary turbine layout, when it is available, to determine if any potential conflicts exist.

Based on a field view of the site, the majority of farm sites have mature forested groves around them that appear to be larger than at other wind projects in southern Minnesota. The larger forested groves may provide potential summer habitat for bats and this should be taken into account during the decision making process for the acoustic monitoring effort and fatality monitoring protocols.

At the March 3, 2015, meeting the DNR brought up the potential to increase the bat acoustic data collection. The DNR still believes that additional acoustic detectors would be beneficial in order to collect a more robust data set for a project that encompasses a very large area. The more robust data collection would inform the record concerning bat activity and species presence throughout the project area. The DNR will support United States Fish & Wildlife Service recommendations concerning the need for additional acoustic detectors that would improve the detection of Northern Long-Eared Bats (proposed for federal listing).

At the March 3, 2015, meeting a discussion occurred concerning the need for specific wetland or grassland bird surveys. The DNR is not recommending additional surveys based on the small size and isolated nature of the wetlands and grassland habitat located within the project boundary. However, it may be beneficial for the record to conduct the surveys as background data for avian use in the project area. The surveys would supplement the avian point counts and eagle surveys that are currently planned for the site.

Project developers crossing (over, under, or across) any state land or public water with any utility (power lines, including feeder lines) need to secure a DNR License to Cross Public Lands and Waters (Minnesota Statutes, section 84.415). Information on obtaining a Utility License can be found at: http://www.dnr.state.mn.us/permits/utility_crossing/index.html. For detailed information on where the Public Waters are located in a project area, visit the following site and click on the Public Waters Inventory (PWI) Maps Download button: http://www.dnr.state.mn.us/waters/watermgmt_section/pwi/maps.html.

During development of the turbine layout it is recommended that numerous alternate turbine locations be included. The alternate turbine locations provide an opportunity to avoid or minimize potential impacts to natural resources and to work around other issues that arise during project development.

This review constitutes a preliminary review of the project and is not a substitute for reviewing potential turbine placement. Further review of the project will be conducted when the preliminary turbine locations are determined. The DNR will provide a second review of the project that is site specific to the proposed turbine locations, transmission lines, substations, and access roads. The DNR recommendation for fatality monitoring will be provided when the proposed turbine layout is available and the bat acoustic data has been analyzed.

March 18, 2015 Page 3

The DNR looks forward to working in a positive and collaborative manner on this project to ensure that sustainable energy sources are developed while protecting Minnesota's natural resources. Please contact me directly at (507) 359-6073 if you have any questions about this letter.

Sincerely,

Kevin Mixon

Regional Environmental Assessment Ecologist Division of Ecological and Water Resources

- Maga

ec: Lisa Joyal, Endangered Species Review Coordinator

Jamie Schrenzel, Environmental Review

Dan Girolamo, Area Hydrologist

Jim Sehl, EWR Assistant Supervisor

Jeanine Vorland, Area Wildlife Supervisor

Joel Wagar, Parks and Trails Margaret Rheude, USFWS

Richard Davis, Department of Commerce-EERA

DNR R4 REAT

ERDB#20150260

Minnesota Department of Natural Resources



Division of Ecological and Water Resources, Box 25

500 Lafayette Road St. Paul, Minnesota 55155-4025

Phone: 651-259-5109 E-mail: lisa.joyal@state.mn.us

March 26, 2015

Correspondence # ERDB 20150260

Mr. Todd Mattson WEST, Inc. 1710 Douglas Drive, Suite 283 Golden Valley, MN 55422

RE: Natural Heritage Review of the proposed Freeborn Large Wind Energy Conversion System,

Freeborn County

Township (N)	Range (W)	Section(s)
102	20	7, 8, 13-18, 20-28, 33-36
102	19	7, 16-20, 29-32
101	20	1-4, 9-16, 21-28, 33-36
101	19	5-8, 17-20, 28-32

Dear Mr. Mattson,

As requested, the Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, rare features have been documented within the search area. Please note that the following rare features may be adversely affected by the proposed project:

• The Natural Heritage Information System (NHIS) tracks bat maternity colonies and hibernacula plus some Anabat data, but this information in not current or exhaustive. Although there are no NHIS records for bats in the vicinity of the proposed project, all seven of Minnesota's bats can be found throughout Minnesota. The northern long-eared bat (*Myotis septentrionalis*), tricolored bat (*Perimyotis subflavus*), big brown bat (*Eptesicus fuscus*), and little brown bat (*Myotis lucifugus*) are all state-listed species of special concern. The DNR looks forward to receiving the results of the bat acoustic monitoring and may have additional comments regarding state-listed bats at that time.

As you are aware, the U.S. Fish and Wildlife Service (USFWS) has proposed to federally list the northern long-eared bat (*Myotis septentrionalis*) and will make a final listing determination by April 2, 2015. Please continue to coordinate with the U.S. Fish and Wildlife Service regarding this species.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or for an updated review if construction has not occurred within one year.

The Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. To determine whether there are other natural resource concerns associated with the proposed project, please contact your DNR Regional Environmental Assessment Ecologist (contact information available at http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html). Please be aware that additional site assessments or review may be required.

Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources. An invoice will be mailed to you under separate cover.

Sincerely,

Lisa Joyal

Ausa Joyal

Endangered Species Review Coordinator

cc: Kevin Mixon, DNR
Jamie Schrenzel, DNR
Richard Davis, DOC
Margaret Rheude, USFWS

Agency Meeting

Freeborn:

On May 5, 2016, the Freeborn team, including Andrea Giampoli (Invenergy; in person), Todd Mattson (WEST; in person), and Karyn Coppinger (Invenergy; by phone), met with Margaret Rheude of the United States Fish and Wildlife Service (USFWS) located at the Twin Cities Field Office in Bloomfield, MN. Rheude is an eagle and bat specialist. The objective of the meeting was to get Rheude's feedback on Freeborn's proposed eagle strategy and how it will be incorporated into its Avian and Bat Protection Plan (ABPP)(MNDOC prefers "ABPP" over "BBCS"). The goal of the meeting was to address agency feedback to limit public comment. The ABPP is currently being drafted, and will be submitted with the state CUP application.

To summarize the outcomes:

- **Formatting:** USFWS accepted Freeborn's proposed formatting, which is to incorporate the eagle strategy into the ABPP, rather than include an eagle management plan as an appendix to the ABPP. This is a positive outcome because the USFWS did not suggest a stand-alone document for eagles which would indicate that the USFWS might eventually want Freeborn to apply for an eagle take permit.
- Adaptive Management: Freeborn suggested adaptive management triggers in the case that an eagle carcass is discovered on site. USFWS shared a draft document containing 18 additional adaptive management triggers to consider, such as a new nest on site or increased use in the project area by eagles. Freeborn asked WEST to put the triggers into a table so that it can record how it addresses each suggestion. Some triggers are already in the draft ABPP, others will be added, and some will not be recommended for inclusion in the ABPP.
- **O&M Trials:** USFWS suggested that Freeborn conduct post-construction monitoring bias trials to test the O&M staff. Freeborn advised that it does not recommend using large attractants in the field for bias trials because it risks attracting eagles and other raptors into the project area. Freeborn also said that O&M staff have other responsibilities. It's Freeborn's impression that the USFWS has not thought these studies through and it will wait until it gets any additional guidance from USFWS before it considers this.
- **Eagle Model:** USFWS requested that Freeborn run the Bayesian Model to estimate eagle take for the site. WEST is going to run the model and Freeborn is planning to include a range for the estimated take to avoid it being misconstrued as an expectation of take.

Summary: The meeting went well and USFWS was pleased to be a part of the conversation. Freeborn will run the Bayesian model, understanding its shortcomings. It will move forward with drafting the ABPP as planned, updating a few sections based on USFWS feedback. If time allows, Freeborn will schedule one more meeting with USFWS, MNDNR and MNDOC to discuss the draft ABPP prior to submittal.

Wildlife Surveys

Freeborn

Wildlife studies were started by WEST in January 2015. Avian use surveys were conducted through December 2015. To compare eagle use results to 2015, an additional three months were surveyed from January 2016 to March 2016. In total, a 15-month avian use survey was completed. Bat activity was recorded from April 2015 to October 2015. There is limited bat habitat in the project area, so no summer presence/absence surveys were conducted. A raptor nest survey was conducted in March 2015, and two nests were documented within two miles to the west of the project boundary between the Shell Rock River and the project. These two nests were further monitored and flight paths were mapped. The eagles that occupied the nests did not fly into the project area during the surveys. Eagle use is moderate at the site, and is concentrated in the northwest and southwest corners (within the vicinity of the river and Albert Lea Lake). Due to higher eagle use in the northwest corner, and other development considerations, the area of highest use near Albert Lea Lake was removed from the project area. Freeborn is drafting an ABPP.



Minnesota Department of Natural Resources

Division of Ecological and Water Resources, Box 25 500 Lafayette Road St. Paul, Minnesota 55155-4025

Phone: (651) 259-5091 E-mail: samantha.bump@state.mn.us

January 18, 2017

Correspondence # ERDB 20150260-0003

Mr. Randy Duncan WEST, Inc. 1710 Douglas Drive, Suite 283 Golden Valley, MN 55422

RE: Natural Heritage Review of the proposed Freeborn Wind Energy Expansion

County	Township (N)	Range (W)	Section(s)
Freeborn	101	19	1-5, 8-17, 20-29, 32-36
Freeborn	101	20	1,8,17,18,20,29
Freeborn	102	19	1-17.20-29.23-36
Freeborn	102	20	2,3,9-12,15,16

Dear Mr. Duncan,

The Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. For the results of this query, please refer to the enclosed database reports (please visit the Rare Species Guide at http://www.dnr.state.mn.us/rsg/index.html for more information on the biology, habitat use, and conservation measures of these rare species). Given the project layout is not available at this time, I am providing the database reports only and have not evaluated the potential for the proposed project to adversely affect these rare features.

Please note that the enclosed reports include records from the Rare Features Database only. For your information, the DNR Native Plant Communities, the MBS Sites of Biodiversity Significance, and MBS Railroad Rights-of-Way Prairies are three other databases available from the Natural Heritage Information System that you may find useful in your conservation planning efforts considering they are found within the project area. GIS shapefiles of these databases can be downloaded from the MN Geospatial Commons website at https://gisdata.mn.gov/. Please refer to the below links for Guidelines for help interpreting this data. We recommend that the project be designed to avoid impacts to these ecologically significant sites.

It should be noted that many SGCN are not tracked in the Natural Heritage Information System (NHIS), and the NHIS does not include records of migrating birds. Wind farms can affect birds due to collision mortality, displacement due to disturbance, habitat fragmentation, and habitat loss. Even if collision mortality rates are low, the additional mortality may be significant for rare species. In addition, the results from some studies suggest that grassland birds are deterred from nesting in otherwise appropriate habitat by the presence of tall structures in the vicinity. We recommend post-construction avian mortality monitoring to provide information regarding unexpected impacts, if any, to rare birds. Knowledge of these types of extraordinary events would allow for the implementation of additional measures to minimize disturbance, such as the curtailment of turbine operations during certain conditions. Regional DNR staff may have more recommendations regarding avian surveys based on local knowledge of the project site.

The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Although there are no NHIS records for bats in the vicinity of the proposed project, all seven of Minnesota's bats can be found throughout Minnesota. The northern long-eared bat (*Myotis septentrionalis*), tricolored bat (*Perimyotis subflavus*), big brown bat (*Eptesicus fuscus*), and little brown bat (*Myotis lucifugus*) are all state-listed species of special concern. River corridors and forested areas provide bat habitat and the potential for turbines to cause bat fatalities. Therefore, turbines should be placed an adequate distance from these areas. Actions, such as feather turbine blades below cut-in speeds, can minimize impacts to these species. We recommend conducting pre-construction acoustic bat surveys and post-construction bat fatality monitoring to provide useful information on the impacts to these species. As the U.S. Fish and Wildlife Service (USFWS) has listed the northern long-eared bat as threatened under the Endangered Species Act (ESA), please coordinate with the USFWS regarding this species.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

The enclosed results include an Index Report and a Detailed Report of records in the Rare Features Database, the main database of the NHIS. To control the release of specific location information, which might result in the destruction of a rare feature, both reports are copyrighted.

The <u>Index Report</u> provides rare feature locations only to the nearest section, and may be reprinted, unaltered, in an environmental review document (e.g., EAW or EIS), municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the index report for any other purpose, please contact me to request written permission. The <u>Detailed Report</u> is for your personal use only as it may include specific location information that is considered nonpublic data under *Minnesota Statutes*, section 84.0872, subd. 2. If you wish to reprint or publish the Detailed Report for any purpose, please contact me to request written permission.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or for an updated review if construction has not occurred within one year.

The Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. To determine whether there are other natural resource concerns associated with the proposed project, please contact your DNR Regional Environmental Assessment Ecologist (contact information available at http://www.dnr.state.mn.us/eco/ereview/erp regioncontacts.html). Please be aware that additional site assessments or review may be required.

Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources. An invoice will be mailed to you under separate cover.

Sincerely,

Samantha Bump

Natural Heritage Review Specialist

Samantha Bump

enc. Rare Features Database: Index Report

Rare Features Database: Detailed Report

Rare Features Database Reports: An Explanation of Fields

Links: MBS Sites of Biodiversity Significance

http://www.dnr.state.mn.us/eco/mcbs/biodiversity_guidelines.html

DNR Native Plant Communities

http://www.dnr.state.mn.us/npc/index.html

Cc: Cynthia Warzecha

Kevin Mixon



Division of Ecological & Water Resources 21371 Highway 15 South New Ulm, MN 56073

February 21, 2017

Ms. Andrea Giampoli Invenergy LLC One South Wacker Drive, Suite 1900 Chicago, IL 60606

Subject:

Freeborn Large Wind Energy Conversion System

MNDNR Preliminary Review - Revised Project Boundary

Freeborn County, MN

Dear Ms. Giampoli:

The Minnesota Department of Natural Resources (MNDNR) appreciates the opportunity to review and comment on the proposed Freeborn Large Wind Energy Conversion System. Please review the "DNR Guidance for Commercial Wind Energy Projects" and "Avian and Bat Survey Protocols For Wind Energy Projects" for our standard commercial wind project recommendations. The guidance document and survev protocols can be located at the following link: (http://www.dnr.state.mn.us/eco/ereview/additional resources.html).

The DNR Guidance For Commercial Wind Energy Projects should be reviewed and considered throughout project development. The following specific sections are known to pertain to this project area: Rare Species and Native Plant Communities, Native Prairie, State Game Refuge, State Trails and Recreational Trail Corridors, Properties in Government Programs or With Conservation Easements, and Lakes, Wetlands, Streams, and Rivers.

The Bat Acoustic Study Report indicates the bat passes per detector night (BPDN) at 10.4 with a standard error of 0.9. Table 4 indicates a higher failure rate of acoustic detectors in late July and August which is when you typically have higher BPDN. The significantly expanded project area contains an unnamed stream that ultimately flows into Woodbury Creek that has forested riparian areas combined with wetlands, grassland, and forested blocks. As such, further discussions should occur concerning the collection of additional bat acoustic data in 2017.

The MNDNR has identified two areas within the project area that may have higher bird and bat use (maps attached). The Avoidance Areas contain an increased amount of habitat that may concentrate birds and bats. The boundaries of the identified Avoidance Areas are drawn to indicate general areas of higher wildlife activity and they are not intended to be exact. As noted in the Bat Acoustic Study Report, under 4.1.1 Spatial Variation, detector station F4g (near a woodlot) and F6g (near a wetland) recorded significantly higher BPDN. Avoiding the placement of turbines in the identified Avoidance Areas may minimize wildlife impacts, including fatalities. The MNDNR recommends that turbines not be placed in the Avoidance Areas as a measure to potentially decrease fatalities and lessen the likelihood of having bat fatality estimates that could warrant operational mitigation (i.e. increased cut-in-speed).

Ms. Andrea Giampoli February 21, 2017 Page 2

The MNDNR recommends that scientifically rigorous fatality monitoring be conducted for this project. The Avian and Bat Survey Protocols referenced above should be reviewed in order to develop a specific fatality monitoring plan. The fatality monitoring plan should be included in the Avian and Bat Protection Plan as it will be a key component to assess project impacts. As a moderate risk site, the MNDNR recommends a minimum of 1 year of fatality monitoring using scientifically valid protocols. The moderate risk level determination is preliminary as the additional bat acoustic data and turbine siting may change the risk determination. Additional years of fatality monitoring may also be warranted depending on the first year results.

During development of the turbine layout it is recommended that 5-6 alternate turbine locations be included. The alternate turbine locations provide an opportunity to avoid or minimize potential impacts to natural resources and to work around other issues that arise during project development.

The Native Prairie Evaluation Report dated September, 2015 will need to be updated to include the expanded project area. Additional comments concerning native prairie or state-listed species may be provided at a later date by Lisa Joyal, MNDNR Natural Heritage Review Coordinator.

The DNR looks forward to working in a positive and collaborative manner on this project to ensure that sustainable energy sources are developed while protecting Minnesota's natural resources. Please contact me directly at (507) 359-6073 if you have any questions about this letter.

Sincerely,

Kevin Mixon

Regional Environmental Assessment Ecologist Division of Ecological and Water Resources

Ec: Lisa Joyal, Endangered Species Review Coordinator Cynthia Warzecha, Environmental Review

Mify

Jim Sehl, EWR Assistant Supervisor

Jeanine Vorland, Area Wildlife Supervisor

Joel Wagar, Parks and Trails

Margaret Rheude, USFWS

Richard Davis, Department of Commerce-EERA

ERDB#20150260

Avoidance Area



Freeborn Communication Record

April 11, 2017, 4:00 p.m.

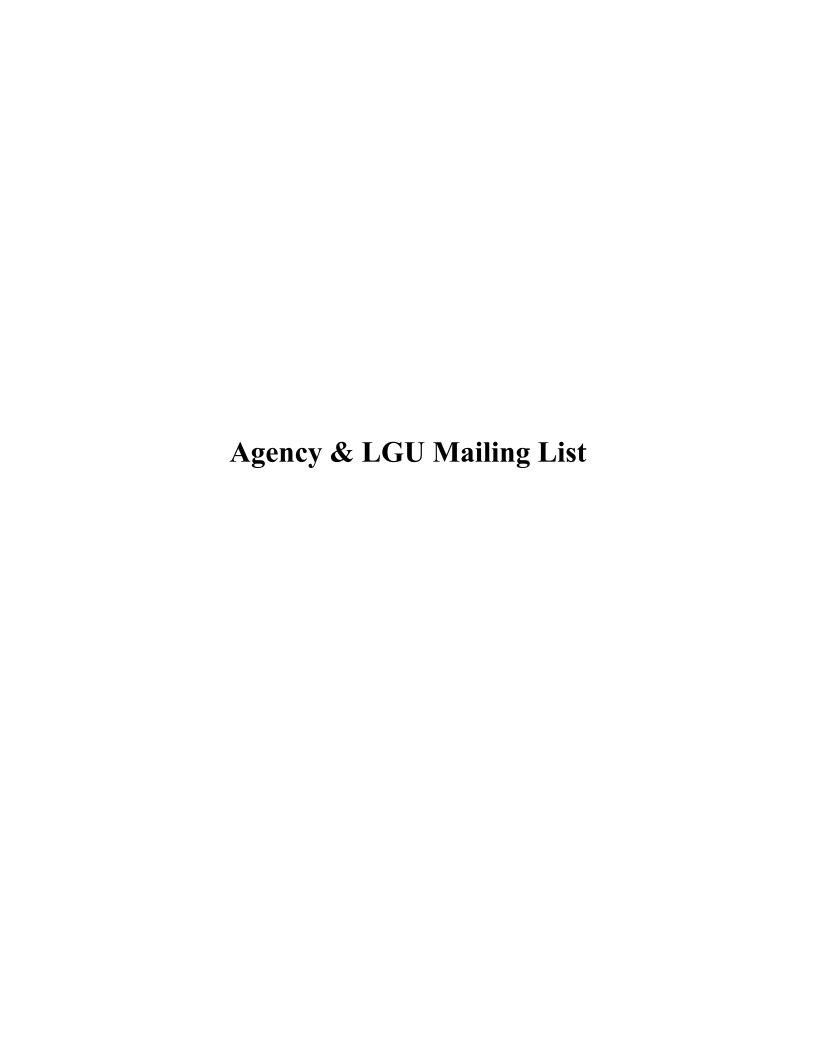
Call attended by: Kevin Mixon (DNR), Sandra Simon (West), Karyn Coppinger (Invenergy), and Andrea Giampoli (Invenergy)

Objective: To follow up on DNR's request for a study that analyzed bat activity at different distance bands from suitable summer habitat, and to determine whether DNR recommended any additional acoustic surveys.

Notes:

Andrea – Invenergy would like to provide a meaningful analysis to meet DNR's goals to better understand bat use at certain distance bands beyond suitable summer habitat; however, previous robust studies have been conducted and Invenergy wouldn't likely meaningfully add to the literature at this scale. Invenergy provided data that demonstrated that it assessed whether it could conduct this analysis with existing data collected in 2015. It also provided citations to the studies previously conducted that it cited on the call.

Kevin – Given that the project area has been limited to a reduced project size, <u>he recommended</u> that we skip any additional acoustics. He was happy with our avoidance of high quality habitat, as seen in the most recent project layout. He asked whether we had communicated with USFWS on the northern long-eared bat, which Invenergy confirmed they had. Kevin added that in their recent PUC applications, Blazing Star and Red Pine Wind had included language on feathering below cut in, which would likely be limited to the date range of 4/1-10/30. Invenergy should look at draft site permit to see the language. He said that Rich Davis and DOC will likely require feathering below cut in on all site permits.



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Confirmed		A2	Full Name	First Name	l and Name	Job Title	Full Address	Address1	8 dd::2	C:L.	State	7:	
Sent	Agency	Agency2	Full Name	First Name	Last Name			Address1	Address2	City	State	Zip	
						Fish and Wildlife Biologist,	4104 American Boulevard East						
X	U.S. Fish & Wildlife Service		Margaret Rheude	Margaret	Rheude	Eagles	Bloomington, MN 55425	4104 American Boulevard East		Bloomington	MN	5542	25
							4101 East 80th Street						
X	U.S. Fish & Wildlife Service		Tony Sullins	Tony	Sullins	Field Office Supervisor	Bloomington, MN 55425	4101 East 80th Street		Bloomington	MN	5542	25
						Environmental Protection	180 5th Street East, Suite 700						
X	U.S. Army Corps of Engineers		Ryan Malterud	Ryan	Malterud	Technician	Saint Paul, MN 55101-1678	180 5th Street East	Suite 700	Saint Paul	MN	55101-1678	
emailed this	, ,		,										
to Joyce H.	Department of Commerce- Nation	اد											
3/31/17	Telecommunications Information												
afternoon	Administration	1	Joyce Henry	Joyce	Henry	Administrator	jhenry@ntia.doc.gov						
	Minnesota Department of	Agriculture Marketing and					625 Robert Street North						
Х	Agriculture	Development Division	Bob Patton	Bob	Patton	Supervisor	North St Paul, MN 55155	625 Robert Street North		North St Paul	MN	5515	55
	Minnesota Department of						1st National Bank Building						
	Employment and Economic						322 Minnesota Street, Suite E-200)					
x	Development		Kevin McKennon	Kevin	McKennon	Deputy Commissioner	Saint Paul, MN 55101-1351	1st National Bank Building	322 Minnesota Street, Suite E-200	Saint Paul	MN	55101-1351	
	Minnesota Department of					Energy Environmental Review	85 7th Place East, Suite 500						
v	Commerce	Energy Facility Permitting	John Wachtler	John	Wachtler	Director	Saint Paul, MN 55101-2198	85 7th Place East	Suite 500	Saint Paul	MN	55101-2198	
^	Commerce	Lifergy racinty remitting	John Wachtier	301111	Waciitiei	Birector		65 / til i lace Last	Suite 300	Janit i aui	IVIIV	33101-2138	
v	Minnesta Density and after the		David Allers and	Devil	Alleman	Assistant Commission	P.O. Box 64975	D O Devi 64075		Saint Baul	NAN!	55164-4025	
Х	Minnesota Department of Health		Paul Allwood	Paul	Allwood	Assistant Commissioner	Saint Paul, MN 55164-4025	P.O. Box 64975		Saint Paul	MN	55164-4025	
	Minnesota Department of Natural						500 Lafayette Road						
X	Resources		Cynthia Warzecha	Cynthia	Warzecha	Energy Project Planner	Saint Paul, MN 55155-4025	500 Lafayette Road		Saint Paul	MN	55155-4025	
	Minnesota Department of Natural					Regional Environmental	261 Highway 15 S.						
Х	Resources		Kevin Mixon	Kevin	Mixon	Assessment Ecologist	New Ulm, MN 56073	261 Highway 15 S.		New Ulm	MN	5607	73
	Minnesota Department of					_	395 John Ireland Blvd, MS 678						
x	Transportation		Marilyn Remer	Marilyn	Remer	Utilities Engineer	Saint Paul, MN 55155	395 John Ireland Blvd.	MS 678	Saint Paul	MN	5515	55
			Mary Ann	,		Manager of Government	345 Kellogg Boulevard West						
v	Minnesota Historical Society		Heidemann	Mary Ann	Heidemann	Programs and Compliance	Saint Paul, MN 55102	345 Kellogg Boulevard West		Saint Paul	MN	5510	12
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	Minnesota Department of Public		Attn:				445 Minnesota Street, Suite 1000						
Х	Safety		Commissioners	Commissioners		N/A	Saint Paul, MN 55101	445 Minnesota Street	Suite 1000	Saint Paul	MN	5510)1
	Minnesota Pollution Control					Supervisor, Environmental	520 Lafayette Road N						
X	Agency		Craig Affeldt	Craig	Affeldt	Review Unit	Saint Paul, MN 55155	520 Lafayette Road N		Saint Paul	MN	5515	55
	Minnesota Office of the State						200 Tower Avenue						
Х	Archaeologist		Scott Anfinson	Scott	Anfinson	State Archaeologist	Saint Paul, MN 55111	200 Tower Avenue		Saint Paul	MN	5511	11
							345 Kellogg Boulevard West						
x	Minnesota Historical Society		Ton Cinadr	Ton	Cinadr	Survey and Inventory Manager	Saint Paul, MN 55102	345 Kellogg Boulevard West		Saint Paul	MN	5510)2
	,					, ,	525 Park Street, Suite 470	55					
v	Greater Minnesota Partnership		Dan Dorman	Dan	Dorman	Executive Director	St. Paul, MN 55103	525 Park Street	Suite 470	Saint Paul	MN	5510	3 Phone: 651.225.8840
Α	Greater Willingsota Farthership		Dan Donnan	Dan	Dorman	EXCEUTIVE BITCETOI	2610 Y.H. Hanson Avenue	323 Fairk Street	Saite 470	Suite Fuui	TVIIV	3310	75 11011C. 051.225.004
	Albant I an Francis Davidson						P.O. Box 370						
	Albert Lea Economic Development												
Х	Agency		Ryan Nolander	Ryan	Nolander	Executive Director	Albert Lea, MN 56007	2610 Y.H. Hanson Avenue	P.O. Box 370	Albert Lea	MN	5600	07 Phone: 507.373.393
				1			411 S. Broadway	1					
				1			P.O. Box 1147	411 S. Broadway	P.O. Box 1147			5600	07
X	Administration		John Kluever	John	Kluever	Administrator	Albert Lea, MN 56007			Albert Lea	MN		
							411 S. Broadway						
				1			P.O. Box 1147	411 S. Broadway	P.O. Box 1147			5600	07
X	Environmental Services		Wayne Sorensen	Wayne	Sorensen	Planning and Zoning	Albert Lea, MN 56007	1		Albert Lea	MN		
			,	1-,	22.2.30.1		3300 Bridge Avenue	†				<u> </u>	
v	Highway Department		Susan G. Miller	Susan	Miller	Engineer	Albert Lea, MN 56007	3300 Bridge Avenue		Albert Lea	MN	5600)7
^	ingnway Department		Jusan G. Willel	Jusan	IAIIIIEI	Engineer Public Health		3300 Bridge Averide		Albeit Lea	INIIA	+	
				1			411 S. Broadway						
			L	L		Director/Community Health	P.O. Box 1147	411 S. Broadway	P.O. Box 1147			5600)/
X	Public Health		Sue Yost, RN/PHN	Sue	Yost	Services Administrator	Albert Lea, MN 56007			Albert Lea	MN		
				1			18893 800th Avenue						
X	Hayward Township		Cynthia Haugen	Cynthia	Haugen	Clerk	Hayward, MN 56043	18893 800th Avenue		Hayward	MN	5604	13 Phone: 507.391.443
							88141 180th Street						
X	Oakland Township		Cheryl Brandt	Cheryl	Brandt	Clerk	Austin, MN 55912	88141 180th Street		Austin	MN	5591	12 Phone: 507.437.133
			,	1 '			80747 River Road	1		-		3331	
Y	Shell Rock Township		Donald Flatness	Donald	Flatness	Clerk	Glenville, MN 56036	80747 River Road		Glenville	MN	5603	36 Phone: 507.448.282
^	SHELL ROCK TOWNSHIP		Dollaiu Fidiliess	Dollaiu	Flattle55	CIEIX		50747 RIVEL RODU		Gieriville	IVIIN	5603	JULI 11011C. JUL.446.282
v	Landan Farmaki		Francis I	E.c.	t to so to	Clark	87340 135th Street	07240 42545 64		Class III.			C Di
	London Township	i	Erin Hornberger	Erin	Hornberger	Clerk	Glenville, MN 56036	87340 135th Street	1	Glenville	MN	5603	36 Phone: 507.402.550

Sample Request for Comment Letters & Mail Receipts



Via Certified Mail

March 31, 2017

Name, Title Agency/Company Address City, State, Zip Code

RE: Freeborn Wind Farm, Freeborn County, Minnesota

Dear	
Deai	

Freeborn Wind Energy LLC, a wholly-owned subsidiary of Invenergy LLC, is proposing a wind energy project in Freeborn County, Minnesota and Worth County, Iowa called the Freeborn Wind Farm (Project). The purpose of this letter is to request agency comments and gather additional information regarding the Minnesota-portion of the Project Boundary as indicated in the attached Figure 1. Comments and information we receive will be included in the Site Permit Application for a Large Wind Energy Conversion System we will be submitting to the Minnesota Public Utilities Commission (MPUC).

The locations of turbines, access roads, collection lines, crane paths and related facilities are being finalized. The following sections are located within the Project Boundary in Minnesota.

Table 1 Sections within the Freeborn Wind Farm Project Boundary

County	Civil Township Name	Township	Range	Sections
Freeborn	Hayward	102	20	12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36
Freeborn	London	101	19	13, 14, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32, 33
Freeborn	Oakland	102	19	7, 8, 9, 14, 15, 16, 17, 18, 19, 20, 21, 22
Freeborn	Shell Rock	101	20	1, 2, 8, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 34, 35, 36



The Project would include a nameplate wind energy capacity of up to 100 megawatts (MW) in Minnesota. Project facilities include:

- Wind turbines and associated equipment;
- Gravel access roads to turbine sites and necessary modification to existing roads;
- Buried electric collection lines;
- Overhead electric collection lines:
- An operations and maintenance facility;
- A Project substation;
- Permanent meteorological towers

Temporary facilities for the Project include staging areas for construction of the Project, two temporary meteorological towers that are currently in place, temporary batch plant area, and improvements to public and private roads for delivery of materials and equipment.

Please respond with any comments and/or questions within 30 days of receipt of this letter so that we can address, as appropriate, and include them within the MPUC Site Permit Application.

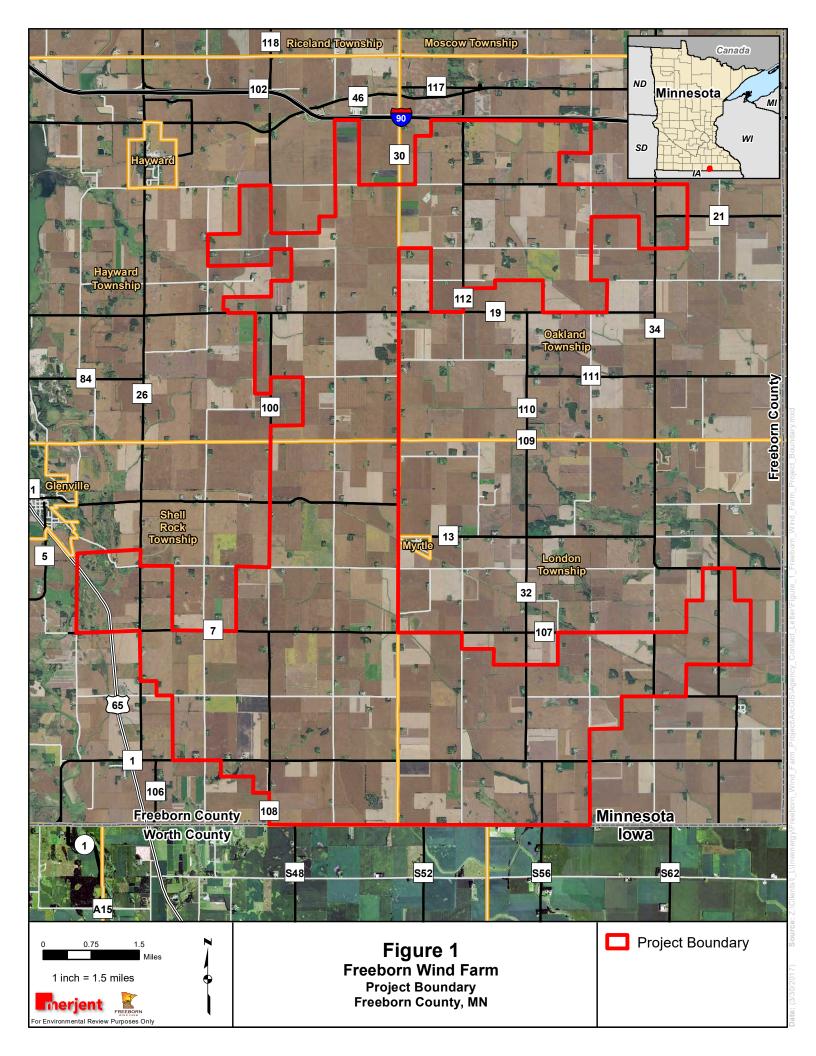
Should you require additional information, please feel free to contact me at dlitchfield@invenergyllc.com, 312.582.1057, or Freeborn Wind Energy LLC, c/o Invenergy LLC, One South Wacker Drive, Suite 1800, Chicago, IL 60606.

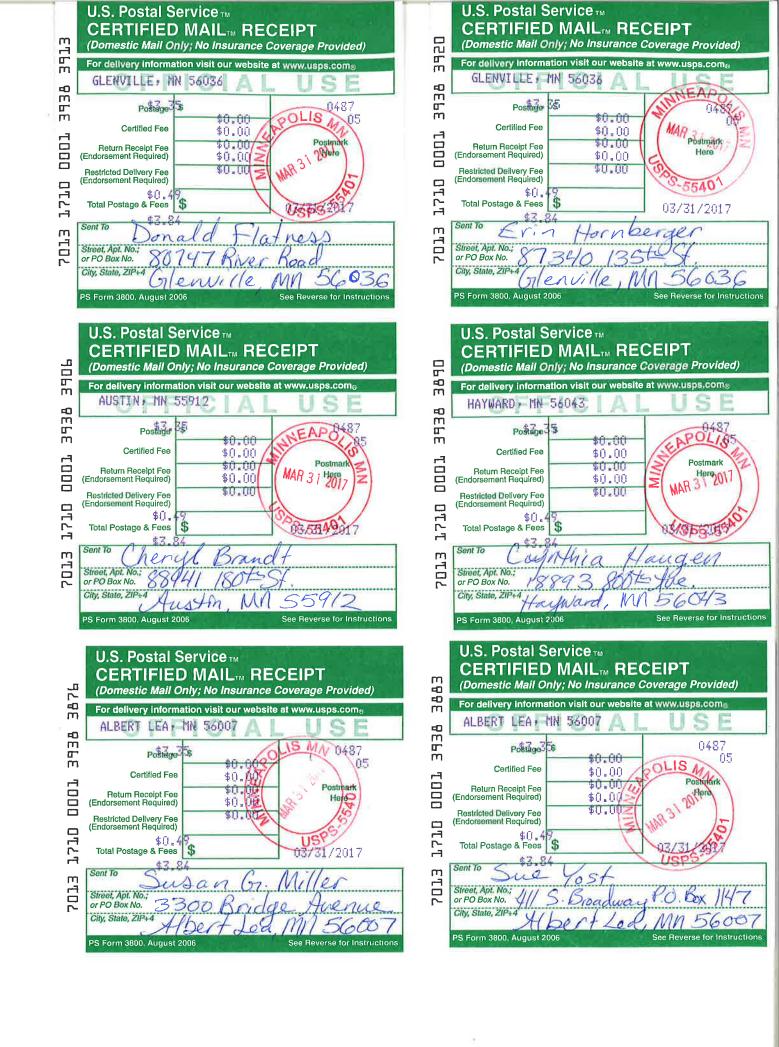
Sincerely,

Freeborn Wind Energy LLC

Dan Litchfield Senior Manager, Project Development

Enc. Figure 1 Project Boundary Map











U.S. Postal Service CERTIFIED MAIL RECEIPT 3661 (Domestic Mail Only; No Insurance Coverage Provided) For delivery information visit our website at www.usps.com MINNEAPOLIS, IN 55425 3938 Politige 3 \$0.00 \$0.00 \$0.00 \$0.00 Certified Fee 1000 Postmark Return Receipt Fee (Endorsement Required) Here Restricted Delivery Fee (Endorsement Required) \$0.00 1710 \$(i .4 Total Postage & Fees 03/31/2017 Street, Apt. No.; or PO Box No. 4 City, State, ZIP See Reverse for Instructions PS Form 3800, August 2006

31

- 8



April 13, 2017

Name, Title Agency/Company Address City, State, Zip Code

RE: Freeborn Wind Farm, Freeborn County, Minnesota

Dear	
Deai	

We previously sent you a letter on March 31 and have gotten some questions that we want to address. The map depicted a proposed project boundary and is not meant to imply that all landowners within this project boundary are participating in the project. The map is meant to show the maximum potential extent of the project, and thus the area the project needs to evaluate for potential impacts. Comments and information we receive will be included in the Site Permit Application for a Large Wind Energy Conversion System we will be submitting to the Minnesota Public Utilities Commission (MPUC).

The locations of turbines, access roads, collection lines, crane paths and associated facilities are being finalized and will be included in our site permit application. We appreciate your early feedback and welcome your ongoing participation in the MPUC permitting process.

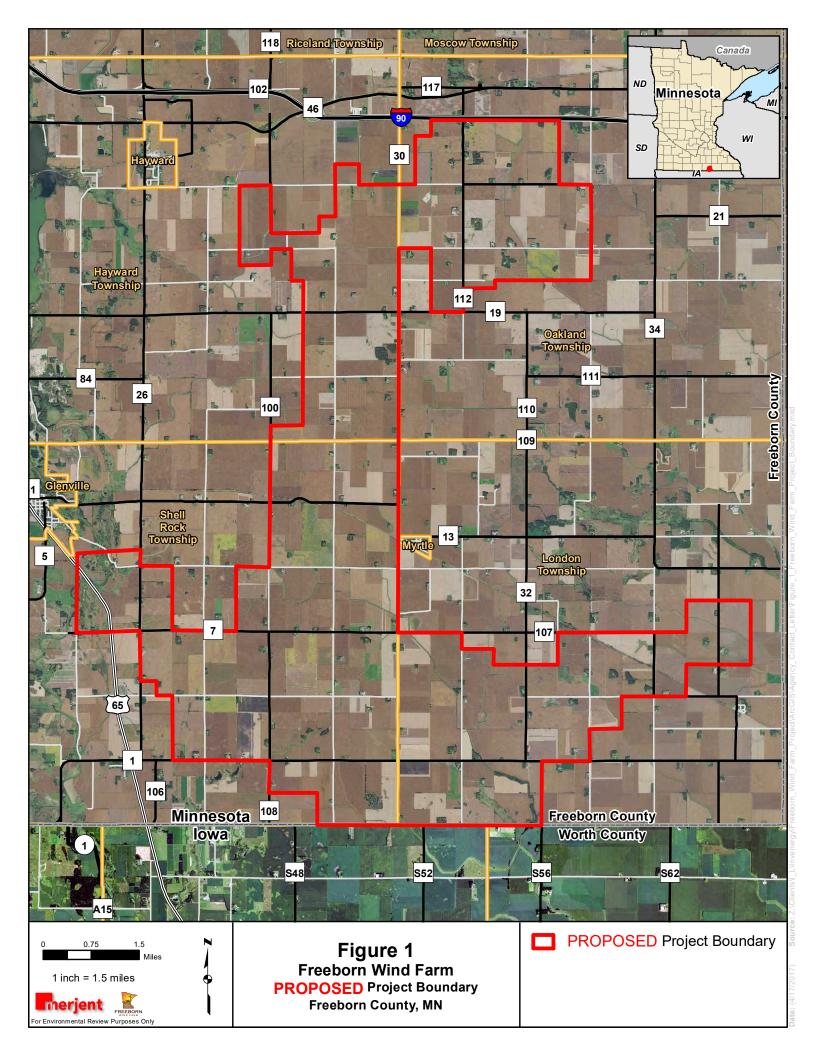
Should you require additional information, please feel free to contact me at dlitchfield@invenergyllc.com, 773-318-1289 (mobile) 312.582.1057 (office), or by mail to Freeborn Wind Energy LLC, c/o Invenergy LLC, One South Wacker Drive, Suite 1800, Chicago, IL 60606.

Sincerely,

Freeborn Wind Energy LLC

Dan Litchfield Senior Manager, Project Development

Enc. Figure 1 Project Boundary Map





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Rate Estimate:

Protection:

Description:

Dimensions:

Service Level:

COD Amount:

Special Service:

Weight:

Ship Ref:

-Please fold or cut in half-----

SENDER'S RECEIPT

AirbIII#:

1ZE268880196471922

To(Company): London Township 87340 135th Street

Glenville,MN 56036 United States

Attention To: Erin Hornberger, Clerk

0000000000 Phone#:

Sent By: jknapp Phone#:

612-746-3660

Payment Options: Date Printed:

Bill Shipment To: Sender

Bill To Account: E26888

2017-04-17 Ship Date:

UPS Signature (optional)

Route

Date

\$25.04 None Required

Letter

\$0.00

2017-04-17

 $0 \times 0 \times 0$

Invenergy/Freeborn

UPS Next Day Air

Time

Amount: \$0



Airbill: 1ZE268880199279797



Create New Shipment

View Pending Shipments

-----Please fold or cut in half---

SENDER'S RECEIPT

Airbill#:

1ZE268880199279797

To(Company): Shell Rock Township 80747 River Road

Glenville, MN 56036 United States

Attention To: Donald Flatness, Clerk

000000000 Phone#:

Sent By: jknapp

Phone#: 612-746-3660 Rate Estimate:

\$25.04

Protection:

None Required Amount: \$0

Description:

Welght:

Letter

Dimensions:

0 X 0 X 0

Ship Ref:

Invenergy/Freeborn Wind

Service Level:

UPS Next Day Air

Special Service:

COD Amount: \$0.00

Payment Options:

Date Printed:

2017-04-17

Bill Shipment To: Sender

BIII To Account: E26888

Ship Date:

2017-04-17

UPS Signature (optional)

Route

Date

Time





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SENDER'S RECEIPT

AirbIII#:

1ZE268880199665584

To(Company): Oakland Township 88141 180th Street

Austin, MN 55912 United States

Attention To: Cheryl Brandt, Clerk

Phone#:

0000000000

Sent By: Phone#: jknapp 612-746-3660 Rate Estimate:

\$24.68

None Required

Amount: \$0

Protection: Description:

Weight:

Letter

Dimensions:

0 X 0 X 0

Ship Ref:

Invenergy/Freeborn Wind

UPS Next Day Air Service Level:

Special Service:

COD Amount:

\$0.00

Payment Options:

Date Printed:

Bill Shipment To: Sender

BIII To Account:

E26888

Ship Date:

2017-04-17

2017-04-17

UPS Signature (optional)

Route

Date

Time





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SENDER'S RECEIPT

AirbIII#:

1ZE268880198710973

To(Company): Hayward Township 18893 800th Avenue

Hayward, MN 56043 United States

Attention To: Cynthla Haugen, Clerk

Phone#: 000000000

Sent By: jknapp

Phone#: 612-746-3660 Rate Estimate:

\$25.04

Protection:

None Required

Amount: \$0

Description:

Weight:

Letter

Dimensions:

0 X 0 X 0

Ship Ref:

Invenergy/Freeborn Wind

Service Level:

Special Service:

UPS Next Day Air

COD Amount:

\$0.00 Payment Options:

Date Printed:

2017-04-17

Bill Shipment To: Sender

BIII To Account:

E26888

Ship Date:

2017-04-17

UPS Signature (optional)

Route

Date

Time





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SENDER'S RECEIPT

Airbill#:

1ZE268881395156556

To(Company):

Freeborn County Administration

411 S. Broadway

Albert Lea, MN 56007

United States

Attention To: John Kluever, County Administrator

Phone#:

507-377-5115

Sent By:

jknapp

Phone#:

612-746-3660

Rate Estimate:

\$24.36

Protection:

None Required Amount: \$0

Description:

Welght:

Letter

Dimensions:

 $0 \times 0 \times 0$

Ship Ref:

Invenergy/Freborn Wind

Service Level:

UPS Next Day Air Saver

Special Service:

COD Amount: \$0.00

Payment Options:

Date Printed:

2017-04-17

Bill Shipment To: Sender

Bill To Account:

E26888

Ship Date:

2017-04-17

UPS Signature (optional)

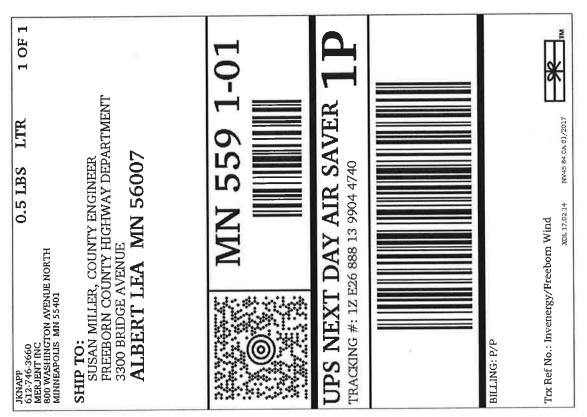
Route

Date

Time



Airbill: 1ZE268881399044740



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SENDER'S RECEIPT

Airbill#: 1ZE268881399044740

To(Company):

Freeborn County Highway Department

3300 Bridge Avenue

Albert Lea, MN 56007

United States

Attention To: Susan Miller, County Engineer

Phone#:

Sent By:

jknapp

Phone#:

612-746-3660

Rate Estimate:

\$24.36

None Required

Amount: \$0

Protection: Description:

Welght:

Letter

Dimensions:

0 X 0 X 0

Ship Ref:

Invenergy/Freeborn WInd

Service Level:

UPS Next Day Air Saver

Special Service:

COD Amount:

\$0.00

Payment Options:

Date Printed:

2017-04-17

Bill Shipment To: Sender

BIII To Account:

E26888

Ship Date:

2017-04-17

UPS Signature (optional)

Route

Date

Time





Create New Shipment

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SENDER'S RECEIPT

Airbill#:

1ZE268881396519966

To(Company):

Freeborn County Environmental Servi

411 S. Broadway

Albert Lea, MN 56007

United States

Attention To: Wayne Sorensen, Planning and Zoning

Phone#:

507-377-5186

Sent By:

jknapp

Phone#:

612-746-3660

Rate Estimate:

\$24.36

Protection:

None Required

Amount: \$0

Description:

Welght:

Letter

Dimensions:

0 X 0 X 0

Ship Ref:

Service Level:

Invenergy/Freeborn Wind UPS Next Day Air Saver

Special Service:

COD Amount:

Payment Options:

Date Printed:

2017-04-17

\$0.00

Bill Shipment To: Sender

Bill To Account:

E26888

Ship Date:

2017-04-17

UPS Signature (optional)

Route

Date

Time



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SENDER'S RECEIPT

Airbill#:

1ZE268881396368530

To(Company):

Freeborn County Public Health

411 S. Broadway

Albert Lea, MN 56007

United States

Attention To: Sue Yost, Public Health Director/Co

Phone#:

507-377-5100

Sent By:

jknapp

Phone#:

612-746-3660

Rate Estimate:

\$24.36

Protection:

None Required

Amount: \$0

Description:

Welght:

Letter

Dimensions:

0 X 0 X 0

Ship Ref:

Invenergy/Freeborn Wind

Service Level:

UPS Next Day Air Saver

Special Service:

COD Amount: \$0.00

Payment Options:

Date Printed:

2017-04-17

Bill Shipment To: Sender Bill To Account:

E26888

Ship Date:

2017-04-17

UPS Signature (optional)

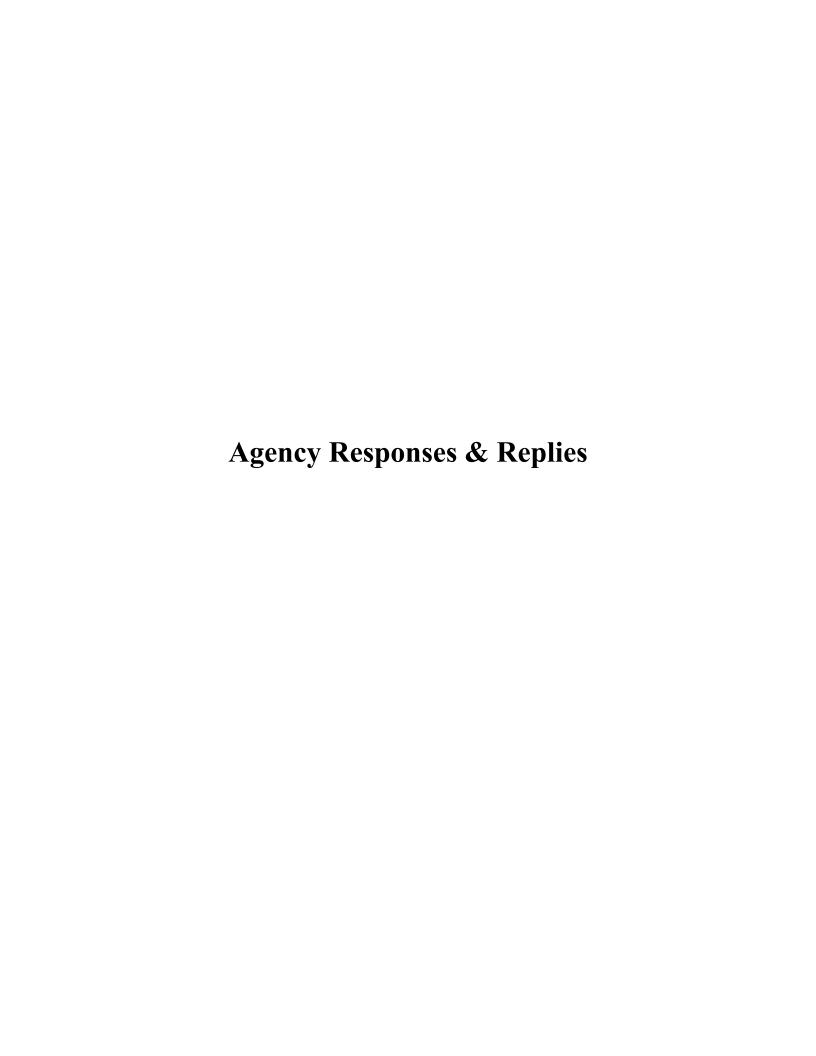
Route

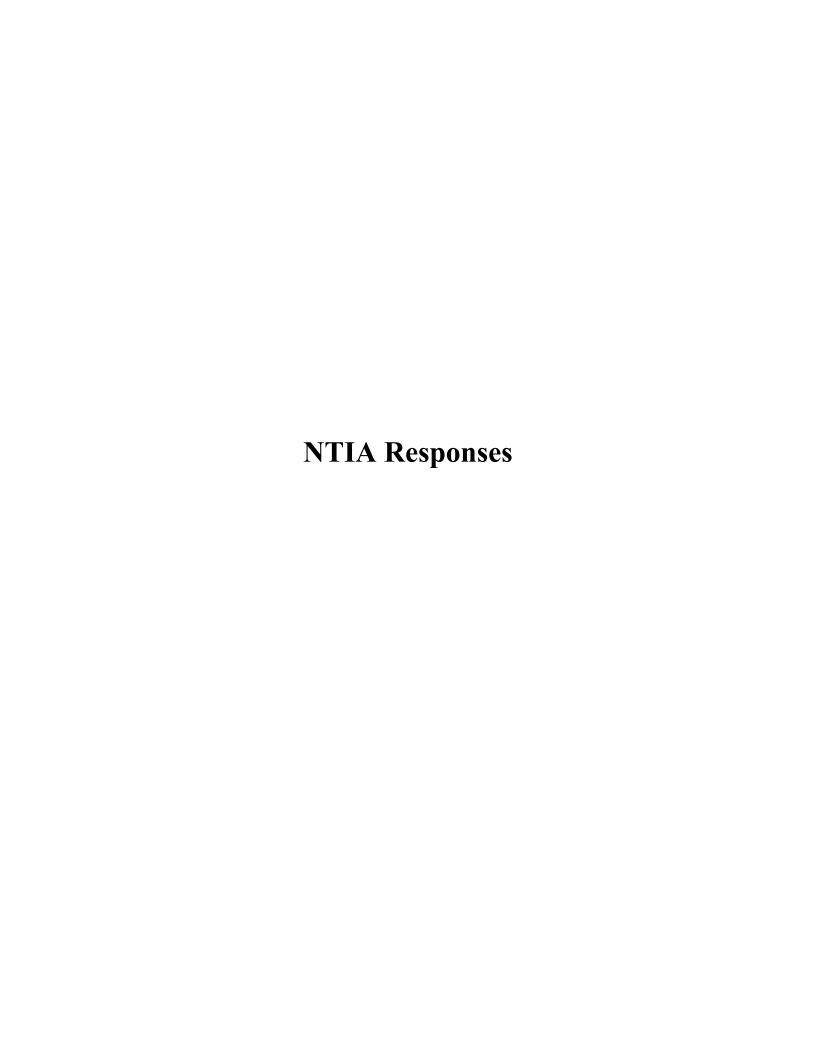
Date

Time



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FEO -3 2017

Mr. Frank O'Brien COMSEARCH 19700 Janelia Farm Blvd. Ashburn, VA 20147

Re: Freeborn Project: Freeborn & Mower Counties, MN

and Worth County, IA

Dear Mr. O'Brien:

In response to your request on December 12, 2016, the National Telecommunications and Information Administration provided to the federal agencies represented in the Interdepartment Radio Advisory Committee (IRAC) the plans for the Freeborn Wind Project, located in Freeborn and Mower Counties, Minnesota and Worth County, Iowa.

After a 45 day period of review, no agencies had issues with turbine placement in this area.

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

Thank you for the opportunity to review these proposals.

Peter A. Tenhula

Deputy Associate Administrator Office of Spectrum Management

To: Litchfield, Daniel; Birmingham, Daniel

Cc: Svedeman, Michael; Dean Sather; Brie Anderson

Subject: RE: Freeborn Wind Farm

From: Henry, Joyce [mailto:JHenry@ntia.doc.gov]

Sent: Monday, April 03, 2017 10:50 AM

To: Litchfield, Daniel < DLitchfield@invenergyllc.com>

Subject: RE: Freeborn Wind Farm

Good Morning, Mr. Litchfield:

Please see the attached SAMPLE of submittal letter for your use. Could you please re-submit this project in the format provided? This sample is for ALL wind turbine submissions to this office for review.

Thank you for your attention to this matter. If you have any questions, please contact me by e-mail.

MRS. Joyce Countee Henry DOC/NTIA/OSM HQ 202-482-1850/51 jhenry@ntia.doc.gov

From: Litchfield, Daniel [mailto:DLitchfield@invenergyllc.com]

Sent: Friday, March 31, 2017 6:03 PM

To: Henry, Joyce

Cc: Brie Anderson; Joe Sedarski **Subject:** Freeborn Wind Farm

Dear Mr. Henry,

Freeborn Wind Energy LLC, a wholly-owned subsidiary of Invenergy LLC, is proposing a wind energy project in Freeborn County, Minnesota and Worth County, Iowa called the Freeborn Wind Farm (Project). The purpose of this letter is to request agency comments and gather additional information regarding the Minnesota-portion of the Project Boundary as indicated in the attached Figure 1. Comments and information we receive will be included in the Site Permit Application for a Large Wind Energy Conversion System we will be submitting to the Minnesota Public Utilities Commission (MPUC).

The locations of turbines, access roads, collection lines, crane paths and related facilities are being finalized. The following sections are located within the Project Boundary in Minnesota.

Table 1 Sections within the Freeborn Wind Farm Project Boundary

County	Civil Township Name	Township	Range	Sections
Freeborn	Hayward	102	20	12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36
Freeborn	London	101	19	13, 14, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32, 33
Freeborn	Oakland	102	19	7, 8, 9, 14, 15, 16, 17, 18, 19, 20, 21, 22

County	Civil Township Name	Township	Range	Sections
Freeborn	Shell Rock	101		1, 2, 8, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 34, 35, 36

The Project would include a nameplate wind energy capacity of up to 100 megawatts (MW) in Minnesota. Project facilities include:

- Wind turbines and associated equipment;
- Gravel access roads to turbine sites and necessary modification to existing roads;
- Buried electric collection lines;
- Overhead electric collection lines;
- An operations and maintenance facility;
- A Project substation;
- Permanent meteorological towers

Temporary facilities for the Project include staging areas for construction of the Project, two temporary meteorological towers that are currently in place, temporary batch plant area, and improvements to public and private roads for delivery of materials and equipment.

Please respond with any comments and/or questions within 30 days of receipt of this letter so that we can address, as appropriate, and include them within the MPUC Site Permit Application.

Should you require additional information, please feel free to contact me at dlitchfield@invenergyllc.com, 312.582.1057, or Freeborn Wind Energy LLC, c/o Invenergy LLC, One South Wacker Drive, Suite 1800, Chicago, IL 60606.

Sincerely,

Dan Litchfield | Senior Manager, Project Development Invenergy | One South Wacker Drive, Suite 1800, Chicago, IL 60606 <a href="https://discommons.org/licharps/licha

This electronic message and all contents contain information which may be privileged, confidential or otherwise protected from disclosure. The information is intended to be for the addressee(s) only. If you are not an addressee, any disclosure, copy, distribution or use of the contents of this message is prohibited. If you have received this electronic message in error, please notify the sender by reply e-mail and destroy the original message and all copies.

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This electronic message and all contents contain information which may be privileged, confidential or otherwise protected from disclosure. The information is intended to be for the addressee(s) only. If you are not an addressee, any disclosure, copy, distribution or use of the contents of this message is prohibited. If you have received this electronic message in error, please notify the sender by reply e-mail and destroy the original message and all copies.

Below is information that gives most of the instructions that are needed to complete the process of submitting a turbine request for review. It should be stressed that the NTIA/IRAC process is not mandatory but tries to fill a possible void of wind energy projects trying to coordinate with the federal telecommunications. Neither wind energy providers nor the federal agencies are required to participate. NTIA is used as a conduit between the parties in an attempt to resolve issues as early in the process as possible, and to try to connect the right people talking to one another. **Note that NTIA has no regulatory authority in this process.**

NTIA has an *informal* process for reviewing wind energy projects with respect to communications systems.

The process is described below.

Developer sends letter (attached is a sample letter which is always scanned in one Adobe file, as regular mail is slow, and not totally reliable within Commerce) to me (jhenry@ntia.doc.gov). Note that the files you send should not be too big, e.g., 2-3 Mb is the maximum size, or it will cause server problems when files are forwarded to the agencies for review. Also in the map(s) you send, we like as much detail as possible for the local area where the project is going to be implemented. Also, I want to restate that this is a voluntary process where NTIA is the funnel to get discussion started between the wind energy side and the agencies. The agencies we funnel this info to are limited to the IRAC agencies (for more info on IRAC, please see http://www.ntia.doc.gov/osmhome/irac.html)) and this process does not eliminate the need for the wind energy facilities to meet any other requirements specified by law, e.g., this review does not eliminate any need that may exist to coordinate with the Federal Aviation Administration (FAA) concerning flight obstruction.

Once your letter is received, I will then send to an e-location that is accessible to all agencies for electronic review; the agencies have 45 calendar days to respond. When the 45 day time limit has elapsed, agency comments are accumulated and included in a letter signed by the Deputy, which I will send to you after an additional 5-7 calendar days. These comments may include some information about any issues and a POC (point of contact) at the agency who commented for you to have further discussions.

FYI, we refer all the wind energy notification requests to all of the IRAC agencies. This includes Army, Air Force, and Navy (a list of all the agencies can be found at http://www.ntia.doc.gov/osmhome/iracdefn.html and below).

As this wind energy notification is being done on a voluntary basis, not 100% sure what systems the agencies take into account, or even if they look at all the notifications. The issues with radars have been the primary concern in responses from the agencies.

Date: The date of this submission

Type of Notification: *example*: **Revision 1**

Enter "New" if this project is being *submitted for the FIRST time*. Enter "Revision #" if you are correcting/revising a previously submitted project.

Project: example: Tri-Color Sand Wind Energy Project

County(ies): example: Blackwood and Jayco

For projects covering multiple counties, include all county names.

State: *example:* **Florida**

Project Sponsor: The name of the firm responsible for the project and a point of contact, phone number and complete USPS <u>and</u> e-mail address.

Turbine Description:

level

Number of Turbines: *estimated final number* of wind turbines to be erected Turbine Hub Height AGL (meters): hub height above ground level Turbine Blade Diameter (meters): diameter of turbine blades (tip to tip) Max Blade Tip Height AGL (meters): highest point the blade tip will be above ground

Turbine Locations: First identify the datum of latitude and longitude coordinates provided, which will be either WGS84 or NAD83 for North America. In a tabular list provide the identifier for each turbine and its latitude and longitude in the following format. For latitude use DD MM SS .XXX for all northern latitudes, for longitude use DDD MM SS. XXX for all western longitudes, where each D represents a degree digit, each M represents a minute digit, S a second digit and(depending upon the available accuracy) XXX as thousandths of a second. Separate the degrees from the minutes and the minutes from the seconds with a colon (:). Use a row for each wind turbine.

Identifier	Latitude	Longitude
Identifier of first turbine	38:53:32.280	077:01:54.840
Identifier of second turbine	38:53:32.000	077:02:09.000
	38:53:32.280	077:01:24.000
•••	38:53:32.280	077:01:39.840
•••	38:53:32.280	077:02:54.840
	38:53:47.880	077:01:54.840
	38:53:47.880	077:02:09.000
Identifier of last turbine	38:53:47.880	077:01:24.000

NOTE: A spreadsheet containing this data as an attachment is acceptable.

Wind Farm Boundary Points: If the specific locations of the turbines have not been selected, identify the boundaries of an area that will contain the proposed facility. Using latitude/longitude coordinates, complete a polygon that will enclose the potential turbine locations. Please identify the datum of LAT and LONG coordinates provided, either WGS84 or NAD83 for North America. Use as many points as necessary to accurately enclose the area to be used. As above, provide and identifier for each point. The last point is considered to connect to the first point without re-specifying the first point again.

Identifier	Latitude	Longitude
Pt1	38:53:32.280	077:01:54.840
Pt2	38:53:32.000	077:02:09.000
Pt3	38:53:32.280	077:01:24.000
	38:53:32.280	077:01:39.840
	38:53:32.280	077:02:54.840
	38:53:47.880	077:01:54.840
	38:53:47.880	077:02:09.000
Ptn	38:53:47.880	077:01:24.000

Maps: please provide two maps, a large-scale map showing the whole state and a county-scale map. On the state map, include a dot or small square showing the project location. Providing these maps will expedite review of the project since each agency will not have to create their own maps of the project. Below are examples of the two types of maps.



STATE MAP: MISSOURI (SAMPLE ONLY)



COUNTY MAP: JACKSON COUNTY, MISSOURI (Sample only)

If you have any questions about this process, please email me.

Joyce Countee Henry DOC/NTIA/OSM HQ 1401 Constitution Ave NW HCH Bldg., Rm 4099A Washington, DC 20230 202-482-1850 (office line) 202-482-2215 (private line)

From: Henry, Joyce <JHenry@ntia.doc.gov>

Sent: Friday, April 7, 2017 2:14 PM **To:** 'faslist@osmmail.ntia.doc.gov'

Subject: ^^Wind Turbine Action Item^^ Freeborn Project: Freeborn County, MN and Worth County, IA **Attachments:** Freeborn Maps_2017_04_06_Project_Boundary.pdf; notifyletter_Freeborn Wind_INVENERGY.docx

Hello Everyone,

Please find attached an **INVENERGY** turbine proposal for the Freeborn Wind Farm, located in Freeborn County, Minnesota and Worth County, Iowa.

Please provide by C.O.B. May 22, 2017, any comments or concerns; and, DO NOT REPLY TO ALL unless the desired intent is to respond to the entire FAS Mailing LIST! Replying to all may create unnecessary traffic to the Listserv.

Your comments will be sent by email to <u>jhenry@ntia.doc.gov</u>. If you indicate any concerns, please include <u>all appropriate</u> contact information in your response.

I will identify any concerns raised by the agencies and prepare our NTIA Response Letter. **Your contact information to include e-mail and USPS address**, will be important for any follow-up from the wind project developers.

Joyce C. Henry DOC/NTIA/OSM HQ Admin Assistant 202-482-2215 jhenry@ntia.doc.gov

From: Henry, Joyce <JHenry@ntia.doc.gov>

Sent: Friday, April 7, 2017 3:17 PM

To: Litchfield, Daniel

Subject: Freeborn Wind Farm Project

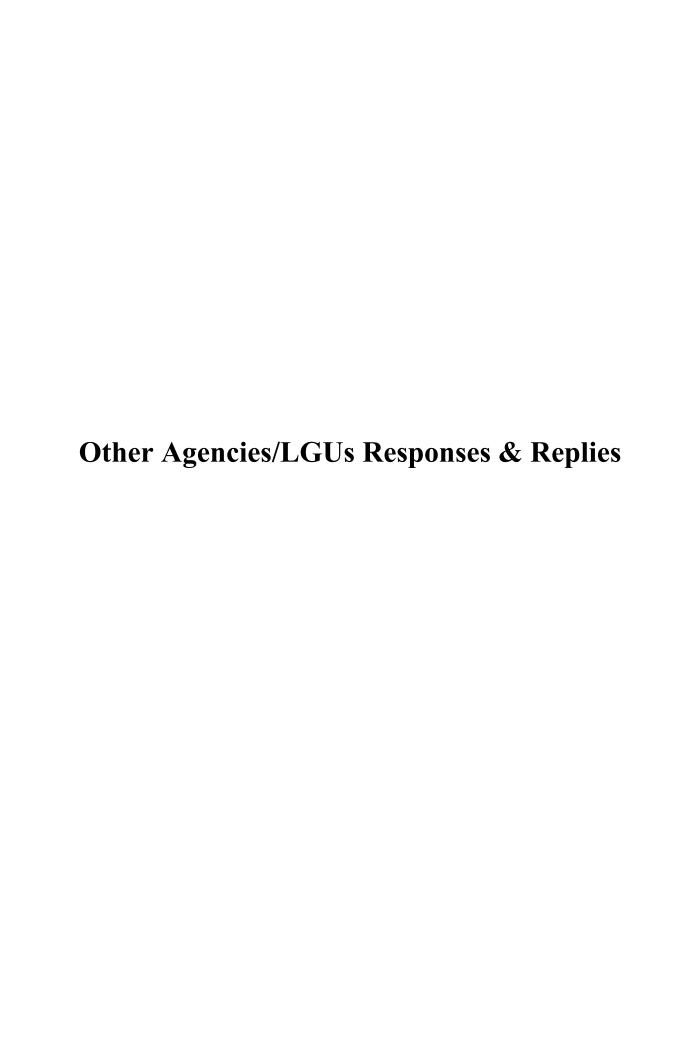
Importance: High

Daniel:

I put your project on the server for review; however we will not be able to make a determination or analysis without the turbine locations, access roads, collection lines, crane paths or other related data.

I advise to re-submit this project when you have all data collected. I intend to remove your project from the database until such time you have submitted the needed information. If you have any issues, please contact me. Thank you.

Joyce C. Henry DOC/NTIA/OSM HQ Admin Assistant 202-482-2215 jhenry@ntia.doc.gov



From: Hafer, Kristen A CIV USARMY CEMVP (US) <Kristen.A.Hafer@usace.army.mil>

Sent: Tuesday, April 4, 2017 1:08 PM

To: Litchfield, Daniel

Cc: Malterud, Ryan M CIV USARMY CEMVP (US)

Subject: Freeborn Wind Farm

Good morning Mr. Litchfield,

This email is in response to the letter we received regarding the Freeborn Wind Farm proposal. Without project specific details on specific sites, we cannot provide you with information as to whether or not Department of the Army permits would be required for the activities. I am providing you with information about the Corps Regulatory Program so that you can determine whether not to reach out to us once you have specific locations identified and an outline of the proposed activities at each site:

If the proposal involves activity in navigable waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (Section 10). Section 10 prohibits the construction, excavation, or deposition of materials in, over, or under navigable waters of the United States, or any work that would affect the course, location, condition, or capacity of those waters, unless the work has been authorized by a Department of the Army permit.

If the proposal involves discharge of dredged or fill material into waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 404 of the Clean Water Act (CWA Section 404). Waters of the United States include navigable waters, their tributaries, and adjacent wetlands (33 CFR § 328.3). CWA Section 301(a) prohibits discharges of dredged or fill material into waters of the United States, unless the work has been authorized by a Department of the Army permit under Section 404. Information about the Corps permitting process can be obtained online at http://www.mvp.usace.army.mil/regulatory.

The Corps evaluation of a Section 10 and/or a Section 404 permit application involves multiple analyses, including (1) evaluating the proposal's impacts in accordance with the National Environmental Policy Act (NEPA) (33 CFR part 325), (2) determining whether the proposal is contrary to the public interest (33 CFR § 320.4), and (3) in the case of a Section 404 permit, determining whether the proposal complies with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR part 230).

If the proposal requires a Section 404 permit application, the Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR § 230.10(a)). Time and money spent on the proposal prior to applying for a Section 404 permit cannot be factored into the Corps' decision whether there is a less damaging practicable alternative to the proposal.

If an application for a Corps permit has not yet been submitted, the project proposer may request a pre-application consultation meeting with the Corps to obtain information regarding the data, studies or other information that will be necessary for the permit evaluation process. A pre-application consultation meeting is strongly recommended if the proposal has substantial impacts to waters of the United States, or if it is a large or controversial project.

If you have any additional questions, please contact me or Ryan Malterud (copied on this email). Respectfully,

Kristen Hafer
Southwest Section Chief, Regulatory
U.S. Army Corps of Engineers, Saint Paul District

☎ (651) 290-5979



County Administration - Government Center 411 So. Broadway, P.O. Box 1147, Albert Lea, Minnesota 56007-1147

507/377-5116 Fax 507/377-5109

April 13, 2017

Dan Litchfield, Senior Manager, Project Development Invenergy, LLC One South Wacker Drive Suite 1800 Chicago, IL 60606

Mr. Litchfield:

Thank you for the notification correspondence dated March 31, 2017 regarding the Freeborn Wind Farm and the opportunity to provide comment regarding this project.

As you are aware, over the past several months we have spoken about this project and one of common themes during these conversations was the need to have a "Developers Agreement" in place prior to any activity initiating on the project.

As you are aware, items including but not limited to, Public Drainage System Protection, Road Use and Repair, Building Permit and Rural Addressing are planned to be covered in this agreement. You are aware that these are matters of great importance to the Commissioner's and residents of Freeborn County therefore we remain sensitive to maintaining the integrity of these systems. It is felt that the Developers Agreement is the best tool for all parties to both maintain integrity and achieve project completion.

We look forward to continued conversations about the project and execution of the Developers Agreement. On behalf of the Freeborn County Board of Commissioners I would like to again thank you for the opportunity to comment on this important matter.

If you should have any questions please contact me at your convenience.

Sincerely,

John W. Kluever

County Administrator

cc:

Jim Nelson, Board Chairman

Christopher Shoff, Vice-Chairman Dan Belshan, Commissioner

Mike Lee, Commissioner

Glen Mathiason, Commissioner

Dan Litchfield, Senior Manager, Project Development Invenergy One South Wacker Drive, Suite 1800 Chicago, IL 60606 dlitchfield@invenergyllc.com

Mr. Litchfield,

The Shell Rock Township Board would like to inform you that a large number of the residents that live here are not in favor of Invenergy's proposed Freeborn Wind Project in Freeborn County, Minnesota.

We, the Shell Rock Township Board, are concerned with the health and well being of all the residents who live in the township. We feel that your current state windmill setbacks are not at a safe distance for these newer, largest turbines that our residents could be living within. At our Township meeting, you stated that these wind turbines were the largest blades that would be installed. You would think that they should have a larger setback too. The current setbacks are for smaller blades.

As a board, we have many concerns. We have heard these from our residents and residents who live within other wind farms in Freeborn County and northern Iowa. The following are just a few of the concerns:

- · Township roads Who pays to put them back into good shape?
- Fiber Optic lines for TV, radio and internet reception? There are none now.
- Telephone reception?
- Eagles, Wildlife, migratory birds? We have noted quite a few!
- · Aerial crop spraying, a local small airport.
- Shadow/Flicker effect and other health issues?
- Land and Property values? Many articles say that they drop by 12-40%. Will you
 buy out our properties when we can't sell for our properties for current asking
 prices?
- Noise from the windmills on start up, shut down, etc.
- Invenergy sales team using false information and maps to sell your project.
- The rights of property owners who live in the footprint? Many landowners signed up don't LIVE within the footprint.

Please consider the residents who live in Shell Rock township and our neighboring townships within your Freeborn Wind Farm footprint as we ask you to keep us all safe.

Thank You!
Gary Richter, Don Lau, Troy Hillman - Shell Rock Township Supervisors

One South Wacker Drive | Suite 1900 | Chicago, Illinois 60606 T 312-224-1400 | F 312-224-1444



Shell Rock Township c/o Don Flatness 80747 River Rd Glenville, MN 56036

Dear Mr. Richter, Mr. Lau, Mr. Hillman and Mr. Flatness,

Thank you for your letter of April 27 and Mr. Richter's personal delivery on May 2. We have requested the landlord of our Glenville office promptly install a mailbox.

Thank you for your questions and concern about the health and wellbeing of township residents. We share these concerns, and that's why we are designing our project to exceed Minnesota's restrictive regulations. I will be able to respond to these points in more detail at a later date but at the moment I need to focus on finalizing our Site Permit Application and that is taking a considerable amount of time due to its complexity and length. Extensive material on all of these subjects will be included in the Application and I am happy to meet with you and review it when the Application is finalized.

So, for now, here is only a brief response to your points and questions:

- 1. State and Freeborn County's property line setbacks are based on the size of the wind turbine rotor (the spinning part), and because our project will use the latest and greatest technology with larger rotors, the setbacks will be larger than used for the other wind farm in Freeborn County. Because the setbacks are bigger, there will be much greater spacing between turbines. Turbine density per square mile and per township will be greatly reduced.
- 2. The project will pay for any necessary repairs to public roads from project construction. We are seeking to initiate negotiations of a 3 part agreement with the township and the county. I had anticipated the County Staff to take the lead in this agreement's negotiation, but that is partly up to you whether Shell Rock Township wants to stay directly involved or delegate your authority to the County.
- 3. As we discussed at the township meeting on April 11, it <u>is possible</u> for certain homes' over-air television and point-to-point internet service to be degraded by the presence of wind turbines, but it is the project's responsibility to restore this service, IF it is affected. A direct effect is dependent on where the house is relative to any wind turbines and broadcast antennas. Because of the large spacing of turbines mentioned in item #1, most homes are going to be just fine. My personal experience at another wind farm was that about 1-2% of homes in the project area were affected. If this holds true here, very few people will have this inconvenience.

- 4. Yes we have noted a lot of wildlife in the area too, and we have revised our project design as a result. We will present this research in our Site Permit Application, as well as correspondence we've had over the years with the MN DNR and US Fish and Wildlife Service. Relative to other forms of energy production and non-energy human activities (such as birds flying into windows, being hit by cars, or hunted by house cats), wind turbines have a very small impact on wildlife.
- 5. Aerial application can and will continue within a wind farm. We are gathering more information on this as I type. For now, let me just share this:



- 6. Freeborn County's Ordinance limits us to a maximum of 30 hours per year of shadow flicker on non-participating homes. This strict regulation means 99.7% of the year flicker will not be allowed. There are no known health effects from shadow flicker.
- 7. We will be presenting local data on property values as well that have shown no drop in property values. National studies have shown this as well.

- 8. Noise modeling is a big part of the aforementioned Site Permit Application. Freeborn County's Ordinance restricts this to 50 dBA in a worst case scenario. The vast majority of the time, we will be well below that.
- 9. We hire experienced and trustworthy professionals to spend the time at kitchen tables and in the field negotiating our land agreements. Unfortunately, a land agent working on our project in 2015 did not live up to this standard and was exposed to be blatantly lying to some landowners. He was fired as soon as we found out, as we deem this behavior completely unacceptable. I don't know what else to say about this I'm sorry for those who were lied to. It is not ok. We are doing the best we can do rebuild trust.
- 10. People living in the footprint of the project have the right to enjoy their property. If they choose not to participate in the project, they are protected by strict sound and flicker limits, and the property line setbacks in #1 mean that a non-participating landowner can limit the placement of turbines on adjacent, participating properties. Regardless of where people live, property rights are universal and Minnesota law strikes a balance people who don't want turbines have significant protections, and people who do want turbines should be able to do so provided we follow the rules, which we are doing.

Please call or email if you have any questions.

Sincerely,

Dan Litchfield, Senior Manager, Project Development Invenergy LLC dlitchfield@invenergyllc.com | T 773-318-1289



PROTECTING, MAINTAINING & IMPROVING THE HEALTH OF ALL MINNESOTANS

May 2nd, 2017

Dan Litchfield Senior Manager, Project Development Freeborn Wind Energy, LLC c/o Invenergy LLC One South Wacker Drive Suite 1800 Chicago, IL 60606

RE: Request for Comments on Freeborn Wind Farm in Freeborn County, Minnesota

Dear Mr. Litchfield,

Thank you for providing the Minnesota Department of Health (MDH) with the opportunity to comment on the Minnesota portion of the Freeborn Wind Farm project in Freeborn County, Minnesota. The mission of MDH is to protect, maintain, and improve the health of all Minnesotans. The careful planning and development of projects such as this one supports this mission and is an important step in ensuring health in all policies.

Wind turbine noise and shadow flicker effect are the two areas related to wind turbines that generally receive the most complaints. MDH reviewed available data on the generation and propagation of turbine noise; the potential for exposure to shadow flicker from wind turbines; and studies of health impacts from exposures to wind turbine noise. Findings are discussed in detail in the 2009 report, *Public Health Impacts of Wind Turbines*.

(http://www.health.state.mn.us/divs/eh/hazardous/topics/windturbines.pdf)

From MDH's 2009 report *Public Health Impacts of Wind Turbines*, complaints about wind turbine noise appear to rise with increasing noise levels above 35 dB(A) when measured outdoors. Sleeplessness and headache are common health complaints and complaints in general are more likely when turbines are visible or when shadow flicker occurs. Most available evidence suggests that reported health effects are related to audible low frequency noise.

Wind turbines generate a broad spectrum of low intensity noise. At typical setback distances higher frequency (or higher pitch) noises may be muted. Walls and windows of homes decrease the loudness of high frequencies, but the effect on low frequencies is more limited. Low frequency noise has been identified as a potential wind turbine issue that may affect some people indoors, especially at night.

Freeborn Wind Farm Page 2 May 2nd, 2017

Regulations regarding placement of wind turbines are intended to assure that Minnesota Pollution Control Agency (MPCA) noise guidelines are not exceeded. The MPCA nighttime standard for noise intensity of 50 dB(A), not to be exceeded more than 50% of the time in a given hour, appears to underestimate how much low frequency noise can enter into dwellings. Prior to site development, MDH recommends that low frequency noise and total noise from turbines be evaluated.

Unlike low frequency noise, shadow flicker can affect individuals outdoors as well as indoors. Shadow flicker is a potential issue in the mornings and evenings, generally within 0.6 miles (1km) of a source. Annoyance, or concern about the potential for other impacts from shadow flicker, can be eliminated by placement of wind turbines outside of the path of the sun as viewed from areas of concern, or by appropriate setbacks.

Potential exposures to shadow flicker and noise are at their highest closer to wind turbines. As the distance from a wind turbine increases, reported complaints and health effects generally decrease. This suggests that the use of appropriate setback distances of homes from wind turbines can minimize or eliminate health complaints. In addition, placing wind turbines in areas where wind shear is minimal and aerodynamic noise is minimized can likely reduce the potential for health complaints.

Again, a more in depth discussion of the above concepts and conclusions can be found in the MDH 2009 report *Public Health Impacts of Wind Turbines* (linked above). MDH encourages you to reference this report when considering the potential health impacts that could be associated with this wind farm project as you move forward with your development plans.

MDH is also following a study being conducted at the University of Minnesota, the Minnesota Study on Wind Turbine Acoustics (http://mnsowta.safl.umn.edu/). The study is intended to evaluate the source and characteristics of wind turbine sound, develop techniques for measuring wind turbine noise, and to better understand the human response to wind turbine generated sound. The study is expected to be completed in 2018.

Recommendations:

- Prior to development, low frequency noise and total noise from turbines should be evaluated by qualified acoustical engineers to determine measurable noise components from wind turbines that engender complaints and to assess noise impacts from proposed wind farms.
- Wind turbine noise estimates should include cumulative impacts (40-50 dB(A) isopleths) of all wind turbines.

- Isopleths for dB(C) dB(A) greater than 10 dB should be determined to evaluate the low frequency noise component.
- The impacts of aerodynamic modulation noise and shadow flicker should be modeled and evaluated.
- Evaluations of turbine noise generation and shadow flicker should be incorporated into decisions when determining the appropriate setback distances of homes from wind turbines.
- Any noise criteria beyond current state standards used for placement of wind turbines should reflect priorities and attitudes of the community.
- Recognizing that it is unknown whether reported health impacts are direct health effects or indirect stress impacts from annoyance and/or lack of sleep resulting from turbine noise or shadow flicker, potential health impacts from wind turbine projects should be acknowledged, and provision should be made to mitigate these effects for residents within and near proposed project areas.
- The project should be designed so that exposure to residents is minimized and inclusion of all potentially impacted residents as compensated participants should be considered.

Health starts where we live, learn, work, and play. To create and maintain healthy Minnesota communities, we have to think in terms of health in all policies. Thank you again for the opportunity to provide comments on the Freeborn Wind Farm project in Freeborn County. Please feel free to contact me at (651) 201-5711 or Paul.Allwood@state.mn.us if you have any questions regarding this letter.

Sincerely,

Paul Allwood

Assistant Commissioner

Minnesota Department of Health

PO Box 64975

Saint Paul, MN 55164-0975

cc: James Kelly, MDH Environmental Surveillance and Assessment Manager Sue Yost, Freeborn County Public Health Director

THE UNITED BY

DEPARTMENT OF THE ARMY

ST. PAUL DISTRICT, CORPS OF ENGINEERS 180 FIFTH STREET EAST, SUITE 700 ST. PAUL, MN 55101-1678

May 12 2017

REPLY TO ATTENTION OF REGULATORY BRANCH

Regulatory File No. MVP-2017-01437-JTB

THIS IS NOT A PERMIT

Dan Litchfield Freeborn Wind Energy LLC c/o Invenergy LLC One South Wacker Drive, Suite 1800 Chicago, IL 60606

Dear Mr. Litchfield:

We have received your submittal described below. You may contact the Project Manager with questions regarding the evaluation process. The Project Manager may request additional information necessary to evaluate your submittal.

File Number: MVP-2017-01437-JTB

Applicant: Freeborn Wind Energy LLC

Project Name: Freeborn Wind Energy LLC / Freeborn Wind Farm

Received Date: 05/04/2017

Project Manager: Justin Berndt

651-290-5446

Justin.T.Berndt@usace.army.mil

Additional information about the St. Paul District Regulatory Program, including the new Clean Water Rule, can be found on our web site at http://www.mvp.usace.army.mil/missions/regulatory.

Please note that initiating work in waters of the United States prior to receiving Department of the Army authorization could constitute a violation of Federal law. If you have any questions, please contact the Project Manager.

Thank you.

U.S. Army Corps of Engineers St. Paul District Regulatory Branch Dan Litchfield
Senior Manager
Project Development Invenergy
One South Wacker Drive, Suite 1800
Chicago, IL 60606
dlitchfield@invenergyllc.com

Mr. Litchfield,

The London Township Board would like to inform you that a large number of the residents that live in the township are not in favor of Invenergy's proposed Freeborn Wind Project in Freeborn County, Minnesota.

We, the London Township Board, are concerned with the health and well-being of all the residents who live in the township. We feel that your current state windmill setbacks are not at a safe distance for these newer, larger turbines that our residents could be living with. We understand that the proposed turbines have longer blades that most other sites in the surrounding area. It would seem logical that the minimum setback should be the 1,600+ feet that the manufactures have set as safety zones. The current 1,140 foot setback is simply not safe.

As a board, we have many concerns. We have heard these from our residents and residents who live within other wind farms in Freeborn County and northern lowa. The following are just a few concerns:

- Fiber Optic lines for TV, radio and internet reception there are none now.
- Telephone reception
- Township roads who pays to put them back into good shape?
- Eagles, wildlife, and migratory birds
- Aerial crop spraying, a local small airport
- Land and property values. Many articles say that they drop by 12-40%. Will you buy out our properties at the current asking price when we can't sell them in the future?
- Noise from the windmills on startup and shut down
- Shadow/flicker effect and other health issues
- Invenergy sales team using false information and maps to sell your project

• The rights of property owners who live in the footprint – many landowners who signed up don't live within the footprint.

Please consider the residents who live in the London Township and our neighboring townships within your Freeborn Wind Farm footprint as we ask you to keep us all safe.

Thank you,

London Township Supervisors

Gregg Koch Henry Tews Ron Wilkes

One South Wacker Drive | Suite 1900 | Chicago, Illinois 60606 T 312-224-1400 | F 312-224-1444



London Township c/o Gregg Koch 87340 135th St Glenville, MN 56036

Dear Mr. Koch,

Thank you for your letter of May 12.

Thank you for your questions and concern about the health and wellbeing of township residents. We share these concerns, and that's why we are designing our project to exceed Minnesota's restrictive regulations. I will be able to respond to these points in more detail at a later date but at the moment I need to focus on finalizing our Site Permit Application and that is taking a considerable amount of time due to its complexity and length. Extensive material on all of these subjects will be included in the Application and I am happy to meet with you and review it when the Application is finalized.

So, for now, here is only a brief response to your points and questions:

- 1. Good news: I can clear up a misconception because the turbines we plan to use are larger, the setbacks ARE commensurately bigger. Freeborn County's Ordinance codifies Minnesota's practice of implanting a "Wind Access Buffer" of three times the rotor diameter, and five time the rotor diameter in prevailing wind directions. So by using state of the art wind turbines with larger rotor diameters than older turbine models, we are also subject to larger property line setbacks. Because the setbacks are bigger, there will be much greater spacing between turbines. Turbine density per square mile and per township will be greatly reduced.
- 2. It is possible for certain homes' over-air television and point-to-point internet service to be degraded by the presence of wind turbines, but it is the project's responsibility to restore this service, IF it is affected. A direct effect is dependent on where the house is relative to any wind turbines and broadcast antennas. Because of the large spacing of turbines mentioned in item #1, most homes are going to be just fine. My personal experience at another wind farm was that about 1-2% of homes in the project area were affected. If this holds true here, very few people will have this inconvenience.
- 3. There will be no effect on telephone reception.
- 4. The project will pay for any necessary repairs to public roads from project construction. We are seeking to initiate negotiations of a 3 part agreement with the township and the county. I had anticipated the County Staff to take the lead in this agreement's negotiation, but that is up to whether

London Township wants to stay directly involved or delegate your authority to the County.

5. Yes we have noted a lot of wildlife in the area too, and we have revised our project design as a result. We will present this research in our Site Permit Application, as well as correspondence we've had over the years with the MN DNR and US Fish and Wildlife Service. Relative to other forms of energy production and non-energy human activities (such as birds flying into windows, being hit by cars, or hunted by house cats), wind turbines have a very small impact on wildlife.

6. Aerial application can and will continue within a wind farm. We are gathering more information on this locally. For now, let me just share this:



7. We will be presenting local data on property values as well that have shown no drop in property values. National studies have shown this as well. No, we are not in the business of buying residences.

- 8. Noise modeling is a big part of the aforementioned Site Permit Application. Freeborn County's Ordinance restricts this to 50 dBA in a worst case scenario. The vast majority of the time, we will be well below that.
- Freeborn County's Ordinance limits us to a maximum of 30 hours per year of shadow flicker on non-participating homes. This strict regulation means 99.7% of the year flicker will not be allowed. There are no known health effects from shadow flicker.
- 10. We hire experienced and trustworthy professionals to spend the time at kitchen tables and in the field negotiating our land agreements. Unfortunately, a land agent working on our project in 2015 did not live up to this standard. He was fired as soon as we found out, as we deem this behavior completely unacceptable. I don't know what else to say about this I'm sorry for those who were lied to. It is not ok. We are doing the best we can do rebuild trust.
- 11. People living in the footprint of the project have the right to enjoy their property. If they choose not to participate in the project, they are protected by strict sound and flicker limits, and the property line setbacks in #1 mean that a non-participating landowner can limit the placement of turbines on adjacent, participating properties. Regardless of where people live, property rights are universal and Minnesota law strikes a balance people who don't want turbines have significant protections, and people who do want turbines should be able to do so provided we follow the rules, which we are doing.

Please call or email if you have any questions.

Sincerely,

Dan Litchfield, Senior Manager, Project Development Invenergy LLC dlitchfield@invenergyllc.com | T 773-318-1289

3

Dan Litchfield, Senior Manager, Project Development Invenergy One South Wacker Drive, Suite 1800, Chicago, IL 60606

Mr. Litchfield,

I am contacting you as a concerned Oakland Township resident. In full disclosure, I am also the Township Clerk, but am writing this on a completely personal level. I want to inform you that I am not in favor of Invenergy's wind project in Freeborn County.

Many of the land owners that have signed up do not live in the township. Why are their rights viewed as more important than the people that live here?

I am concerned with the health and well-being of all that live in the township. I do not feel that the current state setbacks are at a safe level from homes. Studies show that setbacks at ½ mile are recommended and still do not negate the affect on various health issues which develop.

I am also concerned with the heavy machinery that will be on the township roads. The roads currently are in prime condition. Will you pay for all the damage to the roads and the maintenance for the years to come?

I also understand that the landline phones, radio/TV stations and internet will be affected by the turbines. I would expect you to pay for the fiber optic lines to run to every house in Oakland Township and my concern is that you would not.

What about the impact to the wild life and eagle population within the project area? There are numerous eagles and migrating birds sighted on a regular basis in the township. Other environmental concerns are with DNR land located in the township. Are there certain setbacks for them?

What about the acreage owners? What will happen to the value of their property? Will you offer a buyout if they cannot sell their acreage due to lowered land values because of the wind turbines?

The farmers also have concerns with aerial spraying and GPS coordinates on their machinery once these turbines are up. Please consider and respond to all the issues that I have brought up. Thank you.

Cheryl Brandt 88141 180th St. Austin MN 55912 Dan Litchfield, Senior Manager, Project Development Invenergy One South Wacker Drive, Suite 1800, Chicago, IL 60606

Mr. Litchfield,

I am contacting you as a concerned Oakland Township resident. In full disclosure, I am also a Township Supervisor, but am writing this on a completely personal level. I want to inform you that I am not in favor of Invenergy's wind project in Freeborn County.

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What about the acreage owners? What will happen to the value of their property? Will you offer a buyout if they cannot sell their acreage due to lowered land values because of the wind turbines?

The farmers also have concerns with aerial spraying and GPS coordinates on their machinery once these turbines are up. Please consider and respond to all the issues that I have brought up. Thank you.

Lena Langowski
Rena Langowski

19960 900th Ave. Austin MN 55912 Dan Litchfield, Senior Manager, Project Development Invenergy One South Wacker Drive, Suite 1800, Chicago, IL 60606

Mr. Litchfield,

I am contacting you as a concerned Oakland Township resident. In full disclosure, I am also a Township Supervisor, but am writing this on a completely personal level. I want to inform you that I am not in favor of Invenergy's wind project in Freeborn County.

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What about the impact to the wild life and eagle population within the project area? There are numerous eagles and migrating birds sighted on a regular basis in the township. Other environmental concerns are with DNR land located in the township. Are there certain setbacks for them?

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The farmers also have concerns with aerial spraying and GPS coordinates on their machinery once these turbines are up. Please consider and respond to all the issues that I have brought up. Thank you.

Jim Benesh 85821 173rd St. Austin MN 55912

One South Wacker Drive | Suite 1900 | Chicago, Illinois 60606 T 312-224-1400 | F 312-224-1444



Cheryl Brandt 88141 180th St Austin, MN 55912

Rena Langowski 19960 900th Ave Austin, MN 55912

Dear Mrs. Brandt and Ms. Langowski,

Thank you for your letters. Because they were nearly identical, I'll respond to you two together.

Thank you for your questions and concern. We share this concern, and that's why we are designing our project to exceed Minnesota's restrictive regulations. I will be able to respond to these points in more detail at a later date but at the moment I need to focus on finalizing our Site Permit Application and that is taking a considerable amount of time due to its complexity and length. Extensive material on all of these subjects will be included in the Application and I am happy to meet with you and review it when the Application is finalized.

So, for now, here is only a brief response to your points and questions:

- 1. People living in the footprint of the project have the right to enjoy their property. If they choose not to participate in the project, they are protected by strict sound and flicker limits, and the property line setbacks in #2 mean that a non-participating landowner can limit the placement of turbines on adjacent, participating properties. Regardless of where people live, property rights are universal and Minnesota law strikes a balance people who don't want turbines have significant protections, and people who do want turbines should be able to do so provided we follow the rules, which we are doing.
- 2. State and Freeborn County's property line setbacks are based on the size of the wind turbine rotor (the spinning part), and because our project will use the latest and greatest technology with larger rotors, the setbacks will be larger than used for the other wind farm in Freeborn County. Because the setbacks are bigger, there will be much greater spacing between turbines. Turbine density per square mile and per township will be greatly reduced. Freeborn County's Ordinance limits us to a maximum of 30 hours per year of shadow flicker on non-participating homes. This strict regulation means 99.7% of the year flicker will not be allowed. There are no known health effects from shadow flicker. Noise modeling is a big part

of the aforementioned Site Permit Application. Freeborn County's Ordinance restricts this to 50 dBA in a worst case scenario. The vast majority of the time, we will be well below that. I would be willing to review the studies you mentioned, so please share them. But current state law and experience shows that the current setbacks are adequate. A simple mapping analysis will show that if we were to design the project with progressively larger setbacks from homes, at some point there will simply be no room for wind turbines. If that's what you want, sorry, we won't be able to agree. But if you want strict regulations on a wind farm to prevent nuisance, please keep an open mind to the existing rules and review our permit application carefully.

- 3. The project will pay for any necessary repairs to public roads from project construction. We are seeking to initiate negotiations of a 3 part agreement with the township and the county. I had anticipated the County Staff to take the lead in this agreement's negotiation, but that is partly up to you whether Oakland Township wants to stay directly involved or delegate your authority to the County.
- 4. It is possible for certain homes' over-air television and point-to-point internet service to be degraded by the presence of wind turbines, but it is the project's responsibility to restore this service, IF it is affected. A direct effect is dependent on where the house is relative to any wind turbines and broadcast antennas. Because of the large spacing of turbines mentioned in item #2, most homes are going to be just fine. My personal experience at another wind farm was that about 1-2% of homes in the project area were affected. If this holds true here, very few people will have this inconvenience.
- 5. Yes we have sighted a lot of wildlife in the area too, and we have revised our project design as a result. We will present this research in our Site Permit Application, as well as correspondence we've had over the years with the MN DNR and US Fish and Wildlife Service. Relative to other forms of energy production and non-energy human activities (such as birds flying into windows, being hit by cars, or hunted by house cats), wind turbines have a very small impact on wildlife.
- 6. We will be presenting local data on property values that show no drop. National studies have shown this as well.
- 7. Aerial application can and will continue within a wind farm. We are gathering more information on this as I type. For now, let me just share

this:



GPS guidance systems for tractors will not be affected.

Please call or email if you have any questions.

Sincerely,

Dan Litchfield, Senior Manager, Project Development Invenergy LLC dlitchfield@invenergyllc.com | T 773-318-1289

One South Wacker Drive | Suite 1900 | Chicago, Illinois 60606 **T** 312-224-1400 | **F** 312-224-1444



Jim Benesh 85821 173rd St. Austin, MN 55912

Dear Mr. Benesh,

Thank you for your letter. It's good to hear from you. How have you been? Good luck with your planting these next few weeks.

Because your letter was identical to the letters I got from your fellow Supervisor Rena Langowski and township Clerk Cheryl Brandt, what follows is an identical response to what I sent them.

Thank you for your questions and concern. We share this concern, and that's why we are designing our project to exceed Minnesota's restrictive regulations. I will be able to respond to these points in more detail at a later date but at the moment I need to focus on finalizing our Site Permit Application and that is taking a considerable amount of time due to its complexity and length. Extensive material on all of these subjects will be included in the Application and I am happy to meet with you and review it when the Application is finalized.

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Sincerely,

Dan Litchfield, Senior Manager, Project Development Invenergy LLC dlitchfield@invenergyllc.com | T 773-318-1289

From: Mixon, Kevin (DNR) <kevin.mixon@state.mn.us>

Sent: Wednesday, May 17, 2017 1:55 PM

To: Litchfield, Daniel
Subject: RE: Freeborn LWECS

Dan:

I took a quick look at the proposed transmission line route. You will need a MNDNR utility license to cross the Shell Rock River and we will require avian flight diverters at that crossing. Please contact Karla Ihns at 507-359-6072 if you have any questions about the license process.

South of the Glenwood Station there is a moderate site of biodiversity significance. To receive information regarding rare features and species in the vicinity of the proposed project, submit a completed NHIS data request form (http://files.dnr.state.mn.us/eco/nhnrp/nhis data request.pdf). The Natural Heritage review will identify known occurrences of rare plants, animals, and native plant communities in the vicinity of the project boundary. Please contact Lisa Joyal, Endangered Species Review Coordinator, at 651-259-5109 if you have questions about the NHIS review process.

Thanks

From: Litchfield, Daniel [mailto:DLitchfield@invenergyllc.com]

Sent: Wednesday, April 05, 2017 3:22 PM

To: Mixon, Kevin (DNR) <kevin.mixon@state.mn.us>; Warzecha, Cynthia (DNR) <cynthia.warzecha@state.mn.us> **Cc:** Svedeman, Michael <MSvedeman@invenergyllc.com>; Joe Sedarski <jsedarski@merjent.com>; Coppinger, Karyn

<KCoppinger@invenergyllc.com>
Subject: RE: Freeborn LWECS

Hi Kevin and Cynthia,

You both asked for shape files and I can get you the project boundary probably Monday and turbine and other facilities layouts in May. Yes we modified our boundary: we shrunk it. I hope this isn't a problem and expect, from your perspective, less impact is better. Andrea is out of the country at the moment but she can get in touch with you upon her return and I'll see about getting you shapefiles sooner.

Dan Litchfield | Senior Manager, Project Development Invenergy | One South Wacker Drive, Suite 1800, Chicago, IL 60606 <a href="https://discom.nih.gov/discom/disco

From: Mixon, Kevin (DNR) [mailto:kevin.mixon@state.mn.us]

Sent: Wednesday, April 05, 2017 10:49 AM

To: Litchfield, Daniel < DLitchfield@invenergyllc.com>

Subject: Freeborn LWECS

Dan:

I received your letter dated March 31, 2017 concerning the Freeborn LWECS. The project boundary is significantly different than what we commented on in our February 21, 2017 letter. Please send the shapefiles for the new project boundary along with the turbine layout, crane paths, collector lines etc., if available. We will review the revised project boundary and provide comments in the near future.

Thanks!

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