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October 18, 2012

Dr. Burl W. Haar
Executive Secretary
Minnesota Public Utilities Commission
127 7th Place East, Suite 350
St. Paul, MN 55101-2147

RE: **Comments and Recommendations of the Department of Commerce Energy Facility Permitting Staff**
Docket No. IP-6866/WS-11-831

Dear Dr. Haar:

Attached please find the comments and recommendations of the Department of Commerce Energy Facility Permitting in the following matter:

Application for a Large Wind Energy Conversion System Site Permit for the 40 MW
Getty Wind Project in Stearns County, Minnesota

The site permit application was filed on October 13, 2011, by:

Keith L. Thorstad, Vice President
Getty Wind Company, LLC
P.O. Box 321
Chokio, MN 56221

Energy Facility Permitting staff has prepared: (1) proposed findings of fact, conclusions of law, and order, and (2) a proposed LWECS site permit. EFP staff is available to answer any questions the Commission may have.

Sincerely,

A handwritten signature in black ink that reads 'Suzanne Steinhauer'. The signature is written in a cursive, flowing style.

Suzanne Lamb Steinhauer
Energy Facility Permitting

Attachments

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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS AND RECOMMENDATIONS OF THE MINNESOTA DEPARTMENT OF COMMERCE ENERGY FACILITY PERMITTING STAFF

DOCKET NO. IP-6866/WS-11-831

EFP Staff: Suzanne Lamb Steinhauer.....651-296-2888

In the Matter of the Application for a Large Wind Energy Conversion System Site Permit for the 40 MW Getty Wind Project in Stearns County

Issues Addressed: The following are the Department of Commerce, Energy Facility Permitting (EFP) staff's comments on issuance of a site permit for the proposed Getty Wind Project.

Documents Attached:

1. Project Location Maps
2. Proposed Findings of Fact, Conclusions of Law, and Order
3. Exhibit List
4. Proposed Site Permit with Turbine Layout Maps

Additional documents and information can be found on eDockets:

<https://www.edockets.state.mn.us/EFiling/search.jsp> (11-831) and on the Department's energy facility permitting website: <http://mn.gov/commerce/energyfacilities/Docket.html?Id=32297> .

This document can be made available in alternative formats; i.e. large print or audio tape by calling (651) 296-0391 (Voice). Persons with hearing or speech disabilities may call us through Minnesota Relay at 1-800-627-3529 or by dialing 711.

Introduction and Background

On October 11, 2011, Getty Wind Company, LLC (Getty) filed a site permit application with the Public Utilities Commission for the 40 MW Getty Wind Project (Project).¹

Project Location

¹ Getty Wind Company, LLC, Application for a LWECS site Permit for the Getty Wind Project, October 11, 2011, eDockets ID: [201110-67223-01](https://www.edockets.state.mn.us/EFiling/search.jsp) – 07 [herein after Site Permit Application]

Getty proposes to locate the Project in an agricultural area south and southwest of the city of Sauk Centre. As shown in Figure 1 attached, Getty has identified a site of approximately 7,600 acres located in Sections 29-33 of Sauk Centre Township (T126N, R34W) and Sections 4 - 9, and 16 - 21 of Getty Township (T125N, R34W) in Stearns County.² The topography in the project area is characterized with low rolling hills in an area comprised mostly of cropland with scattered pockets of uncultivated lands, wetlands, and wooded lands.

The Project is adjacent to, and immediately east of the Black Oak Wind Farm being developed by Black Oak Wind, LLC (see Figure 2, attached). The Commission is reviewing the site permit application for the Black Oak Wind Farm under Commission Docket IP6853/WS-10-1240). The Padua Wildlife Management Area (WMA) is located adjacent to the Project. Four additional WMAs are located within five miles of the Project. The Trisko and Kenna Waterfowl Production Areas (WPAs) are adjacent to the Project; 14 additional WPAs are located within five miles of the Project.³

Project Description

Getty is considering three turbine models ranging between 1.5 and 3.0 MW for the Project. In their most recent filings on the project layout, dated June 22, 2012, Getty Wind provided updated maps showing preliminary turbine locations and associated facilities; The most recent layouts provided by Getty Wind show 21 REpower MM100 1.8 MW turbines, representing an installed capacity of 37.8 MW, and two alternate locations; 23 Goldwind 87/1500 1.5 MW turbines, representing an installed capacity of 34.5 MW, and four alternate locations; and 13 Vestas V112 3.0 MW turbines, representing an installed capacity of 39 MW, and two alternate locations.⁴ The height of the proposed turbines would be 80 to 100 meters (262 or 328 feet), with rotor diameters of 87 to 112 meters (285 to 368 feet) for a total height of between 423 and 492 feet with a blade fully extended.⁵

The project will also include an underground automated supervisory control and data acquisition system (SCADA) for real-time monitoring and control of turbine operations. Up to two (2) permanent free standing 80 meter meteorological towers will be used as part of the communication system.⁶ Other components of the project include a concrete and steel foundation for each tower, step-up transformers (either pad-mounted or internal), all weather class 5 roads of gravel or similar material, an operation and maintenance (O&M) building, and an underground energy collection system, a project substation, and a 69 kV transmission line connecting the project substation to Xcel Energy's Black Oak Switching Station.⁷

Each turbine is interconnected through an underground electrical collection system at 34.5 kV. All of the proposed feeder lines would connect to the proposed project substation. Depending upon whether the Getty and Black Oak projects are constructed together or separately, separate substations may be constructed for each project, or the projects may jointly construct one

² Site Permit Application, at p. 4

³ Ibid., at pp. 28 - 29

⁴ Black Oak & Getty, Hearing Testimony of Patric Smith with Schedules, June 26, 2012, eDockets ID: [20126-75957-02](#) [herein after Smith Direct Testimony] , at Schedules 1 - 6

⁵ Site Permit Application, at p. 10

⁶ Black Oak and Getty, Black Oak and Getty Post Hearing Comments and Revised ABPP, July 10, 2012, eDocket ID: [20127-76674-09](#) [herein after Black Oak & Getty Post-Hearing Comments]

⁷ Site Permit Application, at pp. 11 - 13

substation.⁸ If the Project Substation is constructed by Getty, either separately or to serve both the Getty and Black Oak projects, Getty Wind anticipates the substation will be located in Section 7 of Black Oak Township (see Site Permit Maps, shown in Attachments 1a – 1c of the proposed site permit), pending biological, archaeological, and soil surveys. The Project will interconnect with the electrical grid at Xcel Energy's Black Oak Switching Station, located approximately three and one-half miles east of the Project's eastern boundary.⁹ The interconnection will be in accordance with Midwest System Operator Standards and consistent with the Large Generator Interconnection Agreement. Getty and/or Black Oak will seek a permit from Stearns County for the 69 kV transmission line between the Project Substation and the Black Oak Switching Station and for the O&M facility.¹⁰

Getty anticipates a net capacity factor of between 39 and 44 percent at the 100 meter hub height and projects an average annual output from of between 136,000 and 154,000 MWh per year with the 1.8 MW turbines, somewhat less if either the 1.5 MW or 2.0 MW turbines are used.¹¹

Getty anticipates that a contract for the power will be negotiated sometime in late 2012 and that construction of the Project will begin in mid-2013, with commercial operation expected by the end of 2013.¹² Getty estimates the total cost of the project to be between \$68 and \$76 million with ongoing operating and administrative costs of approximately \$1.3 to \$1.5 million annually.

Regulatory Process and Procedures

Commission review of an LWECS application entails two separate processes: the Certificate of Need (CN) and the Site Permit. Pursuant to Minn. Rule 7854.0500, subp. 2A, the Commission shall not issue a site permit for which a CN is required until the CN has been issued by the Commission. The following provides an overview of the CN and Site Permit processes.

Certificate of Need Process

A CN is required for any "large energy facility" as defined by Minnesota Statutes section 216B.2421, subdivision 2(1).

Getty, together with Black Oak Wind, LLC, jointly submitted a petition for a Certificate of Need for the Black Oak Wind Farm and the Getty Wind Project, on October 11, 2011.¹³

On December 15, 2011, the Commission issued an order authorizing an informal review process for its consideration of the need for the project. A public hearing on the Black Oak Wind Farm and Getty Wind Project projects was held in Sauk Centre on June 26, 2012;¹⁴ the hearing was noticed to include opportunity for public comments on both the Black Oak and Getty site

⁸ Black Oak & Getty Post-Hearing Comments, at response 7

⁹ Site Permit Application, at p. 10

¹⁰ Site Permit Application, at p. 11

¹¹ Site Permit Application, at p.pp. 67-68

¹² Smith Direct Testimony, at p.12

¹³ Black Oak Wind, LLC and Getty Wind Company, LLC, *Joint Application for Certificate of Need for the Black Oak and Getty Wind Projects*, October 11, 2011, eDocket ID: [201110-67221-03](#)

¹⁴ Transcript of Public Hearing held June 26, 2012, July 11, 1012, eDocket ID: [20127-76685-01](#) (Exhibit 22)

permits.¹⁵ The period for written comments closed on July 10, 2012, and Administrative Law Judge Bruce H. Johnson issued a Summary of Public Testimony on August 8, 2012.¹⁶

A site permit may not be issued until the Commission determines the need for the facility.

Site Permit Process

A site permit from the Commission is required to construct an LWECS, which is any combination of wind turbines and associated facilities with the capacity to generate five megawatts or more of electricity. This requirement became law in 1995. The Minnesota Wind Siting Act is found at Minnesota Statutes Chapter 216F. The rules to implement the permitting requirements for LWECS are in Minn. Rule 7854.

On October 11, 2011, Getty Wind Company, LLC (Getty), filed a site permit application with the Public Utilities Commission for the 40 MW Getty Wind Project (Project).¹⁷

Following a public comment period on the site permit application, the Commission issued a draft site permit for the project in its order of February 23, 2012.¹⁸ Following notice, a public meeting on the Draft Site Permit was held in on March 20, 2012. Five comments were received by the close of the public comment period on April 22, 2012.¹⁹

As noted above, comments on the Black Oak and Getty Site Permits were also accepted during the comment period for the CN public hearing ending July 10, 2012, and are included in the ALJ's Summary of Public Testimony.

Standard for Permit Issuance

The test for issuing a site permit for an LWECS is to determine whether a project is compatible with environmental preservation, sustainable development, and the efficient use of resources. Pursuant to Minnesota Statute 216F.02, certain sections of Minnesota Statutes 216E (Minnesota Power Plant Siting Act) apply to siting LWECS, including 216E.03, subdivision 7 (considerations in designating sites and routes). Minnesota Statutes section 216F.04 (d) allows the Commission to place conditions in LWECS permits.

County Ordinance Standards for LWECS

Minnesota Statutes section 216F.08 authorizes counties to assume responsibility for processing permit applications for LWECS with a combined nameplate capacity of less than 25,000 kilowatts. Pursuant to Minnesota Statutes section 216F.08, Stearns County assumed permitting responsibility for projects under 25 MW in December 2009.

Certain standards adopted by ordinance by Stearns County are more stringent than the Commission's General Permit Standards as set forth in Docket No. E,G-999/M-07-1102. Minnesota Statutes section 216F.081 states that the Commission shall consider and apply those more stringent standards unless the Commission finds good cause not to apply the standards. The

¹⁵ Revised Notice of Public Hearing, May 25, 2012, eDockets ID: [20125-75012-03](#)

¹⁶ Written Public Comments, August 14, 2012, eDockets ID: [20128-77850-01](#), [20127-76745-01](#), [20127-76745-04](#); OAH Summary of Public Testimony, August 8, 2012, eDockets ID: [20128-77666-01](#)

¹⁷ Site Permit Application

¹⁸ Commission Order Issuing Draft Site Permit for Public Review and Comment, February 23, 2012, eDockets ID: [20122-71812-01](#)

¹⁹ Written Comments on Draft Site Permit, eDockets ID: [20124-73344-01](#), [20126-75767-01](#), and [20122-71712-03](#)

Draft Site Permit issued for public comment identified these more stringent standards in Special Condition 13.1.

DOC EFP Staff Analysis and Comments

DOC EFP staff addresses oral and written comments below relating to the siting of the Project and LWECS site permit conditions. EFP staff comments do not address issues related to the Certificate of Need.

Wind Access Buffer Setback

In consideration of the statutory directive to site LWECS "in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources,"²⁰ LWECS site permits issued by the Commission and the Environmental Quality Board have long addressed the importance of wind rights and the free flow of wind by providing for a "wind access buffer," between a proposed project and areas where the applicant does not hold wind rights.

In its January 2008 Order adopting "General Wind Turbine Permit Setbacks and Standards for LWECS Facilities Permitted by Counties Pursuant to Minnesota Statute 216F.08," the Commission affirmed a long-standing Wind Access Buffer Setback of three rotor diameters on the secondary wind axes and five rotor diameters (RD) on the predominant axes.²¹ The Commission's found that,

"Therefore the Commission will maintain its current setbacks of three rotor diameters on the secondary wind axis and five rotor diameters on the predominant axis. This buffer setback has been shown to protect wind rights and future development options of adjacent rights owners."²²

Although the Commission's January 2008 Order established general permit standards for permitting of LWECS less than 25 MW, the 3 by 5 RD setback is typical of most permits issued by the Commission.

The most recent layouts provided for the Project were filed on June 22, 2012.²³ The proposed layouts appear to show the setback buffers for a number of the turbines near the western portion of the project overlap setback buffers for some turbines on the adjacent Black Oak Wind Farm.

In the July 10, 2012, comment letter to the ALJ, Black Oak and Getty acknowledge that certain of the turbines are within the 3 by 5 RD Wind Access Buffer between the Black Oak and Getty Projects and provide their justification for the spacing.

"The Applicants understand this question to refer to turbines G21 and G1 of the GW87 layout, G2 and G20 of the MM100 Layout, and G1 and G2 of the V112 Layout. All of

²⁰ MN Stat. 216F.03

²¹ Minnesota Public Utilities Commission "Order Establishing General Wind Permit Standards," January 15, 2008. eDocket ID: [4897855](#)

²² Ibid., at p. 4

²³ Smith Direct Testimony, at schedules 1 - 6

these turbines are located within the 3 x 5 RD setback buffer between the Black Oak and Getty project boundaries.

This wind resource area is under wind lease and easement agreements and shared between the two projects via an agreement as part of Black Oak and Getty's joint development partnership. Because the wind leases and easements are shared, there should be no need for the Commission to vary the 3 x 5 RD wind access buffer. However, if the Commission believes approval is required, Black Oak and Getty believe such approval is justified based on the shared lease interests and the joint turbine siting activities undertaken to carefully consider the reciprocal impact of each Black Oak and Getty wind turbine."²⁴

Stearns County has established in its ordinances a Project Boundary requiring a setback of 5 RD from all parcels of land for which the Permittee has a wind easement for the Project unless the county finds the wake interference to be less than 5 RD. Stearns County filed comments on the LWECS Site Permit Applications stating that Getty Wind had demonstrated wake interference of less than 5 RD, and recommending a setback of 5 RD on the prevailing wind axis and 3 RD on the non-prevailing wind access.²⁵ Because the Stearns County recommendations were consistent with the 3 RD by 5 RD wind access buffer, the Draft Site Permit did not identify the 5RD setback as a more stringent setback.

EFP Response: The site permit, at section 4.1, establishes a 3 RD by 5 RD setback from lands where the permittee does not hold wind rights. Although Black Oak and Getty have stated in their July 10, 2012 Post-Hearing Comments that wind leases and easement agreements are shared between the two projects, neither has provided evidence of the extent of their wind rights within their separate sites or shared between projects. The permit, at section 10.1, requires the permittee to demonstrate that it has obtained wind rights necessary to construct and operate the Project. In this instance, a filing by Getty establishing the extent of its wind rights overlain with a turbine layout prior to the Commission's decision would be useful in clarifying the extent of the wind rights and ensuring that Getty is able to comply with this requirement.

Section 4.1 of the permit does allow the Commission to approve placement of turbines within the 3 RD by 5 RD Wind Access Buffer. As noted in Mr. Smith's direct testimony, Getty made modifications to earlier layouts in response to DNR's comments and avian risk assessment on an earlier layout.²⁶ EFP staff believes the Commission could find that the placement of turbines within the Wind Access Buffer is acceptable given Getty and Black Oak's agreement on the turbine placement and the overall lowering of the DNR's assessment to a moderate risk assessment for all proposed turbine layouts achieved by the layout modifications.

As noted in the Project Description above, Getty's most recent layouts include between two and four alternate turbine sites for each proposed layout. If Getty is unable to demonstrate sufficient wind rights to site the preferred turbine locations, it has the option of using one or more of the alternate turbines in a final layout. Alternatively, Getty could construct a project with fewer

²⁴ Black Oak & Getty Post-Hearing Comments, at response 4

²⁵ Public Comments received on Getty Wind Company, LLC's LWECS Site Permit Application for the 40 MW Getty Wind Project in Stearns County, January 18, 2012, eDockets ID: [20121-70416-01](#), at p. 19

²⁶ Smith Direct Testimony, at pp. 4 – 5

turbines than shown in the proposed layouts and still be in compliance with the site permit as proposed.

Avian and Bat Impacts and Mitigation

Bird and bat fatalities are known to occur with wind projects and would be expected to occur as a result of the Project. The joint Getty - Black Oak surveys of wildlife habitat and use of the adjacent sites emphasized avian species.

Getty and Black Oak jointly developed an Avian and Bat Protection Plan (ABPP). The intent of the ABPP, as stated in 6.7.1 of the proposed permit, is to address steps taken to identify, avoid, minimize and mitigate impacts to avian and bat species during both the construction and operations phase of the projects, including formal and informal monitoring, training, wildlife handling, documentation, and reporting protocols for each phase of the Project.²⁷ In response to comments received from EFP staff, DNR, and the United States Fish and Wildlife Service (USFWS), Black Oak and Getty submitted a Revised ABPP on July 10, 2012.²⁸

Based on results of the avian surveys conducted for the Project and the adjacent Black Oak Wind Farm, Getty revised the turbine layouts to avoid flyways identified in the field surveys. DNR reviewed the proposed turbine layouts submitted by and recommends post construction fatality monitoring consistent with the DNR draft avian and bat fatality protocols for moderate risk sites for all layouts under consideration.²⁹

Black Oak and Getty installed bat detectors in the spring of 2012 and, as part of the Getty site permitting process, have committed to reporting on the results of the preconstruction monitoring.

EFP Response: EFP staff believes the revised ABPP provides both necessary background for understanding potential avian and bat impacts and as a framework for avoiding, minimizing, and mitigating potential impacts that are important for the Commission's decision. Issues raised in the USFWS and DNR comments have either been incorporated into the Revised ABPP or in sections 6.7, 13.2, 13.3, and 13.4 of the proposed site permit as discussed below.

It has been the Commission's practice for the past few years to require preparation of an ABPP for wind projects. Historically, the ABPP was provided after the issuance of the permit, but before construction. In the case of the Getty Project, Getty and Black Oak provided a Draft ABPP on January 17, 2012. Because of the timing of the Draft ABPP and the desire for an opportunity for public and agency comments on the Draft ABPP prior to the Commission's final permit decision on the Project, the Draft ABPP was provided for public comment as Attachment 5 to the Draft Site Permit. The Draft Site Permit, at section 6.7, required Getty to comply with the provisions of the ABPP as detailed in Attachment 5.

Although the Revised ABPP is very useful, the document, as it stands, provides the perspective of the Applicants much like a site or route permit application and not necessarily the position of the Commission. For this reason, EFP staff recommends that the revised ABPP not be included

²⁷ Draft Avian and Bat Protection Plan, January 17, 2012, eDockets ID: [20121-70380-01](#)

²⁸ Revised Avian and Bat Protection Plan, July 10, 2012, eDockets ID: [20127-76674-03](#)

²⁹ DNR Comments on Turbine Layouts for Black Oak and Getty Wind Projects in Stearns County, June 24, 2012, eDockets ID: [20128-78117-01](#).

as an attachment to the proposed site permit. EFP staff believes that the opportunity for agencies and the public to comment on the ABPP was beneficial in identifying potential avian impacts and developing mitigation strategies. Going forward, EFP staff would recommend that the Commission not accept any new LWECS site permit applications as complete unless a Draft ABPP is included in the application, allowing for comment on a proposed ABPP during the application review period.

EFP staff proposes a number of changes to Section 6.7 of the permit to (1) remove reference to the ABPP as an attachment to the proposed permit, while requiring Getty to comply with the provisions of the ABPP filed on July 10, 2012, and (2) characterize the ABPP document as one component of an ongoing compliance system, rather than a static document. The proposed changes separate the required compliance filings:

6.7.1 ABPP: The proposed permit requires annual audits of the ABPP as recommended by the DNR in their comments and incorporated by Black Oak and Getty in the Revised ABPP. As proposed the audit would summarize bird and bat fatalities and injuries reported over the previous year and provide estimates of overall bird and bat injuries at the site. The audit would identify any deficiencies or recommended changes in operation to the Project along with a proposed schedule for implementing any changes. The audit provides a mechanism to identify issues related to avian impacts over the potentially 30 year lifetime of the Project.

6.7.2 Quarterly Incident Reports: The proposed permit continues the requirement for filing quarterly incident reports and, requires Getty to provide copies of these reports to USFWS and DNR at the time the reports are filed with the Commission.

6.7.2 Immediate Incident Reports: Pursuant to comments from the USFWS the proposed permit requires reporting within 24 hours of any dead or injured bald eagle, regardless of its listing status.

The proposed permit also includes three special conditions related to avian and bat species:

Section 13.2 Overhead Collector Lines

The proposed changes specify feeder lines, rather than collector lines. The permit, at section 4.15 requires collector lines carrying power from individual turbines to an interconnection point, be buried. Section 4.15 allows feeder lines carrying power from an internal project interconnection point to be either overhead or underground. In response to DNR comments, the proposed permit also requires Getty to provide location and spacing of proposed bird flight diverters to DNR and the Commission prior to the preconstruction meeting. Because the proposed 69 kV transmission line is not being permitted as part of the project, the special condition does not address transmission lines.

Section 13.3 Site Specific Bat Study: The site-specific bat study identified in section 13.3 of the proposed site permit is currently underway and results will be submitted by December 15, 2012, as required by this section of the proposed permit. In July 2012 the United States Geological Survey (USGS) has released a report summarizing current literature on the

interaction between bats and wind energy.³⁰ The USGS report highlighted the need for more study regarding impacts to bats from wind projects. Based on the conclusions of the USGS bat study, it appears that the interaction between bats and wind turbines is complex and the science is not developed to the point where preconstruction data on bat activity and species present at a site can be used to inform a layout that would minimize impacts to bats. Although information on bat activity and species within the site does not directly inform turbine and infrastructure siting, EFP staff recommends that this permit condition remain, and the information be used to develop a baseline knowledge of the site that may be useful in developing survey design as part of the post-construction monitoring.

13.4 Post-Construction Fatality Monitoring: Pursuant to DNR comments on post-construction fatality monitoring, the proposed site requires Getty to design and execute post-construction monitoring consistent with DNR recommendations.

Review of Biological Inventories

DNR staff requested a period of at least 30 days to review biological surveys required under Section 6.1.

EFP Response: The proposed site permit, at Section 6.1, changes this time period to 30 rather than 14 days. This 30 day review period is consistent with that in the Draft Site Permit for the Black Oak Project.

Site Restoration

DNR staff noted that allowing up to 12 months for restoration of sites allows for the introduction of invasive species and requests that the time period be addressed in the Invasive Species Prevention Plan required under Section 7.11 of the Site Permit.

EFP Response: EFP staff notes DNR staff's concern with the possible length of time, but believes that the permit language allows necessary flexibility for Getty and the landowner to negotiate a complete restoration of disturbed land, and not solely re-vegetation in a mutually agreeable timeframe. EFP staff anticipates that a more detailed timeline for re-vegetation would be included in the Soil Erosion and Sediment Control Plan required under Sections 7.11 of the Site Permit.

Landowner Participation

Applicants state that they have approximately 5,000 acres within the project area under site control. One written comment alleged that wind rights may have been obtained under duress and that signed easements may not have been properly executed with the required witness.³¹

EFP Response: The Permit, at Section 10.1 requires Getty to demonstrate it has obtained wind rights necessary to construct and operate the Project prior to construction.

³⁰ Ellison, L.E. 2012. *Bats and Wind Energy-A Literature Synthesis and Annotated Bibliography*: U.S. Geological Survey Open-File Report 2012-1110. 57 p., <http://pubs.usgs.gov/of/2012/1110/OF12-1110.pdf>

³¹ Public Hearing Written Comments, August 14, 2012, eDockets ID: [20128-77851-01](#), see Wiener comments

Setbacks

One commenter questioned why the proposed permit does not require setbacks as stringent as the permit issued by the Commission in the Goodhue Wind Project. Stearns County Ordinance sets forth different requirements than Goodhue County.³²

EFP Response: As discussed above, Stearns County assumed permitting for Projects less than 25 MW in December 2009. Certain standards adopted by ordinance in Stearns County are more stringent than the Commission's General Permit Standards. The Draft Site Permit issued for public comment identified these more stringent standards in permit condition 13.1.

Other Comments

Issues of need for the Project and other Project alternatives are subject of the Certificate of Need before the Commission. Wind resources are addressed in Findings 32 – 35; wind rights and agreements are discussed in Findings 33 – 40 and in the Site Permit at section 10.1; impacts to property values are addressed in Findings 51 – 52; aesthetic impacts are addressed in Findings 62 – 64; stray voltage is addressed in Finding 72; impacts to the local economy are addressed in Findings 90 and 91; wildlife impacts are addressed in the Site Permit at sections 6.1, 6.7, 13.2, 13.3, and 13.4 and in Findings 100 – 110; groundwater impacts are addressed in Finding 121; impacts to surface water and wetlands are addressed in the Site Permit at sections 4.6, 6.1, 7.11, and 10.5.1 and at Findings 122 – 124. The Site Permit, at section 10.2 requires a power purchase agreement or other enforceable mechanism. Getty anticipates a contract for sale of the power in late 2012, as noted in Finding 30.

Other Proposed Changes in Proposed Permit

In addition to the changes in permit language noted above, (sections 6.1, 6.7, 13.2, 13.3, and 13.4 of the proposed permit), EFP staff proposes some additional changes in permit language between the Draft Site Permit and the Proposed Permit. New language is noted in the attached permit by underline and strikeout. Some changes are grammatical and to provide small changes (e.g. use of "Project" rather than "LWECS") consistent with the proposed Black Oak site permit and are not described further. Changes proposed to provide consistency with permits and permit amendments recently issued by the Commission, and with the structure of the permit are detailed below:

Section 3, Application Compliance: The proposed language is consistent with more recently issued permits to ensure that, should there be a conflict between the compliance filings detailed in Attachment 4 to the Permit, the conditions of the Permit shall prevail.

Section 5.2, Notice to Local Residents: The proposed language clarifies that the Permittee shall provide a printed copy of the permit to local governments and landowners and that the complaint procedure provided to landowners within the Project Boundary is that required in Section 5.8 of the permit. These changes are consistent with the language in the Draft Site Permit for the Black Oak Wind Farm.

Section 6.2 Shadow Flicker: The proposed language changes "impact" to "exposure," and clarifies that the Permittee shall file these surveys with the Commission prior to the pre-

³² Ibid., see Mueller Comments; Commission Order issuing LWECS Site Permit for Goodhue Wind Project, August 24, 2011, eDockets ID: [20118-65631-01](#)

construction meeting. These changes are consistent with the language adopted by the Commission in its amendment to the Morgan Wind Project (Docket No. IP-6723/WS-09-360).³³

Section 6.4 Interference: The proposed changes clarify that pre-construction assessments of interference potential include radio signals and telecommunications. These changes are consistent with the language in the Draft Site Permit for the Black Oak Wind Farm.

Section 6.8 Project Energy Production

This section contains minor technical changes consistent with the language adopted by the Commission in its amendment to the Morgan Wind Project.³⁴

Section 6.9 Wind Resource Use

The proposed permit contains technical changes to this section and clarifies that the information is considered public, consistent with the language adopted by the Commission in its amendment to the Morgan Wind Project.³⁵

Section 10.3 Failure to Commence Construction

The proposed permit removes reference to Section 5 of the permit. Preconstruction studies are identified in Section 6 of the permit. However, because Section 6 also identifies several additional reports required prior to operation, and ongoing through operation, the proposed language does not reference this section specifically.

Section 13.1 Application of County Standards

The proposed permit includes a statement that a recorded fall zone easement acceptable to the county may be allowed in lieu of the setback from property lines. This change is consistent with the language in the Draft Site Permit distributed for the Getty Project.

Section 13.5 Project Substation

The proposed permit adds a special condition clarifying that the location of the Project Substation complies with the setback requirements in the Stearns County Land Use and Zoning Ordinance.

Proposed Findings of Fact and LWECS Site Permit

EFP staff has prepared (1) proposed findings of fact, conclusions of law, and order, and (2) a proposed LWECS site permit (attached). The proposed findings address the procedural aspects the process followed, describe the Project, and address the environmental and other considerations of the Project, incorporating some findings that were previously made for other LWECS projects. The site considerations addressed in the proposed findings (such as human settlement, public, health and safety, noise, recreational resources, community beliefs, effects on land based economies, archaeological and historical resources, wildlife, and surface water) track the factors described in the Commission's rules for other types of power plants that are pertinent to wind projects. The proposed permit includes measures to ensure that the Project is constructed safely and that impacts from construction and operation of the Project are minimized or mitigated.

³³ PUC, *Order Amending Site Permit*, July 26, 2012, eDocket ID: [20127-77265-01](#)

³⁴ Ibid.

³⁵ Ibid.

EFP Staff Recommendations

Department EFP staff recommends that the Commission:

1. Approve and adopt the proposed findings of fact, conclusions of law, and order, thereby
 - a. Designating a site for the up to 40 MW Getty Wind Project LWECS in Stearns County
 - b. Issuing a site permit, with appropriate conditions, to Getty Wind Company, LLC, for the up to 40 MW Getty Wind Project LWECS in Stearns County.

Figure 1: Getty Wind Project Site

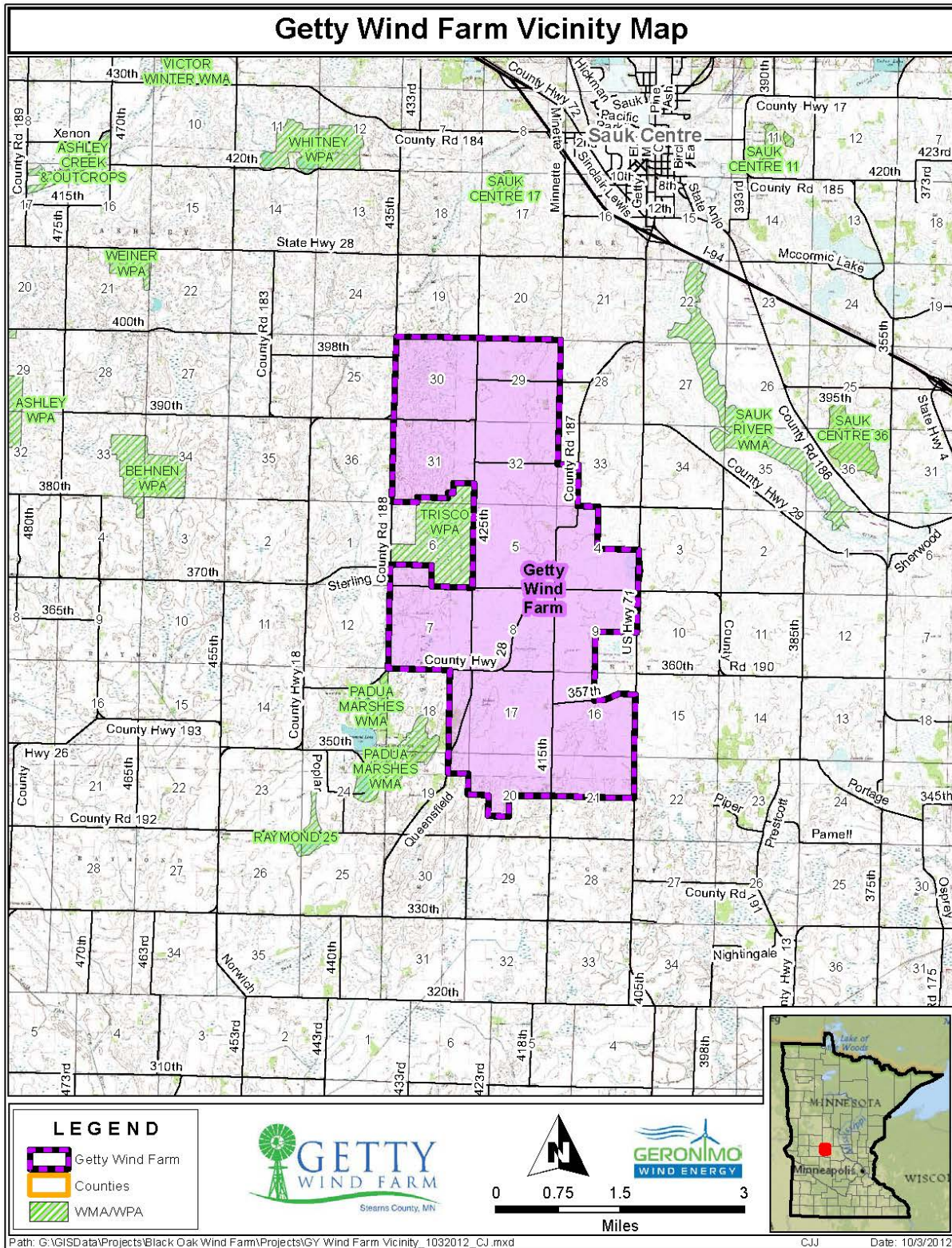
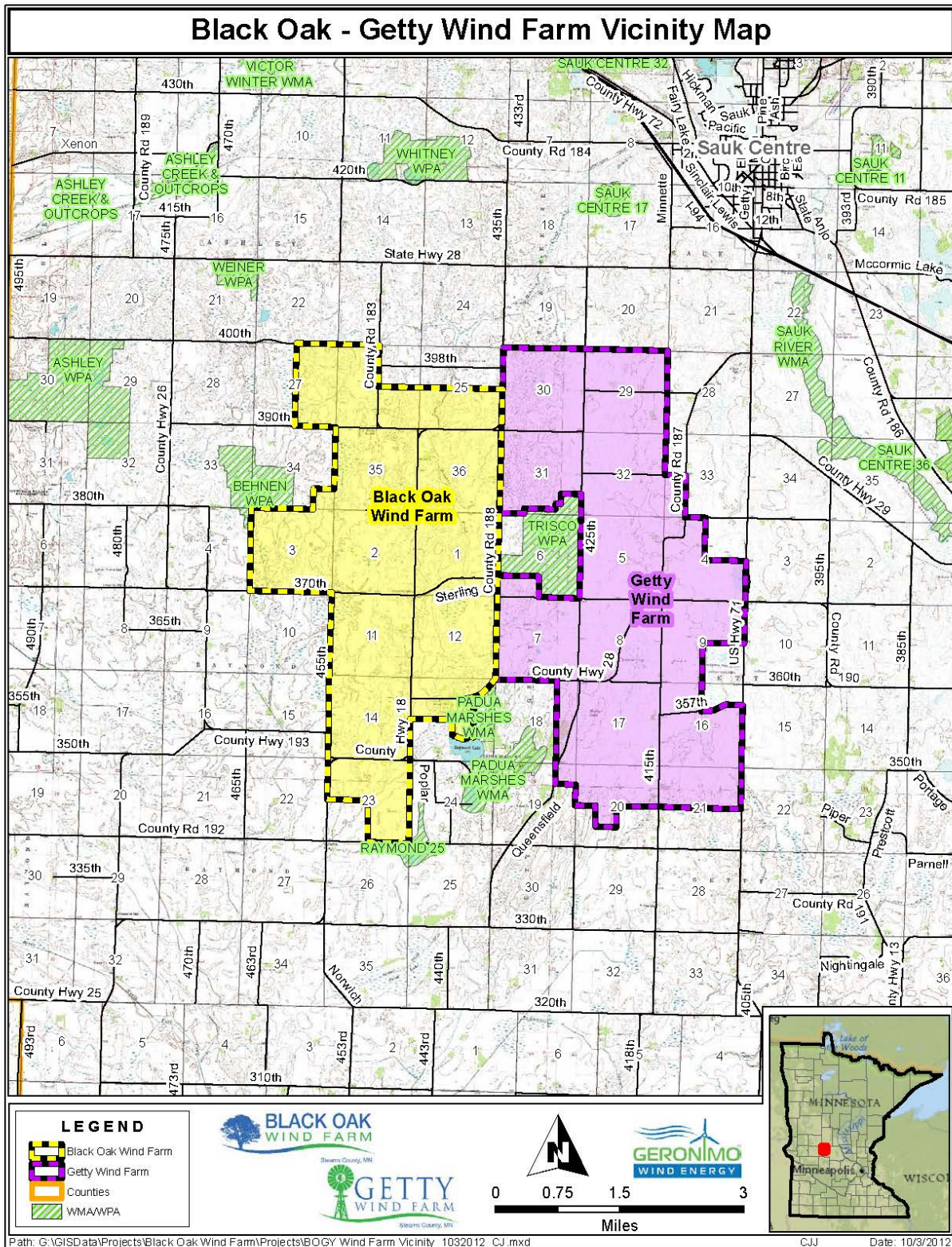


Figure 2: Black Oak & Getty Wind Projects Vicinity



**STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION**

Beverly Jones Heydinger
David Boyd
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Chair
Commissioner
Commissioner
Commissioner
Commissioner

In the Matter of the Application for a Large
Wind Energy Conversion System Site
Permit for the 40 MW Getty Wind Project
in Stearns County, Minnesota

ISSUE DATE:

DOCKET NO.

IP-6866/WS-11-831

**FINDINGS OF FACT, CONCLUSIONS
OF LAW AND ORDER ISSUING A
SITE PERMIT TO GETTY WIND
COMPANY, LLC FOR THE GETTY
WIND PROJECT**

The above-entitled matter came before the Minnesota Public Utilities Commission (Commission) pursuant to an application submitted by Getty Wind Company, LLC (Getty or Applicant) for a site permit to construct, own, operate, maintain and manage a 40 Megawatt (MW) nameplate capacity Large Wind Energy Conversion System (LWECS) and associated facilities in Stearns County.

A public meeting was held on March 20, 2012, in Sauk Centre, Minnesota. The meeting was presided over by the Department of Commerce (DOC) Energy Facility Permitting (EFP) staff. The meeting continued until all persons who desired to speak had done so. The public comment period closed on April 4, 2012. Comments on the Getty Wind Project (Project) were also received during the public hearing record for the combined Black Oak/Getty Certificate of Need docket (IP-6553 and 6866/CN-11-471). Administrative Law Judge Bruce H. Johnson presided over a public hearing on the Black Oak and Getty projects held in Sauk Centre, Minnesota, on June 26, 2012. The Comment period closed on July 10, 2012 and Administrative Law Judge Johnson issued a Summary of Public Testimony on August 8, 2012.

STATEMENT OF ISSUE

Should Getty Wind Company, LLC be granted a site permit under Minnesota Statutes section 216F.04 to construct a 40 MW Large Wind Energy Conversion System in Stearns County?

Based upon the record created in this proceeding, the Public Utilities Commission makes the following:

FINDINGS OF FACT

Category Findings

Background and Procedure	1-13
Certificate of Need	14 – 16
Project Description	17 – 29
Site Location and Characteristics	30 – 31
Wind Resource Considerations	32 – 35
Wind Rights and Easement/Lease Agreements	33 – 40
Site Considerations	41
Human Settlement	42 – 44
Zoning and Land Use	45 – 50
Property Values	51 – 52
Noise	53 – 56
Shadow Flicker	57 – 61
Visual Values	62 – 64
Health and Safety	65 – 75
Public Services and Infrastructure	76 – 87
Recreational Resources	88 – 89
Community Benefits	90 – 91
Effects on Land-Based Economics	92 – 95
Archaeological and Historical Resources	96 – 98
Air and Water Emissions	99
Wildlife	100 – 110
Rare and Unique Natural Resources	111 – 113
Vegetation	114 – 117
Soils, Geologic and Groundwater Resources	118 – 121
Surface Water and Wetlands	122 – 124
Future Development and Expansion	125 – 127
Maintenance	128
Decommissioning and Restoration	139 – 133
Site Permit Conditions	134 – 136

Background and Procedure

1. On October 11, 2011, Getty Wind Company, LLC (Getty), filed a site permit application with the Public Utilities Commission for the 40 MW Getty Wind Project (Project).¹
2. Getty is a wholly owned subsidiary of Getty Wind, LLC, which, in turn, is wholly owned by 10 Minnesota limited liability companies formed by 18 Minnesota residents for the intent and purpose of owning Getty collectively and developing the Project as a Community Based Energy Development (C-BED) wind project.² Mnioka Construction, LLC (Mnioka), a North Dakota limited liability corporation, will develop the Project. Keith Thorstad, a member of one of Getty Wind, LLC's owners, has an ownership stake

¹ Site Permit Application, October 11, 2011, eDocket ID: [201110-67223-01](#), [201110-67223-02](#), [201110-67223-03](#), [201110-67223-04](#), [201110-67223-05](#), [201110-67223-06](#), [201110-67223-07](#), [201110-67226-07](#) (Exhibit 1)

² Exhibit 1, at p. 1

in West Stevens Wind, LLC, which has developed the 20 MW West Stevens Wind Project in Stevens County.³

3. Department of Commerce Energy Facility Permitting (EFP) staff reviewed the application for compliance with the application requirements of Minnesota Rules, part 7854.0500. In its comments and recommendations to the Commission, dated November 1, 2011, EFP staff recommended that the Commission accept the application.⁴
4. On November 14, 2011, a Commission Order accepted the application for the Getty Wind Project.⁵
5. Published notice of site permit application acceptance, and opportunity to comment on the site permit application appeared in the *Sauk Centre Herald*, on December 1, 2011.⁶ The published notice provided: a) description of the proposed project; b) deadline for public comments on the application; c) description of the Commission site permit review process; and d) identification of the public advisor. The notice published meets the requirements of Minnesota Rule, Part 7854.0600, subpart 2.
6. On November 29, 2011, Getty distributed copies of the "Site Permit Application for the Getty Wind Project Project" and Notice of Application Acceptance, to government agencies and landowners pursuant to Minnesota Rule, Part 7854.0600, subparts 2 and 3.⁷
7. EFP staff received 13 comment letters by the close of the official public comment period on December 30, 2011.⁸ Written comments are summarized in EFP's February 9, 2012, Comments and Recommendations to the Commission.⁹
8. On February 23, 2012, the Commission Order issued a "Draft Site Permit" for the Project.¹⁰
9. On February 28, 2012, the Department's EFP staff issued a notice of draft site permit issuance and public information meeting. The published notice provided: a) location and date of the public information meeting; b) description of the proposed project; c) deadline for public comments on the application and draft site permit; d) description of the Commission's site permit review process; and e) identification of the public advisor. The notice meets the requirements of Minnesota Rules, Part 7854.0900 subp 1. This notice was posted on the EFP website and sent to interested persons on February 28, 2012 and

³ Id., at p. 4

⁴ EFP Staff Comments, December 23, 20120, eDocket ID: [201111-67963-01](#) (Exhibit 2)

⁵ Commission Order Accepting Black Oak Wind, LLC's LWECS Site Permit Application, eDocket ID: [201111-68332-01](#) (Exhibit 3)

⁶ Notice of PUC's acceptance of the LWECS Site Permit Application for Getty Wind Project, *Sauk Centre Herald*, December 1, 2011, eDockets ID: [201112-68960-01](#) (Exhibit 5)

⁷ Id.

⁸ DOC EFP, Public Comments received on Getty Wind Company, LLC's LWECS Site Permit Application for the 40 MW Getty Wind Project in Stearns County, January 18, 2012, eDockets ID: [20121-70416-01](#) (Exhibit 7)

⁹ DOC EFP, EFP Comments and Recommendations on Issuance of Draft Site Permit, eDockets ID: [20122-71386-01](#) (Exhibit 8)

¹⁰ Minnesota PUC, Order Issuing Draft Site Permit for public review and comment, eDockets ID: [20122-71812-01](#), [20122-71812-02](#) (Exhibit 9)

to governmental agencies on June 21, 2012, as required by Minnesota Rules, Part 7854.0900, subp. 2.¹¹

10. Published notice of draft site permit issuance and public information meeting appeared in the *Sauk Centre Herald* on March 1, 2012,¹² and in the *EQB Monitor* on March 5, 2012,¹³ as required by Minnesota Rules, Part 7854.0900, subp. 2. The published notice contained all of the information required by Minnesota Rules part 7854.0900 subp. 1.
11. A Public Information Meeting on the Project was held in Sauk Centre on March 20, 2012. The purpose of the meeting was to provide an overview of the Commission permitting process and to receive comments on the draft site permit. Approximately twenty-five (25) people attended the hearing. EFP staff and representatives from Getty were present. EFP staff provided an overview of the LWECS site permitting process, the draft site permit and responded to questions. EFP staff and Getty representatives responded to project specific questions and general questions about wind energy. Questions and comments were related to project benefits for local residents, the need for renewable energy, the cost of wind energy, and local wildlife.¹⁴
12. EFP staff received four written comments on the draft site permit before the close of the comment period on April 4, 2012.¹⁵ As discussed in Finding 15, comments on the Getty Siting docket were also received during the public hearing record for the combined Black Oak/Getty Certificate of Need docket (IP-6853 and 6866/CN-11-471). In addition to statements of support or opposition to the Project, written comments were related to wildlife impacts, site restoration, and agency review periods for biological documents. Issues related to both oral and written comments received during the comment period and during the Public Hearing are addressed in the Findings and the Site Permit. Wind resources are addressed in Findings 32 – 35; wind rights and agreements are discussed in Findings 33 – 40 and in the Site Permit at section 10.1; impacts to property values are addressed in Findings 51 – 52; aesthetic impacts are addressed in Findings 62 – 64; stray voltage is addressed in Finding 72; impacts to the local economy are addressed in Findings 90 and 91; wildlife impacts are addressed in the Site Permit at sections 6.1, 6.7, 13.2, 13.3, and 13.4 and in Findings 100 – 110; groundwater impacts are addressed in Finding 121; impacts to surface water and wetlands are addressed in the Site Permit at sections 4.6, 6.1, 7.11, and 10.5.1 and at Findings 122 – 124. The Site Permit, at section 10.2 requires a power purchase agreement or other enforceable mechanism.

¹¹ Notice of Public Hearing and Availability of Draft Site Permit for public review and comment, eDockets ID: [20122-71943-01](#), Notice of Draft Site Permit to Local Governmental Units, eDockets ID: [20126-75901-01](#) (Exhibits 10 and 11)

¹² *Sauk Centre Herald*, "Notice of Draft Site Permit Availability and Public Meeting, March 1, 2012," eDockets ID: [20124-74058-01](#) (Exhibit 12)

¹³ *EQB Monitor*, "Notice of Draft Site Permit Availability and Public Meeting," March 5, 2012, eDockets ID: [20124-74073-01](#) (Exhibit 13)

¹⁴ Oral Comments: Draft Site Permit and Pubic Information Meeting on Getty Project held March 20, 2012, in Sauk Centre. eDockets ID: [20124-74076-01](#) (Exhibit 14)

¹⁵ Comments on Draft Site Permit, eDockets ID: [20124-73344-01](#), [20126-75767-01](#), and [20122-71712-03](#) (Exhibit 15)

13. There were no requests for a contested case hearing submitted during the comment period.

Certificate of Need

14. Getty, together with Black Oak Wind, LLC, jointly submitted a petition for a Certificate of Need for the Black Oak Wind Farm and the Getty Wind Project, on October 11, 2011.¹⁶
15. On December 15, 2011, the Commission issued an order authorizing an informal review process for its consideration of the need for the project. A public hearing on the Black Oak Wind Farm and Getty Wind Project projects was held in Sauk Centre on June 26, 2012;¹⁷ the hearing was noticed to include opportunity for public comments on both the Black Oak and Getty site permits.¹⁸ A total of eight (8) written comments were received during the written comment period that closed on July 10, 2012.¹⁹ Administrative Law Judge Bruce H. Johnson issued a Summary of Public Testimony on August 8, 2012.²⁰
16. A site permit may not be issued until the Commission determines the need for the facility.

Project Description

17. Getty Wind is considering three turbine models ranging between 1.5 and 3.0 MW for the Project. In the site permit application, Getty provided preliminary layouts for each of the three turbine models under consideration. The layouts were comprised of up to 21 REpower MM100 1.8 MW turbines for an installed capacity of 37.8 MW, up to 26 Goldwind 87/1500 1.5 MW turbines for an installed capacity of 39 MW, and up to 13 Vestas V112 3.0 MW turbines for an installed capacity of 39 MW. Getty requests that the Commission permit the project for turbines in the range of 1.5 to 3.0 MW, without specifying turbine manufacturer.²¹
18. On June 22, 2012, Getty and Black Oak provided updated maps showing preliminary turbine locations and associated facilities.²² The updated turbine layouts show 21 REpower MM100 1.8 MW turbines, representing an installed capacity of 37.8 MW, and two alternate locations; 23 Goldwind 87/1500 1.5 MW turbines, representing an installed capacity of 34.5 MW, and four alternate locations; and 13 Vestas V112 3.0 MW turbines, representing an installed capacity of 39 MW, and two alternate locations.

¹⁶ Black Oak Wind, LLC and Getty Wind Company, LLC, *Joint Application for Certificate of Need for the Black Oak and Getty Wind Projects*, October 11, 2011, eDocket ID: [201110-67221-03](#)

¹⁷ Court Reporter, Transcript of Public Hearing, July 11, 1012, eDocket ID: [20127-76685-01](#) (Exhibit 21)

¹⁸ Revised Notice of Public Hearing, May 25, 2012, eDocket ID: [20125-75012-03](#) (Exhibit 17)

¹⁹ OAH & Court Reporter, Written Public Comments, August 14, 2012, eDockets ID: [20128-77850-01](#), [20127-76745-01](#), and [20127-76745-04](#) (Exhibit 23)

²⁰ OAH Summary of Public Testimony, August 8, 2012, eDocket ID: [20128-77666-01](#) (Exhibit 22)

²¹ Exhibit 1, at p. 4, , Figures 2.1 – 2.3

²² Black Oak & Getty, Hearing Testimony of Patrick Smith with Schedules, at Schedules, June 26, 2012, eDocket ID: [20126-75957-02](#) (Exhibit 19), at schedules 1 - 6

19. Hub height for the REpower MM100 1.8 MW turbines would be 80 or 100 meters (262 or 328 feet) with a rotor diameter of 100 meters (328 feet), resulting in an overall height of the tower, nacelle and blade of approximately 427 - 492 feet when one blade is in the vertical position. The hub height for the Goldwind 87/1500 1.5 MW would be 80 or 100 meters (262 or 328 feet) with a rotor diameter of 87 meters (285 feet), resulting in an overall height of approximately 423 to 472 feet when one blade is in a vertical position. The hub height for the Vestas V112 3.1 MW turbine would be 84 or 94 meters (276 or 308 feet) with a rotor diameter of 112 meters (368 feet), resulting in an overall height of approximately 459 to 492 feet when one blade is in a vertical position.²³
20. Turbine towers would be constructed of tubular steel. Each tower will be secured by a concrete foundation approximately 2,500 square feet and approximately 10 feet deep, depending on turbine size and engineering, soil conditions, turbine tower load specification and cost considerations.²⁴
21. The project will also include an underground automated supervisory control and data acquisition system (SCADA) for real-time monitoring and control of turbine operations. Up to two (2) permanent free standing 80 meter meteorological towers will be used as part of the communication system.²⁵ Other components of the project include a concrete and steel foundation for each tower, step-up transformers (either pad-mounted or internal), all weather class 5 roads of gravel or similar material, an operation and maintenance (O&M) building, and an underground energy collection system and a project substation. Getty Wind intends to pursue permitting for the O&M facility and the 69 kV transmission line through Stearns County.²⁶
22. All turbine models under consideration are three bladed, upwind, active yaw, and active aerodynamic control regulated wind turbines. All turbine models are also equipped with emergency power supplies to allow the turbine to be shut down safely if power from the grid is lost. Each turbine is equipped with a wind sensor to allow the turbine to rotate to optimize turbine output based on real-time wind conditions. Turbines towers will be tubular steel painted a non-glare white. Each turbine blade is equipped with a lightning receptor, which, in turn, is attached to the turbine's lightning protection system.²⁷
23. Each turbine is interconnected through an underground electrical collection system at 34.5 kV. All of the proposed feeder lines from the Project, approximately 9 – 12 miles, would connect to the proposed project substation.²⁸ Depending upon whether the Getty and Black Oak projects are constructed together or separately, separate substations may be constructed for each project, or the projects may jointly construct one substation.²⁹ If the Project Substation is constructed by Getty, either separately or to serve both the Getty and Black Oak projects, Getty Wind anticipates the substation will be located in Section

²³ Exhibit 1, at p. 4

²⁴ Id., at pp. 64 - 65

²⁵ Black Oak and Getty Post Hearing Comments and Revised ABPP, July 10, 2012, eDocket ID: [20127-76674-09](#) (Exhibit 24)

²⁶ Exhibit 1, at pp. 11 - 13

²⁷ Id., at p. 9

²⁸ Id., at p. 11

²⁹ Exhibit 24, at response 7

7 of Black Oak Township, near the intersection of County Roads 187 and 190 (415th Avenue and 370th Street).³⁰ Final substation siting remains dependent on archaeological and biological field surveys as well as soil testing. The Project will interconnect with the electrical grid at Xcel Energy's Black Oak Switching Station, located approximately three and one-half miles east of the Getty Wind Project's eastern boundary.³¹ The interconnection will be in accordance with Midwest System Operator Standards and consistent with the Large Generator Interconnection Agreement. Getty and/or Black Oak will seek a permit from Stearns County for the 69 kV transmission line between the Project Substation.³²

24. Depending upon final site design Getty anticipates that the project would permanently occupy approximately 17 to 31 acres when constructed.³³ Getty Wind anticipates that an additional 20 to 40 acres will be temporarily disturbed for contractor staging and assembly areas, turbine foundations, access roads, electric collection lines, substation, and an operations and maintenance facility.³⁴
25. Getty Wind anticipates construction of approximately two to five miles of access roads. During the construction phase, roads will be approximately 32 feet wide to allow for the large construction equipment; after construction roads will be reduced to approximately 16 feet wide and covered with gravel to allow permanent year-round access to turbine sites. Access roads will be low-profile to allow farm equipment to cross easily.³⁵
26. Getty has filed an interconnection request with the Midwest Independent Transmission System Operator (MISO) and anticipates it will be able to execute a General Interconnection Agreement (GIA) for the Project in February, 2013.³⁶
27. Getty anticipates the capital costs for the project to be between \$68 and \$76 million and ongoing operating and administrative costs to be approximately \$1.3 to \$1.5 million per year.³⁷
28. Getty Wind anticipates that construction of the Project will begin in mid-2013, with commercial operation expected by the end of 2013.³⁸
29. Getty Wind anticipates that a contract for sale of power from the Project will be reached in late 2012.³⁹

³⁰ Exhibit 1, at Figure 4

³¹ Id., at p. 10

³² Id., at p. 11

³³ Id., at p. 33

³⁴ Id., at p. 39

³⁵ Id., at p. 64

³⁶ Exhibit 19, at p. 13

³⁷ Exhibit 1, at p. 66

³⁸ Exhibit 19, at p.12

³⁹ Id., at p. 13

Site Location and Characteristics

30. The Project will be located in an agricultural area south and southwest of the city of Sauk Centre. Getty Wind has identified a site of approximately 7,600 acres located in sections 29-33 of Sauk Centre Township (T126N, R34W) and sections 4 - 9, and 16 - 21 of Getty Township (T125N, R34W) in Stearns County.⁴⁰ The topography in the site is characterized with low rolling hills with an elevation of approximately 1,340 to 1,360 feet above mean sea level.⁴¹
31. The Padua Wildlife Management Area (WMA) is located adjacent to the south of the site. Four additional WMAs are located within five miles of the Project. The Trisko and Kenna Waterfowl Production Areas (WPAs) are adjacent to the site; 14 additional WPAs are located within five miles of the Project.⁴²

Wind Resource Considerations

32. Based on data obtained from two temporary meteorological stations within the site, long-term correlation data from sites in Alexandria, Saint Cloud, and Chokio, as well as topographic and land cover information, Getty calculated long-term monthly average wind speeds of between 6.8 and 8.7 meters/second (15.2 to 19.4 miles per hour) at 80 meters and 7.1 to 9.0 meters/second (15.9 to 20.1 miles per hour), with a mean wind speed of 7.4 meters/second (16.6 miles per hour) at a height of 80 meters and 7.8 meters/second (17.5 miles per hour). The strongest wind speeds occur during the months of March through May, while June and July typically have the lowest average wind speeds. Wind speeds are generally greater in the evening and nighttime hours and lower in the morning.⁴³
33. The prevailing wind directions at the site are from the northwest and the southeast.⁴⁴ Getty intends to develop a final layout that maximizes the Project's energy production while minimizing impacts from the Project. The final site layout will be dictated by the topography of the site, the turbine model selected, and required setbacks from homes, environmental constraints, and areas where Getty does not have site control.⁴⁵
34. Turbine placement, aside from other resource features where setbacks or wind access buffers are required, will be designed to provide sufficient spacing between the turbines to minimize internal wake losses. Given the prevalence for southerly and northerly winds, the spacing is widest in the north-south direction. As addressed in Section 4.10 of the site permit, greater or lesser spacing between the turbines or turbine strings may be used in areas where the terrain dictates the spacing. Sufficient spacing between the turbines is utilized to minimize wake losses when the winds are blowing parallel to the turbines.

⁴⁰ Exhibit 1, at p. 4

⁴¹ Id., at p. 35 and 37

⁴² Id., at pp. 28 - 29

⁴³ Id., at p. 58

⁴⁴ Id., at p. 61, Table 9.5

⁴⁵ Id., at p. 6

35. Getty anticipates a net capacity factor of between 39 and 44 percent at a 100 meter hub height. Getty anticipates the Project's average annual output to be between 136,000 and 154,000 MWh per year, using the 1.8 MW turbines, depending upon final design and turbine selection.⁴⁶ Getty anticipates that annual output would be somewhat less if the 1.5 MW or 3.0 MW turbines were used.⁴⁷

Wind Rights and Easement/Lease Agreements

36. In order to build a wind facility, a developer must secure site leases and easement agreements to ensure access to the site for construction and operation of a proposed project. These lease or easement agreements also prohibit landowners from any activities that might interfere with the execution of the proposed project. Land and wind rights will need to encompass the proposed LWECS, including all associated facilities, including but not limited to wind and buffer easements, wind turbines, access roads, meteorological towers, and the electrical collection system.
37. Getty exerts some form of site control, in the form of signed wind leases, easements or options, over approximately 5,000 acres of 7,600 acres located within the site.⁴⁸ Section 10.1 of the site permit requires Getty to demonstrate that it has obtained the wind rights necessary to construct and operate the Project at least 14 days before the pre-construction meeting.
38. In its January 2008 *Order Establishing General Wind Permit Standards*, the Commission affirmed a Wind Access Buffer Setback of three rotor diameters on the secondary wind axis and five rotor diameters on the predominant axis to protect wind rights of adjacent property owners.⁴⁹
39. The proposed project layouts shown in the June 22, 2012, filing show at least one turbine in each layout located within the Wind Access Buffer Setback between the Project and the adjacent Black Oak Wind Farm.⁵⁰
40. Getty and Black Oak contend that in cases where turbines are located within the Wind Access Buffer Setback, wind lease and easement agreements are shared between the two projects via an agreement as part of Black Oak and Getty's joint development partnership. Getty and Black Oak further contend that because the wind leases and easements are shared, there should be no need for the Commission to vary the 3 x 5 RD wind access buffer.⁵¹

Site Considerations

41. Minnesota Statutes chapter 216F and Minnesota Rules chapter 7854 apply to the siting of LWECS. The rules require an applicant to provide a substantial amount of information to

⁴⁶ Exhibit 1, at pp. 67 - 68

⁴⁷ Exhibit 24, at response 18

⁴⁸ Id., at response 19

⁴⁹ Commission Order Establishing General Wind Permit Standards, January 15, 2008. eDocket ID: [4897855](#)

⁵⁰ Exhibit 19, Schedules 1-6

⁵¹ Exhibit 24, at response 4

allow the Commission to determine the potential environmental and human impacts of the proposed project and whether the project is compatible with environmental preservation, sustainable development, and the efficient use of resources.⁵² Pursuant to Minnesota Statutes section 216F.02, certain sections in Minnesota Statutes chapter 216E (Minnesota Power Plant Siting Act) apply to siting LWECS, including section 216E.03, subdivision 7 (considerations in designating site and routes). The analysis of the environmental impacts required by Minnesota Rule 7854.0500, subpart 7 satisfies the environmental review requirements; no environmental assessment worksheet or environmental impact statement is required for a proposed LWECS project.⁵³ Therefore, environmental review is based on the application and the record. The following analysis addresses the relevant criteria that are to be applied to a LWECS project.

Human Settlement

42. The Project is located within a moderately populated rural area in Stearns County. There are 33 homes within the Project boundary.⁵⁴ Then nearest city, Sauk Centre, is located approximately two miles northeast of the Project. As established in section 4.2 of the site permit, Getty Wind will maintain a setback distance of at least 1,000 feet from all residences. In all cases the setback shall be sufficient to comply with the noise standards established by the Minnesota Pollution Control Agency. As established in Section 4.1 of the site permit, Getty will also maintain a setback of five rotor diameters (1280 – 1680 feet) on the prevailing wind axis from non-participating landowner's property lines and three rotor diameters (760 – 985 feet) on the non-prevailing wind axis.
43. The Project is not expected to affect any existing water wells, as turbine locations will be set back from residences.⁵⁵
44. There will be no displacement of existing residences or structures in siting the wind turbines and associated facilities.

Zoning and Land Use

45. The Project is located within the Agricultural District A-160 zoning classification established in the *Stearns County Land Use and Zoning Ordinance 439*.⁵⁶ The A-160 zoning classification limits residential development by establishing a one dwelling per 160 acres. Approximately 81 percent of the Project Area comprised of cultivated row crops and 17 percent of the Project Area comprised of Grasslands.⁵⁷
46. Minnesota Statutes section 216F.08 authorizes counties to assume responsibility for processing permit applications for LWECS with a combined nameplate capacity of less than 25,000 kilowatts. Pursuant to Minnesota Statutes section 216F.08, Stearns County notified the Commission in writing on December 10, 2009, that the Stearns County Board

⁵² Minn. Stat. § 216F.03 and Minn. R. 7854.0500

⁵³ Minn. Rule 7854.0500, subp. 7

⁵⁴ Exhibit 1, at p. 15

⁵⁵ Id., at p. 37

⁵⁶ Id., at p. 16

⁵⁷ Id., at p. 39

of Commissioners assumed permitting responsibility for projects under 25 megawatts. The Stearns County Board amended its ordinance governing Wind Energy Conversion Systems on December 21, 2010.

47. Certain standards adopted by ordinance by Stearns County are more stringent than the Commission's General Permit Standards as set forth in the in Docket No. E, G-999/M-07-1102. Minnesota Statutes section 216F.081 states that the Commission shall consider and apply those more stringent standards unless the Commission finds good cause not to apply the standards.
48. The Draft Site Permit identified these more stringent setbacks as a special condition in Section 13.1, Application of County Standards, to allow for public to comment on whether these more stringent standards were appropriate for the site permit. In summary, Stearns County had adopted more stringent standards related to setbacks from: (1) property lines; and (2) Occupied structures, Stearns County differentiates between occupied structures of participating and non-participating property owners. The Stearns County ordinance also precludes turbines from being placed within a Shoreland Overlay District and requires certain assumptions in modeling for shadow flicker.
49. No comments were received opposing the more stringent setbacks or identifying any good cause not to apply them. All special conditions identified in the Draft Site Permit are carried forward and take precedence.
50. Under Section 7.11.4 of the *Stearns County Land Use and Zoning Ordinance 439*, the project substation is a permitted use in all Stearns County zoning districts subject to the setback provisions applicable in the applicable zoning classification. The site permit, at Section 13.5, requires the project substation to be sited in compliance with setback standards established for the A-160 zoning classification under Section 9.1.11 of the *Stearns County Land Use and Zoning Ordinance 439*.⁵⁸

Property Values

51. Property values are influenced by a complex interaction between factors specific to each individual piece of real estate as well as local and national market conditions; consequently the effect of one particular project on the value of one particular property is difficult to determine.
52. In a 2009 Lawrence Berkeley National Laboratory conducted a nationwide study on the potential impacts of wind projects on property values. Results from that study indicated that property values near wind projects are not negatively impacted and that home buyers and sellers consider a property's scenic vista when determining a sale/purchase price.⁵⁹ In their consideration of a moratorium on wind development, the Stearns County

⁵⁸ Stearns County Land Use and Zoning Ordinance 439, May 15, 2012,
<http://www.co.stearns.mn.us/Portals/0/docs/Document%20Library/ordinances/ord439.pdf>

⁵⁹ Hoen et al, *The Impact of Wind Power Projects on Residential Property Values in the United States: A Multi-Site Hedonic Analysis*, Ernest Orlando Lawrence Berkeley National Laboratory, December 2009,
<http://eetd.lbl.gov/ea/ems/reports/lbnl-2829e.pdf>

Commission looked at the potential impact to property values from wind projects. The Stearns County Assessor's Office prepared "A Study of Wind Energy Conversion Systems in Minnesota." As part of the study, the Assessor's office surveyed counties with LWECS to assess impacts on property values as a result of wind farms. Six counties in southern Minnesota (Dodge, Jackson, Lincoln, Martin, Mower, and Murray) with large wind energy conversion systems responded to the survey. Although the study did not find any changes in property valuation to properties hosting a wind tower, the study also concluded that there was insufficient data to allow for a reasonable analysis of the development of wind facilities on property values.⁶⁰ The Stearns County study also cited a study from the Renewable Energy Policy Project of 25,000 properties within five miles of a wind project in ten communities in the United States, and concluded that property values were not negatively impacted. The Stearns County study also cited a study conducted by the Royal Institute of Chartered Surveyors, which found that almost 30 percent of respondents reported a decrease in property values for properties located near wind facilities. In their decision not to adopt a moratorium on LWECS, the Stearns County Commission found that "the impact of wind farms will have a negligible effect on property values."⁶¹

Noise

53. The operation of the wind turbines would produce noise. Turbines produce mechanical noise (noise due to the gearbox and generator in the nacelle) and aerodynamic noise (noise due to wind passing over the turbine blades).⁶²
54. Noise impacts to nearby residents will be factored into the turbine micro-siting process. The Applicant must demonstrate the Project can meet the noise standard pursuant to Minnesota Rules chapter 7030 (site permit, sections 4.3 and 6.6). Noise levels have been predicted by a noise modeling program and will be verified per Section 5.1 to be compliant with the Minnesota Pollution Control Agency (PCA) Daytime and Nighttime L10 and L50 Limits as stated in Minn. Rule 7030.0040. These standards describe the limiting levels of sound established on the basis of present knowledge for the preservation of public health and welfare. These standards are consistent with speech, sleep, annoyance, and hearing conversation requirements for receivers within areas grouped according to land activities by the Noise Area Classification (NAC) system established in Minn. Rule. 7030.0050. The NAC-1 was chosen for receivers in the Project Area since this classification includes farm houses as household units. The nighttime L50 limit of 50 dBA is the most applicable stringent state limit.
55. Getty Wind estimates a maximum cumulative calculated noise level of 41.7 to 46.5 dBA at the nearest noise sensitive receptor, with an average project-related noise level of 28.7

⁶⁰ Exhibit 15, at pp. 6 – 10

⁶¹ Stearns County Commission, *Stearns County Resolution 10-46: Resolution Adopting Findings of Fact for the Proposed Stearns /county Interim Ordinance Number 444 Imposing a Moratorium on Large Wind Energy Conversion Systems (LWECS) for Projects Five (5) Megawatts and Greater*, June 15, 2010, posted to Paynesville Wind Docket, eDockets ID: [20106-52067-01](#) .

⁶² Minnesota Department of Health, *Public Health Impacts of Wind Turbines*, May 22, 2009, <http://www.health.state.mn.us/divs/eh/hazardous/topics/windturbines.pdf>

to 31.9 dBA. The highest maximum and average noise levels were for the 1.5 MW turbine layout; an illustration of the noise modeling shows at least two homes experiencing noise levels of between 46 and 50 dBA. Maximum calculated noise levels for the 1.8 MW and 3.0 MW turbine layouts are at least 5 dB below the nighttime L50 noise limit of 50 dBA; maximum noise levels for the 1.5 MW turbine layout is 3.5 MW below the nighttime L50 noise limit.⁶³

56. Getty Wind will conduct a post-construction noise study as required in Section 6.6 of the Permit. The noise study will determine the noise levels at different frequencies and at various distances from the turbines at various wind directions and speeds. The purpose of the post-construction noise study report is to quantify sound generated by the operational LWECS at receptors, compare results to Minnesota Noise Standards, confirm the validity of the pre-construction noise modeling and assess the modeling as a predictor of probable compliance with Minnesota noise standards.

Shadow Flicker

57. Shadow flicker can be described as alternating changes of light intensity at a given receptor. Shadow flicker does not occur when the sun is obscured by clouds or fog, when the turbine rotor is oriented parallel to the receptor, or when the turbine is not operating. Shadow intensity, or how “light” or “dark” a shadow appears at a specific receptor, will vary with the distance from the turbine. Closer to a turbine, the blades will block out a larger portion of the sun’s rays and shadows will be wider and darker. Receptors located farther away from a turbine will experience much thinner and less distinct shadows since the blades will not block out as much sunlight. Shadow flicker usually occurs in the morning and evening hours when the sun is low in the horizon and the shadows are elongated. Shadow flicker will be greatly reduced or eliminated within a residence when buildings, trees, blinds, or curtains are located between the turbine and receptor.
58. Shadow flicker computer models simulate the path of the sun over the year and assess at regular time intervals the possible shadow flicker across a project area. The outputs of the model are useful in the design phase of a wind farm.
59. Shadow flicker consultants generally agree that flicker is not noticeable beyond about 10 rotor diameters from a wind turbine.⁶⁴ Minnesota has not adopted a standard of acceptable hours for shadow flicker. In December 2010 the Wisconsin PSC adopted administrative rules specifying general permit standards a political subdivision (a city, village, town or county) may impose on the installation or use of a wind energy system. Political subdivisions that choose to regulate wind energy systems may not promulgate regulations more restrictive than those identified in the PSC's rules. The rules became effective in March 2012.⁶⁵ Under the Wisconsin Rules, a political subdivision may prohibit a wind energy system from producing shadow flicker more than 30 hours per year at the homes of non-participating residences or occupied community buildings, and

⁶³ Exhibit 19, at p. 6 and Schedules 7 - 9

⁶⁴ Environmental Health Division, Minnesota Department of Health, *Public Health Impacts of Wind Turbines*, May 22, 2009, at 14, <http://www.health.state.mn.us/divs/eh/hazardous/topics/windturbines.pdf>

⁶⁵ Wisconsin Public Service Commission, Wind Siting Rules, <http://psc.wi.gov/renewables/windSitingRules.htm>

may require a wind energy system owner to mitigate shadow flicker that occurs 20 or more hours per year.⁶⁶ Several jurisdictions in other countries have established guidelines for acceptable levels of shadow flicker based on certain assumptions.

60. Getty provided a preliminary shadow flicker analysis for both expected case and worst case scenarios. Under the expected case, which uses real and weather data to simulate ground conditions, the average home near the Project could be expected to be exposed to approximately 1.1 to 2.1 hours of shadow flicker per year, with some homes experiencing between 23.6 to 42.5 hours, depending upon the turbines used. Under a worst case scenario, which assumes that the sun is always shining, the turbines are always in motion and oriented towards the homes, residences could expect exposures of between 4.2 and 6.4 hours per year under average conditions or between 79.5 and 121.8 hours per year under maximum conditions.⁶⁷ The analysis does not differentiate between participating and non-participating landowners.
61. As directed by section 6.2 of the site permit, the Permittee shall provide data on shadow flicker impacts on each residence of non-participating landowners and participating landowners prior to construction. Information shall account for topography and the physical characteristics of the selected wind turbine. Getty Wind will use the results of the modeling in developing a final layout to minimize impacts to residents.

Visual Values

62. The placement of up to 26 turbines for the Project, as well as up to 28 turbines on the adjacent Black Oak Wind Farm, will alter the appearance of the area. The existing landscape in the Project vicinity is characterized by agricultural fields, scattered farmsteads and associated windbreaks, and gently rolling topography. The turbines, with heights of up to 492 feet from ground to tip of fully-extended blade, will be prominent features on the landscape. There will be intermittent, expansive views of the turbines to local residents, passing motorists on local roads, and from the nearby WMAs and WPAs. Motorists and drivers may travel within 250 feet of some turbines.
63. The visual impact of the wind turbines will be reduced by the use of a neutral paint color. The only lights will be those required by the Federal Aviation Administration (site permit at section 7.18). All site permits issued by the Commission require the use of tubular towers; therefore, the turbine towers will be uniform in appearance. Blades used in the proposed project will be white or grey. The project site will retain its overall rural character. The turbines and associated facilities necessary to harvest the wind for energy are not inconsistent with existing agricultural practices.
64. Many factors influence how a wind energy facility is perceived. Factors may include levels of visual sensitivity of individuals, viewing conditions, visual settings, and individual ideas and experiences. Distance from a turbine(s) and activities within and near the project area, landscape features such as hills and tree cover, as well as an individual's personal feelings about wind energy technology can all contribute to how a

⁶⁶ Wisconsin Administrative Code, Chapter 128, http://docs.legis.wisconsin.gov/code/admin_code/psc/128.pdf

⁶⁷ Exhibit 19, at p.7

wind energy facility is perceived. Existing wind plants have altered the landscape elsewhere in Minnesota from agricultural to wind plant/agricultural. This project will modify the visual character of the area. Visually, the Getty Wind Project will be similar to other LWECS projects located in rural areas in Minnesota.

Health and Safety

65. There are no public airports within the Project boundary. There are four airports within 20 miles of the Project boundary. The Sauk Centre Municipal Airport is the nearest airport, located approximately two miles northeast of the Project boundary and primarily serves local navigation and has an average of 112 flights per week on its two runways.⁶⁸
66. Getty has not yet been issued a “no hazard” determination from the Federal Aviation Administration (FAA). Section 4.12 of the site permit requires the Permittee to avoid placing wind turbines or associated facilities in a location that could create an obstruction to navigable airspace of public or licensed private airports. The Permittee must comply with the requirements of the Minnesota Department of Transportation, Department of Aviation and FAA (site permit, sections 10.5.1 and 4.12).
67. A preliminary review of the project area using the screening tool developed by the US Department of Defense to assess potential impacts to Long-Range and Weather Radar shows the project to be outside of the anticipated impact zones for NEXRAD weather radar and Air Defense and Homeland Security Radars.⁶⁹
68. Air traffic may be present near the Project for crop dusting of agricultural fields. Crop dusting is typically carried out during the day by highly maneuverable airplanes or helicopters. The installation of wind turbines in active croplands and installation of overhead collector lines, if needed, will create a potential for collisions with crop dusting aircraft. Any new overhead collector lines are expected to be similar to existing distribution lines and located along the edges of fields and roadways, minimizing the potential for collisions with aircraft. The turbines themselves would be visible from a distance and lighted according to FAA guidelines (section 7.18 of the site permit). The permanent meteorological towers will be free standing and have lighting consistent with the turbines.
69. Possible health concerns associated with wind turbines and transmission of electricity generally include those from electric and magnetic fields (EMF). The term EMF refers to electric and magnetic fields that are present around electrical devices. Electric fields arise from the voltage or electrical charges and magnetic fields arising from the flow of electricity or current that travels along transmission lines, power collection (feeder) lines, substation transformers, house wiring and electrical appliances. The intensity of the electric field is related to the voltage of the line and the intensity of the magnetic field is related to the current flow through the conductors. When operating, the proposed Project will generate electromagnetic fields.

⁶⁸ AirNav.com, <http://www.airnav.com/airport/D39>

⁶⁹ US Federal Aviation Administration, DOD Preliminary Screening Tool, <https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp>

70. EMF from underground electrical collection lines dissipates very close to the line because they are installed below ground within insulated shielding. The voltage for the feeder lines for this project would be 34.5 kV. EMF associated with the transformers at the base of each turbine completely dissipates within 500 feet from the transformer.⁷⁰ Turbines will be set back at least 1,000 feet from residences.
71. The Commission has consistently found that there is insufficient evidence to demonstrate a causal relationship between EMF exposure and adverse human health effects.
72. Stray voltage, also referred to as neutral-to-earth voltage, is sometimes raised as an issue with transmission lines in relation to effect on livestock. The Project is not expected to create stray voltage because the Project does not connect directly to residences or farms in the area and does not change on-farm electrical service.⁷¹
73. In winter months ice may accumulate on the wind turbine blades when the turbines are stopped or operating very slowly. Furthermore, the anemometer may ice up at the same time, causing the turbine to shut down during any icing event. As weather conditions change, any ice will normally drop off the blades in relatively small pieces before the turbines resume operation. This is due to flexing of the blades and the blades' smooth surface. Although turbine icing is an infrequent event, it remains important that the turbines are not sited in areas where regular human activity is expected below the turbines during the winter months. The setback requirements in Section 4 of the site permit provide further assurance that the turbines will be placed an adequate distance from residences, roads and other areas of human activity.
74. Getty will prepare an emergency response plan (fire protection and medical emergency plan) in consultation with the emergency responders having jurisdiction over the Project area (site permit, section 7.16). As with any large construction project, some risk of worker or public injury exists during construction. Getty and its construction representatives and workers will prepare and implement work plans and specifications in accordance with applicable worker safety requirements during construction of the Project. Getty will also control public access to the Project during construction and operation. Getty will provide security during construction and operation of the project, including fencing, warning signs, and locks on equipment and facilities. Getty will also provide landowners, interested persons and public officials and emergency responders with safety information about the project and its facilities (site permit, sections 7.15 and 7.16).
75. Each turbine will be clearly labeled to identify each unit, and a map of the site with the labeling system will be provided to local authorities as part of the emergency response plan (site permit, sections 7.17 and 7.16).

⁷⁰ Exhibit 1, at p. 30

⁷¹ DOC EFP, *Environmental Report: Black Oak/Getty Wind Project*, May 2012, eDocket ID: [20125-74522-01](#)

Public Services and Infrastructure

76. The Project is expected to have minimal effects on existing public infrastructure. Except for a short period of time during construction and occasionally during operation and maintenance activities, the Project will not generate an increase in traffic volumes or daily human activity. The construction contractor will repair any road damage that may occur during the construction of the Project (site permit, section 7.8).
77. Construction of the Project will require the use of public roads to deliver construction supplies and materials to the work site, resulting in wear and tear on roads. The Project is located approximately three miles south of Interstate 94, and is crossed by a number of county and township roads. Other than short-term impacts during construction, no significant permanent changes in road traffic patterns or volume are expected. Getty will provide the Commission, township, and county officials identification of all roads to be used for the Project at least 14 days prior to pre-construction meeting, including the timing of the delivery of towers and turbines and arrival of the crane to erect project equipment (site permit, 7.8.1). Prior to using the roads, Getty will make satisfactory arrangements with the appropriate road authorities concerning use, maintenance, and repair of roads to be used during the construction of the Project (site permit, 7.8.1).
78. Getty will construct approximately two to five miles of access roads connecting the turbines with public roads. Access roads will be low-profile to allow farm equipment to cross easily. The typical access road will be approximately 32 feet wide during the construction phase of the Project to accommodate large cranes required for installation. Following construction, the roads would be reduced to approximately 16 feet in width and covered in Class 5 gravel (or similar material) to provide year-round access.⁷² Areas that were temporarily disturbed during the construction phase will be re-graded to natural contours, filled, and dressed as needed.⁷³ The specific turbine locations will determine the amount of roadway that will be constructed for this Project. Temporary disturbances during construction of the Project include crane pads at each turbine site, temporary travel roads for the cranes, temporary laydown areas around each turbine, trenching in the underground electrical collection system, and storage/stockpile area.
79. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits (site permit section 7.8.2). During operation and maintenance of the wind plant, operation and maintenance crews, while inspecting and servicing the wind turbines, will use access roads. Periodic grading and maintenance activities will be used to maintain road integrity. Getty may do this work or contract it out.
80. If access roads are installed across streams or drainage ways Getty, in consultation with the Minnesota Department of Natural Resources (DNR), will design, shape and locate the road so as not to alter the original water flow or drainage patterns. Any work required below the ordinary high water line, such as road crossings or culvert installation, will require a permit from the DNR (site permit at 4.6 and 7.8.2).

⁷² Exhibit 1, at p. 64

⁷³ Id., at p. 65

81. Getty will bury all SCADA communications cables within or adjacent to land necessary for turbine access roads (site permit section 4.14).
82. The proposed project will have approximately nine to twelve miles of cables for the collector lines on private property within the wind farm.⁷⁴ Collector lines carrying electrical power from turbines to electrical interconnection points will be buried underground and placed within or adjacent to turbine access roads unless otherwise negotiated with affected landowners (site permit, section 4.15). Feeder lines carrying power from internal project interconnection points to the Project substation may be overhead or underground as negotiated with individual landowners (site permit section 4.15). Getty anticipates that feeder lines will also be buried; if conditions exist that would prevent the feeder lines from being buried, feeder lines will be installed overhead.⁷⁵
83. Prior to construction Getty will contact Gopher State One Call to locate underground facilities so they can be avoided.⁷⁶ Further, section 7.15 of the site permit requires the Permittee to submit the location of underground cables, collector, and feeder lines to Gopher State Once Call.
84. In areas where Project facilities cross or may otherwise affect existing telephone lines or equipment Getty will enter into agreement with telecom service providers to avoid interference with existing telecom facilities.⁷⁷ Getty will fulfill, comply with, and satisfy all Institute of Electrical and Electronics engineers, Inc. (IEEE) standards applicable to the Project with respect to avoiding interference with communication systems (site permit, Section 4.15).
85. Under Section 6.4 of the site permit Getty may not operate the Project so as to cause microwave, television, radio, telecommunications, or navigation interference in violation of Federal Communication Commission regulations or other law. In concordance with Section 6.4 of the site permit, Getty will prepare an assessment of communication resources in the Project vicinity to provide data that can be used in the future to determine whether elements of the Project are the cause of disruption or interferences with television, or radio reception, microwave patterns, or telecommunications signals. The permit requires Getty to take timely measures to correct any interference that may occur as a result of the Project. Getty has identified two microwave beam paths near the Project, but no microwave beam paths crossing the southern part of the Project.⁷⁸
86. There are no pipelines or railroads located within the project boundary.⁷⁹
87. Great River Energy (GRE) owns a 400 kV Direct Circuit transmission line that crosses the Project. There are no established setbacks from high voltage transmission lines, but

⁷⁴ Id., at p.9

⁷⁵ Id., at p. 12

⁷⁶ Id., at p. 26

⁷⁷ Id.

⁷⁸ Id.

⁷⁹ Id.

Getty has committed to maintaining a setback of 1.1 time the total turbine height from the 400 kV DC line.⁸⁰ A portion of Xcel Energy's Fargo – St. Cloud 345 kV transmission line will cross through the northern portion of the Project.

Recreational Resources

88. Wildlife Management Areas (WMAs) are established to protect lands and waters that have a high potential for wildlife production, public hunting, trapping, fishing and other compatible recreational uses. These DNR lands are acquired and developed primarily with hunting license fees. There are no WMAs within the Project boundary, however the Padua WMA is located just south of the Project and the Sauk River, and Spirit Marsh, Victor Winter, and Miller WMAs are located within approximately five miles of the Project.⁸¹ Waterfowl Production areas (WPAs) are acquired as public land or protected through perpetual easement as part of the US Fish and Wildlife Services (USFWS) National Wildlife Refuge System to provide habitat for a variety of birds and wildlife. WPAs also provide outdoor recreational opportunities such as hunting, hiking, and wildlife watching. The Trisko WPA is located between the Getty and Black Oak projects and is adjacent to both projects. The Kenna WPA is also adjacent to the Project; 14 other WPAs are located within five miles of the Project.⁸²

89. Scientific and Natural Areas are designated to protect rare and endangered species habitat, unique plant communities, and significant geologic features that possess exceptional scientific or educational values; the Sedan Brook Prairie SNA is located approximately five miles south of the Project boundary. There are no National Wildlife Refuges, state, or national parks within five miles of the Project boundary.⁸³

Community Benefits

90. Getty estimates that the Project will generate approximately \$164,000 to \$185,000 in Wind Energy Production Tax to local units of government. Landowners with turbine(s) and/or wind easements on their property will also receive payments from the Permittee. Local contractors and suppliers will be used for portions of the construction.⁸⁴

91. Getty estimates that approximately 50 to 80 temporary workers will be required over a period of four to six months for construction of the Project. Once the Project becomes operational, approximately two to four maintenance positions may be required to ensure continued operation of the Project.⁸⁵

Effects on Land-Based Economies

92. The Project is located in an agricultural area. Most of the soil within the Project area is considered prime farmland. Most of the impacts from the Project will occur on cultivated

⁸⁰ Id.

⁸¹ Id., at p. 28

⁸² Id., at p. 29

⁸³ Id., at p. 28

⁸⁴ Id., at p. 35

⁸⁵ Id.

agricultural lands. Getty estimates that approximately 18 to 32 acres of land, all currently cropped excepting one acre of grassland, will be permanently removed from agricultural production. Getty estimates that approximately 40 to 72 acres of agricultural land, all currently cropped excepting 2 acres of grassland, will be temporarily impacted by construction activities (e.g. grading, soil compaction, access roads, turnaround areas, temporary construction staging areas) as a result of the Project.⁸⁶ Overall, impact to agricultural lands as a result of the Project is not expected to alter crop production. Once in operation, it may occasionally be necessary for Getty to complete repairs, or clear vegetation around a turbine or facility, which could result in additional temporary impact to agricultural operations. These interruptions are expected to be infrequent and short term.

93. Under Section 7.2 of the site permit Getty is required, unless otherwise negotiated with landowners, to implement measures to protect and segregate topsoil from subsoil in cultivated land.
94. The site permit, at Sections 7.5 and 7.6, requires Getty to promptly repair or replace any fences or gates removed or damaged during all phases of the Project's life unless otherwise negotiated with affected landowners. Section 7.6 of the site permit requires Getty to promptly repair or replace any drainage tiles broken or damaged during any phase of the Project's life.
95. The proposed project will not adversely affect any forestry or mining operations.⁸⁷

Archaeological and Historical Resources

96. Getty commissioned a Phase I Archaeological Field Investigation for 27 potential turbine sites as part of the due diligence performed in the early stages of project development; the turbine sites investigated were preliminary and represent a portion of facility locations under consideration by Getty.⁸⁸ A review of historic records did not identify any recorded archaeological sites within 300 feet of the area of potential effect identified for each of the potential turbine sites. The field investigation included a pedestrian survey and randomized shovel testing found no evidence of prehistoric or historic properties within the area of potential effect identified for each turbine.⁸⁹ Getty will prepare an Archaeological Field Investigation Report addressing all turbine sites, roads, and other facilities.
97. Section 6.3 of the site permit requires the Permittee to conduct an archaeological reconnaissance survey (Phase I or Phase IA) and provide the results to the Commission, the State Historic Preservation Office (SHPO) and the State Archaeologist at least 14 days prior to the pre-construction meeting. An archaeological reconnaissance survey is used to determine if archaeological sites exist within the area potentially affected by the

⁸⁶ Id., at p. 39

⁸⁷ Id., at p. 33

⁸⁸ Id., at p. 27

⁸⁹ Id., at Appendix K

Project. Depending upon the results of the reconnaissance survey, more detailed work may be necessary.

98. If any archaeological sites are found during the Phase I survey, their integrity and significance should be addressed in terms of the site's potential eligibility for placement on the National Register of Historic Places (NRHP). If such sites are found to be eligible for the NRHP, appropriate mitigative measures will need to be developed in consultation with the SHPO, the State Archaeologist, and consulting American Indian communities. Section 6.3 of the site permit also requires the Permittee to stop work and notify the Commission, SHPO, and the State Archaeologist if any unrecorded cultural resources are found during construction.

Air and Water Emissions

99. No harmful air or water emissions are expected from the construction and operation of the Project.

Wildlife

100. Landcover within the Project boundary is comprised primarily of cultivated land (approximately 82 percent) and grassland (approximately 17 percent).⁹⁰ Direct disturbances to wildlife habitat are expected to be minimal, as Getty has committed to placing turbines, access roads, and other project components on agricultural land, mainly used for row crops such as corn, soybeans, and alfalfa.⁹¹
101. Wildlife species found within the Project area include both resident and migratory species of Minnesota game and non-game wildlife that are associated with the cropland, upland grasslands and wetland and forested area that comprise the project area.⁹²
102. Based on studies of existing wind power projects in the United States and Europe, impacts to avian and bat populations are typically the areas of greatest concern. Direct impacts may include strike fatality from turbine blades, power lines, and related infrastructure. Indirect impacts may include displacement of birds and bats and other wildlife from their habitats, site avoidance, and behavioral modification.⁹³
103. Getty, together with Black Oak, commissioned surveys of wildlife habitat and use of the Black Oak and Getty sites, with particular emphasis on avian species. Getty used information from these surveys to avoid siting turbines in areas known to have high avian use.
104. Black Oak and Getty jointly developed and submitted a draft Avian and Bat Protection Plan (ABPP) into the record on January 17, 2012.⁹⁴ The draft ABPP incorporates survey

⁹⁰ Id., at p. 39

⁹¹ Id., at p. 40

⁹² Id., at p. 41

⁹³ National Wind Coordinating Collaborative, *Wind Turbine Interactions With Birds, Bats, and Their Habitats: A Summary of Research Results and Priority Questions*. Spring, 2010. www.nationalwind.org

⁹⁴ Draft Avian and Bat Protection Plan, January 17, 2012, eDocket ID. [20121-70380-01](https://www.eDocket.com/record/20121-70380-01) (Exhibit 6)

information of wildlife habitat and use of the Black Oak and Getty sites and describes design, construction, and operation standards to be used to minimize impacts to avian and bat species. The draft ABPP provided for public comment in this matter also describes training procedures to be used for construction and operations staff, a wildlife carcass and injury discovery process, reporting procedures, and proposed incident reporting forms.

105. The Draft Site Permit authorized by the Commission to be distributed for public comment included the Draft ABPP in Attachment 5 to the Draft Permit.⁹⁵ Black Oak and Getty received comments on the Draft ABPP from the USFWS, DNR, and Department of Commerce Staff.⁹⁶ Black Oak and Getty submitted a revised ABPP on July 10, 2012.⁹⁷
106. Publicly available post construction avian and bat mortality at wind farms across the U.S. show a range of avian fatalities reported of between 0.49 to 7.17 birds per MW, or 0.44 to 11.83 birds per turbine.⁹⁸ Because research on the aggregate impact of avian fatalities resulting from wind farms on species populations is ongoing, it is not possible to determine impacts the Project may have on species populations in the area.
107. Section 6.7 of the site permit requires Getty Wind to comply with the provisions of the ABPP prepared for the Project, submit quarterly avian and bat reports, and report dead or injured birds or bats.
108. Throughout the project record DNR staff reviewed several iterations of the layout of the Project. DNR comments note the presence of public lands, public waters, wetlands, and sensitive species as well as the large tracts of disturbed agricultural lands within the Project, and the efforts taken by Getty to avoid demonstrated areas of high avian use. The most recent DNR comments characterize the Project, and the adjacent Black Oak project, as of moderate risk to birds and bats. DNR staff recommends that the Commission require post-construction monitoring for avian fatalities according to the moderate risk protocol.⁹⁹ The proposed site permit, at Section 13.4, requires Getty to design and implement a post-construction avian and bat fatality survey consistent with the DNR Draft Avian and Bat Monitoring Protocol for a site considered to be of moderate risk to wildlife and to provide the survey design to the Commission at least 90 days prior to the planned commencement of commercial operation.
109. In its comments on the adjacent Getty Wind Project, the United States Fish and Wildlife Service recommended that bird diverters be installed on any above ground collector,

⁹⁵ Exhibit 9

⁹⁶ Written Public and Agency Comments, June 19, 2012, eDocket ID: [20126-75767-01](#) (Exhibit 16); DNR Supplemental Comments on Draft Site Permit and Draft Avian and Bat Protection Plan, May 17, 2012 eDocket ID: [20125-74801-01](#) (Exhibit 18); and DOC EFP Comment Letter on Black Oak Wind Farm and Getty Wind Project Projects, June 26, 2012, eDocket ID: [20126-76020-01](#) (Exhibit 20)

⁹⁷ Black Oak and Getty, *Black Oak & Getty Wind Avian and Bat Protection Plan*, July 10, 2012, eDocket ID: [20127-76674-0](#) (Exhibit 25)

⁹⁸ *Id.*, at p. 21

⁹⁹ DNR, *Comments on Turbine Layouts for Black Oak and Getty Wind Projects in Stearns County*, August 24, 2012, eDocket ID: [20128-78117-01](#) (Exhibit 27)

feeder, distribution or transmission lines to minimize the potential for bird collisions with above ground electrical lines.¹⁰⁰ The attached proposed site permit contains a special condition, at Section 13.2, requiring Getty to install bird diverters on any overhead collector, feeder, or distribution line constructed as part of this project.

110. At this time published peer-reviewed research identifying mitigation strategies to minimize impacts to bats is limited. In particular, information on turbine locations to minimize bat impacts is unclear. There is a growing body of literature indicating that curtailment, limiting turbine operation either through a higher cut-in speed or turning turbines off at certain times of high bat activity, may significantly minimize bat impacts from wind projects.¹⁰¹ The site permit, at section 13.3, requires Getty to submit a report to the Commission no later than December 15, 2013, summarizing the findings from a site-specific bat study characterizing species present and level of bat activity within the Project boundary. EFP staff will continue to monitor for mitigation strategies to minimize impacts to bats.

Rare and Unique Natural Resources

111. Field surveys at the site did not identify any species listed under the federal Endangered Species Act. The field studies did identify seven bird species (trumpeter swan, horned grebe, Wilson's Phalarope, marbled godwit, Forster's Tern, American white pelican, and bald eagle) listed by the State of Minnesota as endangered, threatened or special concern.¹⁰²
112. An active Bald Eagle nest was discovered early in the avian surveys and was monitored throughout the surveys and into the spring of 2012. The revise ABPP, dated July 2012, identifies disturbance of the active bald eagle nest as a primary concern for avian species during the construction phase of the Project and identifies training that will be implemented to avoid nest disturbance.¹⁰³ Black Oak and Getty Wind state that they continue to work closely with the USFWS to analyze bald eagle use data collected during the surveys. Under 50 CFR § 22.26, the USFWS may issue an eagle take permit if an otherwise lawful activity may result in disturbance, injury or harm (i.e. "take") to bald or golden eagles and the risk of a "take" cannot be effectively avoided or mitigated. As of July 10, 2012, the USFWS has not recommended that Black Oak or Getty seek an eagle take permit.¹⁰⁴
113. The DNR has identified several areas of natural land cover in the central portion of Minnesota as Central Region Regionally Ecologically Significant Areas (CRRESA). These CRRESAs are used to help make regional scale land use decisions. Based on GIS information several CRRESAs have been identified within the Project boundary and

¹⁰⁰ Exhibit 13 , [20126-75767-01](#), at pp. 20 - 23

¹⁰¹ Ellison, L.E. 2012. *Bats and Wind Energy-A Literature Synthesis and Annotated Bibliography*: U.S. Geological Survey Open-File Report 2012-1110. 57 p., <http://pubs.usgs.gov/of/2012/1110/OF12-1110.pdf>

¹⁰² Exhibit 1, at Appendix I, *Draft Avian Use Assessment Report on the Black Oak/Getty Wind Development Sites*, pp. 12 - 17

¹⁰³ Exhibit 25, at pp.14-15

¹⁰⁴ Exhibit 24, at response 8

near the Project. In their review of preliminary turbine locations, the DNR has not identified any turbines located within a CRRESA.¹⁰⁵

Vegetation

114. Approximately 17 percent of the area within the site is grassland. Grassland and wetland areas within the Project boundary may contain remnant native prairie areas.¹⁰⁶ Areas of native prairie within the area potentially disturbed during construction of the Project will be identified in the Biological Inventory Survey required under section 6.1 of the permit. If any native prairie is identified in the Biological Inventory Survey, Section 4.7 of the permit requires Getty to prepare a Prairie Protection and Management Plan identifying steps taken to avoid impacts to native prairie and mitigation for unavoidable impacts to native prairie.
115. Getty has not identified any Conservation Reserve Program (CRP) or Reinvest in Minnesota (RIM) lands or easements within the Project boundary. Getty states that it will provide updated information on any conservation easements identified prior to construction.¹⁰⁷
116. Section 7.11 of the site permit requires Getty to incorporate a comprehensive re-vegetation plan in the Soil Erosion and Sediment Control Plan developed for the Project, in order to ensure adequate erosion control and restoration of the site.
117. No forested lands are expected to be adversely affected by the project. No groves of trees or shelterbelts will need to be removed to construct and operate the system.¹⁰⁸

Soils, Geologic and Ground Water Resources

118. Construction of the wind turbines and access roads in farmland increases the potential for erosion during construction. Section 7.11 of the site permit requires a Soil Erosion and Sediment Control Plan. Because the Project disturbs more than one acre, it will require a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater Permit from the PCA. Getty will prepare a Storm Water Pollution Prevention Plan (SWPPP) for the Project, identifying the management practices used to prevent erosion.¹⁰⁹
119. Upon completion of construction Getty will re-grade temporarily disturbed areas to natural contours. Access roads will be re-graded, filled and dressed. Disturbed areas will be loosened and re-seeded to blend with existing vegetation.¹¹⁰
120. Section 7.3 of the site permit requires Getty to implement measures to minimize soil compaction during all phases of the Project's life.

¹⁰⁵ Exhibit 7

¹⁰⁶ Exhibit 1, at p. 39

¹⁰⁷ Getty Wind Comments on Draft Site Permit, April 4, 2012, eDocket ID: [20124-73344-01](#) (Exhibit 15)

¹⁰⁸ Exhibit 1, at p. 41

¹⁰⁹ Id., at p. 37

¹¹⁰ Id., at p. 65

121. Surface geology in the Project area consists of glacial deposits associated with the Des Moines Lobe. The surficial deposits range in depth from 150 to 200 feet across the Project area. The glacial aquifers providing groundwater in Project area are generally unconfined and considered low yield. The water table is shallow, approximately 0 to 20 feet below ground surface across the site. Water needs for the Project will be limited, similar to those required by a residence.¹¹¹ Because turbine locations will be set back from residences, impacts to wells are not anticipated.¹¹²

Surface Water and Wetlands

122. Wind turbines and associated facilities will not be located in public water wetlands, except that collector and feeder lines may cross if authorized by the appropriate permitting agency (site permit, section 4.6). A permit may be required if surface waters are impacted (site permit, section 10.5.1).
123. Use of appropriate erosion control measures will minimize impacts to surface waters and wetlands. Getty will identify erosion control measures to be implemented in each phase of the Project in the Soil Erosion and Sediment Control Plan prepared for the Project (site permit, section 7.11).
124. Getty will identify any potentially affected wetlands prior to construction (site permit, section 6.1)

Future Development and Expansion

125. Current information suggests windy areas in this part of the state are large enough to accommodate more wind facilities. The Paynesville Wind Farm was permitted by the Commission in 2011 but has not yet begun construction; other facilities are believed to be in various stages of planning or development in Stearns County.
126. While large-scale projects have occurred elsewhere (Texas, Iowa and California), little systematic study of the cumulative impact has occurred. EFP staff will continue to monitor for impacts and issues related to wind energy development.
127. The Commission is responsible for siting of LWECS “in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources.”¹¹³ Section 4.1 of the site permit provides for buffers between adjacent wind generation projects to protect production potential.

Maintenance

128. Getty will manage the ongoing operation of the Project. Once a turbine model is selected, Getty will contract with the turbine vendor for service and maintenance of the Project at least through the warranty period. Maintenance of the turbines will be on a

¹¹¹ DOC, *Environmental Report: Black Oak/Getty Wind Project* May 2012, eDocket ID: [20125-74522-01](#), at p. 19

¹¹² Exhibit 1, at p. 37

¹¹³ Minn. Stat. § 215F.03.

scheduled, rotating basis.¹¹⁴ An Operations and Maintenance facility is planned for the Project. Once a site is selected, Getty will seek permitting for the O&M facility through Stearns County.¹¹⁵

Decommissioning, Turbine Abandonment, and Restoration

129. Getty anticipates that the life of the Project to be 30 years beyond the date of first commercial operation. Getty wishes to reserve the right to extend the life of the Project beyond the 30 year date and may apply for an extension of the LWECS site permit to continue operation of the Project.¹¹⁶
130. At the end of operation, Getty will be responsible for removing wind facilities and turbines. Getty will be responsible for costs to decommission the Project and associated wind facilities.¹¹⁷ Getty estimates the cost of decommissioning to be approximately \$74,500 in current dollars.¹¹⁸
131. As provided in section 9.1 of the site permit, the Permittee must submit a Decommissioning Plan to the Commission prior to the pre-operation compliance meeting. The Decommissioning Plan will document the manner in which Getty will ensure that it carries out its obligations to provide for the resources necessary to fulfill its requirements to properly decommission the Project at the appropriate time. The site permit addresses site restoration at Section 9.2.
132. As provided in the site permit, at Section 9.2, Getty Wind is required to dismantle and remove from the site all towers, turbines, transformers, overhead and underground cables and lines, foundations, buildings and ancillary equipment to a depth of four feet. Any agreement for removal of Project facilities to a lesser depth, or for no removal, must be recorded with the county in a manner that clearly shows the location of any remaining foundations. Under terms of Section 9.2 of the site permit, Getty Wind will restore and reclaim the site to its pre-project topography and topsoil quality within 18 months of the time the Project, or any component, ceases operation.
133. As provided in section 9.3 of the site permit, Getty Wind shall advise the Commission of any turbines abandoned prior to termination of the operation of the Project. As further specified in section 9.3 of the site permit, any turbines abandoned prior to termination of operation of the Project are to be decommissioned pursuant to Section 9.2 of the site permit unless an alternate decommissioning plan is developed and submitted to the Commission.

Site Permit Conditions

134. All of the above findings pertain to Getty's requested permit for a 40 megawatt LWECS.

¹¹⁴ Exhibit 1, at pp. 65-66

¹¹⁵ Id., at p. 13

¹¹⁶ Id., at p. 68

¹¹⁷ Id.

¹¹⁸ Exhibit 24, at response 6

135. Most of the conditions contained in this site permit were established as part of the site permit proceedings of other wind turbine projects permitted by the Environmental Quality Board and the Public Utilities Commission. Comments received by the Commission have been considered in development of the site permit. Minor changes and additions that provide for clarifications of the draft site permit conditions have been made.
136. The site permit contains conditions that apply to site preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning and all other aspects of the Project.

Based on the foregoing findings, the Minnesota Public Utilities Commission makes the following:

CONCLUSIONS OF LAW

1. Any of the foregoing findings which more properly should be designated as conclusions are hereby adopted as such.
2. The Minnesota Public Utilities Commission has jurisdiction over the site permit applied for by Getty Wind Company, LLC, for the 40 megawatt Getty Wind Project pursuant to Minnesota Statute 216F.04.
3. Getty Wind Company, LLC, has substantially complied with the procedural requirements of Minnesota Statutes chapter 216F and Minnesota Rules chapter 7854.
4. The Minnesota Public Utilities Commission has complied with all procedural requirements required of Minnesota Statutes chapter 216F and Minnesota Rules chapter 7854.
5. The Minnesota Public Utilities Commission has considered all the pertinent factors relative to its determination of whether a site permit should be approved.
6. The Getty Wind Project is compatible with the policy of the state to site LWECS in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources under Minnesota Statutes section 216F.03.
7. The Minnesota Public Utilities Commission has the authority under Minnesota Statutes section 216F.04 to place conditions in a permit and may deny, modify, suspend, or revoke a permit. The conditions contained in the site permit issued to Getty Wind Company, LLC, for the Getty Wind Project are reasonable and appropriate.

Based on the foregoing Findings of Fact and Conclusions of Law, the Minnesota Public Utilities Commission issues the following:

ORDER

A LWECS Site Permit is hereby issued to Getty Wind Company, LLC to construct and operate the 40 megawatt Getty Wind Project in Stearns County- in accordance with the conditions contained in the site permit and in compliance with the requirements of Minnesota Statute 216F.04 and Minnesota Rules Chapter 7854 for PUC Docket No. IP6866/WS-11-831.

The site permit is attached hereto, with a map showing the approved site.

BY THE ORDER OF THE COMMISSION

Burl W. Haar
Executive Secretary

(S E A L)

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In the Matter of the Application for a Large Wind Energy
Conversion System Site Permit for the 40 MW Getty Wind
Project in Stearns County

EXHIBIT LIST
PUC Docket NO.: IP-6866/WS-11-831

Exhibit Number	Submitter	Date	Description	e-Docket ID.
1.	Getty Wind Company, LLC (Getty)	10/11/2011	Getty Wind Company, LLC, Application for a LWECS site Permit for the Getty Wind Project	201110-67223-01 201110-67223-02 201110-67223-03 201110-67223-04 201110-67223-05 201110-67223-06 201110-67223-07 201110-67226-07
2.	DOC EFP	11/1/2011	DOC EFP Comments & Recommendations to the PUC on acceptance of Getty Wind Company, LLC's, LWECS Site Permit Application.	201111-67963-01
3.	PUC	11/14/2011	PUC Order accepting Getty Wind Company, LLC's LWECS Site Permit Application	201111-68332-01
4.	DOC	11/23/2011	Notice of Application Acceptance	201111-68596-01
5.	Getty	12/5/2011	Affidavits of Publication and Service: Notice of PUC's acceptance of the LWECS application appearing in <i>Sauk Centre Herald</i> , December 1, 2011; mailed November 29, 2011.	201112-68960-01
6.	Getty	1/17/2012	Draft Avian and Bat Protection Plan	20121-70380-01 20121-70380-07 20121-70380-03 20121-70380-05
7.	DOC EFP	1/18/2012	Public Comments received on Getty Wind Company, LLC's LWECS Site Permit Application for the 40 MW Getty Wind Farm in Stearns County	20121-70416-01
8.	DOC EFP	2/9/2012	EFP Comments & Recommendations on Issuance of Draft Site Permit	20122-71386-01
9.	PUC	2/23/2012	PUC Order Issuing Draft Site Permit for Public Review and Comment	20122-71812-01 20122-71812-02
10.	DOC EFP	2/28/2012	Notice of Public Hearing and Availability of Draft Site Permit and Affidavit of Service to Project Contact List	20122-71943-01
11.	DOC EFP	6/21/2012	Notice of Draft Site Permit to Local Governmental Units	20126-75901-01
12.	Getty	4/26/2012	Affidavits of Publication: Notice of Draft Site Permit Issuance and Public Information Meeting published in <i>Sauk Centre Herald</i> (3/1/2012)	20124-74058-01
13.	DOC EFP	4/26/2012	<i>EQB Monitor</i> Notice of Availability of the Draft Site Permit (3/5/2012)	20124-74073-01
14.	DOC EFP	4/26/2012	Oral comments Public Information Meeting held in Sauk Centre,	20124-74076-01

Exhibit List – Getty Site Permit
PUC Docket No. 6866/WS-11-831

			Minnesota, March 20, 2012	
15.	DOC EFP, Getty, Colleen Mueller	4/4/2012 5/17/2012	Comments on Draft Site Permit	20124-73344-01 20126-75767-01 20122-71712-03
16.	PUC	5/11/2012	Notice of Public Hearing	20125-74638-03
17.	PUC	5/25/2012	Revised Notice of Public Hearing	20125-75012-03
18.	DOC EFP	5/17/2012	DNR Supplemental Comments on Draft Site Permit and Draft Avian and Bat Protection Plan	20125-74801-01
19.	Black Oak & Getty	6/26/2012	Patrick Smith Direct Testimony (June 22, 2012)	20126-75957-02
20.	DOC EFP	6/26/2012	Comment letter on Black Oak Wind Farm and Getty Wind Farm Projects	20126-76020-01
21.	Court Reporter	7/11/2012	Transcript of Public Hearing	20127-76685-01
22.	OAH	8/8/2012	OAH Summary of Public Testimony	20128-77666-01
23.	OAH & Court Reporter	8/14/2012	Written Public Comments (includes those presented at the Public Hearing)	20128-77850-01 20127-76745-01 20127-76745-04
24.	Black Oak & Getty	7/10/2012	Black Oak & Getty Post-Hearing Comments	20127-76674-09
25.	Black Oak & Getty	7/10/2012	Revised ABPP	20127-76674-03
26.	DOC EFP	8/16/2012	Letter clarifying origin of certain comments referenced in OAH Summary of Public Testimony	20128-77907-02
27.	DNR	8/24/2012	DNR Comments on Turbine Layouts for Black Oak and Getty Wind Projects in Stearns County	20128-78117-01

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

**SITE PERMIT FOR A
LARGE WIND ENERGY CONVERSION SYSTEM**

IN STEARNS COUNTY MINNESOTA

**ISSUED TO
GETTY WIND COMPANY, LLC**

PUC DOCKET NO. IP-6866/WS-11-831

In accordance with Minnesota Statutes section 216F.04 this site permit is hereby issued to:

Getty Wind Company, LLC

Getty Wind Company, LLC is authorized to construct and operate up to a 40 Megawatt Large Wind Energy Conversion System on the site identified in this site permit and in compliance with the conditions contained in this permit.

This permit shall expire thirty (30) years from the date of this approval.

Approved and adopted this _____ day of {Month} 2012

BY ORDER OF THE COMMISSION

BURL W. HAAR
Executive Secretary

(S E A L)

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Table of Contents

1.	PROJECT DESCRIPTION	1
2.	DESIGNATED SITE	1
2.1	PROJECT BOUNDARY	1
2.2	TURBINE LAYOUT	1
3.	APPLICATION COMPLIANCE	2
4.	SETBACKS AND SITE LAYOUT RESTRICTIONS	2
4.1	WIND ACCESS BUFFER	2
4.2	RESIDENCES	2
4.3	NOISE	2
4.4	ROADS	3
4.5	PUBLIC LANDS	3
4.6	WETLANDS	3
4.7	NATIVE PRAIRIE	3
4.8	SAND AND GRAVEL OPERATIONS	4
4.9	WIND TURBINE TOWERS	4
4.10	TURBINE SPACING	4
4.11	METEOROLOGICAL TOWERS	4
4.12	AVIATION	4
4.13	FOOTPRINT MINIMIZATION	5
4.14	COMMUNICATION CABLES	5
4.15	ELECTRICAL COLLECTOR AND FEEDER LINES	5
5.	ADMINISTRATIVE COMPLIANCE PROCEDURES	6
5.1	SITE PLAN	6
5.2	NOTICE TO LOCAL RESIDENTS	6
5.3	NOTICE OF PERMIT CONDITIONS	7
5.4	FIELD REPRESENTATIVE	7
5.5	SITE MANAGER	7
5.6	PRE-CONSTRUCTION MEETING	7
5.7	PRE-OPERATION COMPLIANCE MEETING	7
5.8	COMPLAINTS	7
6.	SURVEYS AND REPORTING	8
6.1	BIOLOGICAL AND NATURAL RESOURCE INVENTORIES	8
6.2	SHADOW FLICKER	8
6.3	ARCHAEOLOGICAL RESOURCES	8
6.4	INTERFERENCE	9
6.5	WAKE LOSS STUDIES	9
6.6	NOISE	9
6.7	AVIAN AND BAT PROTECTION PLAN	10

6.8	PROJECT ENERGY PRODUCTION.....	11
6.9	WIND RESOURCE USE	11
6.10	EXTRAORDINARY EVENTS.....	11
7.	CONSTRUCTION AND OPERATION PRACTICES.....	12
7.1	SITE CLEARANCE	12
7.2	TOPSOIL PROTECTION	12
7.3	SOIL COMPACTION	12
7.4	LIVESTOCK PROTECTION	12
7.5	FENCES.....	12
7.6	DRAINAGE TILES.....	12
7.7	EQUIPMENT STORAGE.....	12
7.8	ROADS	13
7.9	CLEANUP	13
7.10	TREE REMOVAL.....	13
7.11	SOIL EROSION AND SEDIMENT CONTROL.....	14
7.12	RESTORATION.....	14
7.13	HAZARDOUS WASTE	14
7.14	APPLICATION OF HERBICIDES.....	14
7.15	PUBLIC SAFETY	15
7.16	EMERGENCY RESPONSE	15
7.17	TOWER IDENTIFICATION	15
7.18	FEDERAL AVIATION ADMINISTRATION LIGHTING	15
8.	FINAL CONSTRUCTION	15
8.1	AS-BUILT PLANS AND SPECIFICATIONS	15
8.2	FINAL BOUNDARIES	16
8.3	EXPANSION OF SITE BOUNDARIES	16
8.4	NOTIFICATION TO THE COMMISSION.....	16
9.	DECOMMISSIONING, RESTORATION, AND ABANDONMENT.....	16
9.1	DECOMMISSIONING PLAN	16
9.2	SITE RESTORATION	16
9.3	ABANDONED TURBINES.....	17
10.	AUTHORITY TO CONSTRUCT LWECS.....	17
10.1	WIND RIGHTS	17
10.2	POWER PURCHASE AGREEMENT	17
10.3	FAILURE TO COMMENCE CONSTRUCTION	18
10.4	PREEMPTION OF OTHER LAWS.....	18
10.5	OTHER PERMITS	18

11.	COMMISSION POST-ISSUANCE AUTHORITIES	19
11.1	PERIODIC REVIEW.....	19
11.2	MODIFICATION OF CONDITIONS.....	19
11.3	REVOCATION OR SUSPENSION OF PERMIT	19
11.4	MORE STRINGENT RULES	20
11.5	TRANSFER OF PERMIT.....	20
11.6	RIGHT OF ENTRY	20
11.7	PROPRIETARY INFORMATION	20
12.	EXPIRATION DATE.....	20
13.	SPECIAL CONDITIONS	21
13.1	APPLICATION OF COUNTY STANDARDS.....	21
13.2	OVERHEAD COLLECTOR <u>FEEDER</u> LINES.....	21
13.3	SITE SPECIFIC BAT STUDY.....	21
13.4	AVIAN AND BAT POST CONSTRUCTION FATALITY MONITORING ...	22
13.5	PROJECT SUBSTATION.....	22
<hr/>		
ATTACHMENT 1:	Site Permit Map	23
ATTACHMENT 2:	Complaint and Handling Procedures for Large Wind Energy Conversion Systems	26
ATTACHMENT 3:	Compliance Filing Procedure for Permitted Energy Facilities	29
ATTACHMENT 4:	Permit Compliance Filings	30
ATTACHMENT 5:	Draft Avian and Bat Protection Plan

SITE PERMIT

This Site Permit for a Large Wind Energy Conversion System (LWECS) authorizes Getty Wind Company, LLC (Permittee) to construct and operate the Getty Wind Farm (Project), a 40 Megawatt (MW) nameplate capacity LWECS and associated facilities in Stearns County, on a site of approximately 7,600 acres in accordance with the conditions contained in this permit.

SECTION 1

PROJECT DESCRIPTION

The up to 40 MW nameplate capacity LWECS Project authorized to be constructed in this permit will be developed and constructed by the Permittee. The Project will consist of up to ~~26~~ 23 Goldwind 87 1500 1.5 MW wind turbine generators (turbines), up to 21 Repower MM100 1.8 MW turbines, or up to 13 Vestas V112 3.0 MW turbines. The Permittee may modify the turbine selection with the Minnesota Public Utilities Commission's (Commission) approval. The rotor diameter is 285 to 367 feet (87 to 112 meters). Associated facilities include wind turbine access roads, communications cables, electrical collection system, a Project substation with Supervisory Control and Data Acquisition (SCADA) equipment, and two permanent meteorological towers. Turbines are interconnected by communication and overhead and underground 34.5 kV electrical power collection facilities within the wind farm that will deliver wind-generated power to the Project substation. The Permittee will seek local permitting for an Operations and Maintenance (O&M) building, and a 69 kV transmission line connecting the Project Substation with Xcel Energy's Black Oak Switching Station.

SECTION 2

DESIGNATED SITE

2.1 PROJECT BOUNDARY

The Project boundary is shown on the maps at **Attachments 1a – 3c**. The Project is located in the following townships:

Township Name	Sections	Township	Range
Sauk Centre	29, 30, 31, 32, 33	T126N	R34W
Getty	4, 5, 6, 7, 8, 9, 16, 17, 18, 20, 21	T125N	R34W

2.2 TURBINE LAYOUT

Preliminary wind turbine and associated facility layouts are shown on the map at Attachments 1a-c. The preliminary layouts represent the approximate location of wind turbines of the types and sizes under consideration and associated facilities within the Project boundary and identify layouts that minimize the overall potential human and environmental impacts, which were

evaluated in the permitting process. The final layout depicting the location of each wind turbine and associated facility shall be located within the Project boundary. The Project boundary serves to provide the Permittee with the flexibility to make minor adjustments to the preliminary layout to accommodate landowner requests, unforeseen conditions encountered during the detailed engineering and design process, and federal and state agency requirements. Any modification of the location of a wind turbine and associated facility to a preliminary layout shall be done in such a manner to have comparable overall human and environmental impacts and shall be specifically identified in the site plan pursuant to Section 5.1. The Permittee shall submit the final site layout in the site plan pursuant to Section 5.1.

SECTION 3

APPLICATION COMPLIANCE

The Permittee shall comply with those practices set forth in its Site Permit Application, dated October 11, 2011, and the record of this proceeding unless this Permit establishes a different requirement in which case this Permit shall prevail.

Attachment 4 contains a summary of compliance filings required under this permit. ~~Attachment 4 which is provided solely for the convenience of the Permittee, and shall not be construed as a substitute for the conditions contained in this permit. If this permit conflicts or is not consistent with Attachment 4, the conditions in this permit will control.~~

SECTION 4

SETBACKS AND SITE LAYOUT RESTRICTIONS

4.1 WIND ACCESS BUFFER

Wind turbine towers shall not be placed less than five (5) rotor diameters (RD) on prevailing wind directions and three (3) RD on non-prevailing wind directions from the perimeter of the lands where the Permittee does not hold the wind rights, without the approval of the Commission. This section does not apply to public roads and trails.

4.2 RESIDENCES

Wind turbine towers shall not be located closer than 1,000 feet from all residences or the distance required to comply with the noise standards pursuant to Minnesota Rule 7030.0040 established by the Minnesota Pollution Control Agency (PCA), whichever is greater.

4.3 NOISE

The wind turbine towers shall be placed such that the Permittee shall comply with noise standards established as of the date of this permit by the PCA at all times at all appropriate locations. The noise standards are found in Minnesota Rules chapter 7030. Turbine operation shall be modified or turbines shall be removed from service if necessary to comply with these

noise standards. The Permittee or its contractor may install and operate turbines, as close as the minimum setback required in this permit, but in all cases shall comply with PCA noise standards. The Permittee shall be required to comply with this condition with respect to all homes or other receptors in place as of the time of construction, but not with respect to such receptors built after construction of the towers.

4.4 ROADS

Wind turbine and meteorological towers shall not be located closer than 250 feet from the edge of the nearest public road right-of-way.

4.5 PUBLIC LANDS

Wind turbines and associated facilities including foundations, access roads, underground cable, and transformers, shall not be located in public lands, including Waterfowl Production Areas, Wildlife Management Areas, Scientific and Natural Areas, or in county parks, and wind turbine towers shall also comply with the setbacks of Section 4.1.

4.6 WETLANDS

Wind turbines and associated facilities including foundations, access roads, underground cable, and transformers, shall not be placed in public waters wetlands, as defined in Minnesota Statutes section 103G.005, subdivision 15a, except that electric collector or feeder lines may cross or be placed in public waters or public waters wetlands subject to permits and approvals by the Minnesota Department of Natural Resources (DNR), the United States Army Corps of Engineers (USACE), and local units of government as implementers of the Minnesota Wetland Conservation Act.

4.7 NATIVE PRAIRIE

The Permittee shall, in consultation with the Commission and DNR, prepare a Prairie Protection and Management Plan and submit it to the Commission and DNR at least fourteen (14) days prior to the pre-construction meeting if native prairie, as defined in Minnesota Statutes section 84.02, subdivision 5, is identified in any biological and natural resource inventories conducted pursuant to Section 6.1. The plan shall address steps to avoid impacts to native prairie and mitigation to unavoidable impacts of native prairie by restoration or management of other native prairie areas that are in degraded condition, by conveyance of conservation easements, or by other means agreed to by the Permittee and Commission. Wind turbines and associated facilities including foundations, access roads, collector and feeder lines, underground cable, and transformers shall not be placed in native prairie unless addressed in a prairie protection and management plan and shall not be located in areas enrolled in the Native Prairie Bank Program. Construction activities, as defined in Minnesota Statutes section 216E.01, shall not impact native prairie unless addressed in a Prairie Protection and Management Plan.

4.8 SAND AND GRAVEL OPERATIONS

Wind turbines and all associated facilities, including foundations, access roads, underground cable, and transformers shall not be located within active sand and gravel operations, unless otherwise negotiated with the landowner with notice given to the owner of the sand and gravel operation.

4.9 WIND TURBINE TOWERS

Structures for wind turbines shall be self-supporting tubular towers. The towers may be up to 100 meters (328 feet) above grade measured at hub.

4.10 TURBINE SPACING

The turbine towers shall be constructed within the site boundary as shown in **Attachments 1a-c**. The turbine towers shall be spaced no closer than three (3) RD in non-prevailing wind directions and five (5) RD on prevailing wind directions. If required during final micro-siting of the turbine towers to account for topographic conditions, up to 20 percent of the towers may be sited closer than the above spacing but the Permittee shall minimize the need to site the turbine towers closer.

4.11 METEOROLOGICAL TOWERS

Permanent towers for meteorological equipment shall be free standing. Permanent meteorological towers shall not be placed less than 250 feet from the edge of the nearest public road right-of-way and from the boundary of the Permittee's site control, or in compliance with the county ordinance regulating meteorological towers in the county the tower is built, whichever is more restrictive. Meteorological towers shall be placed on property the Permittee holds the wind or other development rights.

Meteorological towers shall be marked as required by the Federal Aviation Administration (FAA). There shall be no lights on the meteorological towers other than what is required by the FAA. This restriction shall not apply to infrared heating devices used to protect the wind monitoring equipment.

4.12 AVIATION

The Permittee shall not place wind turbines or associated facilities in a location that could create an obstruction to navigable airspace of public and licensed private airports (as defined in Minnesota Rule 8800.0100, subparts 24a and 24b) in Minnesota, adjacent states, or providences. The Permittee shall apply the minimum obstruction clearance for licensed private airports pursuant to Minnesota Rule 8800.1900, subpart 5. Setbacks or other limitations shall be followed in accordance with the Minnesota Department of Transportation (DOT), Department of Aviation, and FAA. The Permittee shall notify owners of all known airports within six (6) miles of the Project prior to construction.

4.13 FOOTPRINT MINIMIZATION

The Permittee shall design and construct the LWECS so as to minimize the amount of land that is impacted by the LWECS. Associated facilities in the vicinity of turbines such as electrical/electronic boxes, ~~step-up~~ transformers, and monitoring systems shall, to the greatest extent feasible, be mounted on the foundations used for turbine towers or inside the towers unless otherwise negotiated with the affected landowner(s).

4.14 COMMUNICATION CABLES

The Permittee shall place all supervisory control and data acquisition (SCADA) communication cables underground and within or adjacent to the land necessary for turbine access roads unless otherwise negotiated with the affected landowner(s).

4.15 ELECTRICAL COLLECTOR AND FEEDER LINES

Collector lines that carry electrical power from each individual transformer associated with a wind turbine to an internal project interconnection point shall be buried underground. Collector lines shall be placed within or adjacent to the land necessary for turbine access roads unless otherwise negotiated with the affected landowner(s).

Feeder lines that carry power from an internal project interconnection point to the Project substation or interconnection point on the electrical grid may be overhead or underground. Feeder line locations shall be negotiated with the affected landowner(s).

Any feeder lines that parallel public roads shall be placed within the public rights-of-way or on private land immediately adjacent to public roads. If feeder lines are located within public rights-of-way, the Permittee shall obtain approval from the governmental unit responsible for the affected right-of-way.

Collector and feeder line locations shall be located in such a manner to minimize interference with agricultural operations, including, but not limited to, existing drainage patterns, drain tile, future tiling plans, and ditches. Safety shields shall be placed on all guy wires associated with overhead feeder lines. The Permittee shall submit the engineering drawings of all collector and feeder lines in the site plan pursuant to Section 5.1.

The Permittee must fulfill, comply with, and satisfy all Institute of Electrical and Electronics Engineers, Inc. (IEEE) standards applicable to this Project, including but not limited to, IEEE 776 [Recommended Practice for Inductive Coordination of Electric Supply and Communication Lines], IEEE 519 [Harmonic Specifications], IEEE 367 [Recommended Practice for Determining the Electric Power Station Ground Potential Rise and Induced Voltage from a Power Fault], and IEEE 820 [Standard Telephone Loop Performance Characteristics] provided the telephone service provider(s) have complied with any obligations imposed on it pursuant to these standards. Upon request by the Commission, the Permittee shall report to the Commission on compliance with these standards.

SECTION 5

ADMINISTRATIVE COMPLIANCE PROCEDURES

The following administrative compliance procedures shall be executed in accordance with the Permit Compliance Filings at Attachments 3 and 4.

5.1 SITE PLAN

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall submit to the Commission:

- (a) a site plan for all turbines, roads, electrical equipment, collector and feeder lines, and other associated facilities to be constructed;
- (b) engineering drawings for site preparation, construction of the facilities; and
- (c) a plan for restoration of the site due to construction.

Construction is defined under Minnesota Statutes section 216E.01. The Permittee may submit a site plan and engineering drawings for only a portion of the Project if the Permittee intends to commence construction on certain parts of the Project before completing the site plan and engineering drawings for other parts of the Project. The Permittee shall document, through GIS mapping, compliance with the setbacks and site layout restrictions required by this permit, including compliance with the noise standards pursuant to Minnesota Rules chapter 7030. In the event that previously unidentified environmental conditions are discovered during construction that by law or pursuant to conditions outlined in this permit would preclude the use of that site as a turbine site, the Permittee shall have the right to move or relocate turbine site. The Permittee shall notify the Commission of any turbines that are to be relocated before the turbine is constructed on the new site and demonstrate compliance with the setbacks and site layout restrictions required by this permit.

5.2 NOTICE TO LOCAL RESIDENTS

Within fourteen (14) days of approval of this permit, the Permittee shall send a printed copy of the permit to the office of the auditor of each county in which the site is located and to the clerk of each city and township within the site boundaries. If applicable, the Permittee shall, within fourteen (14) days of permit approval, send a copy of this permit to each regional development commission, local fire district, soil and water conservation district, watershed district, and watershed management district office with jurisdiction in the county where the site is located. Within thirty (30) days of approval of this permit, the Permittee shall send a printed copy of the permit to each landowner within the Project boundary. In no case shall the landowner receive this site permit and complaint procedure, developed pursuant to Section 5.8, less than five (5) days prior to the start of construction on their property.

5.3 NOTICE OF PERMIT CONDITIONS

Prior to the start of construction, the Permittee shall inform all employees, contractors, and other persons involved in the construction and ongoing operation of the Project of the terms and conditions of this permit.

5.4 FIELD REPRESENTATIVE

At least fourteen (14) days prior to the pre-construction meeting and continuously throughout construction, including site restoration, the Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this permit during the construction phase of this Project. This person (or a designee) shall be accessible by telephone during normal working hours. This person's address, phone number, and emergency phone number shall be provided to the Commission, which may make the number available to local residents and officials and other interested persons. The Permittee may change the field representative by notification to the Commission.

5.5 SITE MANAGER

The Permittee shall designate a site manager responsible for overseeing compliance with the conditions of this permit during the commercial operation and decommissioning phases of this Project. The Permittee shall provide the Commission with the name, address, and phone number, and emergency phone number of the site manager prior to placing any turbine into commercial operation. This information shall be maintained current by informing the Commission of any changes, as they become effective.

5.6 PRE-CONSTRUCTION MEETING

Prior to the start of any construction, the Permittee shall conduct a pre-construction meeting with the Field Representative and the State Permit Manager designated by the Commission to coordinate field monitoring of construction activities.

5.7 PRE-OPERATION COMPLIANCE MEETING

At least fourteen (14) days prior to commercial operation, the Permittee shall conduct a pre-operation compliance meeting with the Site Manager and the State Permit Manager designated by the Commission to coordinate field monitoring of operation activities.

5.8 COMPLAINTS

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall submit to the Commission the company's procedures to be used to receive and respond to complaints. The Permittee shall report to the Commission all complaints received concerning any part of the Project in accordance with the procedures provided in Attachments 2 and 3 of this permit.

SECTION 6

SURVEYS AND REPORTING

6.1 BIOLOGICAL AND NATURAL RESOURCE INVENTORIES

The Permittee, in consultation with DNR and other interested parties, shall design and conduct pre-construction desktop and field inventories of potentially impacted native prairies, wetlands, and any other biologically sensitive areas within the site and assess the presence of state threatened, endangered, or species of special concern or federally listed species. The results of any surveys shall be submitted to the Commission and DNR at least ~~fourteen (14)~~ thirty (30) days prior to the pre-construction meeting to confirm compliance of conditions in this permit.

The Permittee shall provide to the Commission any biological surveys or studies conducted on this Project, including those not required under this permit.

6.2 SHADOW FLICKER

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall provide data on shadow flicker impacts on each residence of non-participating landowners and participating landowners. Information shall include the results of modeling used, assumptions made, and the anticipated levels of ~~impact exposure~~ from turbine shadow flicker on each residence. The Permittee shall provide documentation on its efforts to avoid, minimize and mitigate shadow flicker ~~impacts-exposure~~. The results of any modeling shall be submitted to the Commission at least fourteen (14) days prior to the pre-construction meeting to confirm compliance of conditions in this permit.

6.3 ARCHAEOLOGICAL RESOURCES

The Permittee shall work with the State Historic Preservation Office (SHPO) and the State Archaeologist. The Permittee shall carry out a Phase 1 or 1A Archaeology survey for all proposed turbine locations, access roads, junction boxes, and other areas of Project construction impact to determine whether additional archaeological work is necessary for any part of the proposed Project. The Permittee shall contract with a qualified archaeologist to complete such surveys, and shall submit the results to the Commission, the SHPO, and the State Archaeologist at least fourteen (14) days prior to the pre-construction meeting.

The SHPO and the State Archaeologist will make recommendations for the treatment of any significant archaeological sites which are identified. Any issues in the implementation of these recommendations will be resolved by the Commission in consultation with SHPO and the State Archaeologist. In addition, the Permittee shall mark and preserve any previously unrecorded archaeological sites that are found during construction and shall promptly notify the SHPO, the State Archaeologist, and the Commission of such discovery. The Permittee shall not excavate at such locations until so authorized by the Commission in consultation with the SHPO and the State Archaeologist.

If human remains are encountered during construction, the Permittee shall immediately halt construction at that location and promptly notify local law enforcement authorities and the State

Archaeologist. Construction at the human remains location shall not proceed until authorized by local law enforcement authorities or the State Archaeologist.

If any federal funding, permit, or license is involved or required, the Permittee shall notify the SHPO as soon as possible in the planning process to coordinate section 106 (36 C.F.R. part 800) review.

Prior to construction, construction workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If any archaeological sites are found during construction, the Permittee shall immediately stop work at the site and shall mark and preserve the site and notify the Commission and the SHPO about the discovery. The Commission and the SHPO shall have three (3) working days from the time the agency is notified to conduct an inspection of the site if either agency chooses to do so. On the fourth day after notification, the Permittee may begin work on the site unless the SHPO has directed that work shall cease. In such event, work shall not continue until the SHPO determines that construction can proceed.

6.4 INTERFERENCE

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall submit a plan to the Commission for conducting an assessment of television and radio signal reception, ~~and~~ microwave signal patterns, and telecommunications in the Project area. The assessment shall be designed to provide data that can be used in the future to determine whether the turbines and associated facilities are the cause of disruption or interference of television reception or microwave patterns in the event residents should complain about such disruption or interference after the turbines are placed in operation. The assessment shall be completed prior to installation of the turbines. The Permittee shall be responsible for alleviating any disruption or interference of these services caused by the turbines or any associated facilities.

The Permittee shall not operate the Project so as to cause microwave, television, radio, telecommunications, or navigation interference in violation of Federal Communications Commission regulations or other law. In the event the Project or its operations cause such interference, the Permittee shall take timely measures necessary to correct the problem.

6.5 WAKE LOSS STUDIES

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall provide to the Commission the pre-construction micro-siting analysis leading to the final tower locations and an estimate of total Project wake losses. The Permittee shall provide to the Commission any operational wake loss studies conducted on this Project.

6.6 NOISE

The Permittee shall submit a proposal to the Commission at least fourteen (14) days prior to the pre-operation compliance meeting for the conduct of a post-construction noise study. Upon the approval of the Commission, the Permittee shall carry out the study. The study shall be designed

to determine the operating LWECS noise levels at different frequencies and at various distances from the turbines at various wind directions and speeds. The Permittee shall submit the study within eighteen (18) months after commercial operation.

6.7 AVIAN AND BAT PROTECTION PLAN

6.7.1 AVIAN AND BAT PROTECTION PLAN

The Permittee shall comply with the provisions of the Revised Avian and Bat Protection Plan submitted for this Project on July 10, 2012 as detailed in Attachment 5. The plan addresses steps to be taken to identify, avoid, minimize and mitigate impacts to avian and bat species during the construction phase and the operation phase of the Project. The plan also includes formal and informal monitoring, training, wildlife handling, documentation (e.g., photographs), and reporting protocols for each phase of the Project.

The Permittee shall, by March 15 following each complete or partial calendar year of operation, file with the Commission an annual report detailing findings of its annual audit of ABPP practices. The annual report shall include summarized and raw data of bird and bat fatalities and injuries and shall include bird and bat fatality estimates for the Project using multiple agreed upon estimators from the prior calendar year. The annual report shall also identify any deficiencies or recommended changes in the operation of the Project or in the ABPP to reduce avian and bat fatalities and shall provide a schedule for implementing the corrective or modified actions. The Permittee shall provide a copy of the report to DNR and to the U.S. Fish and Wildlife Service at the time of filing with the Commission.

6.7.2 QUARTERLY INCIDENT REPORTS

The Permittee shall submit quarterly avian and bat reports to the Commission. Quarterly reports are due by the 15th of each January, April, July, and October commencing the day following commercial operation and terminating upon the expiration of this permit. Each report shall identify any dead or injured avian and bat species, location of find by turbine number, and date of find for the reporting period in accordance with the reporting protocols. If a dead or injured avian or bat species is found, the report shall describe the potential cause of the occurrence and the steps taken to avoid future occurrences. The Permittee shall provide a copy of the report to DNR and to the U.S. Fish and Wildlife Service at the time of filing with the Commission.

6.7.3 IMMEDIATE INCIDENT REPORTS

The Permittee shall notify the Commission, U.S. Fish and Wildlife Service, and DNR within twenty-four (24) hours of the discovery of any of the following:

- (a) five or more dead or injured non-protected avian or bat species within a reporting period;
 - (b) one or more dead or injured migratory avian or bat species;
 - (c) one or more dead or injured state threatened, endangered, or species of special concern;
- or

- (d) one or more dead or injured federally listed species; or-
- (e) one or more bald eagles.

6.8 PROJECT ENERGY PRODUCTION

The Permittee shall ~~submit a report no later than~~ by February 1st following each complete or partial year of Project operation submit a report to the Commission including. ~~The report shall include:~~

- (a) The ~~rated nameplate~~ installed capacity of the permitted Project;
- (b) The total monthly energy generated by the Project in MW hours;
- (c) The monthly capacity factor of the Project;
- (d) Yearly energy production and capacity factor for the Project;
- (e) The operational status of the Project and any major outages, major repairs, curtailments, or turbine performance improvements occurring in the previous year; and
- (f) Any other information reasonably requested by the Commission.

This information shall be considered public and must be submitted electronically.

6.9 WIND RESOURCE USE

The Permittee shall, by February 1st following each complete or partial calendar year of operation, file with ~~upon the request of the Commission report to the Commission on the~~ monthly energy production of the Project and the average monthly and average annual wind speed collected at one permanent meteorological tower ~~selected by the Commission during the~~ preceding year or partial year of operation. ~~Section 11.7 shall apply to data provided pursuant to this section.~~

This information shall be considered public and must be submitted electronically.

6.10 EXTRAORDINARY EVENTS

Within twenty-four (24) hours of an occurrence, the Permittee shall notify the Commission of any extraordinary event. Extraordinary events include but shall not be limited to: fires, tower collapse, thrown blade, collector or feeder line failure, and injured LWECS worker or private person. The Permittee shall, within thirty (30) days of the occurrence, submit a report to the Commission describing the cause of the occurrence and the steps taken to avoid future occurrences.

SECTION 7

CONSTRUCTION AND OPERATION PRACTICES

7.1 SITE CLEARANCE

The Permittee shall disturb or clear the site only to the extent necessary to assure suitable access for construction, safe operation, and maintenance of the LWECS.

7.2 TOPSOIL PROTECTION

The Permittee shall implement measures to protect and segregate topsoil from subsoil in cultivated lands unless otherwise negotiated with the affected landowner.

7.3 SOIL COMPACTION

The Permittee shall implement measures to minimize soil compaction of all lands during all phases of the Project's life and shall confine compaction to as small an area as practicable.

7.4 LIVESTOCK PROTECTION

The Permittee shall take precautions to protect livestock during all phases of the Project's life.

7.5 FENCES

The Permittee shall promptly replace or repair all fences and gates removed or damaged during all phases of the Project's life unless otherwise negotiated with the affected landowner(s). When the Permittee installs a gate where electric fences are present, the Permittee shall provide for continuity in the electric fence circuit.

7.6 DRAINAGE TILES

The Permittee shall take into account the location of drainage tiles during Project layout and construction. The Permittee shall promptly repair or replace all drainage tiles broken or damaged during all phases of the Project's life unless otherwise negotiated with the affected landowner(s).

7.7 EQUIPMENT STORAGE

The Permittee shall not locate temporary equipment staging areas on lands under its control unless negotiated with landowner(s). Temporary staging areas shall not be located in wetlands or native prairie as defined in Sections 4.6 and 4.7.

7.8 ROADS

7.8.1 PUBLIC ROADS

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall identify all state, county, or township roads that will be used for the Project and shall notify the Commission and the state, county, or township governing body having jurisdiction over the roads to determine if the governmental body needs to inspect the roads prior to use of these roads. Where practical, existing roadways shall be used for all activities associated with the Project. Where practical, all-weather roads shall be used to deliver cement, turbines, towers, assembled nacelles, and all other heavy components to and from the turbine sites.

The Permittee shall, prior to the use of such roads, make satisfactory arrangements with the appropriate state, county, or township governmental body having jurisdiction over roads to be used for construction of the Project for maintenance and repair of roads that will be subject to extra wear and tear due to transportation of equipment and Project components. The Permittee shall notify the Commission of such arrangements upon request of the Commission.

7.8.2 TURBINE ACCESS ROADS

The Permittee shall construct the least number of turbine access roads it can. Access roads shall be low profile roads so that farming equipment can cross them and shall be covered with Class five gravel or similar material. Access roads shall not be constructed across streams and drainage ways without required permits and approvals from the DNR, USFWS, and/or USACE. When access roads are constructed across streams and drainage ways, the access roads shall be designed in a manner so runoff from the upper portions of the watershed can readily flow to the lower portion of the watershed. Access roads shall also be located and constructed in accordance with all necessary township, county, or state road requirements and permits.

7.8.3 PRIVATE ROADS

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the site, unless otherwise negotiated with the affected landowner(s).

7.9 CLEANUP

The Permittee shall remove all waste and scrap that is the product of construction, operation, restoration, and maintenance from the site and properly dispose of it upon completion of each task. Personal litter, bottles, and paper deposited by site personnel shall be removed on a daily basis.

7.10 TREE REMOVAL

The Permittee shall minimize the removal of trees and the Permittee shall not remove groves of trees or shelter belts without notification to the Commission and the approval of the affected landowner(s).

7.11 SOIL EROSION AND SEDIMENT CONTROL

The Permittee shall develop a Soil Erosion and Sediment Control Plan prior to construction and submit the Plan to the Commission at least fourteen (14) days prior to the pre-construction meeting. This Plan may be the same as the Storm Water Pollution Prevention Plan (SWPPP) submitted to the PCA as part of the National Pollutant Discharge Elimination System (NPDES) permit application.

The Soil Erosion and Sediment Control Plan shall address what types of erosion control measures will be implemented during each Project phase and shall at a minimum identify: plans for grading, construction, and drainage of roads and turbine pads; necessary soil information; detailed design features to maintain downstream water quality; a comprehensive re-vegetation plan to maintain and ensure adequate erosion control and slope stability and to restore the site after temporary Project activities; and measures to minimize the area of surface disturbance. Other practices shall include containing excavated material, protecting exposed soil, and stabilizing restored material and removal of silt fences or barriers when the area is stabilized. The plan shall identify methods for disposal or storage of excavated material. Erosion and sedimentation control measures shall be implemented prior to construction and maintained throughout the Project's life.

The Permittee shall develop an invasive species prevention plan to prevent the introduction of invasive species on lands disturbed by project construction activities. This requirement may be included as an element of the Soil Erosion and Sediment Control Plan.

7.12 RESTORATION

The Permittee shall, as soon as practical following construction of each turbine, considering the weather and preferences of the affected landowner(s), restore the area affected by any Project activities to the condition that existed immediately before construction began, to the extent possible. The time period may be no longer than twelve (12) months after completion of construction of the turbine, unless otherwise negotiated with the affected landowner(s). Restoration shall be compatible with the safe operation, maintenance, and inspection of the Project.

7.13 HAZARDOUS WASTE

The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean-up, and disposal of hazardous wastes generated during any phase of the Project's life.

7.14 APPLICATION OF HERBICIDES

The Permittee shall restrict herbicide use to those herbicides and methods of application approved by the Minnesota Department of Agriculture and the U.S. Environmental Protection Agency. Selective foliage or basal application shall be used when practicable. The Permittee shall contact the landowner or his designee to obtain approval for the use of herbicide prior to any application on their property. The landowner may request that there be no application of herbicides on any part of the site within the landowner's property. All herbicides shall be applied

in a safe and cautious manner so as to not damage property, including crops, orchards, tree farms, or gardens. The Permittee shall also, at least fourteen (14) days prior to the application, notify beekeepers with an active apiary within one mile of the proposed application site of the day the company intends to apply herbicide so that precautionary measures may be taken by the beekeeper.

7.15 PUBLIC SAFETY

The Permittee shall provide educational materials to landowners within the site boundary and, upon request, to interested persons, about the Project and any restrictions or dangers associated with the Project. The Permittee shall also provide any necessary safety measures, such as warning signs and gates for traffic control or to restrict public access. The Permittee shall submit the location of all underground facilities, as defined in Minnesota Statutes section 216D.01, subdivision 11, to Gopher State One Call.

7.16 EMERGENCY RESPONSE

The Permittee shall prepare an emergency response plan (fire protection and medical emergency plan) in consultation with the emergency responders having jurisdiction over the area prior to LWECS construction. The Permittee shall submit a copy of the plan to the Commission at least fourteen (14) days prior to the pre-construction meeting and a revised plan, if any, at least fourteen (14) days prior to the pre-operation compliance meeting. The Permittee shall also register the LWECS with the local governments' emergency 911 services.

7.17 TOWER IDENTIFICATION

All turbine towers shall be marked with a visible identification number.

7.18 FEDERAL AVIATION ADMINISTRATION LIGHTING

Towers shall be marked as required by the FAA. There shall be no lights on the towers other than what is required by the FAA. This restriction shall not apply to infrared heating devices used to protect the wind monitoring equipment.

SECTION 8

FINAL CONSTRUCTION

8.1 AS-BUILT PLANS AND SPECIFICATIONS

Within sixty (60) days after completion of construction, the Permittee shall submit to the Commission a copy of the as-built plans and specifications. The Permittee must also submit this data in a GIS compatible format so that the Commission can place it into the Minnesota Geospatial Information Office's geographic data clearinghouse located in the Department of Administration.

8.2 FINAL BOUNDARIES

After completion of construction, the Commission shall determine the need to adjust the final boundaries of the site required for this Project. If done, this permit may be modified, after notice and opportunity for public hearing, to represent the actual site required by the Permittee to operate the Project authorized by this permit.

8.3 EXPANSION OF SITE BOUNDARIES

No expansion of the site boundaries described in this permit shall be authorized without the approval of the Commission. The Permittee may submit to the Commission a request for a change in the boundaries of the site for the Project. The Commission will respond to the requested change in accordance with applicable statutes and rules.

8.4 NOTIFICATION TO COMMISSION

At least three (3) days before the Project is to commence commercial operation, the Permittee shall notify the Commission of the date on which the Project will commence commercial operation and the date on which construction was completed

SECTION 9

DECOMMISSIONING, RESTORATION, AND ABANDONMENT

9.1 DECOMMISSIONING PLAN

At least fourteen (14) days prior to the ~~pre-construction~~ operation compliance meeting, the Permittee shall submit to the Commission a Decommissioning Plan documenting the manner in which the Permittee anticipates decommissioning the Project in accordance with the requirements of Minnesota Rules 7854.0500, subpart 13. The Permittee shall ensure that it carries out its obligations to provide for the resources necessary to fulfill its requirements to properly decommission the Project at the appropriate time. The Commission may at any time request the Permittee to file a report with the Commission describing how the Permittee is fulfilling this obligation.

9.2 SITE RESTORATION

Upon expiration of this permit, or upon earlier termination of operation of the Project, or any turbine within the Project, the Permittee shall have the obligation to dismantle and remove from the site all towers, turbine generators, transformers, overhead and underground cables and lines, foundations, buildings, and ancillary equipment to a depth of four feet. To the extent feasible, the Permittee shall restore and reclaim the site to its pre-project topography and topsoil quality. All access roads shall be removed unless written approval is given by the affected landowner(s) requesting that one or more roads, or portions thereof, be retained. Any agreement for removal to a lesser depth or for no removal shall be recorded with the county and shall show the locations of all such foundations. All such agreements between the Permittee and the affected

landowner(s) shall be submitted to the Commission prior to completion of restoration activities. The site shall be restored in accordance with the requirements of this condition within eighteen (18) months after expiration, or upon earlier termination of the Project, or any turbine within the Project.

9.3 ABANDONED TURBINES

The Permittee shall advise the Commission of any turbines that are abandoned prior to termination of operation of the Project. A Project, or any turbine within the Project, shall be considered abandoned after one (1) year without energy production and the land restored pursuant to Section 9.2 unless a plan is developed and submitted to the Commission outlining the steps and schedule for returning the Project, or any turbine within the Project, to service.

SECTION 10

AUTHORITY TO CONSTRUCT LWECS

10.1 WIND RIGHTS

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall demonstrate that it has obtained the wind rights and any other rights necessary to construct and operate the Project within the boundaries of the LWECS authorized by this permit.

Nothing in this permit shall be construed to preclude any other person from seeking a ~~site~~ permit to construct a LWECS in any area within the boundaries of the Project covered by this permit if the Permittee does not hold exclusive wind rights for such areas.

10.2 POWER PURCHASE AGREEMENT

In the event the Permittee does not have a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the Project at the time this permit is issued, the Permittee shall provide notice to the Commission when it obtains a commitment for purchase of the power. This permit does not authorize construction of the Project until the Permittee has obtained a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the Project. In the event the Permittee does not obtain a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the Project within two years of the issuance of this permit, the Permittee must advise the Commission of the reason for not having such power purchase agreement or enforceable mechanism. In such event, the Commission may determine whether this permit should be amended or revoked. No amendment or revocation of this permit may be undertaken except in accordance with applicable statutes and rules, including Minnesota Rule 7854.1300.

10.3 FAILURE TO COMMENCE CONSTRUCTION

If the Permittee has not completed the pre-construction surveys required under ~~Section 5~~ this permit and commenced construction, as defined in Minnesota Statutes section 216E.01, of the

LWECS within two years of the issuance of this permit, the Permittee must advise the Commission of the reason construction has not commenced. In such event, the Commission shall make a determination as to whether this permit should be amended or revoked. No revocation of this permit may be undertaken except in accordance with applicable statutes and rules, including Minnesota Rule 7854.1300.

10.4 PREEMPTION OF OTHER LAWS

Pursuant to Minnesota Statutes section 216F.07, this site permit shall be the only site approval required for the location of this Project, and this permit shall supersede and preempt all zoning, building, and land use rules, regulations, and ordinances adopted by regional, county, local, and special purpose governments. Nothing in this permit shall release the Permittee from any obligation imposed by law that is not superseded or preempted by law.

10.5 OTHER PERMITS

The Permittee shall be responsible for acquiring any other federal, state, or local permits or authorizations that may be required to construct and operate a LWECS within the authorized site. The Permittee shall submit a copy of such permits and authorizations to the Commission upon request.

10.5.1 COMPLIANCE WITH FEDERAL AND STATE AGENCY PERMITS

The Permittee shall comply with all terms and conditions of permits or licenses issued by Federal, State, or Tribal authorities including, but not limited to, the requirements of the PCA (Section 401 Water Quality Certification, National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) stormwater permit for construction activity, and other site specific discharge approvals), DNR (License to Cross Public Lands and Water, Public Water Works Permit, and state protected species consultation), SHPO (Section 106 Historic Consultation Act), FAA determinations, and DOT (Utility Access Permit, Highway Access Permit, Oversize and Overweight Permit, Aeronautics Airspace Obstruction Permit, and the Mn/DOT Utility Accommodation Policy).

10.5.2 COMPLIANCE WITH COUNTY, CITY OR MUNICIPAL PERMITS

The Permittee shall comply with all terms and conditions of permits, authorizations, or licenses issued by the counties, cities, and municipalities affected by the Project that do not conflict with or are not pre-empted by federal or state permits and regulations. These authorizations include, but are not limited to, compliance with Minnesota's Wetland Conservation Act.

SECTION 11

COMMISSION POST-ISSUANCE AUTHORITIES

11.1 PERIODIC REVIEW

The Commission shall initiate a review of this permit and the applicable conditions at least once every five (5) years. The purpose of the periodic review is to allow the Commission, the Permittee, and other interested persons an opportunity to consider modifications in the conditions of this permit. No modification may be made except in accordance with applicable statutes and rules.

11.2 MODIFICATION OF CONDITIONS

After notice and opportunity for hearing, this permit may be modified or amended for cause including but not limited to the following:

- (a) Violation of any condition in this permit;
- (b) Endangerment of human health or the environment by operation of the facility; or
- (c) Existence of other grounds established by rule.

11.3 REVOCATION OR SUSPENSION OF PERMIT

The Commission may take action to suspend or revoke this permit upon the grounds that:

- (a) A false statement was knowingly made in the application or in accompanying statements or studies required of the Permittee, and a true statement would have warranted a change in the Commission's findings;
- (b) There has been a failure to comply with material conditions of this permit, or there has been a failure to maintain health and safety standards; or
- (c) There has been a material violation of a provision of an applicable statute, rule, or an order of the Commission.

In the event the Commission determines that it is appropriate to consider revocation or suspension of this permit, the Commission shall proceed in accordance with the requirements of Minnesota Rule 7854.1300 to determine the appropriate action. Upon a finding of any of the above, the Commission may require the Permittee to undertake corrective measures in lieu of having this permit suspended or revoked.

11.4 MORE STRINGENT RULES

The Commission's issuance of this site permit does not prevent the future adoption by the Commission of rules or orders more stringent than those now in existence and does not prevent the enforcement of these more stringent rules and orders against the Permittee.

11.5 TRANSFER OF PERMIT

The Permittee may not transfer this permit without the approval of the Commission. If the Permittee desires to transfer this permit, the holder shall advise the Commission in writing of such desire. The Permittee shall provide the Commission with such information about the transfer as the Commission requires to reach a decision. The Commission may impose additional conditions on any new Permittee as part of the approval of the transfer.

11.6 RIGHT OF ENTRY

Upon reasonable notice, presentation of credentials and at all times in compliance with the Permittee's site safety standards, the Permittee shall allow representatives of the Commission to perform the following:

- (a) To enter upon the facilities easement of the site property for the purpose of obtaining information, examining records, and conducting surveys or investigations;
- (b) To bring such equipment upon the facilities easement of the property as is necessary to conduct such surveys and investigations;
- (c) To sample and monitor upon the facilities easement of the property; and
- (f) To examine and copy any documents pertaining to compliance with the conditions of this permit.

11.7 PROPRIETARY INFORMATION

Certain information required to be submitted to the Commission under this permit, including energy production and waste loss data, may constitute trade secret information or other type of proprietary information under the Data Practices Act or other law and is not to be made available by the Commission. The Permittee must satisfy requirements of applicable law to obtain the protection afforded by the law.

SECTION 12

EXPIRATION DATE

This permit shall expire thirty (30) years after the date this permit was approved and adopted.

SECTION 13

SPECIAL CONDITIONS

Special conditions shall take precedence over any of the other conditions of this Permit if there should be a conflict between the two.

13.1 APPLICATION OF COUNTY STANDARDS

The Permittee shall site all wind turbines and associated facilities consistent with the wind energy ordinances adopted by Stearns County. Stearns County has adopted more stringent standards than those identified in Section 4 of this permit for the following features:

- (a) Property Lines: Turbines shall have a setback of 1.1 times the total height, (as measured from the tip of the blade when the blade is extended perpendicular to the tower) from property lines. A recorded fall zone easement acceptable to Stearns County may be allowed in lieu of this setback, provided all other setbacks are met;
- (b) Occupied Structure – Participating Property Owner: Turbines shall be set back at least 500 feet and sufficient distance to meet the state noise standard, from occupied structures of participating property owners;
- (c) Occupied Structure – Non-Participating Property Owner: Turbines shall be set back at least 1,000 feet and sufficient distance to meet the state noise standard from occupied structures of non-participating property owners.
- (d) Shadow Flicker Modeling: Permittee shall incorporate assumptions identified in Stearns County Ordinance when modeling for shadow flicker.
- (e) Shoreland Overlay District: Turbines shall not be placed within areas designated by Stearns County as a "Shoreland Overlay District."

13.2 OVERHEAD COLLECTOR FEEDER LINES

The Permittee shall use bird flight diverters on overhead ~~collector~~ feeder lines within or adjacent to delineated wetland areas and waterways. The Permittee shall provide DNR and the Commission with the location and spacing of proposed bird flight diverters at least fourteen (14) days prior to construction of overhead feeder lines.

13.3 SITE-SPECIFIC BAT STUDY

The Avian and Bat Protection Plan in Section 6.7 shall include provision for a site-specific study characterizing bat activity and species present within the Project area developed in consultation with the Commission, DNR, and USFWS. The ABPP shall outline the monitoring protocol and data to be analyzed in the bat study. The Permittee shall submit a report summarizing the findings of the study and recommendations for further actions to the Commission no later than December 15, 2012. Need for additional studies shall be based on review of this compliance filing.

13.4 AVIAN AND BAT POST-CONSTRUCTION FATALITY MONITORING

The Permittee shall, in consultation with DNR, design and implement a post-construction avian and bat fatality survey consistent with the DNR Draft Avian and Bat Monitoring Protocol for a site considered to be of moderate risk to wildlife. The survey design shall be filed with the Commission no later than ninety (90) days prior to commercial operation of the Project. The survey shall be conducted for a minimum of one complete field season starting March 15 and ending November 15 after the commencement of commercial operation. At a minimum, fatality monitoring must include:

- 1) Twenty percent of the turbines will be searched (minimum 10 and maximum 25)
- 2) 160 meter square search plot centered on the base of the turbine (80 meters in each direction from the turbine base).
- 3) Two search days per week
- 4) 75 searcher efficiency trials
- 5) 50 carcass removals
- 6) Minimum search time of 1-2 hours per turbine

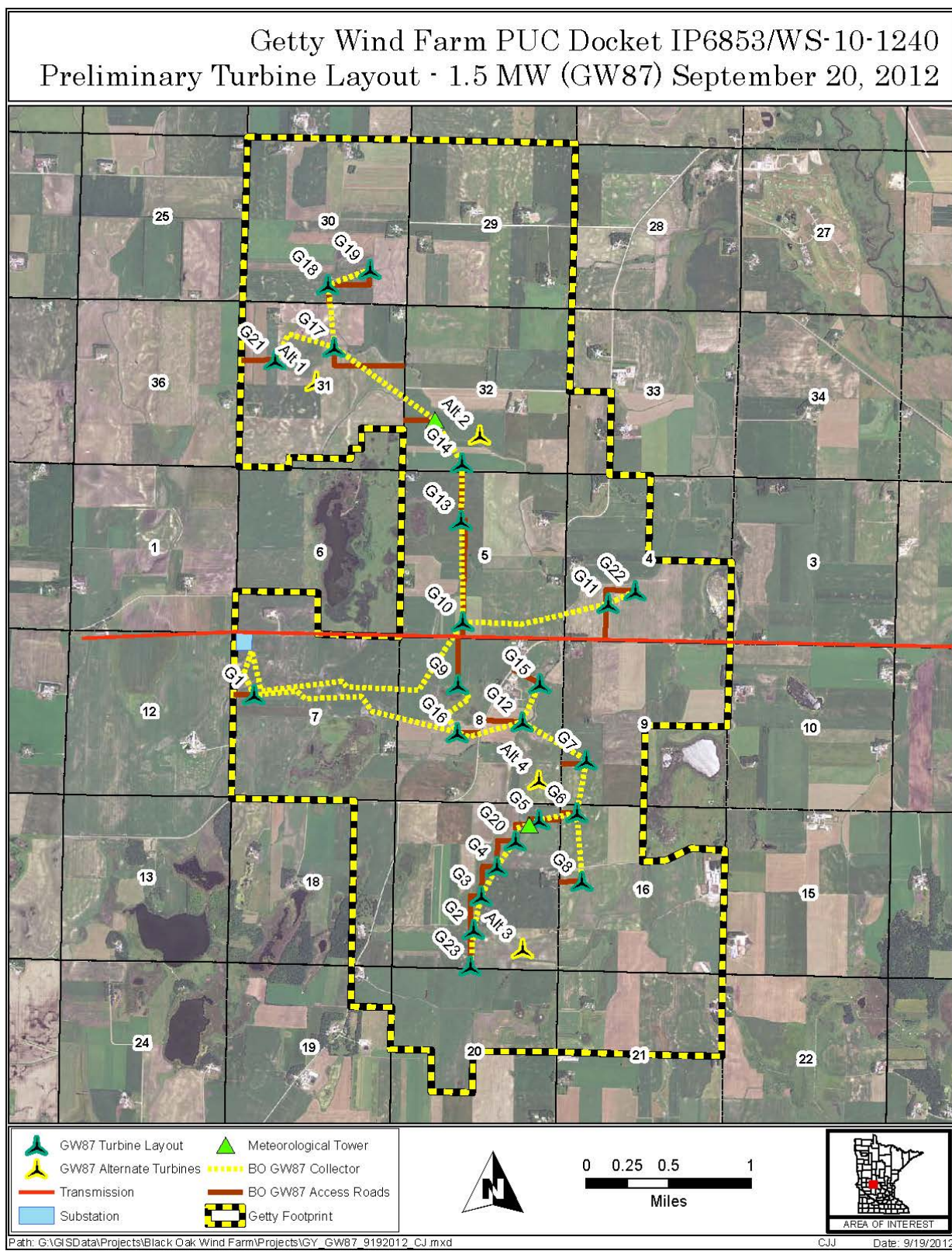
Monitoring results shall be submitted to Commission, DNR, and USFWS monthly. Monthly results shall be provided in an Excel spreadsheet and include summarized and raw data..

13.5 PROJECT SUBSTATION

The location of the Project Substation shall comply with the setback requirements set forth in Stearns County Land Use and Zoning Ordinance.

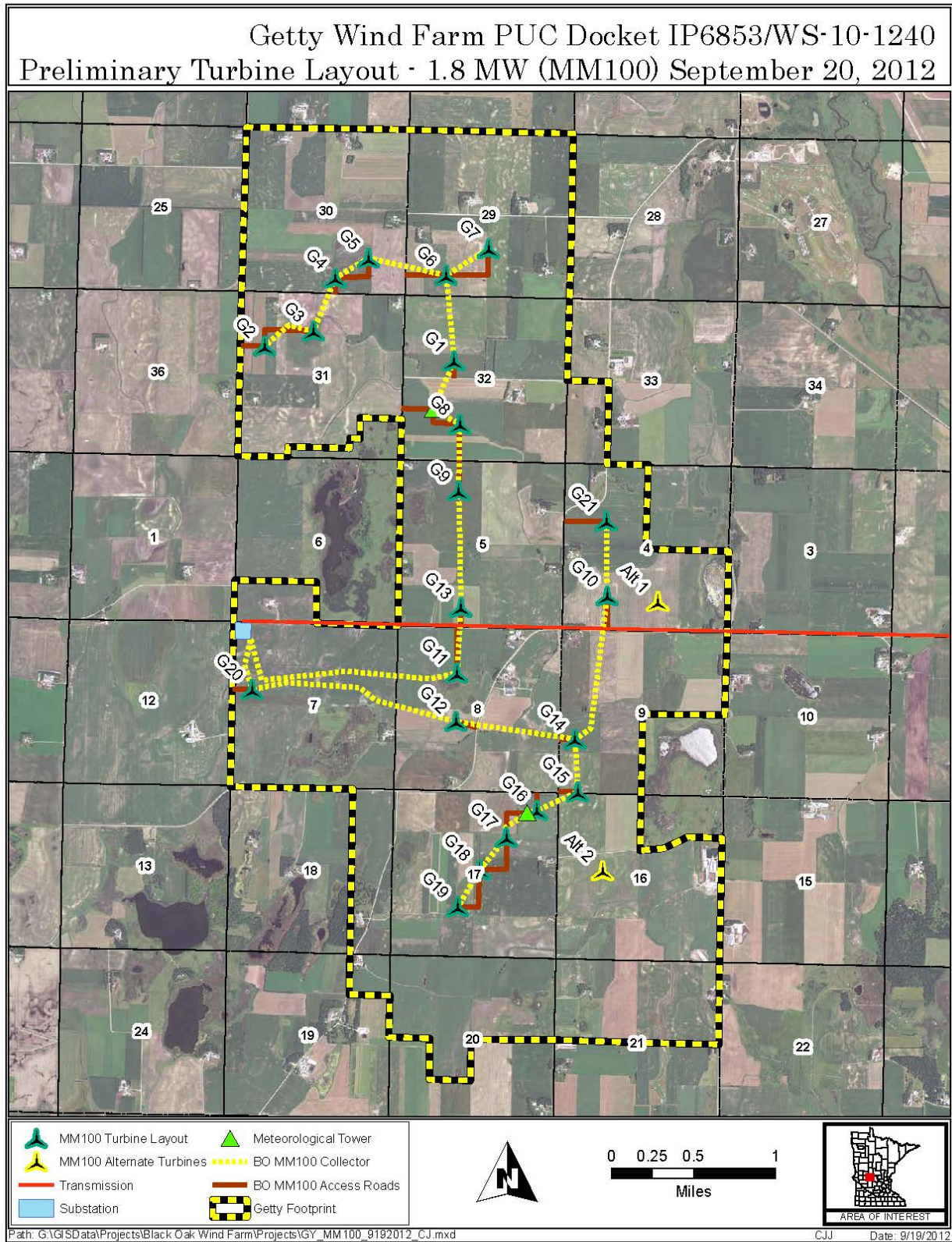
ATTACHMENT 1: SITE PERMIT MAPS

Attachment 1a



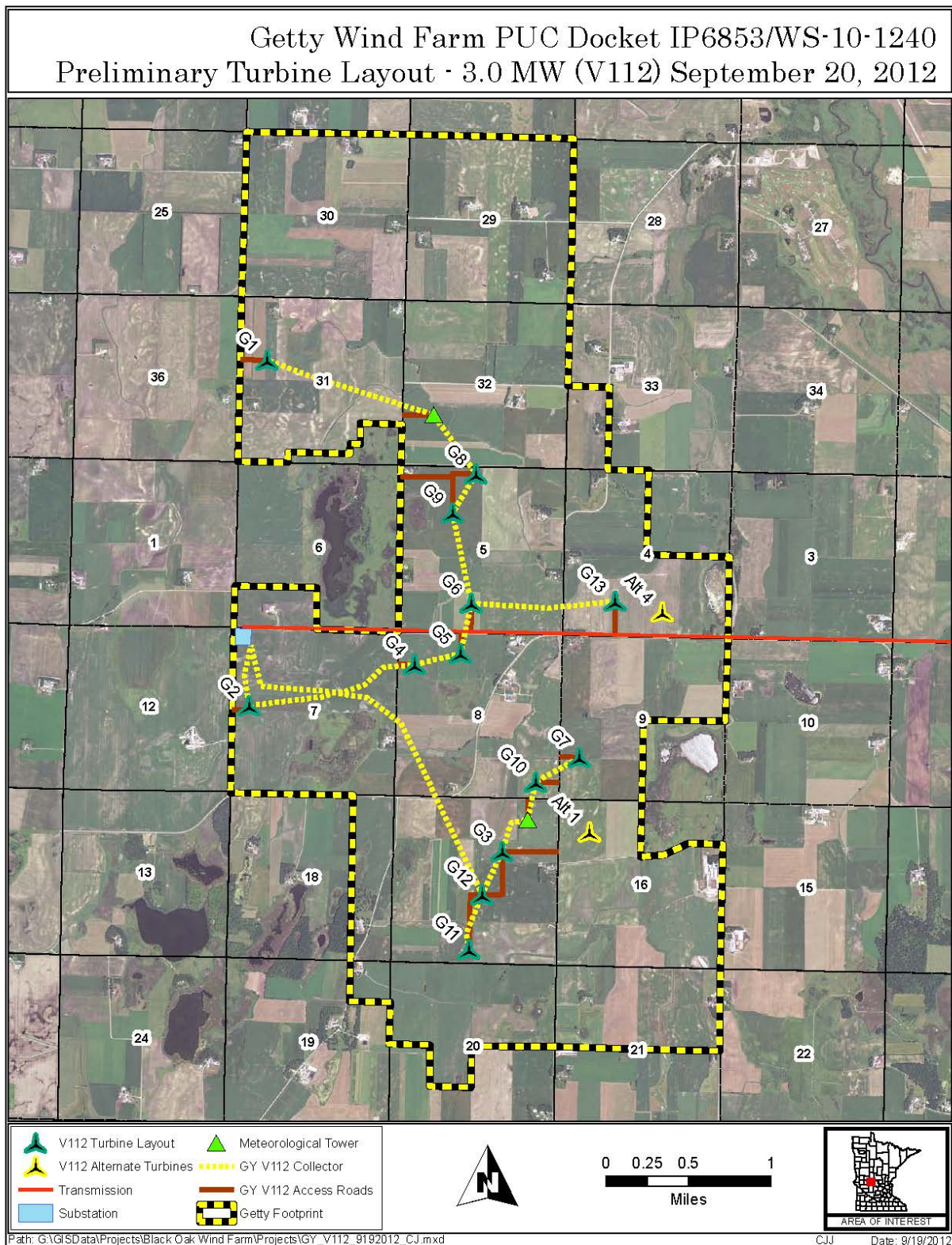
ATTACHMENT 1: SITE PERMIT MAPS

Attachment 1b



ATTACHMENT 1: SITE PERMIT MAPS

Attachment 1c



**MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLAINT HANDLING PROCEDURES
FOR
LARGE WIND ENERGY CONVERSION SYSTEMS**

A. Purpose:

To establish a uniform and timely method of reporting complaints received by the Permittee concerning Permit conditions for site preparation, construction, cleanup and restoration, operation, and resolution of such complaints.

B. Scope:

This document describes Complaint reporting procedures and frequency.

C. Applicability:

The procedures shall be used for all complaints received by the Permittee and all complaints received by the Commission under Minn. Rule 7829.1500 or 7829.1700 relevant to this Permit.

D. Definitions:

Complaint: A verbal or written statement presented to the Permittee by a person expressing dissatisfaction or concern regarding site preparation, cleanup or restoration or other LWECS and associated facilities site permit conditions. Complaints do not include requests, inquiries, questions, or general comments.

Substantial Complaint: A written Complaint alleging a violation of a specific Site Permit condition that, if substantiated, could result in Permit modification or suspension pursuant to the applicable regulations.

Unresolved Complaint: A Complaint which, despite the good faith efforts of the permittee and a person(s), remains to both or one of the parties unresolved or unsatisfactorily resolved.

Person: An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

E. Complaint Documentation and Processing:

1. The Permittee shall document all Complaints by maintaining a record of all applicable information concerning the Complaint, including the following:

ATTACHMENT 2: LWECS COMPLAINT HANDLING PROCEDURES

Page 2 of 3

- a. Name of complainant, address, phone number, and e-mail address.
 - b. Precise property description or parcel number.
 - c. Name of Permittee representative receiving Complaint and date of receipt.
 - d. Nature of Complaint and the applicable Site Permit conditions(s).
 - e. Activities undertaken to resolve the Complaint.
 - f. Final disposition of the Complaint.
2. The Permittee shall designate an individual to summarize complaints for the Commission. This person's name, phone number and e-mail address shall accompany all complaint submittals.
3. A Person presenting the Complaint should to the extent possible, include the following information in their communications:
 - a. Name, address, phone number, and e-mail address.
 - b. Date
 - c. Tract or parcel
 - d. Whether the complaint relates to (1) a Site Permit matter, (2) an LWECS and associated facility issue, or (3) a compliance issue.

F. Reporting Requirements:

The Permittee shall report all complaints to the Commission according to the following schedule:

Immediate Reports: All substantial complaints shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to Wind Permit Compliance, 1-800-657-3794, or by e-mail to: DOC.energypermitcompliance@state.mn.us, Voice messages are acceptable.

Monthly Reports: By the 15th of each month, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be Filed to Dr. Burl W. Haar, Executive Secretary, Public Utilities Commission, using the Minnesota Department of Commerce eDocket system (see eFiling instructions attached to this permit).

If no Complaints were received during the preceding month, the permittee shall submit (eFile) a summary indicating that no complaints were received.

G. Complaints Received by the Commission or OES:

Complaints received directly by the Commission from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the Permittee.

H. Commission Process for Unresolved Complaints:

Initial Screening: Commission staff shall perform an initial evaluation of unresolved Complaints submitted to the Commission. Complaints raising substantial LWECS Site Permit issues shall be processed and resolved by the Commission. Staff shall notify Permittee and appropriate person(s) if it determines that the Complaint is a Substantial Complaint. With respect to such Complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the Staff notification. Staff shall present Briefing Papers to the Commission, which shall resolve the Complaint within twenty days of submission of the Briefing Papers.

I. Permittee Contact for Complaints:

Mailing Address: Complaints filed by mail shall be sent to the address below:

Roland Jurgens
Getty Wind Company, LLC
PO Box 321
Chokio, MN 56221

Tel: (320) 324-7122

email: rjurgens@mnioka.com

ATTACHMENT 3: COMPLIANCE FILING PROCEDURES

MINNESOTA PUBLIC UTILITIES COMMISSION COMPLIANCE FILING PROCEDURE FOR PERMITTED ENERGY FACILITIES

1. **Purpose**

To establish a uniform and timely method of submitting information required by the Commission energy facility permits.

2. **Scope and Applicability**

This procedure encompasses all compliance filings required by permit.

3. **Definitions**

Compliance Filing – A sending (filing) of information to the Commission, where the information is required by a Commission site or route permit.

4. **Responsibilities**

- A) The permittee shall eFile all compliance filings with Dr. Burl Haar, Executive Secretary, Public Utilities Commission, through the Department of Commerce (DOC) eDocket system. The system is located on the DOC website:
<https://www.edockets.state.mn.us/EFiling/home.jsp>

General instructions are provided on the website. Permittees must register on the website to eFile documents.

- B) All filings must have a cover sheet that includes:

- 1) Date
- 2) Name of submitter / permittee
- 3) Type of Permit (Site or Route)
- 4) Project Location
- 5) Project Docket Number
- 6) Permit Section Under Which the Filing is Made
- 7) Short Description of the Filing

- C) Filings that are graphic intensive (e.g., maps, plan and profile) must, in addition to being eFiled, be submitted as paper copies and on CD. Copies and CDs should be sent to: 1) Dr. Burl W. Haar, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN, 55101-2147, and 2) Department of Commerce, Energy Facility Permitting, 85 7th Place East, Suite 500, St. Paul, MN, 55101-2198. Additionally, the Commission may request a paper copy of any eFiled document.

ATTACHMENT 4: PERMIT COMPLIANCE FILINGS

Page 1 of 3

PERMIT COMPLIANCE FILINGS¹

PERMITTEE: Getty Wind Company, LLC
PERMIT TYPE: LWECS Site Permit
PROJECT LOCATION: Stearns County
COMMISSION DOCKET: IP-6866/WS-11-831

PRE-CONSTRUCTION MEETING

Permit Section	Description	Due Date	Notes	eDocket Doc. ID	Date Filed
4.7	Native Prairie Protection Plan	14 days prior to pre-construction meeting, if required.	Develop in consultation with Commission and DNR.		
5.1	Site Plan	14 days prior to pre-construction meeting.			
5.4	Field Representative	14 days prior to pre-construction meeting.			
5.8	Complaint Reporting Procedures	14 days prior to pre-construction meeting.			
6.1	Biological & Natural Resource Inventories	14 days prior to pre-construction Meeting.	Results may trigger need for a Native Prairie Protection Plan.		
6.2	Shadow Flicker Analysis	14 days prior to pre-construction meeting.			
6.3	Archaeological Resources	14 days prior to pre-construction meeting and as recommended by the State Historic Preservation Office.			
6.4	Interference	14 days prior to pre-construction Meeting.			
6.5	Wake Loss	14 days prior to pre-construction meeting.			

¹ This compilation of permit compliance filings is provided for the convenience of the Permittee and the Commission. However, it is not a substitute for the permit; the language of the permit controls.

ATTACHMENT 4: PERMIT COMPLIANCE FILINGS

7.8	Road Identification	14 days prior to pre-construction meeting.			
7.11	Soil Erosion & Sediment Control Plan	14 days prior to pre-construction.	May be the same as NPDES SWPPP.		
7.16	Emergency Response	14 days prior to pre-construction meeting. Must register in 911 Program.			
9.1, 9.2, & 9.3	Decommissioning Plan	14 days prior to commercial operation.			
10.1	Wind Rights	14 days prior to pre-construction meeting.			

PRE-OPERATION COMPLIANCE MEETING

Permit Section	Description	Due Date	Notes	eDocket Doc. ID	Date Filed
5.7	Pre-operation compliance meeting	14 days prior to commercial operation.			
6.6	Noise Study Protocol	14 days prior to pre-operation meeting.			
<u>9.1 & 9.3</u>	<u>Decommissioning Plan</u>	<u>14 days prior to pre-operation meeting.</u>			

OTHER REQUIREMENTS

Permit Section	Description	Due Date	Notes	eDocket Doc. ID	Date Filed
5.2	Notice to Landowners & Government Units	Within 30 days of permit issuance.			
5.5	Site Manager	14 days prior to prior to commercial operation.	Update contact information as necessary.		
5.8	Complaints	Complaint submittals on the 15 th of each month or within 24 hours.	Must eFile report even if no complaints.		
6.6	Noise Study Results	Within 18 months of Commercial Operation.			

ATTACHMENT 4: PERMIT COMPLIANCE FILINGS

OTHER REQUIREMENTS

6.7	Avian and Bat Reporting Requirements	Quarterly reports due and within 24 hours of discovery of certain species.			
6.7.1	<u>Annual Audit Report of ABPP</u>	<u>By March 15th following each complete or partial year of operation</u>			
6.7.2	<u>Quarterly Incident Reports</u>	<u>By the 15th of January, April, July, and October</u>			
6.7.3	<u>Immediate Incident Reports</u>	<u>Within 24 hours of discovery</u>			
6.8	Project Energy Production	Due 2/1 each year.			
6.9	Wind Resource Use	Upon request of the Commission. <u>February 1st following each complete or partial year of operation</u>			
6.10	Extraordinary Events	Within 24 hours and report on occurrence of event within 30 days.			
8.1	As Builts	Within 60 days of completion of construction.			
8.4	Notification of Commercial Operation	At least 3 days prior to commencement of commercial operation			
10.2	PPA or Enforceable Mechanism	Within 2 years of permit issuance.	If no PPA or other enforceable mechanism at time of permit issuance.		
10.3	Failure to Start Construction	Within 2 years of permit issuance.			
13.3	<u>Site Specific Bat Study</u>	<u>December 15, 2012</u>			
13.4	<u>Avian and Bat Post-Construction Monitoring – Survey Design</u>	<u>90 days prior to commercial operation of the Project</u>			
13.4	<u>Avian and Bat Post-Construction Monitoring –</u>	<u>Monthly so long as monitoring is being conducted</u>			

ATTACHMENT 4: PERMIT COMPLIANCE FILINGS

	<u>Monitoring Results</u>				
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Proposed