



BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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

DOCKET NO. IP-6853/WS-10-1240

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In the Matter of the Site Permit Application for a 42 Megawatt (MW) Large Wind energy Conversion System (LWECS) in Stearns County

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

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> (10-1240), and on the Department's energy facilities permitting website: <http://mn.gov/commerce/energyfacilities/Docket.html?Id=30578>.

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Introduction and Background

On December 6, 2010, Black Oak Wind, LLC (Black Oak) filed a site permit application with the Public Utilities Commission for the 42 MW Black Oak Wind Farm (Project).¹

Project Location

¹ Black Oak Wind, LLC Application for a LWECS Site Permit for the Black Oak Wind Farm, December 6, 2010, eDocket ID: [201012-57165-01](#) – 10 [herein after Site Permit Application]

Black oak proposes to locate The Project in an agricultural area south and southwest of the city of Sauk Centre. As shown in Figure 1, Black Oak has identified a site of approximately 7,100 acres located in Sections 25-27 and 34-36 of Ashley Township (T126N, R35W) and Sections 1-3, 11-14, and 23 of Raymond Township (T125N, R35W) in Stearns County.²

The Project is adjacent to, and immediately west of the Getty Wind Project being developed by Getty Wind Company, LLC (see Figure 2, attached). The Commission is reviewing the site permit application for the Getty Wind Project under Commission Docket IP6866/WS-11-831. The Padua Wildlife Management Area (WMA) is located approximately 500 feet southeast of the Project Area. Five additional WMAs are located within five miles of the Project Area. The Behnen and Trisko Waterfowl Production Areas (WPAs) are adjacent to the site; 15 additional WPAs are located within five miles of the Project Area.³

Project Description

Black Oak is considering three turbine models ranging between 1.5 and 3.0 MW for the Project. Depending upon the turbine model selected, the Black Oak Wind Farm would be comprised of up to 22 REpower MM100 1.8 MW turbines for an installed capacity of 39.6 MW, up to 28 Goldwind 87/1500 1.5 MW turbines for an installed capacity of 42 MW, and up to 13 Vestas V112 3.0 MW turbines for an installed capacity of 39 MW. All of the proposed turbine layouts have two alternate turbine 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, transformers (either within the turbine or pad-mounted), all weather class 5 roads of gravel or similar material, an operation and maintenance (O&M) building, a Sonic Detection and Ranging (SODAR) unit or a Light Detection and Ranging (LIDAR) unit, 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 from the Project, approximately six miles, would connect to the project substation.⁸ 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

² Site Permit Application, at p. 2

³ Ibid., at pp. 27 - 29

⁴ Black Oak, Hearing Testimony of Patrick Smith with Schedules, June 22, 2012, at Figures 2 – 4, eDocket ID: [20126-75957-03](#) [herein after Smith Direct Testimony]

⁵ Black Oak Filing Updating Turbine Layout Based on Avian Report, January 17, 2012, eDocket ID: [20121-70385-01](#) [Herein after Black Oak Filing - January 17, 2012] , at p. 4

⁶ Black Oak Wind, LLC and Getty Wind, LLC Post-Hearing Comments , July 10, 2012, eDocket ID: [20127-76674-07](#) [herein after Black Oak & Getty Post-Hearing Comments], at response 10

⁷ Black Oak Wind, LLC Amended Application for a LWECs Site Permit for the Black Oak Wind Farm, eDocket ID: [20111-58574-02](#), [20111-58574-03](#), [20111-58574-04](#), and [20111-58574-05](#), [herein after Revised Site Permit Application], at p. 2

⁸ Ibid., at p. 16

may jointly construct one substation. Black Oak has tentatively identified a substation site in Section 12 of Ashley Township (see Site Permit Maps, shown in Attachments 1a – 1c of the proposed site permit). Alternatively, if the Black Oak and Getty projects are constructed simultaneously, Black Oak may tie into the Getty Substation, tentatively located in Section 7 of Black Oak Township near the intersection of County Roads 187 and 190 (415th Avenue and 370th Street.⁹ 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.¹⁰ 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.

Depending upon final site design Black Oak anticipates that the project would permanently occupy approximately 13.5 to 20 acres when constructed.¹¹ EFP staff estimates that approximately 60 to 100 additional 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.

Assuming net capacity factor of 35 - 40 percent, projected average annual output from the Project, based on a nameplate generating capacity of 42 MW, will be approximately 129,000 to 147,000 MWh per year.¹²

Black Oak 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 2013.¹³ Black Oak estimates capital costs for the project to be \$82 million and ongoing operating and administrative costs, including property taxes and royalties to landowners, to be approximately \$2.5 million per year.

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). In the order dated March 11, 2011, the Commission stated that, based on the information in the record to date, the Commission determined that a CN was not required for the Project.

⁹ Black Oak & Getty Post-Hearing Comments, at Response 7

¹⁰ Revised Site Permit Application, at p. 9

¹¹ *Ibid.*, at p. 65

¹² Black Oak & Getty Post-Hearing Comments, at response 13

¹³ Smith Direct Testimony, at p.12

Subsequent to the Commission's order accepting the application, on October 11, 2011, Black Oak, together with Getty Wind, LLC, jointly submitted a petition for a Certificate of Need for the Black Oak Wind Farm and the Getty Wind Farm (PUC Docket IP-6853 & IP-6866/CN-11-471).

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 Farm 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 permits.¹⁵ The OAH received eight written comments before the close of the comment period on July 10, 2012.¹⁶ Administrative Law Judge Bruce H. Johnson issued a Summary of Public Testimony on August 8, 2012.¹⁷

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 December 6, 2010, Black Oak Wind, LLC (Black Oak), filed a site permit application with the Public Utilities Commission for the 42 MW Black Oak Wind Farm.¹⁸ On January 14, 2011, a Commission Order accepted the application for the Black Oak Wind Farm as complete with the condition that Black Oak provide additional information on the project as requested by the Commission and EFP staff.¹⁹ On January 14, 2011, Black Oak filed amended maps and texts to the Site Permit Application as recommended in the December 23, 2010, EFP staff comments.²⁰

Following a public comment period on the site permit application, the Commission issued a draft site permit for the project in its order of March 11, 2011.²¹ Following notice, a public meeting on the Draft Site Permit was held in on April 7, 2011. A public comment period was open through April 22, 2011.

On January 17, 2012, Black Oak submitted comments to the Commission providing a draft Avian and Bat Protection Plan (ABPP), providing a revised layout, and informing the

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

¹⁵ Revised Notice of Public Hearing, May 25, 2012, eDocket ID: [20125-75012-02](#)

¹⁶ Written Public Comments, August 14, 2012 and July 12, 2012, eDocket ID: [20128-77851-01](#), [20127-76745-02](#), [20127-76745-05](#)

¹⁷ OAH Summary of Public Testimony, August 8, 2012, eDocket ID: [20128-77667-01](#)

¹⁸ Site Permit Application

¹⁹ Commission Order Accepting Black Oak Wind, LLC's LWECS Site Permit Application, eDocket ID: [20111-58530-01](#)

²⁰ Revised Route Permit Application

²¹ Commission Order Issuing Draft Site Permit for Public Review and Comment, March 11, 2011, eDocket ID: [20113-60298-01](#)

Commission of certain project changes resulting from coordination with the adjacent Getty Wind Project.²²

As noted above, comments on the Black Oak and Getty Site Permits were also accepted during the comment period for the CN public hearing 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 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,"²³ 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

²² Black Oak Filing – January 17, 2012

²³ MN Stat. 216F.03

the secondary wind axes and five rotor diameters (RD) on the predominant axes.²⁴ 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."²⁵

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, 2012.²⁶ The proposed layouts appear to show that setback buffers for a number of the turbines near the eastern portion of the project overlap setback buffers for some turbines on the adjacent Getty Wind Project.

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 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."²⁷

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.

EFP Response: Although the July 10, 2012, comments refer to turbines on the Getty Project (denoted by a "G" preceding the turbine number), EFP staff notes that, based on the maps shown in Schedules 1-6 of Mr. Smith's pre-filed testimony of June 22, 2012, certain turbines on the

²⁴ Minnesota Public Utilities Commission "Order Establishing General Wind Permit Standards," January 15, 2008. eDocket ID: [4897855](#)

²⁵ Ibid., at p. 4

²⁶ Smith Direct Testimony, at schedules 1 - 6

²⁷ Black Oak Wind & Getty Post-Hearing Comments, at Response 4

Black Oak Project appear to be located within the 3 by 5 RD Wind Access Buffer:²⁸ These turbines are:

- B24 and B27 in the GW 87 1.5 MW Turbine layout shown in schedules 1 and 2,
- B21 and B16 on the MM100 1.8 MW turbine layout shown in schedules 3 and 4, and
- B8 in the V112 3.0 MW turbine layout show in schedules 5 and 6.

The proposed permit, at section 13.1, requires Black Oak to site turbines consistent with the more stringent setbacks set forth in the Stearns County wind energy ordinance. This includes a 5 RD setback from lands for which the Permittee has a wind easement for this Project (see proposed findings 40 and 50) . In the case of the adjacent Getty Project, Stearns County filed comments on the LWECS Site Permit Application 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, consistent with the 3 RD by 5 RD Wind Access Buffer identified in the permit.²⁹ Stearns County did not file comments in the Black Oak Docket and the 5 RD setback is called for in the proposed site permit at section 13.1(d). Special conditions take precedence over other conditions of the permit (see proposed finding 51); consequently the 5 RD setback takes precedence over the 3 RD by 5 RD setback established at section 4.1 of the proposed permit. Based on a cursory review of the layouts provided in schedules 1 – 6 of Mr. Smith's direct testimony, it appears that more turbines than those identified above may not meet this 5 RD setback.

Black Oak's wind rights may extend beyond the site boundary identified on the maps attached to the proposed permit but that information is not in the record at this time. 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 Black Oak 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 Black Oak is able to comply with the 5 RD setback.

Minnesota Statutes section 216F.081 states that the Commission shall consider and apply those more stringent standards of a county unless the Commission finds good cause not to apply the standards. The Draft Site Permit issued for public comment identified these more stringent standards in Special Condition 13.1, no comments suggesting less stringent standards were submitted during the comment period. EFP staff does not believe that the record provides good cause not to apply the standards (see Finding 51). Black Oak could pursue a finding from the Stearns County Commission that it finds that wake interference is less than 5 RD and provide that as a compliance filing.

As noted in the Project Description above, Black Oak's most recent layouts include two alternate turbine sites for each proposed layout. If Black Oak is unable to demonstrate sufficient wind

²⁸ Smith Direct Testimony, at schedules 1-6.

²⁹ 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

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, Black Oak could construct a project with fewer 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 sites emphasized on avian species.

Black Oak and Getty jointly developed an Avian and Bat Protection Plan (ABPP).³⁰ The intent of the ABPP, as stated in the 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 a project as well as including formal and informal monitoring, training, wildlife handling, documentation, and reporting protocols for each phase of the Project. 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, 2012.³¹

Based on results of the avian surveys conducted for the Project and the adjacent Getty Wind Project, Black Oak 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.³²

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 filed July 10, 2012, provides both the necessary background for understanding potential avian and bat impacts and a framework for avoiding, minimizing, and mitigating potential impacts that are important for the Commission's decision. Issues raised in the comments on the Draft ABPP from the USFWS and DNR 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 Project, Getty and Black Oak provided a Draft ABPP on January 17, 2012.

EFP staff proposes a number of changes to Section 6.7 of the permit to (1) recognize that an ABPP exists for the project and require the Permittee to comply with the provisions of the ABPP filed on July 10, 2012, and (2) characterize the ABPP document as one component of an

³⁰ Draft Black Oak and Getty Wind Avian and Bat Protection Plan, January 17, 2012, eDocket ID: [20121-70380-02](#)

³¹ Black Oak & Getty Avian and Bat Protection Plan – REVISED July 9, 2012, eDocket ID: [20127-76674-01](#)

³² DNR Comments on Turbine Layouts for Black Oak and Getty Wind Projects in Stearns County, August 24, 2012, eDocket ID: [20128-78119-01](#).

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, consistent with the language from the Getty Draft Site Permit, specifies that the report describe the potential cause of the incident and steps taken to avoid future incidents. The proposed permit also requires Black Oak to provide copies of these reports to the 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 Feeder Lines: The proposed addition of this section is based on a special condition requiring installation of bird flight diverters developed in response to concerns addressed by USFWS for the Getty Project staff in that docket. The proposed language contains a requirement that Black Oak provide locations of the bird flight diverters to the Commission and DNR before construction and is consistent with language proposed in the Site Permit for the Getty Project.

Section 13.3 Site Specific Bat Study: The proposed addition of this section carries forward a special condition from the Getty Draft Site Permit. Black Oak and Getty have installed bat monitors in both project areas and will report on findings from the study by December 15, 2012.

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

Landowner Participation

Applicants state that they have approximately 6,500 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.³³

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

³³ 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.³⁴

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

Public Comments received during the comment period on the Draft Site Permit and as part of the Public Hearing Record addressed many topics. 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 33 – 36; wind rights and agreements are discussed in Findings 37 – 41 and in the Site Permit at section 10.1; impacts to property values are addressed in Findings 52 – 53; noise impacts are discussed at sections 4.3, 5.1, and 6.6 of the permit and at Findings 54 – 57. Shadow flicker from the Project is addressed in section 6.2 of the permit and in Findings 58 – 62; aesthetic impacts are discussed in Findings 63 – 65; stray voltage is addressed in Finding 73; impacts to farmland are discussed in sections 7.2 – 7.6 of the permit, and in Findings 93 – 95; wildlife impacts are discussed in Findings 101 – 112 and in the Site Permit at sections 6.1, 6.7, 13.2, 13.3, and 13.4; groundwater impacts are addressed in Finding 120; 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 121 – 123; decommissioning is addressed in the Site Permit at sections 9.1 – 9.3, and in Findings 128 – 132. The Site Permit, at Section 10.2 requires a power purchase agreement or other enforceable mechanism; Black Oak 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, 13.2, 13.3, and 13.5 of the 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") language consistent with the proposed Getty permit and are not described further. Additional changes proposed to provide consistency with recently issued permits and permit amendments issued by the Commission, and with the structure of the permit are detailed below:

Use of Calendar Days: The draft permit requires a number of compliance filings be submitted within a certain number (generally 10) working days. Recently issued permits have used calendar days, rather than working days, to allow for better compliance tracking. Throughout the Draft Site Permit, EFP staff has changed references to "working days" to "days," both to remove confusion, and to allow for better tracking of the timeliness of compliance filings.

³⁴ Ibid., see Mueller Comments, Commission Order issuing LWECS Site Permit for Goodhue Wind Project, August 24, 2011, eDockets ID: [20118-65631-01](#)

Section 1 Project Description: The proposed permit includes technical corrections to the ownership of the Black Oak Switching Station and specifies that Black Oak is seeking local permitting for the transmission line and the operations and maintenance facility, not the project substation.

Section 3 Application Compliance: The proposed permit corrects the date of the application.

Section 4.6 Wetlands: The proposed permit adds language identifying local units of government as implementers of the Minnesota Wetland Conservation Act. The proposed language is consistent with that of the Draft Site Permit for the Getty Project.

Section 4.7 Native Prairie: The proposed language is consistent with that of the Draft Site Permit for the Getty Project.

Section 4.15 Electrical Collector and Feeder Lines: The proposed language is consistent with that of the Draft Site Permit for the Getty Project.

Section 5.1 Site Plan: The proposed language references the statutory definition of construction, consistent with that of the Draft Site Permit for the Getty Project.

Section 6.1 Biological Inventory/Survey: The proposed language makes certain technical corrections and also clarifies that this information is not considered trade-secret or proprietary, consistent with the language in the Draft Site Permit for the Getty Project. EFP staff note that although there are constraints on providing the location of threatened or endangered species as well as cultural resources, the presence or absence of these resources within a 7,100 acre site can reasonably be considered to be public information.

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-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).³⁵

Section 6.3 Archaeological Resources: The proposed language requires the Permittee to mark and promptly notify the Commission and state historical preservation offices of any newly previously unrecorded archaeological site discovered during construction. These changes are consistent with that of the Draft Site Permit for the Getty Project.

Section 6.8 Project Energy Production: This section contains technical changes consistent with the language adopted by the Commission in its amendment to the Morgan Wind Project.

Section 6.9 Wind Resource Use: This section contains minor technical changes 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 Commission Order Amending Site Permit In the Matter of Morgan Wind Acquisition Group, LLC's Site Permit for a 31.5 Megawatt Large Wind Energy Conversion System in Redwood and Brown Counties, July 26, 2012, eDocket ID: [20127-77265-01](#)

Section 8.4 Notification to Commission: The proposed permit adds a condition, requiring the Permittee to notify the Commission prior to commercial operation; this is used to establish an operation date from which compliance filings will flow. The proposed language is consistent with that in the Getty Draft Site Permit.

9.2 Site Restoration: This section adds a clause clarifying that the site must be restored upon early termination of the Project or any turbine within the Project, not just the expiration of the term of the permit. The language is consistent with that in the Getty Draft Site Permit.

Section 10.2 Power Purchase Agreement: The proposed language replaces "commitment" with "power purchase agreement or other enforceable mechanism," consistent with the language in the Getty Draft Site Permit.

Section 10.3 Failure to Commence Construction: The proposed permit includes a clause referencing the statutory definition of construction, consistent with the language in the Getty Draft Site Permit.

Section 10.5.2 Compliance with County, City, or Municipal Permits: Consistent with the change noted in Section 4.6, EFP staff added a clause to this section stating that local authorizations include, but are not limited to, compliance with Minnesota's Wetland Conservation Act. This language is consistent with that in the Draft Site Permit for the Getty Project.

Section 11.7 Proprietary Information: The proposed changes remove specific reference to energy production and wake loss data as trade secret information. As discussed in comments relating to Section 6.8 of the permit, the requested information is summary monthly and annual energy production and will be considered public. If Black Oak believes the wake loss information required under Section 6.5 of the site permit constitutes trade secret proprietary information, it may file it as such subject to requirements of applicable law.

13.5 Project Substation

EFP staff has added 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.

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 42 MW Black Oak Wind Farm LWECS in Stearns County
 - b. Issuing a site permit, with appropriate conditions, to Black Oak Wind, LLC, for the up to 42 MW Black Oak Wind Farm LWECS in Stearns County.

Figure 1: Black Oak Wind Farm Site

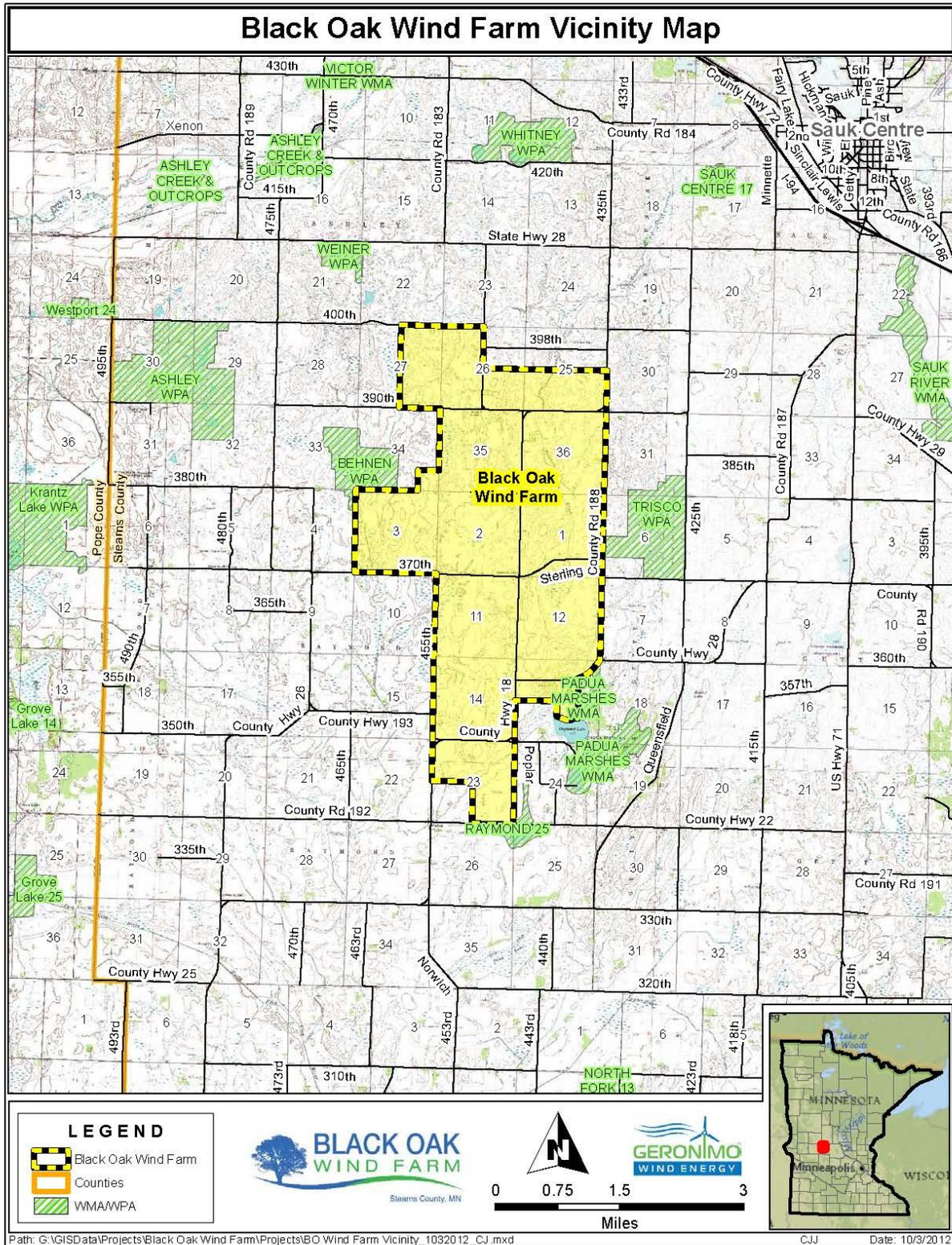


Figure 2: Black Oak & Getty Wind Projects Vicinity

