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STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

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| In the Matter of the Applications of Lakefield Wind Project, LLC for a Certificate of Need and Site Permit for a Large Wind Energy Conversion System in Jackson County | |
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SUMMARY OF PUBLIC TESTIMONY

A public hearing was conducted in this matter at the Lakefield Multipurpose Center in Lakefield, Minnesota, commencing at 6:30 p.m. on July 19, 2010. Testimony was heard from the Applicant, Lakefield Wind Project, LLC (enXco) and several members of the public. The record closed on August 9, 2010, the last day set for receipt of written comments by mail.

Kate O'Hair, Regional Project Developer, appeared on behalf of the Applicant. Larry B. Hartman, State Planning Director, and Jamie MacAlister, Senior Planner, appeared on behalf of the Minnesota Department of Commerce (DOC). Brett A. Eknes, State Planning Director, appeared on behalf of the staff of the Minnesota Public Utilities Commission (PUC).

SUMMARY OF ORAL TESTIMONY

1. The Lakefield Wind Project has been in the planning and development stages for approximately seven years. Construction of the wind turbines which are designed to convert wind energy to electricity is scheduled to begin in the Fall of 2010. The project consists of 137 1.5 mw turbines (a total of 205.5 mw (renewable)), located in four townships in Jackson County. The electrical energy generated by each turbine is transmitted to an interconnection point, which serves as many as 15-20 different turbines, and from there the energy is transmitted to a central interconnection point located at the Lakefield Junction Substation. The Lakefield Junction Substation, owned by Interstate Transmission Company, is connected to a High-Voltage Transmission Line (HVTL).

2. For the first 20 years of the project (which is scheduled to go "online" in September, 2011) the energy produced by the Lakefield project turbines will be purchased by Indianapolis Power and Light.

3. The General Electric turbines (Model GE SLE) will stand up to 408 feet high, when the blade on the rotor is at its apex. The mast of each turbine is approximately 268 feet high. Each turbine will be made of rolled steel, and have a circular diameter of approximately 20 feet at its base, surrounded by a circular gravel pad (skirt) extending another 15 feet around the outside of the base of the turbine. Taken together, the turbine and its skirt will be approximately 50 feet in diameter. Small access roads will be constructed through fields, connecting each turbine and its skirt to roads or landowners' driveways. The access roads will be between 15 and 20 feet wide. The area occupied by the turbine pads and access roads for each turbine will be approximately one-quarter acre. During the construction phase of each turbine, approximately eight acres will be granted by easement to enXco to allow sufficient room for the transport, layout and construction of the turbine components and related equipment needed to build and erect each structure.

4. The developer of the project, EDF-EN (Electricite de France-Energie Nouvelles), is the renewable energy division of the French national electric company. In France, the production of electrical energy is a national monopoly.

5. Transformer boxes will be constructed adjacent to each turbine, from which boxes the electric energy will be transmitted by cable to the intermediate collection points described above. In response to a question from Mike Handzus, Ms. O'Hair clarified that the lines from each transformer to each intermediate collection point will stay on the private property of the participating landowner. Ms. O'Hair pointed out also that reports regarding impacts on cultural resources, an ecological risk assessment, and a bird survey were filed as part of the Applications.

6. Local landowner John Nauerth, a supporter of the project, urged commencement of construction as soon as possible.

7. Mr. Handzus, Thomas Hotzler and Richard Klima raised questions regarding the positioning and setback requirements for each turbine. Mr. Hotzler was concerned about whether any public money was to be spent on the Lakefield project, and Ms. O'Hair clarified that only private funds would be used in the development of the project.

8. Mr. Hartman explained that the State's noise standard, relevant to the wind turbines proposed for construction, is for a limit of 50 decibels (which can be exceeded for a maximum of 10 minutes each hour). In order meet the standard, each turbine must be placed at least five rotor diameters (approximately 1,250 feet) from each other along the prevailing wind axis (north-south) and three rotor diameters (approximately 750-800 feet) apart on the nonprevailing wind axis (east-west). Ms. O'Hair noted that enXco is locating the turbines at a minimum setback of 1,000 feet from any road, and that the developer intends to place its turbines far enough from any occupied building to meet the applicable noise standard.

9. In response to a question from Mr. Hotzler, Ms. O'Hair explained that the 137 turbines planned currently will completely fill the area planned for the project. No other turbines are planned in connection with this development.

10. In response to Richard Klima and Mike Handzus, Ms. O'Hair clarified that the turbines will be positioned, so far as possible, perpendicular to the prevailing winds, which are from the northwest during the winter, and from the southeast during the summer. Mr. Klima asked whether landowners could build homes closer to the turbines than the distance allowed for the State noise standard, and Mr. Hartman explained that the distance required to meet the noise standard could not be waived.

11. Mr. Handzus expressed concern that the project may lead to the construction of additional high voltage transmission lines in the area in order to transmit the electricity converted from wind energy in the Project. His concern was that landowners may end up having more of their property confiscated by eminent domain in order to build the High-Voltage Transmission Lines.

12. Richard Klima raised concerns about emergency situations, such as collapse of any of the turbines or their components, and fires. Mr. Klima and Milton Fricke also raised concerns about possible difficulties associated with farming in the areas where interconnecting cables would be laid in the ground. The two major issues are whether tile lines would be cut during construction of the trenches for the interconnection cables, and whether excessive weight on the soil underneath the areas on which heavy equipment will operate during the construction phase would result in soil compaction which could stunt the growth of crops grown in those areas in the future.

13. Regarding safety procedures, Ms. O'Hair that each turbine could be controlled separately from the Project's office in Lakefield, and also from enXco's regional center in Minneapolis, such that each individual turbine can be shut down if the wind velocity gets to a point that might endanger any particular structure (which danger would be exacerbated if the rotor is operating). The control centers will also be equipped to detect any fires.

14. The developer is committed to fixing any tile that may be cut during the process of digging trenches for the collection system of electrical cables, and will also finance evaluation by local Agricultural Extension Agents to determine whether or not crop lands have been damaged permanently due to soil compaction that occurs during the construction phase of the Project. In that connection it was noted that 125-foot easements for road construction would be acquired in order to haul turbines and associated equipment in and out of the building sites.

WRITTEN COMMENTS ON THE LAKEFIELD PROJECT

1. Written comments on the Project were received from Jamie Schrenzel, Principal Planner with the Environmental Review Unit of the Minnesota Department of Natural Resources (DNR), and local landowner Mike Handzus.

2. Ms. Schrenzel's filing indicates that the DNR has reviewed the Site Permit Application, Draft Site Permit, and Avian Survey documents, including the survey protocol and results for the Project. Attached to Ms. Schrenzel's submission is a "Final Bird Survey Protocol for the Lakefield Wind Project", issued by Debra R. Pile of the Office of Energy Security.

3. Ms. Schrenzel notes that, pursuant to a Commission Order on March 9, 2010 to the effect that the Applicant work with the DNR to identify and conduct studies assessing the need for exclusion areas and avian and bats-specific permit conditions, the appropriate staffs of the DNR, United States Fish and Wildlife Service (USFWS) and OES met to discuss pre-construction survey protocols. Subsequent to the meeting, Ms. Pile issued her April 20, 2010 letter, referenced above.

4. Ms. Schrenzel noted that while the DNR and the Applicant generally agreed on survey locations, the Final Protocol included less observation time and fewer field visits than what the DNR and USFWS had recommended.

5. Ms. Schrenzel wrote that the Applicant has completed surveys as required by the Final Protocol and submitted a Pre-Construction Avian Survey Report, dated July 7, 2010. She notes that no bat surveys had been conducted to date.

6. Ms. Schrenzel stated the purpose of conducting surveys and possible flyways and breeding bird habitats near wildlife management areas, a DNR Wildlife Designated Lake (South Heron), Conservation Reserve Program Lands and a USFWS-managed Waterfowl Production Area was to assess need for exclusion of turbines within the project boundary to prevent avian mortality. The report data indicates there are no clear flyway patterns in areas where turbines would be located between wildlife conservation lands, and that diversity of breeding birds at turbine locations closer to water features was not found to be significantly different from the diversity of breeding birds at turbines located farther away. However, Ms. Schrenzel pointed out there may be some uncertainty in the data due to short observation times and the timing of gathering of the data (late in the migration season). As a result, the DNR suggests obtaining migration data in the fall to assess more adequately the need for exclusion areas and avian specific permit conditions.

7. Ms. Schrenzel's comment notes that the season for acoustic monitoring of bat activity ends soon (late September), but suggests that the DNR has provided information on the conduct of bat surveys and will be available for consultation regarding the procedures for any studies.

8. Due to the density of conservation lands and avian and bat habitat features within and near the Project area, the DNR considers the site to be at high risk for avian and bat mortality due to turbine strikes or habitat avoidance.

9. The DNR recommends also mortality monitoring, to be included as a permit condition for the site permit, requiring post-construction mortality surveys for two years (developed with DNR consultation), for the purpose of understanding actual impacts and what may be necessary to develop the best adaptive management techniques if rare or migratory species takings or high avian mortality occurs despite avoidance efforts taken in response to pre-construction data.

10. The DNR is concerned also with the possible disruption in the viewshed of the Kilen Woods State Park, located adjacent to the project area. After a study of the maps showing the proposed turbine layout, the DNR believes the viewshed will not be altered to a degree that significantly affects the character of the State Park or experience of the visitors thereto. In that connection, the DNR recommends a condition be added to the permit to require PUC and DNR review of layout changes, in the event infrastructure or turbines are proposed to be built closer to Kilen Woods than are currently planned.

11. The DNR notes also that System Site Permits currently do not include guidance or requirements addressing the prevention of invasive plant species introduction to areas that are temporarily disturbed, specifically during periods of construction when larger areas of soil will be exposed. The DNR suggests adding prevention methods to limit the introduction of invasive species in the Soil Erosion and Sediment Control Plan.

12. The comments filed by Mr. Handzus expand on the concerns he raised orally at the Public Hearing about emergency situations such as the toppling of the turbines and the possible fire hazards. In addition, his filing includes information on the possible "ice-throwing" hazard that could result from pieces of ice being hurled from the ends of the turbine rotors. Mr. Handzus's data relates an incident in Iowa where a piece of ice hurled from the end of a turbine rotor struck the windshield of a passing car, resulting in the fatality of the driver. His data indicates that pieces of ice can be hurled as far as 1,600 feet by the rotors on wind-generating turbines.

13. Mr. Handzus's data includes also accounts of serious fires and heavy damage inflicted by the collapse of turbines. He details also the health hazards involved with constant exposure to the noise generated by the turbines and the "flicker effect" (shadow flicker and strobing flicker). People exposed to the constant low-frequency noises emitted by wind farms can demonstrate a range of symptoms from headaches, migraines, nausea, dizziness, palpitations and tinnitus to sleep disturbance, stress, anxiety and depression. These symptoms affect persons activities of daily living, causing poor concentration, irritability and an inability to cope. The data submitted by Mr. Handzus indicates also that the most severe health risk associated with shadow flicker and strobing is seizure. Other risks include headache, loss of balance, nausea and disorientation. If a person is driving a car or operating a piece of farm equipment when stricken with a seizure, the result could be devastating.

Dated this 30th day of August, 2010.

/s/ Richard C. Luis

RICHARD C. LUIS
Administrative Law Judge

Reported: Court Reported
Transcript Prepared by Christine Simons, Shaddix & Associates