

## STAFF REPORT FOR A SPECIAL USE

### McLean County Department of Building and Zoning

#### CASE NUMBER SU-18-02

#### 1. REFERENCE:

- a. Hearing date: February 6, 2018
- b. Applicant's name and address: Lexington Chenoa Wind Farm, LLC, Suite 700, 808 Travis St., Houston, TX 77002
- c. Land owners: Multiple land owners listed in the application

#### 2. LOCATION AND CURRENT/PROPOSED ZONING AND LAND USE:

- a. Property location: On property in sections 13, 24, 25, 26 & 36 in Chenoa Township, in sections 4, 9, 10, 17, 18, 19, 20, 21, 28, 29, 30, 31, 32, 33 & 34 in Yates Township, and in sections 3, 4, 9, 10 & 16 in Lawndale Township, and generally bounded to the west by Old Route 66, to the north by 3200 North Rd., to the east by County Highway 13, and to the south by the line established by 2300 North Rd. if it were extended.
- b. Parcel numbers: Multiple parcel numbers listed in the application
- c. Existing zoning: A-Agriculture District
- d. Applicant request: A special use to allow a Wind Energy Conversion System (WECS) consisting of up to 58 wind turbine generators that are up to 550 feet in height, as well as any access roads, transformers, power lines, communications lines, interconnection lines, substation, construction lay-down yards, and other ancillary facilities or structures, on approximately 4,922 acres in the Agriculture District. The application also requests that the time period to apply for building permits for the Wind Energy Conversion System be extended to three years, rather than two years as provided by the McLean County Zoning Ordinance.
- f. Existing land use: Primarily crop production and pasture

#### 3. DIMENSIONS:

- a. Acreage: 4,922 acres of participating parcels
- b. Road Frontage: Multiple locations along U.S., County and Township Roads.

#### 4. EXISTING LAND FEATURES:

- a. Topography: Relatively flat to sloping in some areas
- b. Drainage: Multiple drainage patterns
- c. Vegetation: Primarily crop production with some grass and trees

5. SURROUNDING ZONING: A-Agriculture District

6. SURROUNDING LAND USE: Primarily crop production with some pasture

#### 7. STAFF ANALYSIS:

The analysis of the seven standards listed in Article VII Section 350-56 (Standards for Special Use Permits) of the Zoning Ordinance as they apply to this zoning request is as follows:

- 1. **The proposed special use will not be detrimental to or endanger the health, safety, morals, comfort, or welfare of the public.** This standard can be met. The applicant is

proposing to build a Wind Energy Conversion System (WECS) consisting of up to 58 wind turbine generators that are up to 550 feet in height that will produce 208 megawatts (MW) of electricity. The applicant intends to use a combination of the Vestas V136 3.45 MW and 4.6 MW turbine models for the project. In their analysis, 27 of the 58 turbines have been assumed to be equipped with serrated trailing edge (STE) blades to reduce acoustic impact. The substation is also included in this analysis. A sound impact assessment was submitted with the application that concludes that all applicable Illinois Pollution Control Board (IPCB) sound regulations at all existing occupied residences in the project area are met. If the applicant changes the type of turbine, an updated sound impact assessment will need to be provided to ensure compliance with IPCB noise regulations.

The proposed Wind Energy Conversion System meets the setback requirements of the Zoning Ordinance. The application states that no turbine will be closer than the greater of 500 feet or 1.1 times the total height of the turbine to the property line of a nonparticipating landowner, and no closer than 1,500 feet or 3 times the total height of the turbine to the closest corner of an occupied residence. The turbines will be set back 1.1 times the height of the turbine from all side and rear property lines of non-participating property owners, from the edge of any public road right-of-way, third party transmission lines and communication towers as measured from the tip of the blade. Three residences are located within a distance of three times the turbine height for which the applicant is working with the homeowners on setback agreements.

A professional engineer shall certify, as part of the building permit application, that the foundation and tower design of the WECS is within accepted professional standards. After construction is complete, a professional engineer will verify that they are built according to the approved plans.

The applicant has submitted an Obstruction Evaluation and Airspace Analysis, a Microwave Beam Path report, an Off-Air TV Reception Analysis, an AM and FM Analysis and a Land Mobile Emergency Services Report. Project neighbors living within close proximity to the project are eligible to sign a neighbor agreement which entitles them to annual payments for the life of the project. The applicant will work to remedy or mitigate any problems caused by the project by maintaining a hotline for 24 hour access during once construction begins. After the project is complete, the applicant will maintain an on-site complaint resolution process at their local operating and maintenance facility. The application states that the applicant commits to meet with participating and nonparticipating landowners in the project area upon request and will attempt to resolve issues of concern, including any involving noise, shadow or flicker effect, telecommunications, aerial application to agricultural land, traffic, or other operational aspects of the Project.

The application states that in the event that a public safety entity believes its coverage has been compromised by the presence of the wind energy facility, it has many options to improve its signal coverage to the area through optimization of a nearby base station or even adding a repeater site. Utility towers, meteorological towers or even the turbine towers within the wind project area can serve as the platform for a base station or repeater site.

The Application includes an Emergency Action Plan (EAP) that establishes procedures required to effectively respond to emergencies that may affect the project or the surrounding community. The EAP will be prepared and implemented throughout the construction and operation of the project. It is necessary for the applicant to coordinate and provide aid to local fire districts to promote safety and emergency response procedures.

The application indicates they will fulfill the decommissioning use standard of the Zoning Ordinance. The applicant will submit a Decommissioning Plan when the Agricultural Mitigation Agreement (AIMA) is finalized with the Illinois Department of Agriculture.

The application includes a site characterization study where it is reported that the applicant conducted wildlife studies in consultation with the Illinois Department of Natural Resources (IDNR) and United States Fish and Wildlife Service (USFWS) to verify the results of the study.

The application indicates the following studies addressing all relevant species have been completed, as recommended by IDNR and USFWS:

- Land Cover Mapping – 2009
- Avian Use Surveys – 2009 - 2010
- Raptor Nest Survey – 2009 -2010
- Land Cover Mapping – 2009
- Acoustic Bat Surveys – 2009
- Stage 1 Eagle Risk Assessment – 2016
- Avian Use Surveys – December 2016 to December 2017
- Raptor Nest Survey – 28 February 2017 through 1 March 2017
- American Golden-Plover Surveys – 18 April 2017 through 9 May 2017
- Bat Habitat Assessment – 2017

The application states that prior to operations, the applicant will submit a post-construction study plan, including methodology for post-construction bird and bat fatality monitoring, to IDNR and USFWS for review. A minimum of one year post-construction fatality monitoring will be conducted at the project, the results of which will be submitted to the IDNR and USFWS. The Applicant will minimize potential bat mortality caused by operation of the project by implementing turbine operational adjustments. The Applicant will feather turbine blades when wind speeds are below the manufacturer's cut-in speed at night during the fall migration period. The Applicant will consult with IDNR and USFWS on any follow-up issues raised with respect to the results of these post-construction studies.

The County has not yet received a pre-siting study, addressing all relevant species, submitted to the Illinois Department of Natural Resources (IDNR) and implementation of the IDNR recommendations based on pre-siting study results as required in the Zoning Ordinance for wildlife.

There has been no communication submitted from the Illinois Historical Preservation Agency (IHPA).

The McLean County Regional Comprehensive Plan approved on November 17, 2009, proposes that the project area remain in agricultural land use and states that wind energy developments are an opportunity for preserving local farmland and agricultural heritage. The Plan goes on to state in reference to the two windfarms that had already been

approved at the time, “Besides adding significant tax dollars, both projects will assist local farmers as some take advantage of annual turbine rental fees for allowing the energy firms to erect turbines on private property”.

2. **The proposed special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for purposes already permitted or substantially diminish property values in the immediate area.** This standard can be met. The surrounding property that is currently used for crop production will continue to be desirable for such use, and will continue to be farmed. The proposed wind farm is compatible with agricultural operations in the project area, and these agricultural operations will not likely be negatively impacted.

The application meets the setback requirements of the Zoning Ordinance. Compliance with these setback requirements ensure that project improvements are located at safe distances from other uses. The application demonstrates that the project will comply with noise standards of the IPCB. The noise analysis and the turbine setback requirements from occupied residences show that the project will not injure nearby residents.

The applicant is requesting to be allowed to apply for a building permit up to three years after County Board approval rather than two years as allowed. This is a reasonable request and has been approved for other wind farms in the County.

Site approval for each wind turbine within the project area needs to be approved by the Federal Aviation Administration (FAA) before construction can begin. Lighting on turbines shall meet the FAA lighting requirements. The application states that no more intensive lighting will be installed than is required to meet minimum FAA lighting requirements.

None of the proposed turbines is within 1½ miles of a municipal boundary.

McLean County has not yet received a pre-siting study, addressing all relevant species, submitted to the Illinois Department of Natural Resources (IDNR) and implementation of the IDNR recommendations based on pre-siting study results as required in the Zoning Ordinance for wildlife.

3. **The proposed special use will not impede the orderly development of the surrounding property for uses permitted in the district.** This standard can be met. The Agriculture District is very restrictive for establishing non-agricultural residential uses. Nearby land that is suitable for crop production will continue to be suitable for such use. In the limited areas where residences are located, turbines will be set back 1,500 feet or three times the turbine height from occupied residences except for three residences that the applicant has not identified. The application meets the requirements of the Zoning Ordinance with respect to decommissioning. The applicant will submit a Decommissioning Plan when the Agricultural Mitigation Agreement (AIMA) is finalized with the Illinois Department of Agriculture.

The applicant indicates that there are two private airports located within a 10-mile radius of the proposed Site. Mays Aviation Airport, located within the Site in section 19 of Yates Township, and Thacker Airport is located approximately 1.7 miles northwest of the Site.

The application indicates turbines are arranged in lines running east to west parallel to property lines based on feedback from landowners and aerial applicators.

4. **Adequate utilities, access roads, drainage and/or other necessary facilities have been or will be provided.** This standard is met. The applicant will protect the existing drainage near the project and repair any damage made to drain tile or any other drainage improvements. The applicant is proposing to build gravel access roads to each tower. Drainage problems have developed along and through some of these access roads in the already built Twin Groves Wind Farm. It is necessary to install vegetated strips along the upstream side of access roads that are prone to washing out, particularly where the access roads cross waterways. To minimize erosion along access roads, waterways should be improved before access roads are installed, or the crossing will not be installed in a way that minimizes erosion.
5. **Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.** This standard is met. The applicant has been working with the County and townships to obtain road use agreements to maintain the public roads and provide adequate access during the construction process. A signed road use agreement with the County for use of County roads will need to be approved before the County Board takes action on this application. A written road use agreement with the applicable township road commissioners will need to be obtained before construction permits are issued.
6. **The establishment, maintenance and operation of the special use will be in conformance with the intent of the district in which the special use is proposed to be located.** This standard is met. The intent of the Agricultural District states, "Provide for the location and govern the establishment and operation of land uses which are compatible with agriculture and are of such a nature that their location away from residential, commercial and industrial areas is most desirable."
7. **The proposed special use, in all other respects, conforms to the applicable regulations of the Agriculture District.** This standard is met.

8. **CONCLUDING OPINION:**

Staff recommends that this application meets all of the standards set forth in Article VII Section 350-56 (Standards for Special Use Permits) of the Zoning Ordinance provided the following stipulations:

1. A written road use agreement shall be obtained with the County before the County Board approves this application.
2. A written road use agreement shall be obtained with the applicable township road commissioners before construction permits are issued.
3. Development shall follow the plans and documents submitted with the application and with Zoning Regulations including Article VI Section 350-43.OO (2) (Use Standards for WECS).
4. Adequate financial assurance acceptable to the County shall be submitted with the County according to the application and the Decommissioning Plan submitted with the Agricultural Mitigation Agreement (AIMA) with the Illinois Department of Agriculture.
5. If decommissioning is triggered, all facilities will be removed as required under the Agricultural Impact Mitigation Agreement (AIMA) including the turbine foundations to a depth of 5 feet below grade.

6. McLean County shall receive a pre-siting study, addressing all relevant species, submitted to the IDNR and implementation of the IDNR recommendations based on pre-siting study results as required in the Zoning Ordinance for wildlife.
7. Vestas V136 3.45 MW and 4.6 MW turbine models shall be installed in this project according to the project layout submitted with the application. If the applicant changes the type of turbine, an updated sound impact assessment will need to be provided to ensure compliance with IPCB noise regulations.
8. The applicant shall complete consultation with the Illinois Historical Preservation Agency (IHPA) before construction can begin.
9. The applicant shall rectify any television and internet connection problems in the project area and return them to at least the level of service that occurred before the turbines were installed.
10. No lighting shall be installed that is more intensive than the minimum required by the FAA.
11. The applicant will coordinate and provide aid to local fire districts to promote safety and emergency response procedures.

Respectfully submitted,

Philip Dick, AICP, Director

Attachment: Site Plan

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