



**DeKalb County  
Planning/Zoning/Building Department**

110 East Sycamore Street  
Sycamore, IL 60178  
(815) 895-7188  
Fax: (815) 895-1669

**STAFF REPORT**

**TO:** Dave Dockus  
DeKalb County Hearing Officer

**FROM:** Paul R. Miller, AICP  
DeKalb County Planning Director

**DATE:** February 11, 2009

**SUBJECT:** FPL Energy Illinois Wind Special Use Permit  
Petition MI-09-01

FPL Energy Illinois Wind, LLC, has filed an application for a Special Use Permit to establish a wind farm. The request has been filed in accordance with the requirements of Section 9.02.B.2 of the DeKalb County Zoning Ordinance to allow the construction and operation of a wind farm consisting of up to 151 turbines located in both Lee and DeKalb Counties. In unincorporated DeKalb County, the request is for up to 119, 1.5 megawatt turbines consisting of 262-foot-tall towers with three blades each, which would be constructed on several properties, extending as far north as Gurler Road, as far east as State Rte. 23, as far south as 1,500 feet north of Shabbona Grove Road, and as far west as West County Line Road. The subject properties are zoned A-1, Agricultural District.

**Surrounding Zoning and Land Uses** -- The properties on which the turbines would be located are generally in agricultural use, with some scattered non-farm residences. The towers would be located north, south and east of the Village of Lee, and north, northeast, and southwest of the Village of Shabbona.

**Request** -- The wind farm proposal from FPL Energy relies upon an interpretation that a facility which generates electricity from wind power is substantially similar to the Special Use in the A-1 District regulations which allows, "Essential service structures including, but not limited to: . . . electrical station and substation buildings. . . as well as other structures and buildings related to essential or public services." Although the project will consist of multiple wind towers constructed on several properties, a single Special Use Permit, if approved, would apply to the whole project. In reviewing this Special Use Permit application, the Hearing Officer should consider the findings of fact set forth in Section 9.02.B.3 of the Zoning Ordinance (see attached excerpt).

**Correspondence** -- To date, no correspondence related to this petition has been received.

**Staff Evaluation:**

1. Comprehensive Plan -- The Unified Future Land Use Plan of the 2003 DeKalb County Unified Comprehensive Plan recommends Agricultural uses on the properties which are proposed as potential sites for wind turbines. Electricity generating facilities are not agricultural uses, however, such facilities may or may not be compatible with agriculture. The Unified Comprehensive Plan recognizes that there are several compatible, non-agricultural uses, but does not anticipate a wind farm specifically. The petitioner should be prepared to discuss how the proposed towers will be in harmony with the goals and objectives of the Unified Comprehensive Plan for the rural, agricultural portions of the County.
2. Zoning -- The proposed wind project would be a unique and unprecedented land use in DeKalb County. The subject properties where the proposed turbines may be located are all zoned A-1, Agricultural District. The A-1 District is intended to ensure that land areas within the County which are well suited for production of food and fiber are retained for such production. In light of this purpose, the petitioner and Hearing Officer should consider the following:
  - a). “Essential service structures” are a possible Special Use in the A-1 District, meaning such uses may or may not be appropriate on any given property, and the County Board reserves the right to consider each such use on its own merits. FPL is asserting that a wind energy conversion system is substantially similar to other essential service structures. The applicant should be prepared to elaborate on this assertion. The Hearing Officer should consider this question prior to undertaking evaluation of the normal criteria applicable to all Special Uses;
  - b). The Zoning Ordinance requires that a proposed Special Use will not be unreasonably detrimental to the value of other property in the neighborhood. The petitioner’s application asserts that the value of properties where wind turbines are located has increased, while adjoining property values have been largely unchanged. Does the petitioner have any data or studies to support this contention? In particular, is there any evidence of the impact of wind farms on surrounding, non-participating properties from Lee County?;
  - c). The Zoning Ordinance requires that the location and size of the Special Use, the nature and intensity of the operation involved, and the location of the site with respect to streets giving access are such that the Special Use will not dominate the immediate area so as to prevent development and use of neighboring property in accordance with the applicable zoning regulations. The petitioner’s narrative asserts that the actual land area required for each wind tower is limited and that farming can

take place very near to the base of the structures. However, the towers and blades are proposed to be nearly 400 feet in height from the base to the tip of the blades at the highest point. The large blades will move in the wind, and the turbine will change direction to face the wind as needed. Further, staff understands that the towers may be spaced as close as 1,000 feet or less apart, in rows running east west, over an area of roughly 70 square miles, and the petition is for 151 towers (in both counties). The petitioner should be prepared to explain how this wind farm will not dominate the area so as to prevent the development and use of neighboring property;

- d). Further, the petitioner should be prepared to address the impact the wind towers would have on crop dusting activities on adjoining properties; and
  - e). The Zoning Ordinance requires consideration be given as to whether a proposed Special Use will be “visually compatible” with the permitted uses in the surrounding area. Given that the proposed towers will be far larger than most other structures in the area, and will be in motion rather than static, the petitioner should be prepared to elaborate on this point.
3. Subject Properties -- The petitioner has provided copies of easement agreements with a number of property owners, and copies of authorization for FPL to act as an agent in the Special Use Permit for a number of others. The petitioner has also supplied aerial photo maps with property owners names and permanent index numbers. In conversations with petitioner representatives, staff understands that additional easement agreements have been secured since the application was filed on January 5, 2009 and that others are still under negotiation. Staff requests that the petitioner prepare an exhibit that clearly shows on which properties easements have been secured and which have not, along with the proposed locations of wind towers;
4. Construction Schedule, Details, and Accessory Uses:
- a). The petitioner has indicated that the project will, if approved, be operational by the end of 2009. Does this mean that all 151 towers will be erected and operational, or only some? If all turbines are not anticipated to be up and running by the end of the year, how long a construction schedule is anticipated?;
  - b). Is a storage property, for staging of employees, materials, equipment and vehicles throughout at least the construction phase of the project, part of the proposal? If so, where would this storage property be? Will any screening of the appearance of the staging/storage area be provided? How many trips in and out per day could be anticipated, and is the road network adequate to the anticipated traffic volume and weight? What would be the days and hours of operation of the storage area? What

will happen to the storage property after the construction is completed? Will there be guarantees provided to return the property to its previous use?;

- c). An important element of the proposed project is how the power generated by the wind turbines will be transmitted to the proposed electrical sub-station. The petitioner should be prepared to address this issue, including: Where will the transmission lines be located; will the lines be above- or below-ground; will any new easements be required from any public entity or adjoining property owners; and what is the status on securing any necessary approvals for the transmission lines? If the project is approved, permits would be required for buildings and structures on the sub-station, as well as for grading and stormwater management, fencing, and signage;
  - d). The petitioner has indicated that a permanent maintenance facility would be constructed within the jurisdiction of the Village of Shabbona. Where will this facility be? The location should be depicted on the final site plan for the Special Use Permit;
  - e). What is the minimum spacing between wind towers? Is this intended to be the minimum, or might towers be closer yet?; and
  - f). Where will the proposed “meteorological towers” be located? Building Permits, grading plans, etc. would be required for these structures as well.
5. Grading and Stormwater Management -- If this project is approved, a Site Development Permit will be required for each wind tower site, at the same time as a Building Permit. Existing and proposed topography must be provided, as well as a drain tile investigation, financial guarantee, and stormwater calculations to demonstrate the structures and associated pad and access drive will not cause flooding problems on surrounding property.
6. Impact Studies:
- a). The petitioner’s application refers to an avian risk study (prepared by the Illinois Department of Natural Resources and included in the application), and to studies on sound, wetlands, cultural resources and “similar matters before commencement of construction.” When will these additional studies be provided? How can the recommendations of the studies be incorporated into the decision of the County Board if the studies are not available as part of the petitioner’s application?;
  - b). The DeKalb County Soil and Water Conservation District has prepared a detailed study of every proposed wind tower site. This study was included in the petitioner’s application for Special Use Permit. However, the final location of each turbine will

not be established unless and until approval by the County Board, and locations may shift given a variety of conditions:

- 1). If this project is approved, staff recommends that a follow-up site visit and evaluation by the Soil and Water Conservation District should be requested by the applicant, along with a requirement to respond to the recommendations from such subsequent evaluations, as part of the Site Development Permit required for each turbine site;
- 2). The Soil and Water Conservation has submitted an Amendment to its report, in which it recommends guidelines for conservation practices and impact mitigation. If this Special Use Permit is approved, these recommendations should be included as a condition; and
- c). Is the petitioner proposing to work with area residents by using photo-simulation or other modeling techniques as part of the final siting of the wind towers?

7. Conditions of Approval -- The petitioner has provided a list of proposed conditions of approval, based on the list of conditions included in DeKalb County Ordinance 2003-06, which approved a wind farm in 2003 (attached). Staff notes that this new list does not restrict the County Board from adding new conditions or deleting or amending prior conditions should it decide to grant the Special Use. Given that the conditions of approval contained in Ordinance 2003-06 were acceptable to the County and FPL at that time, staff offers the following questions and comments with respect to the new set of conditions submitted by the petitioner:

- a). Condition #1 stipulates that each tower shall be set back a minimum of 437 feet from all public roads, and from above-ground utility easements and property lines equal to or greater than the height, plus ten percent, of the blade tip at its highest point, unless written approval is received from the property owner allowing for a smaller setback from their property line. Staff notes that the Ordinance 2003-06 established a minimum 500-foot setback from all roads. Staff also notes that the setbacks from wind towers were to be measured from the foundation, and is now proposed to be measured from the center of the foundation. Finally, the previous towers were to be a maximum of 220 feet tall, and are now proposed to be 263 feet tall. Why have these changes been made?;
- b). Condition#2 concerns the minimum set back from wind towers to existing residences, and also measures such setback from the center of tower foundation rather than from the edge. Why has this change been proposed?;

- c). Condition # 5 concerns a commitment by the petitioner to work with local rescue authorities to provide training, at FPL's expense, on rescue from a wind tower. As set forth in Ordinance 2003-06, the training was to take place prior to commercial operation of the first wind tower, but this clause has been dropped. The petitioner should be prepared to address why this has been changed;
- d). Condition #6 concerns "shadow flicker," but is revised from the condition contained in Ordinance 2003-06: a regulation has been added that would require shadow flicker to occur in excess of 40 hours per year before FPL would be required to address the issue for any given residence, and the following clause has been dropped, "If FPL receives a verified complaint about shadow flicker visible from within any home owned by someone who is not participating in the wind farm, then Petitioner will program the turbine or turbines causing such shadow flicker to shut down during the brief period of time that such shadow flicker is anticipated to occur." The petitioner should be prepared to provide the rationale and justification for these changes;
- e). Condition #8 concerns the time period which the petitioner would have to commence construction of the wind farm. It would allow 36 months to commence construction of the entire project following County Board approval, rather than the standard 12, and would allow 18 months to commence construction of any given wind tower from the time a Building Permit is issued, rather than the standard six months. The petitioner should be prepared to elaborate as to why these longer periods of time to start construction are justified;
- f). Condition #9 concerns dust control measures to be applied during construction, but differs from the same condition in Ordinance #2003-06 by adding the words "commercially and" to "reasonably required." Why has this change been made?;
- g). Condition # 10 concerns the decommissioning of tower sites and is the same as that set forth in Ordinance 2003-06, except that the obligation to provide a letter of credit to assure decommission and returning of the site to a useable condition for farming would not be provided until the project has been in operation for 15 years, rather than at the time of Building Permit as was previously agreed. The petitioner should be prepared to address the reason for this change. What is proposed should FPL, or any other subsequent owner of the wind towers, go bankrupt or dissolve during the first 15 years?;
- h). Condition #11 concerns offering non-participating homeowners within 3/4 of a mile of any wind tower an opportunity to participate in the "Community Partnership Program." This condition seems to take the place of the condition of Ordinance 2003-06 that provided a property value protection program. No details of the

“Community Partnership Program” have been provided. The petitioner should provide these details, and be prepared to discuss why this program is preferable for DeKalb County homeowners over the previous property value protection program;

- i). Condition #12 concerns sound emissions and the commitment on the part of FPL to comply with applicable federal and State regulations. What does the petitioner propose to do should noise complaints be received even after compliance with applicable regulations?;
  - j). Condition #19 concerns lighting and allows “normal security lighting.” What is normal security lighting for a wind tower? This information should be submitted for evaluation at the public hearing;
  - k). Condition #20 concerns “aviation light deflectors”, but adds the stipulation that these will be used “if required by the FAA”, rather than “if allowed by the FAA” as in Ordinance 2003-06. The petitioner should be prepared to discuss this change in language;
  - l). Ordinance 2003-06 had a condition requiring the use of “ice detectors.” There is no such condition in the new proposal. Is there no equipment available for detecting when ice might become an issue on wind towers?; and
  - m). Condition #28 concerns the right to transfer of the wind farm to another entity. Staff recommends that inclusion of all financial guarantees be specified as a condition of any such transfer.
8. Taxes -- The petitioner’s application indicates that each tower is anticipated to generate \$13,500 in taxes:
- a). Staff understands that the State law which establishes the formula for how property taxes are generated for wind farms will expire in 2011. The existing formula includes a depreciation factor, as well as factoring in increasing tax rates over time. Is the petitioner prepared to commit to paying taxes in accordance with the current law, or in accordance with any law enacted by the State in the future, whichever is higher, for the operational life of the project?; and
  - b). Staff understands that every existing wind farm in Illinois operates under an enterprise zone. However, DeKalb County does not have any enterprise zones. Staff further understands that under an enterprise zone wind farm operators are exempt from sales and use taxes associated with construction of the project. If there is no enterprise zone for this project what, if any, sales and use tax would be generated, and what is the estimated benefit, if any, that would accrue to DeKalb County?

9. Staff Evaluation -- The issues above notwithstanding, the major concern associated with the proposed wind farm is one of aesthetics and individual value systems. Residents of Milan, Shabbona, Afton and Clinton Townships, and DeKalb County in general, are used to and value the wide-open vistas afforded by farm land in northern Illinois. The tallest structures normally encountered are cell towers, which are controversial in their own right. Prior to that technology, electricity transmission towers were the largest structures. Commonly, people are used to seeing nothing bigger than a commercial grain bin on the horizon. The proposed wind towers will be very large, exceeding most cell towers by 100 feet or more in height. Further, the large blades will usually be in motion. The numbers of towers proposed in DeKalb County will make a significant impact on the landscape. The principal issue with which the Hearing Officer and County Board must contend is whether or not this substantial change to the rural landscape in the southwest portion of the County is desirable. This concern and the value placed on the existing vistas should be weighed against the benefits offered by such a project, in the form of an additional source of energy, economic benefits during construction, additional permanent jobs, additional tax to the governmental entities, and benefits to property owners who lease their land for wind towers. It should be borne in mind that, if approved, the proposed wind farm will be a permanent addition to the County. Is this the kind of change the County desires?

cc: G.A. Finch and Pamela Berkowitz, Hoogendoorn and Talbot, LLP  
Ray Bockman, County Administrator

PRM:prm

C:\Documents and Settings\lsanderson\Local Settings\Temporary Internet Files\OLK1503\FPL MI-09-01.wpd

**Excerpt from Zoning Ordinance**  
**Section 9.02.B.3**

Burden of Proof: In presenting any application for a Special Use Permit, the burden of proof shall rest with the applicant to clearly establish that the proposed special use shall meet the following criteria:

- a. The proposed special use complies with all applicable provisions of the applicable district regulations.
- b. The proposed special use will not be unreasonably detrimental to the value of other property in the neighborhood in which it is to be located or the public welfare at large.
- c. The location and size of the special use, the nature and intensity of the operation involved in or conducted in connection with it, and the location of the site with respect to streets giving access to it are such that the special use will not dominate the immediate neighborhood so as to prevent development and use of neighboring property in accordance with the applicable zoning district regulations. In determining whether the special use will so dominate the immediate neighborhood, consideration shall be given to:
  - 1). The location, nature and height of buildings, structures, walls, and fences on the site; and
  - 2). The nature and extent of proposed landscaping and screening on the proposed site.
- d. Off-street parking and loading areas will be provided in accordance with the standards set forth in these regulations.
- e. Adequate utility, drainage, and other such necessary facilities have been or will be provided.
- f. The proposed uses, where such developments and uses are deemed consistent with good planning practice, or can be operated in a manner that is not detrimental to the permitted developments and uses in the district; can be developed and operated in a manner that is visually compatible with the permitted uses in the surrounding area; shall in all other respects conform to the applicable regulations of the district in which it is located; and are deemed essential or desirable to preserve and promote the public health, safety, and general welfare of DeKalb County.