

DTE Energy Comments on Lake Township Draft Wind Ordinance – June 24, 2009

- The draft ordinance provides that the Special Land Use Permits for wind turbines are good for only 5 years, and that a new application must be made every 5 years. There is no automatic renewal. This 5-year limit on permits will prevent wind energy from being built in Lake Township. A turbine is a very expensive and is expected to last 25 years or more. 5-years of operation will not even come close to paying back the developer's investment in a wind turbine. With uncertainty about permit renewals and the conditions that Lake Township may require for renewal, developers will not build wind turbines. It is recommended that the permit be valid for the life of the turbine. Would anyone build a house if the permit or variance they received was good for only 5 years?
- The draft ordinance does not reference the current U.S. Fish and Wildlife Service interim guidelines (of 2003) (<http://www.fws.gov/habitatconservation/wind.pdf>) that discuss conducting appropriate wildlife surveys and letting this information determine where, what and how wind turbines can be built and operated. Further, the USFWS is in the process of amending the interim guidelines. It is recommended that the draft ordinance not codify any hard setbacks like "3 miles from any shoreline" and "5 miles from eagle's nests" as the USFWS interim guidelines state that wind turbine siting should be based on specific wildlife analysis and recommendations. It is further recommended that the ordinance require wind developers to follow USFWS guidelines as amended from time to time and work with the USFWS to determine the where, what and how wind turbines can be safely built and operated.
- The draft ordinance requires turbine setbacks of 2,640 feet (1/2 mile) from property lines and roads. This requirement effectively eliminates all developable land since the roads in Lake Township are one mile apart. Further the requirement for a 1 mile setback from inhabited structures, a 10 rotor diameter distance from wetlands, and 1.5 miles from Pigeon River, Pinnebog River, and Rush Lake are excessive. It is recommended that the ordinance reflect reasonable setbacks based on science. Typical ordinances establish setbacks at 1 to 1.5 times the turbine height from roads and non-participating property owners, 800 to 1,320 feet from residences in combination with noise standards. Specific setbacks from the Pinnebog River, Pigeon River, and Rush Lake Game Area should be deleted from the ordinance and replaced with a requirement that wind developers follow USFWS guidelines as amended from time to time and work with the USFWS to determine the where, what and how wind turbines can be safely built and operated.
- The draft ordinance separately requires that each wind turbine be spaced ½ mile from any other wind turbine. This restriction has no basis in science and greatly limits the ability to develop an economic wind farm.
- The draft ordinance sets an unreasonable height limit of 175 feet. Commercial wind turbines can be 400 feet or higher. A 175 foot turbine will have a capacity of about 0.1 megawatts (MW), only 5% of that of a 2 MW commercial turbine. Further, because the shorter turbine has less wind speed and smaller blades, its energy (megawatt-hour) output is only 3% of the taller 2 MW turbine. The draft ordinance would require thirty-three (33) 175-foot turbines for every 1 commercial sized turbines. It would require over 1,100 175-foot turbines to get the same energy as a 35 commercial turbine wind farm.
- Prohibiting guy wires on meteorological (MET) towers effectively eliminates their use. MET tower data is a mandatory part of wind development. Alternatives to guyed MET towers are expensive, unsightly, and require much more substantial structures be built, and only make sense when a tower will be permanent. Guyed MET towers are commonly used throughout the United States. It is recommended that guyed MET towers be allowed.
- The noise requirements are, in general, confusing, excessive and not based on science. Our comments on the noise requirements are covered by a letter from Resource Systems Group, Inc.

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addressed to Lake Township Planning Commission that has been separately forwarded to the Planning Commission.

- The draft ordinance has many more unreasonable provisions within it. Wind developers will not want to be subject to these unreasonable provisions. Some, but not all, of these subject areas are:
 - Complaint provisions are entirely one-sided and allow not just residents of Lake Township to complain but anybody in the country with a presumption that a claim is valid.
 - Fines are doubled each day, so that after 12 days the fine is \$3 million. Some problems cannot be fixed immediately as it is virtually impossible to mobilize and erect a crane to make major nacelle or blade repairs in less than 3 weeks.
 - Operating parameters including maximum rotor speed of 16 revolutions per minute (RPM). Commercial wind turbines will spin up to about 20 RPM. 175 foot wind turbines spin at approximately 75 RPMs, producing a blade tip speed of 150 MPH. Yet the draft ordinance requires a maximum height of 175 feet and a maximum rotational speed of 16 RPM.
 - The ordinance provides that wind turbines cannot be at a height where the FAA would require lights. This restriction will prohibit commercial wind turbines. The ordinance should be modified to allow FAA lights, provided they are the minimum number required by the FAA. The USFWS recognizes that this amount of lighting is prudent and not a high risk to wildlife.
 - The ordinance provides the Township the ability to exercise arbitrary powers regarding wind turbines. For example, Lake Township reserves sole discretion to increase at any time the amount of the Removal Cost escrow and Administration Costs escrow that are funded by the turbine owner.
 - The ordinance requires that the turbine developer deposit funds into an escrow account to cover future removal costs. Lake Township maintains the sole authority to withdraw funds from this escrow account. The ordinance should be modified to allow qualified surety bonds and letters of credit for the removal cost guarantee.
 - Agricultural zoned land in Sections 33, 32, 31, 29, 28, and 27 are summarily excluded from being able to host wind turbines, even if they meet the eventual setback criteria of the final ordinance and have concurrence from the USFWS. These agricultural zoned areas should be allowed to have wind turbines if they meet the other siting criteria. Zones 33, 32, and 31 border Kinde Road where there will probably be wind turbines in the neighboring Chandler Township sections directly south. To summarily prohibit the land owners in sections 33, 32 and 31 from making their own decisions on hosting or building wind turbines is unfair, and will put them at an economic disadvantage compared to farmers elsewhere in Lake Township and Huron County.
 - The ordinance requires the turbine owner to maintain \$5 million of insurance for each turbine, not to exceed \$100 million if there are multiple turbines owned by the same owner. \$5 million of insurance per turbine is excessive for commercial turbines, and even more so when the ordinance restricts each turbine to a height of 175 feet.

In its present form, the draft ordinance prevents even well designed wind farms from being developed in the township