

WIND ENERGY RECOMMENDATIONS-Updated

I am requesting that the planning commission address the items below that are not adequately addressed in our current Wind Energy Ordinance. Please address them one at a time in an orderly fashion in a manner that protects our residents.

1. Separation of wind turbines from certain areas of our township.
 - a. Substantial separation from populated areas of our township such as subdivisions, condominiums, trailer parks, and other densely populated areas.
There should be a one mile minimum from all residentially zoned property and a half mile from other densely populated areas. Currently, I have not found any ordinances that contains this provision.
 - b. Substantial separation from properties that can be developed for other purposes such as new subdivisions, commercial properties, industrial properties in those areas of the township that have all the utility services available especially sanitary sewer.
There should not be any wind turbines built on property that is identified for future residential, commercial, or industrial development based on our master plan. Currently, I have not found any ordinances that contains this provision.
 - c. Substantial separation from schools and parks.
There should be a one mile separation from schools and our township parks. Currently, I have not found any ordinances that contains this provision.
2. **Require that wind turbines be located exclusively in areas zoned for agricultural.**
3. Establish a complaint process. **Beaver Township has a process that we should use.**
4. Consider notification to neighbors for a special use permit beyond the required 300 feet.
An increased notification area of 1000 feet should be considered given the substantial impact a single wind turbine could have on the surrounding area. Currently, I have not found any ordinances that contains this provision.
5. Require wind turbine setbacks for the categories below.
 - a. Participant property line. **This category can remain only if the Beaver Township and Williams Township setbacks listed below are established.**
 - b. Nonparticipant property line. **4 times the height of the tower which is the same as Beaver Township and Williams Township.**
 - c. Participant dwelling house or building. **2.5 times the height of the tower which is the same as Williams Township. (In Williams Township the setback may be reduced to 2 times the height of the tower by their planning commission). Beaver Township does not appear to have a setback for this category.**
 - d. Nonparticipant dwelling house or building. **A nonparticipant setback in this category should not be needed if the Beaver Township and Williams Township setbacks are established.**
 - e. Public roads. **1.5 times from the height of the tower to a public road right of way which is the same as Beaver Township and Williams Township.**
6. Require a decibel level standard for all the categories above.

50 decibel levels at a participant property line.

45 decibel levels at a nonparticipant property line with a waiver provision.

45 decibel levels at a participant dwelling house or building.

40 decibel levels at a nonparticipant dwelling house or building with a waiver provision.

Beaver Township has a range from 45 to 55 decibel levels while Williams Township has a range from 40 to 50 decibel levels which may be increased by their planning commission.

7. Separation between wind turbines that is a clearly defined minimum standard. **1.5 times the height of tower which is the same as Beaver Township and Williams Township.**
8. Consider the maximum length and duration of shadow flicker and establish definitive standards to avoid any adverse effects. **No shadow flicker on adjacent properties unless waived by the property owner which is the same as Beaver Township.**
9. Radar activated lights for airplane safety that comply with aviation standards. **Lighting required by the FAA that is the minimum amount of lighting required at the lowest intensity and slowest pulse allowed. Use of radar activated lights if the technology is available and if permitted by the FAA.**
10. Create a safety zone that would include some of the following items.
 - a. Warning signs.
 - b. Protection from ice on the blades.
 - c. Protection from faulty blades or other potential wind turbine repair issues.
 - d. Fire safety.

Beaver Township has a subsection on safety that should be incorporated into our ordinance along with the recommendations listed above.

The ordinances from both Beaver Township and Williams Township have helpful provisions that cover some but not all of these areas. We can borrow provisions from both ordinances and improve upon them so that our residents are protected.

Additional Notes and Concerns:

We should have provisions for requiring non-reflective blades, definitions for participants and nonparticipants in the Beaver Township ordinance, that any expert fees incurred be paid by the developer in advance, and reimbursement for any road damage.

Our decommissioning security guarantees appear to exceed those of Beaver and Williams Township. However, both Beaver and Williams Township require removal of all materials along with replacement with cover crops or grass.

Williams Township also has a section on Maximum Vibrations and Low Frequency Sound that states that a wind energy system shall not produce vibrations humanly perceptible upon a nonparticipating parcel.

Ken Malkin, Supervisor
Charter Township of Monitor