PRIVATE VS. COMMERCIAL

Need to distinguish difference – look at language from existing ordinances - Suggested text for Centerville Township

White River

(1) Single WECS for On-site Service Only: Single WECS applications of wind energy conversion system, including WECS Testing Facilities, to service the energy needs of only the property where the structure is located may be approved in any zoning district as a Special Use, provided the property upon which the system is to be located is at least three and one-half (3-1/2) acres in size and subject to the review and approval procedures and standards/criteria of Article X of this Ordinance, as well as all of the following:

a. The tower shall not exceed a height of 80 feet.

b. The blade diameter (tip to tip) shall not exceed 100 feet.

c. The height of the overall WECS (with the blade in the vertical position) shall not exceed 130 feet above ground level (at normal grade).

d. The distance of the structure from all property lines shall be at least two (2) times the WECS height.

Except for the requirements contained above in this subsection (c)(2), single WECS for on-site service only shall not be subject to the other requirements of Section 10.11A.

Otsego

Private Wind Turbine Generation: WTG used primarily to generate electricity or produce mechanical energy for use on the property where located with a wind generation tower height of 100' or less, AND GENERATE 25kw OR LESS OF ELECTRICITY. Sale of electric power via net metering is allowed.

Exceptions: Wind Turbine Generator regulations provided in this Section 18.47 shall not apply to Private WTGs 35 feet high or less with a rotor blade clearance above ground level a minimum of 15' and with a rotor blade not to exceed 20 feet in diameter. If the afore mentioned WTG is not attached to the principal dwelling or use, the WTG shall be regulated as an accessory structure in accordance with Section 18.1 of the Zoning Ordinance.

Bingham Twp. (Leelanau County) 3.14.3

1. Tower construction to be in accord with County Standards.

2. Setback: Base of tower must be setback from an adjacent property line by a distance to the overall height of the tower.

3. Color of the tower and attached equipment to be a neutral color such as to blend with the surrounding foliage and buildings.

4. Towers must be enclosed by security fencing not less than 6 feet in height or be equipped with an appropriate anti-climbing device.

5. Installer must assure that all sounds of the operation will not exceed normal conversation levels at the property line.

6. Overall installation height must not exceed 100 feet.

7. Towers which are unused for a period of one (1) year or more must be removed *by the landowner at the landowner's expense.*

8. No more than one (1) tower permitted per parcel.

9. Commercial production or distribution of electricity is prohibited.

10. Installation of associated electrical handling and storage of equipment shall comply with all applicable Electrical and Building Codes.

Eveline Twp.

Non-Commercial Wind Turbines & Anemometers

1. This Paragraph, 2.6D, shall apply only to noncommercial wind turbine generators and anemometer towers. See Paragraph 2.6L for regulations relating to all other (commercial) wind turbine generators and anemometer towers.

2. The minimum site area for a noncommercial wind turbine generator or an anemometer tower erected prior to a noncommercial wind turbine generator shall be three (3) acres.

3. The maximum noncommercial wind turbine tower height or the height of an anemometer tower erected prior to the noncommercial wind turbine shall be the minimum height necessary or reasonable to serve its intended function or 130 feet, whichever is less.

4. Noncommercial wind turbine towers shall be setback from any property line a minimum distance equal to twice the height of the tower.

Leelanau Township

A. Wind Turbine generator towers and anemometer towers under 75 feet in height shall be a permitted land use in Government, Agricultural and Residential Conservation zoning districts and not subject to the standards of Section 19.4, but subject to Article 11, Site Plan Review.

Most of the other ordinances we have reviewed have very similar language to the White River ordinance or the Eveline Twp. ordinance. I have tried to consolidate features from all of them to come up with something that might work in Centerville…

Draft Centerville Township Ordinance

Private Wind Turbine Generation: WTG used primarily to generate electricity or produce mechanical energy for use on the property where located with a wind generation tower height of 150' or less and generate 30kw or less of electricity. Sale of excess electric power is only allowed via net metering.

1. Minimum lot size – 3 ½ acre
2. Setback from all property lines 2x height
3. No more than 1 WTG per parcel
4. Complete site plan review
5. Must meet sound regulations required for commercial WTG

150' or less This is the current language in the Centerville Twp. zoning ordinance.

30kw This is the maximum size of electric generators eligible for net metering unless a utility voluntarily sets its limit at less than 150kw. MI Public Service Commission

Net-metering Eligible systems are limited in size, not to exceed the customer's self-service needs. Net-metered customers are credited for net excess generation at the utility's retail price of generation. Any credits will be carried over to the next month, limited to a 12-month billing cycle. Credit remaining at the end of the 12-month cycle may be retained by the utility. Advantages to the customer are the ability to use "banked" electricity in higher use months and also eliminate the use of expensive storage battery systems due to the interconnection with the utility. NO CASH goes to the owner of the wind turbine. http://awea.org.smallwind/michigan.html

Meet sound regulations This can be according to the manufacturer specifications for noise data and modeling. While you wouldn't want to place excess financial burden on the owner of a private wind turbine to go through the whole application process, it would give neighbors recourse for action if the turbine was causing noise issues.