10-7-30: WIND ENERGY CONVERSION SYSTEMS (WECS): 4



- (A) Permit Required: WECS shall be considered accessory uses in all zoning districts, except as further limited in this section, and require a conditional use permit. The CUP may address, but is not limited to: height of the system, length of blades, speed of rotation, blade arc and arc setbacks, provisions and sureties for removal, tower access limitation, and shadowing.
- (B) Districts Permitted: WECS are permitted in any zoning district except residential districts, conservation districts and park districts.
- (C) Ornamental Wind Devices: Ornamental wind devices that are not WECS shall be exempt from this section but shall conform to all other provisions of this code.
- (D) Interconnection With Utility Company: No WECS shall be interconnected with a local electrical utility company until the utility company has reviewed and commented upon it. The interconnection of the WECS with the utility company shall adhere to the national electrical code as adopted by the city.
- (E) Warranty: The applicant shall provide documentation or other evidence from the dealer or manufacturer that the WECS has been successfully operated in atmospheric conditions similar to the conditions within Burnsville. The WECS shall be warranted against any system failures reasonably expected in severe weather conditions.
- (F) Design Standards:
- 1. All WECS shall comply with all applicable state and federal regulatory standards including the state building code and federal aviation administration (FAA) requirements; and Minnesota pollution control agency (MPCA) and environmental protection agency (EPA) regulations. Drawings and engineering calculations shall be certified by a Minnesota licensed engineer.
- 2. Any WECS utilizing a tower, pole or self-supporting structure shall be sited so that the tower is located a distance equal to or greater than its height from the nearest property line. If attached to a roof and/or building, the WECS apparatus shall be sited a distance equal to or greater than the height of the building plus the height of the WECS apparatus. In no instance shall a WECS encroach on the minimum principal structure setbacks.
- 3. No more than one WECS shall be permitted per lot or parcel.

- 4. Freestanding and/or tower WECS shall only be permitted on a lot/parcel with a minimum lot size of five (5) acres. WECS may be placed on the roof of any principal structure on a lot with a minimum lot size of two (2) acres.
- 5. WECS shall not encroach on public drainage, utility, roadway or trail easements.
- 6. Maximum height shall be fifteen feet (15') if attached to or placed on a roof of the principal structure and one hundred twenty feet (120') if freestanding wind turbine/tower.
- 7. WECS shall comply with Minnesota pollution control agency standards outlined in Minnesota rules, chapter 7030 (as amended) at all property lines.
- 8. Each WECS shall be equipped with both a manual and automatic braking device capable of stopping the WECS operation in high winds (40 miles per hour or greater).
- 9. The following design provision shall also apply to all freestanding WECS:
 - a. Freestanding WECS structures shall be of monopole tower design only.
 - b. Blade arcs created by the WECS shall have a minimum of thirty feet (30') of clearance over any structure or tree within a two hundred foot (200') radius.
 - c. To prevent unauthorized climbing, WECS towers must comply with one of the following provisions:
- (1) Tower climbing apparatus (on the tower) shall not be located within twelve feet (12') of the ground.
- (2) A locked anticlimb device shall be installed on the tower.
- (3) Tower shall be enclosed by a locked, protective fence at least six feet (6') in height.
 - (G) Abandoned Towers: Any WECS tower, turbines or apparatus which is not used for six (6) successive months shall be deemed abandoned and shall be removed, including accessory facilities, from the property at the expense of the property owner. (Ord. 1231, 4-5-2011)