Chapter 19.62 – SMALL WIND ENERGY GENERATORS

Section 19.62.010 - Declaration of Intent

To promote the safe, effective and efficient use of small wind energy systems installed to reduce the on-site consumption of utility supplied electricity.

Section 19.62.020 – Findings

Whitman County finds that wind energy is a renewable and non-polluting energy resource and its conversion to electricity will reduce our nation's dependence on non-renewable energy resources and decrease air and water pollution that results from the use of conventional energy sources. In Washington State, small wind energy systems, designed and installed for onsite home, farm and small commercial use are an excellent technology to help achieve the goal of increased local electricity generation, increase consumer energy independence and create non-polluting energy.

Therefore, it is necessary to standardize and streamline the proper issuance of building permits for small wind energy systems so that this clean, renewable energy source can be utilized in a cost-effective and timely manner.

Section 19.62.030 – Definitions

Small Wind Energy System: A wind energy conversion system consisting of a wind turbine(s), a tower(s), and associated control or conversion electronics, which has a rated capacity of not more than 100 kw., a turbine height no greater than 125 feet, and which is intended to primarily reduce on-site consumption of utility power.

Turbine Height: The distance measured from grade level of the tower foundation to the highest point of the turbine rotor plane.

Section 19.62.040 – Regulatory Framework

Small wind energy systems shall be a permitted use in all zoning classifications in Whitman County subject to the following requirements outlined in Table 4.1:

Lot Size Acres	Number of Towers Allowed	Tower Type	Maximum Total Height in Feet	Maximum KW per Unit	Maximum KW per Site
0-1/2	0	--	--	--	--
Greater than ½ - 1½	1	Monopole	60 (a)	5	5
Greater than 1½ - 2	2	Monopole	75	10	20
Greater than 2 – 5	2	Monopole, Guyed, Lattice	100	10	20
5+	2 or plus 1 per acre in excess of 5 acres	Monopole, Guyed, Lattice	125	100	100

a) Total height may be increased to 75 ft., but must not exceed 60 ft. above the highest elevation on the parcel.

Note: Compliance with Table 4.1 does not relieve owner from other restrictions established in this ordinance.

Section 19.62.050 – General Requirements for Small Wind Energy Systems

1. Setbacks:
   a. For parcels greater than ½ acre to 1½ acres in size, no part of the wind system structure, including guy wire anchors, may extend closer than 10 feet to the side and rear property lines if adjacent land is open farmland. If there is an adjacent occupied structure to the side or rear, the small wind energy system must be set back a minimum of 1.2 times the turbine height to that occupied structure. If the owner of the adjacent occupied structure has no objection to the small wind system being placed closer to his/her occupied structure, a waiver may be signed and filed with the County Auditor. The front setback to the public road shall be a minimum of 1.2 times the turbine height.

   b. For parcels greater than 1½ acres to 2 acres in size, no part of the wind system structure, including guy wire anchors, may extend closer than 10 feet to the side and rear property lines if adjacent land is open farmland. If there is an adjacent occupied structure to the side or rear, the small wind energy system must be set back a minimum of 1.2 times the turbine height to that occupied structure. If the owner of the adjacent occupied structure has no objection to the small wind system being placed closer to his/her occupied structure, a waiver may be signed and filed with the County Auditor. The front setback to the public road shall be a minimum of 1.2 times the turbine height.

   c. For parcels greater than 2 acres to 5 acres in size, a small wind energy system shall be set back a minimum of 1.2 times the turbine height from all property lines unless an appropriate waiver or easement is obtained from the adjacent landowner. This waiver or easement shall be filed with the County Auditor.

   d. For parcels greater than 5 acres in size, each small wind energy system shall be set back a minimum of 1.2 times the turbine height from all property lines unless an appropriate waiver or easement is obtained from the adjacent landowner. This waiver or easement shall be filed with the County Auditor.

   e. Each small wind energy system shall be set back from the nearest above-ground public or private non-participating electric power line or telephone line a distance no less than 1.2 times the turbine height, determined from the existing power line or telephone line.

2. Tower Height: The total height of a small wind energy system shall not exceed the maximum heights established in Table 4.1 without a conditional use permit.

3. Visual Appearance; Lighting; Power Lines:

   a. Wind turbines shall be painted a non-reflective, non-obtrusive color. Small wind energy towers shall maintain galvanized steel, brushed aluminum, white or grey finish, unless FAA standards require otherwise.
   b. No small wind energy system shall be artificially lighted, except to the extent required by the FAA or other applicable authority.
   c. No small wind energy system shall be used for displaying any advertising except for reasonable identification of the manufacturer.

d. Electrical controls, control wiring and power lines shall be wireless or underground after reaching grade from the turbine and extending away from the base of the tower. Wiring may be exposed vertically from the turbine to the base of the tower.

4. Tower Type: Guyed, lattice and monopole towers are allowed to support wind turbines per the limitations as outlined in Table 4.1.

5. Sound Levels and Measurement: During construction and operations, a small wind energy system shall comply with applicable state noise standards. Whitman County will apply the residential Class A environmental designation for noise abatement (EDNA) requirement in WAC 173-60-030 when measuring noise at receiving occupied structures from small wind turbines.

6. Minimum Ground Clearance: The rotor blade tip of any small wind generating system shall, at its lowest point, have ground clearance of no less than 15 feet as measured at the lowest point of the arc of the rotor blade.

7. Safety:

   a. Monopole towers shall not be climbable up to 15 feet above ground level. A lattice type tower shall have a fence around it that is a minimum of six feet in height.
   b. All electrical equipment shall be safely and appropriately enclosed from unauthorized access by means such as barrier fencing, equipment cabinetry or similar means. All access doors to electrical equipment shall remain locked when not attended.
   c. Appropriate warning signage (e.g. electrical hazards) shall be placed on all small wind energy systems.
   d. All small wind energy systems shall be equipped with manual and automatic over speed controls to limit rotation of the rotor blades to a speed below the designed limits of the system.

8. Compliance with International Building Codes: All small wind energy systems shall comply with the Washington State Building Code and adopted International Building Code.

   a. An application for a small wind energy system shall include standard drawings and an engineering analysis of the system's tower, showing compliance with the Washington State Building Code and International Building Code. The engineering must include a complete analysis of the tower, the tower foundation and the connection of the tower to the foundation. The engineering analysis must be completed by a licensed engineer, certified to practice in the State of Washington.

9. Compliance with National Electrical Code: All small wind energy systems shall comply with requirements per the Washington State Department of Labor & Industries (L&I) and the current adopted edition of the National Electric Code (NEC).

10. Compliance with FAA Regulations: All small wind energy systems must comply with all regulations of the Federal Aviation Administration (FAA), including any necessary approvals for installations close to airports.

11. Other Federal, State and Local Requirements:

    a. All small wind energy systems shall comply with all current adopted Federal, State and Whitman County laws, codes and policies.
    b. All small wind energy systems that are connected to the utility grid shall comply with the requirements of Chapter 80.60 of the Revised Code of Washington, Net Metering of Electricity.

12. Removal of Defective or Abandoned Small Wind Energy Systems: Any small wind energy system found to be unsafe by the building official shall be repaired by the landowner to meet federal, state and local safety standards or removed within three (3) months. If any small wind energy system is not operational for a period of 12 consecutive months or more, the County will request by registered mail that the landowner provide corrective action. The landowner will have 45 days to respond. In such a response, the landowner shall set forth reasons for the operational difficulty and provide a reasonable timetable for corrective action. If the County deems the timetable for corrective action as unreasonable, it must notify the landowner and such landowner shall remove the turbine at his or her own expense within 120 days of receipt of notice from the County. The County shall have the authority to pursue legal action if necessary.
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