



washington state department of
community, trade and economic development

Notification for 60-Day Review of Comprehensive Plan Amendment

Pursuant to RCW 36.70A.106, the following hereby provides 60-day notice of intent to adopt the following comprehensive plan amendments.

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|---------------------------|---|
| Jurisdiction Name: | Kittitas County |
| Address: | 411 N Ruby, Ste 1, Ellensburg WA 98926 |
| Date: | 10/14/2009 |

| | |
|------------------------------------|---|
| Contact Name for Ordinance: | Jan Ollivier |
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|---|---|
| Brief Description of the Proposed Comprehensive Plan Amendment: <input type="checkbox"/> Check the box if this is Supplemental Material for an existing amendment already submitted to CTED. Please also provide the date submitted and/or CTED Material ID number. | CP-09-04 Residential Wind Energy Generator Policy Adding new KCC 17.61.050 |
| Planned Public Hearing Date: | December 1, 2009 |
| Planned Date of Adoption: | December 15, 2009 |
| Please Attach a Draft of the Proposed Amendment. (Attachment Required) | |

NEW Section 17.61B

Small Wind Energy Systems

17.61B.010 Purpose

17.61B.020 Definitions

17.61B.030 Applicability

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17.61B.010 Purpose

The purpose of this Chapter is to facilitate the installation and construction of small wind energy systems in Kittitas County for private landowners, subject to reasonable restrictions to protect life, health and safety.

17.61B.020 Definitions

As used in this Chapter the following terms shall have the meanings indicated:

1. "County" means Kittitas County Government.
2. "FAA" means the Federal Aviation Administration.
3. "Small Wind Energy System (SWES)" means a wind energy conversion system which converts wind energy into electricity through the use of a wind turbine generator, and includes any of the following to accomplish this production: a wind turbine, rotor blades, tower, foundation, and associated control or conversion electronics, which has a rated capacity of not more than 20kW and which is intended to primarily reduce on-site consumption of utility power.
4. "Wind Turbine Total Height" means the distance measured from the grade plane to the tip of the rotor blade when extended vertical to its highest point.
5. "Wind Turbine" means any of the parts of the small wind energy system including the rotor blades, generator, housing and tail.

17.61B.030 Applicability

The requirements set forth in this Chapter shall govern the siting and permitting of small wind energy systems used to generate mechanical or electrical energy to perform work, and which may be connected to the utility grid pursuant to the Revised Code of Washington, Chapter 80.60 (Net Metering of Electricity), serve as an independent source of energy, or serve as part of a hybrid system.

The requirements of this Chapter shall apply to Small Wind Energy Systems (SWES) proposed after the effective date of this Chapter. Any SWES for which a required permit has been properly issued prior to the effective date of this Chapter shall not be required to meet the requirements of this Chapter; provided, however, that any such pre-existing SWES that are not producing energy for a continuous period of twelve (12) months shall meet the requirements of this Chapter prior to production of energy. No modification that increases the height of the system or significantly increases its output shall be allowed without full compliance with this Chapter.

17.61B.040 Regulatory Framework

1. A SWES may be installed pursuant to KCC 17.61.010 as a "minor alternative energy system" for the production of energy that:
 - a. Uses as its fuel wind;
 - b. Is located on the power beneficiary's premises;
 - c. Is intended primarily to offset part or all of the beneficiary's requirements for electricity; and
 - d. Is secondary to the beneficiary's use of the premises for other lawful purposes.
2. Pursuant to KCC 17.61.020, minor alternative energy facilities shall be a permitted use in all zoning districts, provided the following limitations shall apply to wind turbines located within urban growth areas:
 - a. Wind turbines shall not exceed a total height of 75 feet above grade; and
 - b. Rotors shall not exceed 30 feet in diameter.

3. Pursuant to the limitations of KCC 17.61.010 and KCC 17.61A.020, only one wind turbine, with a maximum height of 120 feet above grade, shall be allowed to be constructed by the same person or group of persons on the same or adjoining tax parcels.
4. A SWES may be installed in any land use zone of Kittitas County per the requirements as outlined in Table 5.3.

TABLE 5.3

| LOT SIZE | # TOWERS | POLE TYPE | TOTAL HEIGHT ² | SETBACKS ³ |
|---|----------|--------------------------|---------------------------|-----------------------|
| INSIDE UGA ¹ (minimum 1 acre) | 1 | MONOPOLE | MAXIMUM 75 FEET | 1.2 TIMES HEIGHT |
| 1-3 ACRES OUTSIDE UGA | 1 | MONOPOLE | MAXIMUM 75 FEET | 1.2 TIMES HEIGHT |
| 3-5 ACRES OUTSIDE UGA | 1 | MONOPOLE, GUYED, LATTICE | MAXIMUM 100 | 1.2 TIMES HEIGHT |
| >5 ACRES OUTSIDE UGA | 1 | MONOPOLE, GUYED, LATTICE | MAXIMUM 120 | 1.2 TIMES HEIGHT |

¹Rotors shall not exceed 30 feet in diameter in the UGA.

²Total Height shall be the distance measured from the grade plane to the tip of the rotor blade when extended vertical to its highest point.

³Each SWES shall be setback from the nearest property line a distance no less than 1.2 times the Total Height, unless appropriate easements are secured from adjacent property; or other acceptable mitigation is approved by the Zoning Administrator or Board of Adjustment.

17.61B.050 General Requirements

1. The following visual appearance, lighting and power-line requirements shall apply to all SWES.
 - a. Wind Turbines shall be painted a non-reflective, non-obtrusive color. Small wind energy towers shall maintain galvanized steel, brushed aluminum, white or gray finish, unless FAA standards require otherwise.
 - b. At SWES sites, the design of buildings and related structures shall use materials, colors, textures, screening and landscaping that will blend the SWES to the natural setting and the existing environment.
 - c. No SWES shall be artificially lighted, except to the extent required by the FAA or other applicable authority.
 - d. No SWES shall be used for displaying any advertising except for reasonable identification of the manufacturer.
 - e. 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.
2. Guyed, lattice and monopole towers are allowed to support Wind Turbines per the limitations as outlined in Table 5.3. Lattice type towers shall not include any horizontal members; all lattice tower members must be angled to prevent bird roosting.
3. The following setback and tower height requirements shall apply to all SWES.
 - a. The total Height of a SWES shall not exceed the limitations as established in Table 5.3.
 - b. Property lines: Each SWES shall be set back from the nearest property line a distance no less than 1.2 times the Total Height as established in Table 5.3.
 - c. At the time of application, each SWES shall be set back from the nearest non-participating building structure (i.e., buildings on neighboring land) a distance no less than one and a half (1.5) times its Total Height.
 - d. Communication and electrical lines: Each SWES 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 1.5 times its Total Height, determined from the existing power line or telephone line or easement. Each SWES shall be set back from the nearest above-ground public or private participating utility a distance as specified by said utility.

- e. Setbacks shall be measured to the outer edge of the base of the SWES structure towers. Guy cables and other accessory support structures may be located within setback areas.
- 4. Audible sound due to SWES operations shall not exceed (55) dBA for any period of time, when measured at the property line of any abutting property. The sound level may, however, be exceeded during short-term events such as utility outages and/or severe wind storms.
- 5. The rotor blade tip of any Wind Turbine 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 blades.
- 6. The following safety requirements shall apply to all SWES.
 - a. Wind Turbine towers shall not be climbable up to 15 feet above ground level.
 - b. All electrical equipment shall be safely and appropriately enclosed from unintentional access by means such as barrier fencing, equipment cabinetry or similar means. All access doors to electrical equipment shall remain locked unless access is necessary.
 - c. Appropriate warning signage (i.e., electrical hazards) shall be placed on SWES equipment.
 - d. All SWES shall be equipped with manual and/or automatic overspeed controls to limit rotation of the rotor blades to a speed below the designed limits of the system.
 - e. Any SWES 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 3 months.
- 7. All SWES shall comply with all current adopted Kittitas County Codes and Ordinances and all other current adopted Federal and State requirements.
 - a. All SWES must comply with all regulations of the Federal Aviation Administration (FAA), including any necessary approvals for installations close to airports.
 - b. All SWES shall comply with all applicable sections of the Washington State Building Code and adopted International Building Codes.
 - c. All SWES shall comply with requirements per the Washington State Department of Labor & Industries (L&I) and the current adopted edition of the National Electrical Code (NEC).
 - d. All SWES 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.

17.61B.060 Permit Application Requirements

In addition to all other Building Permit Application requirements, the following items shall be provided by the applicant for a SWES Building Permit Application.

- 1. Description of the project including specific information on the type, size, rotor material and diameter, rater power output, performance, safety, and maximum noise characteristics of the system, including name and address of the manufacturer, model and serial number.
- 2. A site plan showing:
 - a. The planned location of the SWES on the parcel and type and location of any associated support structures.
 - b. The location of and distance to all SWES setback lines, property lines, roads, adjacent properties, ROW's, any overhead utility and/or communication lines on the subject property and adjacent properties within 300 feet of the SWES base, and easements.
 - c. The location of all buildings on the parcel and immediately adjoining parcels, including the building(s) use.
- 3. A scaled representation of the SWES showing the system height and rotor diameter and evidence that the proposed height does not exceed the height recommended by the manufacture of the system or any limitation contained in this Chapter.
- 4. Structural drawings and an engineering analysis from the SWES manufacturer or a licensed professional showing compliance with the current adopted Washington State Building Code and International Building Code. The engineering analysis 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. A "wet" stamp may not be required, provided that the engineering analysis and accompanying drawings demonstrate that the system is designed to meet the most stringent requirements at the site for wind speed and exposure, seismic class, and the weakest soil class, with a soil strength of not more than 1,000 pounds per square foot.
- 5. Description of emergency and normal shutdown procedures.

6. If a roof-mounted or wall-mounted system is proposed, the roof or wall of the structure shall be certified by a licensed professional engineer to be sufficiently sturdy to support the proposed SWES under all applicable design requirements.
7. If a SWES is intended to be connected to the utility grid, the applicant must provide written documentation that the provider of electrical service to the property has been notified of and agrees to the intent of the applicant to install an interconnected electricity generator to the electricity grid.

17.61B.060 Abandonment Process

1. At such time that a SWES is scheduled to be abandoned or discontinued, the owner will notify the Building Official by certified U.S. mail of the proposed date of abandonment or discontinuation of operations.
2. Upon abandonment or discontinuation of use, the owner shall physically remove the SWES within 90 days from the date of abandonment or discontinuation of use. This period may be extended at the request of the owner and at the discretion of the Building Official. The term "physically remove" shall include, but not be limited to:
 - a. Removal of the wind turbine and tower and related above grade structures.
 - b. Restoration of the location of the SWES to its natural condition, except that any landscaping, grading or below-grade foundation may remain in the after-conditions.
3. In the event that an owner fails to give such notice as required in '1' above, the SWES shall be considered abandoned or discontinued if it has been out-of-service for a continuous 12-month period. If any SWES is not operational for a period of 12 consecutive months, the Building Official may issue a Notice of Abandonment to the owner of the SWES. The owner shall have the right to respond to the Notice of Abandonment within 30 days from the Notice receipt date. The Building Official shall withdraw the Notice of Abandonment and notify the owner that the Notice has been withdrawn if the owner provides information that demonstrates that the SWES has not been abandoned.
4. If the owner fails to respond to the Notice of Abatement or if after review by the Building Official it is determined that the SWES has been abandoned or discontinued, the owner of the SWES shall remove the SWES at the owner's sole expense within 3-months of receipt of the Notice of Abandonment. If the owner fails to physically remove the SWES after the Notice of Abandonment procedure, the County shall have the authority to enter the subject property and physically remove the SWES and to recover costs associated with that removal from the property owner.
5. As a condition of initial SWES permit approval, the applicant may be required to provide a form of surety (i.e., post a bond, letter of credit or establish and escrow account or other means) at the time of building permit approval to cover costs of the removal in the event the County must remove the facility. The applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified professional. The amount shall include a mechanism to accommodate the rate of inflation of 15 years.