

RENEWABLE UTILITIES FACILITIES

PURPOSE AND INTENT:

The purpose and intent of this chapter is to promote safe, effective use of residential alternative energy facilities installed to reduce the on site consumption of utility supplied electricity and to provide a regulatory scheme for the construction and operation of alternative energy facilities in the city, subject to reasonable restrictions, which will preserve scenic assets and protect the public health, safety, and welfare.

DEFINITIONS:

1. **RENEWABLE ENERGY FACILITIES SYSTEMS (RES):** systems where energy is produced from sources like the sun and wind.

RESIDENTIAL SOLAR COLLECTOR SYSTEM: A net metered solar collector system, as defined in this chapter, that produces no more than twenty-five (25) kW.

2. **ROOFTOP WIND ENERGY FACILITY:** A wind energy facility mounted to the top of a structure to which it is an accessory. Overall height is measured from grade to highest point on the WEF.

3. **SOLAR COLLECTOR MOUNTS:** Mounting arrangements that hold various devices for the absorption of solar radiation for the heating of water or buildings or the production of electricity.

A. **Building Integrated Photovoltaics (BIPV) Mount:** A solar collector system that is integrated into the structure of a building. Common BIPV applications include carports, awnings, and curtain walls.

B. **Ground Mount:** A solar collector system where an array is mounted onto the ground. The most common type of ground mount is a wedge structure constructed from steel supports anchored in concrete footings. The remainder of the structure is built from aluminum or galvanized steel.

C. **Pole Mount:** A solar collector system that consists of an array that is mounted on top of a single steel pole, which is ground mounted. This type of installation can be manually adjustable, so that the pitch of the array at different times of the year can be changed.

D. **Roof Mount:** A solar collector system with an array of solar panels located on the roof of a structure. In most cases this array will be attached directly to the structural members of the building, does not extend past the plane of the roof, nor blocks solar access to neighbors.

5. **SOLAR COLLECTOR SYSTEM:** A system that is comprised of photovoltaic collectors designed to convert solar energy into electric energy or plate type collectors designed to use solar energy to heat air, water, or other fluids for use in hot water or space heating or other applications. A solar collector system's primary purpose shall be limited to supplying or offsetting energy needs of residences and businesses and shall not exceed the residential peak production capabilities as defined by Idaho Power.

6. WIND ENERGY FACILITY (WEF): A wind energy conversion system consisting of a turbine or generator and typically blades and a tower and associated control or conversion electronics which provides electrical power intended for residential or farm and associated outbuildings and on site uses.

7. WIND ENERGY FACILITY TIP HEIGHT: The height above grade of the fixed portion of the tower plus the blade radius at its highest point.

ZONING REGULATIONS:

The placement, use or modification of a Renewable Energy System as allowed by law within the City of Carey by a permittee, is subject to the provisions of this title.

A. Rooftop Wind Energy Facilities (WEF):

1. One or more rooftop WEF up to an overall height of forty feet (40') is a conditional use within districts A/RL and LI subject to section 9-3A-6, "Conditional Use Permit Procedure", of this chapter.

2. No rooftop WEF shall be permitted within the RH, C, or AV

B. Freestanding Wind Energy Facilities: No freestanding WEF shall be permitted within A/RL, AV, C, LI or RH Districts.

C. Wind Energy Facilities Permitted Uses:

1. Installation of an anemometer, or related devices, for not less than twelve (12) months for the purpose of determining feasibility of a wind energy generating site. The anemometer may not be installed at a WEF height greater than permissible for that zoning district.

2. General repair, maintenance, replacement or upgrade of equipment of an existing WEF provided that any equipment replaced does not violate the conditions of administrative or conditional use permit approval.

3. All WEF systems will be subject to setback requirements as outlined by their zoning district.

D. Solar Collector Systems: The placement, use or modification of a solar collector system shall be an allowed use in all zoning districts, provided the system meets zoning standards set out in subsections 1 through 8 of this section:

1. Photovoltaic solar collector panels are certified by the Solar Collector And Certification Corporation (SRCC);

2. Collector system panels and mounts are installed per manufacturer's specifications;

3. BIPV and roof mounted solar panels systems will be enabled with rapid shut-off capabilities.

4. A licensed engineer has reviewed mounting plans to ensure the roof's structural integrity is maintained and that it meets the international building code standards for wind loads and has provided a structural analysis report included in the Renewable Energy Permit.

5. BIPV and roof collector mounted panels do not exceed five feet (5') from the top of a structure.

6. Ground and pole mounted solar collectors are firmly anchored and:

a. Do not exceed fifteen feet (15') above grade ¹ ; or

b. Collector panels located on isolated slopes do not exceed twenty feet (20') above grade

7. All solar collection systems will be subject to the setback requirements as outlined in their specific zoning district.

8. Repair, maintenance, replacement or upgrade of equipment to an existing solar collecting system installed prior to adoption of this chapter shall not be required to obtain a solar collector permit. The following shall be found to be true prior to issuance of a solar collector permit:

Notes

- 1 1. Pole mounts need 4 feet of snow clearance. Panels are on average 5 feet x 3 feet; sometimes they will stack 2 panels on 1 pole mount. Jon Riley of Whole Energy Solar indicates the majority of pole mounted systems will not need to be more than 15 feet high, as measured from the top of the panel.

CONDITIONAL USE PERMIT PROCEDURE:

A. Whenever there is a request that requires a Conditional Use Permit for an alternative energy system, the Commission shall make recommendations to the Council which shall make the final decision. Both entities shall hold a duly noticed public hearing on the application at its earliest convenience. The procedures as outline in Chapter 12 of this ordinance shall be followed.

B. The Conditional Use Application shall be submitted in tandem with the Renewable Energy Permit.

RENEWABLE ENERGY PERMIT PROCEDURE:

Application Form and Fee: Application for an alternative energy system shall be made on a form furnished by the administrator and shall be filed by the applicant(s). Fees resulting from the technical review by the city engineer or other qualified person as designated by the city are the responsibility of the applicant, and shall be paid prior to approval. No application shall be certified as complete unless it includes the following minimum information in sufficient detail for the Building Department Representative to determine compliance with the standards of evaluation as set forth in this chapter. Based upon site specific circumstances, and upon

appropriate findings, the city staff may require additional information in order to render a decision on an application. Further, the administrator may waive certain submittal requirements based upon site specific condition and appropriate findings.

A. Site Plan: Site plan drawn to scale of no less than one-inch equals twenty feet (1"=20'), specify the following:

1. Standard drawings of the WEF energy structure, if applicable, including design and dimensions of tower, base, footings, and guywire anchors. Overall height from natural grade to tip of extended blade, location of substation(s), electrical cabling from WEF to the substation(s), ancillary equipment, buildings, and structures shall be included.

1. Depiction and explanation of land use on subject property and adjacent property including location and height of surrounding structures, power transmission lines, and trees.

B. Structural Analysis:

1. The structural analysis is a certification that the structure wall and/or existing roof members are adequate to support the weight of the alternative energy system in addition to base design criteria as outlined in IBC, NDS, ASCE/SEI, CBC, IRC and the latest edition of the building codes for the State of Idaho. This analysis must be conducted by a professionally licensed engineer.

C. ADMINISTRATIVE REVIEW OF APPLICATION:

The administrator shall review the application submittal for compliance to the submittal requirements set forth herein. In the event the application is not complete, the administrator shall advise the applicant of the corrective action needed. In the event the data required for the administrator to certify the application as complete is not filed within one year (365 days) from the date the application as complete is not filed with the City of Carey building department, the application shall be null and void. One time only, the administrator, at his/her discretion, may approve one extension of time within which materials may be submitted upon receipt of a written request by the applicant giving in detail the reason additional time is required to file said materials under this section, said approval shall be in writing and for a specific period of time not to exceed one year (365 days).

STANDARDS OF EVALUATION:

The applicant has the burden of demonstrating compliance with each of the standards of evaluation as set forth in this section. The commission or hearing examiner shall review the application and determine if there is substantial evidence in the record to make a finding that either the proposal complies with each of the following standards of evaluation, or the specific standard is not applicable to the application:

A. Administrative Standards:

1. Compliance With International Building Code
2. Compliance With National Electric Code

3. Utility Notification: No renewable energy system shall be installed until evidence has been given that the utility company has been informed of the customer's intent to install an interconnected customer owned generator. Off grid systems shall be exempt from this requirement.

4. Approved Wind Energy Facilities: WEF equipment must be approved under an emerging technology program such as the California energy commission, international electrotechnical commission or any other small wind certification program recognized by the American Wind Energy Association (AWEA) or the U.S. department of energy.

5. Federal Aviation Administration (FAA): WEF must comply with applicable FAA regulations and shall not be permitted within the airport vicinity overlay.

6. Siting Requirements: All parts of a REF, including guywire anchors, are subject to zoning setbacks. No REF shall be sited closer to a neighboring residence or neighboring building envelope than it is to the subject property's residence. Freestanding WEF shall be located a minimum of 1.1 times the overall height of the WEF from all inhabited structures on subject property, property lines, and roads. Wind energy facility blades shall be higher than twenty feet (20') above the ground. No blades may extend over parking areas, playgrounds, driveways or sidewalks.

7. Noise Requirements: Noise emitted from any REF shall not exceed sixty (60) decibels as measured from the nearest adjacent property line.

B. Design Standards:

1. Renewable energy facilities shall be a nonobtrusive color.

2. Renewable energy facilities shall not be artificially lit.

3. On site transmission and power lines between REFs shall, to the maximum extent practicable, be placed underground.

4. A clearly visible warning sign concerning voltage shall be placed at the base of all pad mounted transformers and substations.

5. Wind energy facilities shall not be used for displaying advertising.

6. If the applicant or landowner with respect to an application for a conditional use permit under this section is the state of Idaho, or any agency, board, department, institution, or district thereof, the commission or the board, in addition to all other applicable standards and criteria hereunder, shall take into account the plans and needs of the state, or any agency, board, department, institution or district thereof, as required by Idaho Code 67-6528.

9-3A-11: ABANDONMENT:

A. An RES that is out of service for a continuous one-year period will be deemed to have been abandoned. The administrator may issue a notice of abandonment to the owner of an AES that is deemed to have been abandoned. The owner shall have the right to respond in writing to

the notice of abandonment setting forth the reasons for operational difficulty and providing a timetable for corrective action, within thirty (30) days from the date of the notice. The administrator shall withdraw the notice of abandonment and notify the owner that the notice has been withdrawn if the owner provides information that demonstrates the wind energy system has not been abandoned.

B. If the RES is determined to be abandoned, the owner shall remove the RES at the owner's sole expense within three (3) months of the date of the notice of abandonment. If the owner fails to remove the RES, the administrator may pursue a legal action to have the system removed at the owner's expense.