CHAPTER 17

# **SOLAR**

SECTION:

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9-17-1: **PURPOSE**: The purpose of this chapter is to provide, through zoning provisions, for the reasonable development of residential solar energy systems while providing adequate health, safety and general welfare protections of Owyhee County residents. Accordingly, it is necessary and appropriate to adopt reasonable requirements for solar energy system development that helps minimize potential impacts on the residents of Owyhee County. For the purpose of this ordinance, all solar installations or expansions will be considered cumulatively per parcel whether roof mounted or ground mounted.

9-17-2: **DEFINITIONS**: For the purposes of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning:

**Array**: Any number of electrically connected photovoltaic (PV) modules providing a single

electrical output.

**Accessory Residential Solar:** Solar systems up to 25 kW intended to offset residential electrical usage demand.

**Customer Generation**: An arrangement with a local electric utility that allows customers to

receive a credit for surplus electricity generated by certain renewable energy systems.

**Ground**-**Mounted System**: A solar photovoltaic system mounted on a structure, pole or

series of poles constructed specifically to support the photovoltaic system and not attached to

any other structure.

**Kilowatt (kW)**: A unit of electrical power equal to 1,000 Watts, which constitutes the basic

unit of electrical demand. A watt is a metric measurement of power (not energy) and is the rate

(not the duration) at which electricity is used. 1,000 kW is equal to 1 megawatt (MW).

**Photovoltaic (PV)**: A semiconductor-based device that converts light directly into electricity.

**Roof-Mounted System:** A solar system attached to any part or type of roof on a building or structure that is either the principal structure or an accessory structure on a recorded parcel.

**Solar Energy System (SES):** An energy system of which the primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means. Very small accessory systems of 2 kW or less shall not be considered a solar energy system for the purpose of permitting except when cumulatively they exceed other provisions of this ordinance.

**Solar Farm**: A commercial facility that converts sunlight into electricity, whether by photovoltaics (PV), concentrating solar thermal devices (CST), or other conversion technology, for the purpose of sale of generated electricity.

**Solar Photovoltaic (PV) Related Equipment**: Items including a solar photovoltaic cell,

panel or array, lines, mounting brackets, inverters, framing, and foundations used for or intended to be used for collection of solar energy.

**Solar Photovoltaic (PV) System**: A solar collection system consisting of one or more

building- and/or ground-mounted systems, solar photovoltaic cells, panels or arrays and solar

related equipment that rely upon solar radiation as an energy source for collection, inversion,

storage and distribution of solar energy for electricity generation.

**Tracking System**: A number of photovoltaic modules mounted such that they track the

movement of the sun across the sky to maximize energy production, either with a single-axis or

dual-axis mechanism.

9-17-3: **ZONING CLASSIFICATIONS**: Subject to the provisions of this chapter:

1. Solar energy systems producing less than 10kW shall be considered an allowed use by right within zones A, R, M, C, and I, if they are not covered by an airport or airspace overlay zone, and are subject to an administrative permit and the standards listed herein.
2. Systems producing more than 10kW shall be allowed only by Administrative permit, or conditional use permit approval as outlined in this chapter.

9-17-4: **ADMINISTRATIVE PERMIT REQUIREMENT**:

1. No solar energy system, or an addition to an existing system, shall be constructed or located within Owyhee County unless an administrative permit under this chapter has been issued by the zoning official approving the construction for a solar energy system.
2. Each application shall be submitted with the fee established pursuant to resolution of Owyhee County as adopted. Such fee shall be reasonably related to the cost of administering this chapter.
3. Applications for roof mounted solar energy systems of any square footage up to 25 kW, in zones A, C, I, M, not covered by an airport/airspace overlay, and that meet the design requirements of this ordinance shall be by administrative approval of the zoning official and shall not require a conditional use permit. However, nothing in this ordinance is intended to allow incremental increases over time, or multiple small systems in order to avoid the provisions of this ordinance.
4. Applications for ground mounted solar energy systems of 800 square feet or less, in zones A, C, I, M, not covered by an airport/airspace overlay, and that meet the design requirements of this ordinance shall be by administrative approval of the zoning official and shall not require a conditional use permit.
5. Solar energy system components must have an anti-reflectivity coating to help reduce the amount of glare from the panels.
6. Historic Buildings - Solar energy systems on buildings within designated historic districts or on locally designated historic buildings (exclusive of State or Federal historic designation) must receive approval of the Historic Preservation Commission, consistent with the standards for solar energy systems on historically designated buildings published by the U.S. Department of Interior.

9-17-5: **ADMINISTRATIVE PERMIT APPLICATION**:

A. At the time of administrative permit application, the applicant shall provide to the administrator:

1. A complete application form including required submittals as outlined on the application form.

2. A narrative describing an overview of the project including the number of kW to be produced, total square footage of solar panels, and the location, number and description of accessory equipment and structures to the extent known.

3. A site plan of the property that depicts the locations of all existing and proposed structures (including solar arrays, inverters, transformers, electrical substations, and buildings), property lines, rights-of-way, roads, required setbacks, and visual buffers.

4. Site installation acknowledgement affidavit.

5. Right to Farm Affidavit

6. A decommissioning plan shall be required to ensure that facilities are properly removed after their useful life. Decommissioning of solar panels must occur in the event they are not producing power for 12 consecutive months. The plan shall include the following:

a. the name, address, telephone number, and e-mail address of the person(s) or entity(ies) responsible for implementing the decommissioning plan;

b. a statement of conditions that require the decommissioning plan to be implemented;

c. as part of decommissioning, a removal plan that identifies all structures, components, and non-utility owned equipment that shall be removed;

e. as part of decommissioning, a restoration plan to return the property to its condition prior to the installation of the SES or to some other condition reasonably appropriate for the designated land use after the SES is removed; and

f. a timeline to complete decommissioning.

9-17-6: **SITE DESIGN AND INSTALLATION**:

1. Ground-or pole-mounted solar energy systems shall not exceed 25 feet in height when oriented at maximum tilt. Systems that exceed this height will only be allowed by conditional use permit.
2. For rooftop fire safety, required setbacks of 3 feet from roof ridges, and 1.5 feet from valleys and headwalls shall be met to allow fire fighter access.
3. Setback distances for ground mounted systems shall be at least 50’ from property lines, and 100’ from public roads.
4. Solar energy systems proposed to be located within 1,000 feet of an airport, within approach zones of an airport, or in an airport or airspace overlay zone will be required to complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT).
5. Lighting: Any lighting at the solar installation site, either temporary or permanent, shall utilize motion sensors and be directed downward and inward toward the solar installation so as to minimize the glare on public roads and adjacent properties.

Proposed fee schedule below. Fees would need to be adopted into the official fee schedule

|  |  |  |
| --- | --- | --- |
| Non-commercial net metering projects: Size | Roof Mount  | Ground mounted tracking  |
|   |   |   |
| Up to 800 Sq. ft but less than 10 kW | 0 | 0 |
| 800 -1200 Sq. ft > 10 kW - 25 kW | 0 | 1200 |
| > 1200 – 2800 Sq. ft> 25kW - 75 kW | 1200 | 1200 |
| > than 2800 Sq. ft> 75 kW | 1500 | 1500 |
| Commercial | 4,000 | 4,000 |

Agricultural zone amendment:

9-5A-3: **ALLOWED USES**: The following uses are allowed in district A:

Off-grid solar systems up to 25 kW for agricultural purposes, excluding dwellings.