

Sec. 4-37 Solar energy systems.

(a) Solar energy system, building mounted.

A building-mounted solar energy system as an accessory use shall be subject to the following regulations:

(1) Placement.

- a. No solar energy system shall be mounted or affixed to any freestanding wall or fence.
- b. Panels and building mounts shall be installed per manufacturer's specifications.

c. Design Review and Certification.

Systems located on the roof shall provide, as part of their permit applications, evidence of design review and structural certification if the slope of the panel differs from the roof pitch. All panels on commercial roofs shall provide this information regardless of slopes, as well as any residential roof greater than 50 percent overage.

- d. In residential zoning districts, a solar energy system for aesthetic reasons shall not be located on the front slope of a pitched roof of a principal residential structure unless no other location for the solar energy equipment is feasible. The county may require sun and shadow diagrams specific to the installation to ensure compliance with this provision.

e. Height.

Building-mounted solar panels or systems shall not exceed four feet above the height of any principal building on the site.

f. Permits and Code Compliance.

A building permit shall be required for installation of all building-mounted solar energy systems, *except for flush-mounted panels*.

(b) Solar energy system, ground mounted.

In zoning districts when permitted as an accessory use, a "solar energy system, ground-mounted," as defined in this Development Code shall be subject to the following regulations:

(1) Placement.

- a. A ground-mounted solar energy system shall not be located within the required front yard of a lot.
- b. A ground-mounted system shall not be located over a septic system, leach field area or identified reserve area unless approved by the Health Department.

- c. If located in a floodplain or an area of known localized flooding, all panels, electrical wiring, automatic transfer switches, inverters, etc. shall be located above the base flood elevation.
- d. Panels and ground-mounts shall be installed per manufacturer's specifications.

(2) Maximum area coverage.

For residential properties, a ground-mounted solar energy system shall not exceed 25% of the footprint of the principal building served. For non-residential properties, a solar energy system shall not exceed 50% of the footprint of the principal building served, unless a Special Exception Variance has been approved.

(3) Height.

The maximum height of a ground-mounted solar energy system shall not exceed the maximum building height for accessory buildings in the zoning district in which it is located, or 20 feet, whichever is less.

(4) Permitting.

A building permit is required for any ground-mounted solar energy system and for the installation of any thermal solar energy system.

(c) **Solar energy facility or solar farm.**

In districts where permitted as a principal use, a "solar energy facility" or "solar farm," as defined in this Development Code, shall be subject to the following regulations:

(1) Mounting.

- a. Solar panels or solar arrays shall be mounted onto a pole, rack or suitable foundations, in accordance with manufacture's specifications, in order to ensure the safe operation and stability of the system. The mounting structure (fixed or tracking capable) shall be comprised of materials approved by the manufacturer, which are able to fully support the system components, in accordance with applicable building permit requirements. Electrical components of the facility shall meet applicable electrical code requirements.
- b. Multiple mounting structures shall be spaced apart at a distance to ensure safety and maximum efficiency.

(2) Setbacks.

A solar energy facility and its appurtenant components and structures shall be set back a minimum of 100 feet from all property lines of adjacent property owners; 500 feet from habitable residential use dwelling or neighboring/adjacent properties zoned RS2 and PRD. Setback requirements

may be reduced if agreed to in writing by the adjacent property owner.

(3) Placement.

- a. When located in agricultural zoning districts, the solar energy facility shall be located as much as possible to minimize impacts on prime agricultural soils, as mapped in the Crisp County comprehensive plan.
- b. If located in the 100 year floodplain, all panels, electrical wiring, automatic transfer switches, inverters, etc. shall be located above the base flood elevation.
- c. Components of the facility shall not be located over a septic system, leach field area or identified reserve area unless approved by the Health Department.

(4) Screening

The facility may be screened from adjoining properties, except for those adjoining properties that are also a party to the Solar Farm. All adjacent roads shall be screened using the natural topography or by installation of a vegetative buffer capable of reaching a height of 6 feet within five years of planting.

(5) Height

- a. Freestanding solar panels or solar arrays shall not exceed 25 feet in height as measured from the grade at the base of the structure to the highest point.
- b. Mounted solar panels or solar arrays shall not exceed eight feet above the apex of the structure on which it is mounted or the maximum height for buildings in the zoning district in which it is located.

(6) Security.

- a. Unless 24-hour security guards or video surveillance is provided at the installation, the solar energy facility shall be enclosed by a security fence no less than 6 feet nor greater than 8 feet in height.
- b. Access gates and equipment cabinets must be locked when not in use.

(7) Noise.

Inverter noise shall not exceed 40dBA, measured at the property line.

(8) Glare and Lighting

- a. The solar energy system components shall be designed with an antireflective coating or at least shall not produce glare that would constitute a nuisance to occupants of neighboring properties, aircraft, or persons traveling on adjacent or nearby roads.

- b. If lighting is required, it shall be activated by motion sensors, fully shielded and downcast type where the light does not spill onto any adjacent property or into the night sky.

(9) Maintenance and upkeep.

Systems shall be maintained in accordance with manufacturer's specifications. The operator of the facility shall maintain the facility, including all buffer screening, in compliance with the approved plans and shall keep the facility free from weeds, dust trash and debris.

(10) Site plan review and development permit.

A site plan reviewed and approved by the Planning Division shall be required prior to issuance of a permit. In addition to requirements for site plans generally, the site plan submission shall include the following information: The proposed location and dimensions of all solar panels, battery storage systems, inverters, existing and proposed structures, screening, fencing, property lines, parking, access driveways and turnout locations, ancillary equipment, transmission lines, vegetation, the location of any residences on site and within 500 feet of the perimeter of the facility, the location of any proposed solar access easements, and standard drawings of solar energy system components.

(11) Additional submission requirements.

In addition to requirements for information to be provided during the site plan review and development permitting process, the facility shall not be approved for operation until the following are submitted.

- a. Copy of all recorded agreements in relation to the Solar Farm.
- b. Where interconnection to an electric utility grid is proposed, the applicant shall submit evidence that the electrical utility provider has been informed of the customer's intent to install an interconnection with the local electric utility grid. A copy of the approval from the local utility must also be provided before operation of an interconnected facility will be authorized.
- c. A decommissioning plan for the anticipated service life of the facility or in the event that the facility is abandoned or has reached its life expectancy.
- d. The county may require other studies, reports, certifications, and/or approvals be submitted by the applicant to ensure compliance with this section.
- e. A building permit shall be required for installation of all solar energy systems facility or solar farm.

- (12) Removal of obsolete or unused systems.
- a. Any solar collection device or combination of devices that is not operated for a continuous period of 12 months and for which there are no applications pending for permitted use of the structure at the end of such 12-month period, shall be considered abandoned, whether or not the owner or operator intends to make use of the device(s). The owner of an abandoned solar collection device and the owner of the property where the abandoned solar collection device is located shall be under a duty to remove such device. If such device is not removed within a reasonable time, not to exceed twelve (12) months, after receipt of notice from the governing authority notifying the owner(s) of such abandonment, the governing authority may remove such device(s) and place a lien upon the property for the costs of removal. The governing authority may pursue all legal remedies available to it to ensure that abandoned device(s) are removed. Delay by the governing authority in taking action shall not in any way waive the governing authority's right to take action.
- (13) Within 90 days of the Commercial Operation Date, the owner shall provide the Board of Commissioners with a bond, issued by a surety acceptable to the Board, or a letter of credit from an FDIC-insured bank, or a guaranty from a company with assets of at least Twenty Million Dollars (the "Restoration Security"), which acceptance shall not be unreasonably withheld. The amount of the Restoration Security shall equal the estimated costs of decommissioning the Solar Farm and restoring the Property in compliance with Section 12, less the estimated salvage value of the Solar Farm. If the Parties are unable to agree upon the appropriate amount of the Restoration Security within sixty (60) days of the Parties' first discussion, they shall, at owners expense, hire a mutually acceptable independent engineer, to provide an estimate of the appropriate amount of the Restoration Security, and such estimate shall be deemed the required amount of the Restoration Security. Owner shall keep such Restoration Security as long as the Solar Farm is in operation.
- (14) Solar panels shall not be placed in the vicinity of any airport in a manner that would interfere with airport flight patterns. Acknowledgement from the Federal Aviation Administration may be necessary.