

Below are the existing regulations for solar uses included in the Charlotte County Zoning Ordinance. All proposed amendments are marked in red.

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Sec. 10-23. Solar Energy Systems

Article 9. Use Matrix

B = By Right C = Conditional Use Permit T = Temporary Use Permit

Use Types	Zoning Districts				
	General Agricultural	Intensive Agriculture	General Residential	Village Center	General Industrial
Residential and Related Uses:					
Solar Energy System, Small	B	B	B	B	B
Non-Residential: General and Misc. Commercial					
Solar Energy System, Large	C	C			CB
Non-Residential: Industrial					
Solar Energy System, Utility Scale	C	C			C

Article 10. Supplementary Regulations

Sec. 10-23. Solar Energy Systems.

10-23-1. Principal or Accessory Use. Small Solar Energy Systems and Large Solar Energy Systems, as defined in this Ordinance, will be considered as accessory uses. Utility Scale Solar Energy Systems shall be considered as a principal use. However, an existing use or an existing structure on the same lot shall not preclude the installation of a Utility Scale Solar Energy System on such lot.

10-23-2. Compliance with Building & Electrical Codes. All Solar Energy System components shall conform to the requirements of the National Electrical Code and State Building Code. All Small Solar Energy Systems used for residential purposes, all large Solar Energy Systems and all Utility Scale Solar Energy Systems shall be inspected by a county building inspector through the building permit process.

10-23-3. Installation and Design. Solar Energy System components shall have a UL listing and must be designed with an anti-reflective coating. Individual arrays/panels shall be designed and installed in order to prevent glare toward buildings on adjacent properties and vehicular traffic.

10-23-4. Location. No Utility Scale Solar Energy System shall be located within one (1) mile of an existing town boundary.

10-23-5. Density. No more than three percent (3%) of the land area in any given five mile radius shall be approved for use as the project area for Utility-Scale Solar Energy Systems. For the purpose of calculating density, the project area for a Utility-Scale Solar Energy System shall consist of the entire fenced-in area and the required landscaped buffer zone.

10-23-46. Setbacks.

Large Scale Solar Energy Systems and Utility Scale Solar Energy Systems shall conform to all minimum building setback requirements for principal structures of the zoning district in which they are located, or thirty (30)fifty (50) feet, whichever is greater, unless otherwise prescribed by the Board of Supervisors as a condition of approval for a Conditional Use Permit.

10-23-~~57~~. Height. Solar Energy Systems & equipment shall not exceed twenty-five (25) feet in height when ground mounted as measured from the highest grade at the base to the top of structure. Excluded from this requirement are utility poles and transmission lines. Roof mounted systems shall not exceed the maximum height requirements for the applicable zoning district by more than four (4) feet.

10-23-~~68~~. Lighting. Lighting shall be limited to the minimum necessary and shall meet all requirements of this ordinance.

10-23-~~79~~. Utility Connection. No Utility Scale Solar Energy System shall be installed until evidence has been provided to the County that the owner has been approved by the utility company to interconnect.

10-23-~~810~~. Screening and Fencing for Utility Scale Solar Energy Systems. Utility Scale Solar Energy Systems shall be enclosed by security fencing not less than six (6) feet in height equipped with an appropriate anti-climbing device. The entire facility, including fencing, shall be screened from ground-level view of adjacent properties by a landscaped buffer zone at least 25 feet wide consisting of an evergreen and deciduous mix as approved by the Zoning Administrator, unless otherwise prescribed by the Board of Supervisors as a condition of approval for a Conditional Use Permit. A vegetative buffer at least four (4) feet wide shall be established along the perimeter of the facility. Existing mature tree growth and natural land forms on the site shall be preserved to the maximum extent possible and may be used in whole or in part to provide the required screening if they provide adequate screening from public view as determined by the Zoning Administrator. In the event that existing vegetation or land forms providing screening are disturbed, new plantings shall be provided which accomplish the same.

10-23-~~119~~. Noise Limits for Utility Scale Solar Energy Systems. After completion of construction, noise levels measured at the property line shall not exceed 50 dbA, unless the owner of the affected adjacent property has given written agreement to a higher level.

10-23-~~120~~. Signage for Utility Scale Solar Systems. Appropriate warning signage and a 911 address sign shall be posted in a clearly visible manner. Warning signage must identify the owner and include a 24-hour emergency contact phone number.

10-23-13. Site Maintenance for Utility Scale Solar Systems. Weed control and mowing shall be performed in accordance with an approved site management plan.

10-23-14. Repair of panels. Panels shall be repaired or replaced when in visible disrepair. Such repairs shall also include the restoration of non-reflective finish per manufacturer specifications.

~~10-23-11. Site Plan Requirements for Utility Scale Solar Energy Systems. Utility Scale Solar Energy Systems shall be developed in accordance with an approved site plan that includes the following:~~

- ~~1. The location of the system (including the arrangement of any existing or proposed buildings, structures, or panels);~~
- ~~2. The distance from proposed facilities and structures to the surrounding property lines;~~
- ~~3. Any existing or proposed signs, fencing, lighting, parking areas, driveways, landscaping, vegetative screening or required buffers;~~

4. Horizontal and vertical (elevation) to-scale drawings with dimensions of proposed solar collector structures

The County may require additional information necessary to assess compliance with this ordinance.

10-23-152. Decommissioning of Utility Scale Solar Energy Systems.

1. ~~At the expense of the permittee, a cost estimate for the decommissioning of the facility shall be prepared by a professional engineer or contractor who has expertise in the removal of the solar facilities. The decommissioning cost estimate shall explicitly detail Applications for Utility Scale Solar Energy Systems shall include a decommissioning plan detailing the anticipated life of the project, the estimated decommissioning cost in current dollars, an explanation of how the cost was determined, the method of ensuring funds will be available for decommissioning, the cost and shall include a mechanism for calculating increased removal costs due to inflation, and an explanation of the decommissioning process.~~ The decommissioning estimate shall be prepared by a professional engineer or contractor who has expertise in the removal of solar facilities. ~~This cost estimate shall be recalculated every five (5) years and the guarantee shall be updated accordingly.~~ Salvage value shall not be considered when determining the estimated decommissioning cost.
2. ~~The full estimated decommissioning cost shall be guaranteed by escrow at a federally insured financial institution, irrevocable letter of credit, or, surety bond before a building permit is issued to the applicant. The decommissioning cost guarantee shall remain valid until the solar energy system has been fully decommissioned, or other means before any construction commences.~~ If the ~~facility~~ owner / ~~or~~ operator of the solar facility fails to remove the installation in accordance with the requirements of this permit or within the proposed date of decommissioning, the County may collect the bond or other surety and the County or hired third party may enter the property to physically remove the installation.
- ~~2.3.~~ ~~The decommissioning cost estimate shall be recalculated every five (5) years. If the recalculated estimate exceeds the original estimated decommissioning cost by 10% or more, the facility owner/operator shall increase the guarantee to meet the new cost estimate. If the recalculated estimate is less than 90% of the original estimated cost of decommissioning, the County may approve reducing the guarantee.~~
- ~~3.4.~~ Utility Scale Solar Energy Systems which have reached the end of their useful life or have not been in active service for a period of one (1) year shall be removed at the ~~owner or operator's~~ facility owner/operator's expense. This period may be extended by the Zoning Administrator if evidence is provided that the delay is due to circumstances beyond the ~~facility owner/operator's~~ owner or operator's reasonable control.
- 4.5. The facility owner / ~~or~~ operator shall notify the Zoning Administrator by certified mail of the proposed date of discontinued operations and plans for removal.
- ~~5.6.~~ The facility owner / ~~or~~ operator shall have twelve (12) months to complete decommissioning of the ~~solar facility~~ solar energy system.
7. Decommissioning shall ~~be performed in compliance with the approved decommissioning plan and shall~~ include removal of all solar electric systems, buildings, cabling, electrical components, security barriers, roads, foundations, pilings, and any other associated facilities, so that any agricultural ground upon which the facility and/or system was located is again

tillable and suitable for agricultural uses. Disturbed earth shall be graded and re-seeded unless the land owner requests in writing that the access roads or other land surface areas not be restored. Hazardous material from the property shall be disposed of in accordance with federal and state law.

10-23-16. Application Requirements for Utility Scale Solar Energy Systems. Prior to submitting an application for a utility scale solar energy system, applicants shall have a pre-application meeting with the Zoning Administrator or his/her designee to discuss the location, scale and nature of the proposed project and the application review process. Applicants for utility scale solar energy systems shall provide the following items:

1. A completed Charlotte County Conditional Use Permit Application
2. A detailed project description including an overview of the project location, approximate capacity, description of proposed equipment including approximate number of panels, description of screening and fencing methods and expected footprint of solar equipment to be constructed.
3. Aerial imagery showing the proposed location, fenced area and driveways with the closest distance to all adjacent property lines and dwellings specified.
4. Fourteen hardcopies (11"X17" or larger) and one electronic copy of a preliminary plan prepared by a licensed professional engineer including the following:
 - (1) Parcel numbers for the proposed site and adjacent properties
 - (2) Property lines
 - (3) Existing buildings, and structures
 - (4) Proposed roads, buildings and structures including preliminary layout of solar panels and related equipment, fencing, driveways, internal roads, structures and the location of points of ingress/egress.
 - (5) Distances from proposed structures and panels to property lines
 - (6) The location of proposed buffers and screening elements
 - (7) Location of substation and means of connecting to the substation, ancillary equipment, buildings, and structures including those within any applicable setback.
5. A decommissioning plan as specified in Section 10-23-15.
6. A land management plan that includes a detailed description of plant selections, weed control methods, routine mowing and trimming, and other general site maintenance.
7. Any additional items or information the County may require in order to assess compliance with this ordinance.

10-23-17. 2232 Comprehensive Plan Review. A 2232 review by the County is required by the Code of Virginia (§15.2-2232) for utility-scale solar facilities. This Code provision provides for a review by the Planning Commission of public utility facility proposals to determine if their general or approximate location, character and extent are substantially in accord with the Comprehensive Plan or part thereof.

Article 12. Definitions

Solar energy system, large. A ~~private~~ solar energy conversion system ~~consisting of photovoltaic panels, support structures, and associated control or conversion electronics~~ that has a maximum power of not

more than 999 kW. ~~Large solar energy systems are generally which will be~~ used ~~primarily~~ to reduce onsite consumption of utility power for commercial and industrial applications.

Solar energy system, small. A ~~private~~-solar energy conversion system ~~consisting of photovoltaic panels, support structures, and associated control or conversion electronics~~ that has a maximum power of not more than 15 kW. ~~which will be~~ Small solar energy systems are generally used ~~primarily~~ to reduce onsite consumption of utility power for residential, noncommercial, small commercial, and small industrial applications.

Solar energy system, utility scale. A solar energy conversion system ~~consisting of photovoltaic panels, support structures, and associated control or conversion electronics~~, which has a rated capacity ~~more than~~ of one megawatt (1 MW) or greater. ~~which~~ Utility Scale Solar Energy Systems are generally ~~will be~~ used to provide electricity to ~~a the local~~ utility provider.

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