

Text Amendment (TX-2012-01) Solar Energy Generation Facility & Solar Panels

Summary:

The definitions below and associated standards intend to permit solar energy generation facilities (a.k.a. solar farms) in Henderson County. Currently, Henderson County only allows solar panels as an accessory use.

New Definitions:

Add the following definition to Article XIV, Definitions, in alphabetical order.

Solar Energy Generation Facility. Any solar collection applications designed to facilitate the capture and conversion of solar energy for the purpose of supplying electricity to utility companies. This definition does not include solar panels accessory to a principal use.

New Use Added to Permitted Use Table:

§200A-62. Table of Permitted and Special Uses

USE TYPE	GENERAL USE DISTRICT P=Permitted; S=Special Use Permit											
	R1	R2	R2R	R3	R4	OI	MU	LC	CC	RC	I	SR
9. TRANSPORTATION, WAREHOUSING AND UTILITIES												
<i>Solar Energy Generation Facility ≤ 30 acres</i>	S	S	P	P	P	P	P	P	P	P	P	9.9
<i>Solar Energy Generation Facility > 30 acres</i>			S	S	S	S	S	S	S	S	S	9.9

Note: Existing uses in section 9 of the Table of Permitted and Special Uses and the Supplemental Requirements will be re-numbered following this amendment.

New Supplemental Requirement Standards:

SR 9.9. Solar Energy Generation Facility

- (1) Site Plan. Major *Site Plan* required in accordance with §200A-299 (Major Site Plan Review). The site plan shall include ground level profile drawings of the typical structures proposed and the designed wind and ground snow loads.
- (2) Dust Reduction. Unpaved *roads, travelways* and/or parking areas shall be treated to prevent dust from adverse affects to adjacent properties.
- (3) Perimeter Setback. All structures and components shall be a minimum of twenty (20) feet from property lines. Necessary ingress and egress for vehicles and utility & transmission lines may be located within the perimeter setback. Fences may be placed within the perimeter setback.
- (4) Height. Systems, equipment and structures shall not exceed twenty-five (25) feet in height when ground mounted. Roof mounted systems shall not exceed the maximum height for the applicable zoning district.

- (5) Screening. Screen Class One (1), Two (2), Three (3), or Four (4) shall be provided along sides of the facility which are adjacent to a residential use (as identified in Section 1 of 200A-62, Table of Permitted and Special Uses) on a separate parcel, consistent with 200A-182 (Screen Classification). Where screening is required, screening shall be placed on the exterior side of fencing. Buffer Requirements, as specified by Article V Subpart A, shall not apply to Solar Energy Generation Facilities unless the Solar Energy Generation Facility is not permitted in the zoning district adjacent to the site.
- (6) Scenic Byways. Solar energy Generation Facilities shall not be permitted on sites visible from Scenic Byways as designated by the North Carolina Department of Transportation or Henderson County.
- (7) Security. Solar Energy Generation Facilities shall be completely enclosed within:
 - a. a woven wire fence; or
 - b. a masonry wall; or
 - c. a wooden fence that contains spacing no greater than six (6) inches.Such fences shall be at least six (6) feet in height.
- (8) Power Transmission Lines. To the extent practical, all new power transmission lines to any building, structure or utility connection shall be located underground. Existing above ground utility lines shall be allowed to remain in their current location.
- (9) Electrical Disconnection Switch. The electrical disconnect switch shall be clearly marked and unobstructed. Switches are permitted to be secured within a fenced area or building.
- (10) Wind and Snow Loads. All equipment and structures shall comply with the N.C. State Building Code requirements for survival wind speeds and ground snow loads for buildings. Although the N.C. State Building Code may require such load designs for only buildings, all structures and equipment associated with this use shall meet those same wind and snow load requirements. Note that such requirements vary based on the elevation and location of the site. The Zoning Administrator shall require a certification from a structural engineer, licensed in North Carolina as a professional engineer, stating the designed wind and snow load standards for equipment and structures have been constructed according to the State Building Code and will meet the following:
 - a. Structures and buildings will meet a minimum wind survival speed of 90 m.p.h.; and
 - b. Structures and buildings will meet a minimum snow load of 15 lbs. per square foot.
- (11) Principal Structure. A principal structure, other than the solar collectors, is permitted but not required.
- (12) *Special Flood Hazard Area*. No structures, equipment, storage or buildings shall be located within the *Special Flood Hazard Area*.
- (13) Lighting. *Lighting Mitigation* is required.

Amend the Supplemental Requirement Standards (Accessory Uses Section):

SR 2.11. Solar Panels

- (1) Location. Panels:
 - a. May be placed on the roof of a residential, commercial or industrial *structure*;
 - b. Shall be placed on the *lot* on which a *structure* is located;
 - c. Shall be designed to produce no more than 150 percent of the on site use's energy consumption.