§ 175-46 Solar energy systems.

A. Siting. A commercial solar energy system that complies with the provisions of this section may be permitted as described in §175-13, Table of Uses, except as follows:

(1) The combined additional aggregate acreage of commercial solar energy systems utilized throughout the County shall not exceed 2,000 acres.

(2) Parcels located in the transferable development rights receiving areas.

(3) On parcels where transferable development rights (TDRs) have been lifted, commercial solar may not be sited on the portion of acreage used for TDR transfers.

(4) Parcels under land preservation easements excepting rights-of-way for infrastructure buried at least three feet.

(5) Where solar energy systems are proposed for parcels identified as "greenbelts" or "growth areas" in any comprehensive plan for an incorporated municipality, the impacted jurisdiction must be notified.

B. Design standards; siting. Considerations shall be made to siting, such as avoiding areas/locations with a high potential for biological conflict such as wilderness study areas, areas of environmental concern, County and state parks, historic trails, special management areas or important wildlife habitat or corridors; avoiding significant impacts to visual corridors that are prominent scenic viewsheds, or scenic areas designated by the County; avoiding significant impacts to areas of erodible slopes and soils, where concerns for water quality, severe erosion, and/or high storm runoff potential have been identified; and avoiding known sensitive historical, cultural or archeological resources.

(1) Screening. Visual screening shall be required to ensure the solar energy system does not cause negative significant impacts to the aesthetic and scenic quality of the project area/location. Proposed screening buffers shall be reviewed by a licensed landscape architect selected by the County and at the applicant’s expense. Buffers shall consist of mixed vegetation, including trees, shrubs, ornamental grasses, and berms where appropriate.

(2) Tree removal. The structures comprising the solar facility shall be constructed and located in a manner so as to minimize the necessity to remove existing trees upon the parcel, and in no event shall wooded acreage comprising more than 2% of the deeded acreage of the parcel or portion of the parcel devoted to the solar facility use be removed

without demonstrating that such removal is necessary for the reasonable construction and efficient performance of the use.

(3) Setbacks.

a. Required setbacks. Solar energy system structures shall be located at least 200 feet from all adjoining property lines.

b. Setback modifications. Modifications from these requirements may be granted by owners of residentially zoned parcels or existing residences, provided that a setback modification agreement is submitted. A setback modification agreement shall be required for each property line abutting a solar energy system structure for which a modification is requested and shall set forth the property owners' consent to a modified setback. Setback modifications on any parcel shall not be interpreted as applying to required setbacks from any other parcel. Setback modification agreements shall be in a form provided from the Department and after review shall be filed in the land records for Caroline County. Where a solar energy system encompasses multiple parcels, setbacks shall not be required from inner parcel boundary lines. Additional setbacks may be required to mitigate aesthetic, noise, safety, glare, or any other identified significant impacts, or to provide for designated road or utility corridors.

c. Intent. Setback modifications run for the duration of the underlying solar energy system contract and do not run with the land. This section shall not be construed to allow a property owner to modify a setback for any other property owner.

(4) Height. Solar energy system panel structures shall not exceed the height of 15 feet as measured from the grade at the base of the structure to the apex of the structure. Necessary accessory structures (e.g., lightning rods) are subject to approval.

(5) Utility connections. Reasonable efforts shall be made to place all utility connections from the solar installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider. All electrical interconnections and distribution components must comply with all applicable codes and public utility requirements.

(6) Visibility. Solar energy systems shall be designed to blend into the architecture of the building or be screened from routine view from public rights-of-way or adjacent residentially-zoned parcels. To the extent reasonably possible, use materials, colors, and textures that will blend the facility into the existing environment.

(7) Glare. No solar energy system shall produce glare that would constitute a nuisance to occupants of neighboring parcels or persons traveling neighboring roads.

(8) Lighting. Lighting of the solar energy system and accessory structures shall be limited to the minimum necessary for safety and operational purposes, and shall be reasonably shielded from abutting properties. Lighting shall be activated by motion sensors and shall be fully shielded and downcast to prevent light from shining onto adjacent parcels or into the night sky.

(9) Fencing. A secure chain link fence at least six feet in height shall enclose the entire solar energy system to restrict unauthorized access.

(10) In addition to these design standards, all solar energy systems shall meet all applicable state regulations and permit requirements.

C. Decommissioning. The solar energy system shall be completely decommissioned by the facility owner within 12 months after the end of the energy producing, abandonment or termination of such facility. Decommissioning shall include removal of all solar electric systems, buildings, cabling, electrical components, roads, foundations, pilings, and any other associated facilities, to the extents that any agricultural ground upon which the facility was located is again tillable and suitable for agricultural uses. Any components of the solar energy system buried greater than three feet may remain to avoid unnecessary topsoil disturbance. Disturbed earth shall be graded and re-seeded unless the landowner requests in writing that the access roads or other land surface areas not be restored. The owner of the facility shall secure the costs of decommissioning by appropriate bond, letter of credit, or escrow agreement satisfactory to the County and shall include a mechanism for calculating increased removal costs due to inflation. Both a decommissioning plan and estimate costs shall be submitted by the owner and subject to approval by the County prior to issuance of any permits required.

D. Signs. A sign, not to exceed one square foot, shall be posted at each entrance to the solar energy system to identify the property owner, the solar energy system owner, and twenty-four-hour emergency contact phone number. Information on the sign shall be kept current. The sign shall be posted at the site in a clearly visible manner.

E. Agreements/easements. If the land on which the project is proposed is to be leased, rather than owned, by the solar energy development company, all property within the project boundary must be included in a recorded easement(s), lease(s) or consent agreement(s) specifying the applicable uses for the duration of the project.

F. Public safety. Identify and address any known or suspected potential hazards to adjacent properties, public roadways, communities, aviation, etc., which may be created by the project.

G. FAA. Must demonstrate compliance with federal aviation administration (FAA) regulations pertaining to hazards to air navigation.

H. Project rationale. Project rationale, including estimated construction schedule, project life, phasing, and likely buyers or markets for the generated energy must be provided.

I. Site and development plans. A site plan drawn at an appropriate scale shall be provided identifying the following:

(1) At the time of application, a concept plan drawn at an appropriate scale shall be provided identifying the following:

a. A copy of the interconnection application or a written explanation why an interconnection agreement is not necessary for an interconnected customer-owned generator;

b. Parcel lines, setbacks and physical features including access routes and proposed road improvements;

c. All existing and proposed structures, including impervious surface calculations;

d. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures;

e. Any existing residential dwellings within one-fourth mile of the solar energy system project;

f. Existing utilities and transmission lines, proposed utility lines, and utility and maintenance structures;

g. Existing topographic contours and mapped soils;

h. Existing vegetation (list type and percent of coverage; i.e., grassland, plowed field, wooded areas, etc.);

i. Revegetation areas and methods;

j. Dust and sediment and erosion control;

k. Proposed stormwater management measures;

l. Any floodplains or wetlands;

m. Fencing location;

n. Total site acreage;

o. Landscape and buffer areas.

(2) Before final approval, a major site plan drawn at an appropriate scale shall be provided identifying all items listed in Subsection I(1), as well as:

a. Engineered drawings of the solar installation showing the proposed layout of the system and any potential shading from nearby structures or vegetation.

b. The number of panels to be installed, the proposed location and spacing of solar panels, and location of any associated accessory structures.

c. An operation and maintenance plan.

d. Landscape and landscape maintenance plan.

e. A copy of the interconnection agreement or a written explanation why an interconnection agreement is not necessary.