

COUNTY COMMISSIONERS OF CAROLINE COUNTY, MARYLAND

ORDINANCE #2017-2

PUBLIC HEARING: OCTOBER 17, 2017; BEGINNING AT 6:15 PM
COURTHOUSE, 109 MARKET STREET, ROOM 106,
DENTON, MARYLAND

ENACTED: DECEMBER 12, 2017

EFFECTIVE: DECEMBER 12, 2017

Chapter 175 – Zoning – Solar Energy Systems

AN Act concerning Solar Energy Systems in Caroline County; **FOR** the purpose of revising the Zoning chapter to permit and provide conditions for Accessory and Commercial Solar Energy Systems; **BY** repealing and reenacting, with amendments, and transferring §175-85 to §175-46 of the Code of Public Local Laws of Caroline County and **BY** renumbering §175-86 to §175-85 of the Code of Public Local Laws of Caroline County, Maryland.

Short Title

This Act may be referred to as Chapter 175 – Zoning – Solar Energy Systems.

WHEREAS, the County Commissioners of Caroline County, Maryland (the "County Commissioners") are authorized under the Land Use Article, Title 4 of the Annotated Code of Maryland to enact and administer zoning and land use ordinances; and

WHEREAS, the Commissioners established a temporary moratorium on the permitting of certain solar energy systems via Resolution #2017-008 (the "Resolution") in order to evaluate the taxing, siting and construction of additional solar energy systems and current requirements for such systems in light of changing technology, changing consumer demands, and changes to existing infrastructure in the County; and

WHEREAS, the Resolution established a workgroup to review Land Use Issues (the "Workgroup") related to the subject of the temporary moratorium; and

WHEREAS, the Workgroup held several public meetings to study relevant data, different legislative and regulatory models, industry best practices, and other pertinent information, in the context of the goals of the Caroline County Comprehensive Plan; and

WHEREAS, as the result of its study, the Workgroup recommended certain changes to the Zoning Chapter of the Code of Public Local Laws of Caroline County, Maryland (the "Code") to the Caroline County Planning Commission ("Planning Commission"); and

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WHEREAS, the County Commissioners have received the positive recommendation of the Planning Commission the staff of the Caroline County Department of Planning and Codes regarding the textual amendments proposed in this Ordinance, as reflected herein; and

WHEREAS, the County Commissioners have determined this Ordinance is necessary and appropriate to protect and improve the general health, safety, and welfare of the County and its residents; and

WHEREAS, this Ordinance may also be known by its short title "Chapter 175 – Zoning – Solar Energy Systems."

NOW, THEREFORE, be it enacted by the County Commissioners of Caroline County, Maryland, that:

SECTION 1. §175-8, Definitions, of the Code of Public Local Laws of Caroline County, Maryland is hereby repealed and reenacted, with amendments as follows:

ARTICLE II
Definitions

§175-8. Word usage; terms defined

B. Terms defined. As used in this chapter, the following terms shall have the meanings indicated:

~~Solar power plants~~ **ENERGY SYSTEMS**

~~A mid- or utility-scale commercial facility comprised of one or more freestanding, ground-mounted devices that converts sunlight into electricity, whether by photovoltaics (PV), concentrating solar thermal devices (CST) or various experimental solar technologies, for the primary purpose of wholesale or retail sales of generated electricity.~~

~~(1) Concentrating Solar Thermal Devices~~

~~Also known as "concentrated solar thermal power (CST)" are systems that use lenses or mirrors, and often tracking systems, to focus or reflect a large area of sunlight into a small area. The concentrated energy is absorbed by a transfer fluid or gas and used as a heat source for either a conventional power plant, such as a steam power plant, or a power conversion unit, such as a sterling engine.~~

~~(2) Photovoltaics~~

~~A technology that converts light directly into electricity. Photovoltaic (PV) systems and concentrated photovoltaic (CPV) systems are included within this definition.~~

ACCESSORY: ANY ROOF MOUNTED OR FREESTANDING SOLAR ARRAY THAT IS ACCESSORY TO AND INCORPORATED INTO THE DEVELOPMENT OF AN AUTHORIZED USE ON A PARCEL, AND WHICH ARE DESIGNED FOR THE PURPOSE OF REDUCING OR MEETING ON-SITE ENERGY NEEDS.

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COMMERCIAL: A NON-ACCESSORY COMMERCIAL FACILITY, INCLUDING SHARED COMMUNITY FACILITIES, COMPRISED OF ONE OR MORE FREESTANDING, GROUND MOUNTED DEVICES THAT CONVERTS SUNLIGHT INTO ELECTRICITY FOR THE PRIMARY PURPOSE OF WHOLESALE OR RETAIL SALES OF GENERATED ELECTRICITY. A SOLAR ENERGY SYSTEM MAY BE MADE UP OF 1 OR MORE PARCELS. UTILITY CONNECTIONS ARE NOT SUBJECT TO SOLAR ENERGY SYSTEM REGULATIONS.

(1) SMALL SCALE

A SOLAR ENERGY SYSTEM THAT IS ENGINEERED AND DESIGNED TO PRODUCE UP TO TWO MEGAWATTS (2 MW) OF POWER.

(2) LARGE SCALE – A SOLAR ENERGY SYSTEM THAT IS ENGINEERED AND DESIGNED TO PRODUCE OVER TWO MEGAWATTS (2 MW) OF POWER

SECTION 2. §175-85, Solar Power Plants, of the Code of Public Local Laws of Caroline County, Maryland is hereby repealed and reenacted, with amendments as follows:

**ARTICLE IX
Accessory Structures and Uses**

§ 175-85. Solar ENERGY SYSTEMS ~~power plant~~.

A. SITING. ~~Permitted locations:~~ A COMMERCIAL SOLAR ENERGY SYSTEM ~~solar power plant~~ 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 ~~3000~~ 2000 ACRES.

(2) PARCELS LOCATED IN THE TRANSFERABLE DEVELOPMENT RIGHTS RECEIVING AREAS.

(3) PARCELS UNDER LAND PRESERVATION EASEMENTS EXCEPTING RIGHTS OF WAY FOR INFRASTRUCTURE BURIED AT LEAST THREE (3) FEET.

(4) 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.

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B. Design standards.

~~Minimum lot size. No concentrated solar power plant shall be erected on any lot less than forty (40) acres in size. No photovoltaic solar power plant shall be erected on any lot less than ten (10) acres in size.~~ Siting. Considerations **SHALL** ~~should~~ 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. CONSIDERATIONS SHALL BE MADE FOR VISUAL SCREENING TO ENSURE THE SOLAR ENERGY SYSTEM DOES NOT CAUSE NEGATIVE SIGNIFICANT IMPACTS TO THE AESTHETIC AND SCENIC QUALITY OF THE PROJECT AREA/LOCATION. WHERE SCREENING BUFFERS ARE REQUIRED, THEY SHALL BE OPAQUE WITHIN 3 YEARS AND SHALL CONSIST OF MIXED VEGETATION INCLUDING TREES, SHRUBS, AND ORNAMENTAL GRASSES. WHERE APPROPRIATE, POLLINATOR HABITAT MAY BE USED IN LIEU OF SCREENING BUFFERS.**

(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 meet the minimum zoning setback for the zoning district in which located, or twenty-five (25) feet, whichever is greater. In addition, solar ENERGY SYSTEMS ~~power-plant structures~~ must be located at least **TWO** ~~one-hundred~~ feet from all residentially zoned ~~PARCELS~~ and existing residences.

(B) SETBACK MODIFICATIONS. MODIFICATIONS FROM THESE REQUIREMENTS MAY BE GRANTED BY OWNERS OF RESIDENTIALLY ZONED PARCELS OR EXISTING RESIDENCES PROVIDED 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

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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, and 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 ~~power-electric-generation~~ ENERGY SYSTEM PANEL structures shall not exceed the height of fifteen (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 right-of-ways or adjacent residentially-zoned PARCELS~~property~~. 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 ~~power-plant~~ shall produce glare that would constitute a nuisance to occupants of neighboring PARCELS~~properties~~ or persons traveling neighboring roads.
- (8) Lighting. Lighting of the solar ENERGY SYSTEM ~~power-plant~~ 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.**

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(9) Fencing. A secure chain-link fence at least ~~SIX~~ seven feet in height shall enclose the entire solar ENERGY SYSTEM facility to restrict unauthorized access.

(10) **IN ADDITION TO THESE DESIGN STANDARDS, ALL SOLAR ENERGY SYSTEMS SHALL MEET ALL APPLICABLE STATE REGULATIONS AND PERMIT REQUIREMENTS.** ~~Screening. Every abutting property shall be visually screened from the project through any one or combination of the following: location, distance, plantings, existing vegetation or fencing~~

C. Decommissioning. The solar ENERGY SYSTEM ~~electricity facility~~ shall be completely decommissioned by the facility owner within twelve (12) months after the end of the ENERGY PRODUCING ~~useful life~~, 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 EXTENT** so 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 (3) FEET MAY REMAIN TO AVOID UNECESSARY TOPSOIL DISTRUBANCE.** 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. 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** ~~Such~~ 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 (1) SQUARE FOOT, SHALL BE POSTED AT EACH ENTRANCE TO THE SOLAR ENERGY SYSTEM TO IDENTIFY THE PROPERTY OWNER, THE SOLAR ENERGY SYSTEM OWNER, AND 24-HOUR EMERGENCY CONTACT PHONE NUMBER, AND ~~The manufacturers' or installers' identification and 24-hour emergency contact phone number.~~ **INFORMATON ON THE SIGN SHALL BE KEPT CURRENT. THE SIGN shall be provided along with appropriate warning signage shall be** posted at the site in a clearly visible manner.

E. ~~Interconnection agreement. A copy of the interconnection agreement with the local electric utility company must be provided or a written explanation from the utility company outlining why an interconnection agreement is not necessary for the installation of an interconnected customer owned generator.~~ 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.

G. 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.

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

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

J. 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:

- i. **A COPY OF THE INTERCONNECTION APPLICATION OR A WRITTEN EXPLANATION WHY AN INTERCONNECTION AGREEMENT IS NOT NECESSARY FOR AN INTERCONNECTED CUSTOMER-OWNED GENERATOR.**
- 1) ii. **PARCEL** ~~Property~~ lines, setbacks and physical features including access routes and proposed road improvements;
- 2) iii. All existing and proposed structures including impervious surface calculations;
- 3) iv. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures;
- 4) ~~Blueprints or drawings of the solar installation showing the proposed layout of the system and any potential shading from nearby structures or vegetation;~~
- 5) v. Any existing residential dwellings within one-quarter mile of **THE SOLAR ENERGY SYSTEM PROJECT** ~~a photovoltaic solar project or one-half mile of a concentrated solar project;~~
- 6) vi. Existing utilities and transmission lines, proposed utility lines, and utility and maintenance structures
- 7) vii. Existing topographic contours and mapped soils;
- 8) viii. Existing vegetation (list type and percent of coverage; i.e. grassland, plowed field, wooded areas, etc.)
- 9) ix. Revegetation areas and methods;
- 10) x. Dust and sediment and erosion control;
- 11) xi. Proposed stormwater management measures;
- 12) xii. Any floodplains or wetlands; and
- 13) xiii. Fencing **LOCATION** details
- 14) xiv. Total site acreage;
- 15) xv. Landscape and buffer areas;
- 16) ~~The number of panels to be installed, the proposed location and spacing of solar panels, and location of any associated accessory structures~~
- 17) ~~An operation and maintenance plan~~
- 18) ~~Landscape plan.~~

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(2) BEFORE FINAL APPROVAL, A MAJOR SITE PLAN DRAWN AT AN APPROPRIATE SCALE SHALL BE PROVIDED IDENTIFYING ALL ITEMS LISTED IN (1), AS WELL AS:

- i. ENGINEERED DRAWINGS OF THE SOLAR INSTALLATION SHOWING THE PROPOSED LAYOUT OF THE SYSTEM AND ANY POTENTIAL SHADING FROM NEARBY STRUCTURES OR VEGETATION;
- ii. THE NUMBER OF PANELS TO BE INSTALLED, THE PROPOSED LOCATION AND SPACING OF SOLAR PANELS, AND LOCATION OF ANY ASSOCIATED ACCESSORY STRUCTURES
- iii. AN OPERATION AND MAINTENANCE PLAN
- iv. LANDSCAPE AND LANDSCAPE MAINTENANCE PLAN
- v. A COPY OF THE INTERCONNECTION AGREEMENT OR A WRITTEN EXPLANATION WHY AN INTERCONNECTION AGREEMENT IS NOT NECESSARY.

SECTION 3. §175-85, Solar Energy Systems, of the Code of Public Local Laws of Caroline County, Maryland is hereby transferred to § Article V – Supplementary Regulation, Section 175-46.

SECTION 4. §175-86, Accessory Ground-Mounted Solar Power Electric Generation Structures, of the Code of Public Local Laws of Caroline County, Maryland is hereby renumbered as to § Article IV – Accessory Structures and Uses, Section 175-85.

SECTION 5. Matter deleted is shown by ~~strikethrough~~. Matter added is shown in **BOLD CAPITALIZATION**. Matter added by Amendment is shown by ***BOLD ITALICIZED CAPITALIZATION***. Matter deleted by Amendment is shown by ~~double-strikethrough~~.

SECTION 6. The Recitals to this Ordinance are incorporated herein and deemed a substantive part of this Bill.

SECTION 7. The provisions of this Ordinance are declared to be severable. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held invalid or unconstitutional by any court or competent jurisdiction, the same shall be deemed separate, distinct, and independent from, and such holding shall not affect the validity of, the remaining portions of this Ordinance, it being the intent of the County that this Ordinance shall stand, notwithstanding the invalidity of any section, subsection, sentence, clause, phrase, or portion hereof.

SECTION 8. The Publishers of the Code of Public Local Laws of Caroline County, Maryland (the "Code") in consultation with and subject to the approval of the County shall make non-substantive corrections to codification, style, capitalization, punctuation, grammar, spelling, organization, and any internal or external reference or citations to the Code that is incorrect or

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obsolete, with no further action required by the County Commissioners. All such corrections shall be adequately referenced and described in the editor's note following the section affected.

SECTION 9. The title of this Ordinance, or a condensed version thereof, shall be deemed to be, and is, a fair summary of this Ordinance for publication and all other purposes.

SECTION 10. This Ordinance shall take effect on December 12, 2017

Enacted this 12th day of December 2017.

ATTEST:

Jennifer M. Farina
Jennifer M. Farina
Administrative Coordinator

**COUNTY COMMISSIONERS OF
CAROLINE COUNTY, MARYLAND**

D. J. Franklin
Daniel J. Franklin, President

Larry C. Porter
Larry C. Porter, Vice President

Wilbur Levengood, Jr.
Wilbur Levengood, Jr., Commissioner

(SEAL)



STATE OF MARYLAND CAROLINE COUNTY
FILED FOR RECORD

At 11:00 o'clock am on 12/13 2017
and duly recorded in Liber FDM 2
Folio 462 one of the Ordinance
record books for the aforesaid and
Dale Migner Clerk
Recording Fee

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