



**APPOMATTOX COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT**

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SUMMARY OF PROPOSED AMENDMENTS
ZONING ORDINANCE

Date: June 15, 2020

SECTION: ADD to Section 19.6-12 Definitions
ADD to Section 19.6-67 Permitted Uses and Conditional Uses in A-1, Agricultural
ADD to Section 19.6-68 Permitted Uses in R-1, Low-Density Residential
ADD to Section 19.6-69 Permitted Uses in R-2, Medium-Density Residential
ADD to Section 19.6-73 Conditional Uses in M-1, Industrial
ADD to Section 19.6 74 Conditional Uses in IP, Planned Industrial
ADD NEW Section 19.6-97 Utility Scale Solar Energy Farm

ORIGIN OF REQUEST:

Planning Commission Initiated

This series of amendments were initiated by the Planning Commission after they began studying the issue in depth. The Planning Commission has dealt with multiple petitions on this topic in the past utilizing the "Resource Extraction" land use category. As they became more educated on the subject, the Planning Commission felt it necessary to codify many of the requirements that have been placed on the previous petitions through the conditional use process. Additionally, the General Assembly has taken up the issue of solar energy multiple times over the past few sessions. Staff worked with the Virginia Association of Counties (VACO), the County Attorney's office, the most recent changes to the Virginia Code, and reviewed nearby county ordinances (Campbell, Culpepper, Halifax, Pittsylvania, Powhatan) as these regulations were developed.

PUBLIC HEARINGS:

Planning Commission-December 11, 2019

Board of Supervisors-February 18, 2020

PROPOSED AMENDMENT(S):

The following eight (8) definitions would be added:

Facility Owner-The person or entity that owns all or a portion of a solar energy facility (farm), whether or not it owns the site on which the facility is located.

Operator-The person or entity responsible for the overall operation and management of a solar energy facility (farm), if different from the facility owner.

Photometric Plan-A point by point depicting the intensity and location of lighting on the property.

Photovoltaic or PV-Materials and devices that absorb sunlight and convert it directly to electricity.

Rated Capacity-The maximum capacity of a solar energy facility (farm) based on the sum total of each photovoltaic system's nameplate capacity.

Small Wind Energy System-A wind energy conversion system consisting of a rotating wind turbine and related control or conversion equipment that converts the kinetic energy in wind into mechanical energy and is intended primarily to reduce on-site consumption of energy for homes or businesses.

Solar Energy Collection System, Large Scale or Utility Scale Solar Energy Farm-A renewable energy system consisting of solar panels and related equipment (e.g. heat exchanger, pipes, inverter, wiring, storage) that collects solar radiation and transfers it as heat and converts it to electricity for transfer to an electricity grid. The term applies to solar photovoltaic systems equal to or greater than one (1) acre in size or having a rated capacity equal to or greater than 200 kilowatts (kw).

Solar Energy Collection System, Small Scale or Residential Scale--A renewable energy system consisting of solar panels and related equipment (e.g. heat exchanger, pipes, inverter, wiring, storage) that collects solar radiation and transfers it as heat and converts it to electricity for direct on-site use. The term applies to solar photovoltaic systems less than one (1) acre in size or having a rated capacity less than 200 kilowatts (kw).

The following land use categories would be added to the District Regulations:

Section 19.6-67 A-1, Agricultural District, subsection B, Permitted Uses, "Small Scale or Residential Solar Energy Collection System"

Section 19.6-67 A-1, Agricultural District, subsection C, Conditional Uses, "Utility Scale Solar Energy Farm"

Section 19.6-68, R-1, Low Density Residential District, subsection B, Permitted Uses, "Small Scale or Residential Solar Energy Farm"

Section 19.6-69, R-2, Medium Density Residential District, subsection B, Permitted Uses, "Small Scale or Residential Solar Energy Farm"

Section 19.6-73, M-1, Industrial District, subsection C, Conditional Uses, "Utility Scale Solar Energy Farm"

Section 19.6-74, IP, Planned Industrial District, subsection C, Conditional Uses, "Wind Energy Systems" and "Utility Scale Solar Energy Farm"

The following additional regulations would be created as a baseline standard for all new Utility Scale Solar Energy Farms:

§19.6-97 Utility Scale Solar Energy Farm

§19.6-97.1 Applicability, permitting

The requirements set forth in this section govern the siting, development, construction, installation, operation, and decommissioning of utility scale solar energy facilities in the county. A Conditional Use Permit (CUP) is required for each utility scale solar energy farm proposed to be constructed, installed, or operated in the county. Small scale solar energy arrays and associate apparatus used for individual residential dwellings, not connected to the electrical grid, shall be considered an accessory use to the principal dwelling and permitted as such.

§19.6-97.2 Applications and Required Information for a Utility Scale Solar Energy Farm

In addition to the material required for a Conditional Use Permit petition, applications for utility scale solar energy facilities (farms) shall include the following information:

- A. **Project Narrative:** A narrative identifying the applicant, facility owner, property owner, and the operator of the facility. The narrative should include an overview of the project and its location, the size of the site and the project area; the current use of the site, the estimated time for construction, including a proposed date for commencement of construction; the maximum rated capacity of the facility; the approximate number, types and expected footprint of the solar equipment to be constructed to include photovoltaic panels, ancillary facilities, fencing, buffering, where the electricity generated at the facility will be transmitted, and the location of the proposed electrical grid interconnection.
- B. **Site Development Plan:** A site development plan of a scale and specification, in accordance with the requirements found in the Conditional Use Permit application shall be submitted with the application. Additional information may be required, as determined by the Zoning Administrator, such as scaled elevation view or other supporting drawings, photographs of the site, photographic simulations or modeling of the proposed solar energy facility, specifically from sensitive locations, as deemed necessary by the Zoning Administrator, aerial imagery or other mapping of the site or any other technical report necessary for the proper review of the Conditional Use Permit petition. If the petition is granted, then a full site development plan shall be required in accordance with the regulations found elsewhere in this ordinance.
- C. **Documentation of right to use property for the proposed facility:** Documentation shall include proof of control over the proposed site or possession of the right to use the proposed site in the manner requested. Any sensitive financial or confidential information may be redacted.
- D. **Decommissioning plan; security**
 - 1. The applicant shall provide a detailed decommissioning plan that provides procedures and requirements for removal of all parts of the solar energy generation facility and its various structures at the end of the useful life of the facility or if it is deemed abandoned or unsafe. The plan shall include the anticipated life of the facility, the estimated overall cost of decommissioning the facility in current dollars, the methodology for determining such estimate, and the manner in which the project will be decommissioned. The decommissioning plan and the estimated decommissioning cost shall be update every five (5) years, from the date of the certificate of occupancy or upon request of the Zoning Administrator; however, the updated costs shall be no more than twice every ten (10) years.

2. Prior to receiving a certificate of occupancy to begin operation, the applicant must provide security in the amount of the estimated cost of the decommissioning. Options for security shall include a cash escrow, a performance surety bond, or an irrevocable letter of credit. The security must remain valid until the decommissioning obligations have been met. The security may be adjusted up or down by the county if the estimated cost of decommissioning the facility changes. The security must be renewed or replaced, if necessary, to account for any changes in the total estimated cost of decommissioning if deemed by the updated estimates. Security is a mandatory condition of all conditional use permits for utility scale solar energy farms.
 3. The decommissioning plan, cost estimates, and all updates to plans and estimates shall be sealed by a professional engineer licensed to do business in the Commonwealth of Virginia.
- E. **Economic Analysis:** An economic impact analysis, prepared by a qualified third-party that reports any expected change in the value of the subject property, expected employment during the construction of the facility, any expected impact on the county's tax revenues, the estimated costs to the county associated with the facility in the form of additional services, and information on any other economic benefits or burdens from the project.
- F. **Environmental Protection and Product Safety:** All utility scale solar energy farms shall incorporate generally accepted national environmental protection and product safety standards for the use of solar panels and battery technologies for solar photovoltaic (electric energy) projects, such as those developed for existing product certifications and standards including the National Sanitation Foundation/American National Standards Institute No. 457, International Electrotechnical Commission No. 61215-2, Institute of Electrical and Electronics Engineers Standard 1547, and Underwriters Laboratories No. 61730-2.
- G. **Review fees:** The county may retain qualified third-parties to review portions of the conditional use permit petition or the site development plan that are outside of the county's areas of expertise and do not have adequate state and federal review. Any costs incurred by the county for such review by qualified third-parties shall be bill to the applicant and must be paid in full prior to the issuance of a certificate of occupancy.
- H. **Community meeting:** A public meeting shall be held prior to the county's public hearing with the Planning Commission to give the community the opportunity to hear from the petitioner and ask questions regarding the proposed facility. The meeting shall be held at a location within a reasonable distance to the project and must be advertised in a newspaper with local circulation for two consecutive weeks prior to the meeting. The petitioner shall provide the Zoning Administrator with the date, time and place of the meeting, a copy of the

advertisement, and a summary of any input/comments received from members of the public. Such information shall be provided to the Zoning Administrator no less than seven (7) business days prior to the Planning Commission public hearing.

§19.6-97.3 Visual Impacts, Setbacks, and Buffering

The petitioner shall demonstrate through project siting, and if necessary, through mitigation, that the solar project minimizes impacts to viewsheds from all residential areas, and any areas of scenic, historical, cultural or recreational significance. The following should be adhered to in placement, buffering and/or setback:

1. A vegetative buffer sufficient to mitigate the visual impact of the facility is required along all areas adjacent to public roadways. The buffer shall consist of a twenty (20) foot wide landscaped strip to include trees, shrubs and other vegetation considered native to the area. The landscaped strip may be located within the setback area and should run around or near the perimeter fence. Tree plantings in the buffer strip shall be a minimum of five (5) feet in height at the time of planting, no more than fifteen (15) feet between trees. Trees may be staggered. Existing trees and vegetation may be maintained within the buffer areas and may supplement and satisfy landscaping requirements. An alternative to tree plantings is to construct an earthen berm, minimum height of six (6) feet high. Berm must be stabilized with native grasses and/or plantings. The landscaped buffer must be maintained in good condition for the life of the project.
2. The solar panel arrays shall be set back from each parcel boundary a minimum of five hundred (500) feet. All other structures or infrastructure shall meet the minimum setback for the underlying zoning district. Solar panel arrays shall be set back a minimum of five hundred (500) feet from any stream or wetland area. Existing wells shall be abandoned in accordance with current Virginia Department of Health regulations.
3. The solar panel array area shall be enclosed by a security fence. The fence shall not be less than six (6) feet in height and should be equipped with appropriate anticleimbing devices such as strands of barbed wire at the top. Fencing should be installed on the interior of the buffer area so that it is screened from adjacent property. The fence shall be maintained in good repair for the life of the project.

§19.6-97.4 Processing of Application

The conditional use permit petition will follow the normal and customary process for such petitions, meaning, a duly advertised public hearing before the Planning Commission, followed by a recommendation, and then a duly advertised public hearing before the Board of Supervisors, followed

by final consideration. Petitions are subject to any action afforded any other conditional use permit as enumerated elsewhere in the zoning ordinance.

§19.6-97.5 2232 Review For Utility Scale Solar Energy Farm

In accordance with the Code of Virginia §15.2-2232 *et seq*, utility scale solar energy farm petitions are subject to review against the county's Comprehensive Plan. Prior to the petition being considered by the Planning Commission, the Planning Commission shall make a determination as to conformity with the Comprehensive Plan. The 2232 review may be advertised and approved concurrently with the conditional use permit petition.

§19.6-97.6 Unsafe or Abandoned Projects; Decommissioning

1. If the utility scale solar energy facility is determined to be unsafe by the Building Official, then the facility shall be required to be repaired by the facility owner, site owner, or operator. Repairs shall be made in a timely manner as established by the Building Official. Should the repairs not be completed in the timeframe provided, then the owners or operators will be instructed to commence decommissioning in accordance with the approved decommissioning plan.
2. If the facility is not operated for a continuous period of twelve (12) months, then the county may notify the owner/operator by registered mail and provide forty-five (45) days for the owner/operator to respond. If no response is provided, then the owner/operator will be instructed to commence decommissioning in accordance with the approved decommissioning plan.
3. If the facility is abandoned, the owner/operator is required to notify the Zoning Administrator in writing.

Within one (1) year of the date of said notification, or if determined to be abandoned by the Zoning Administrator in accordance with the above subsections, then the county may pursue legal action to have the facility removed at the expense of the facility owner, site owner, or operator, each of whom shall be jointly and severally liable for the expense of removing or repairing the facility. The county may also call upon the decommissioning security to remove the facility.