

**CULPEPER COUNTY, VIRGINIA
ORDINANCE ADOPTING ARTICLE 17-7 (STANDARDS
AND PROCEDURES FOR RENEWABLE ENERGY GENERATION/UTILITY
SCALE SOLAR FACILITIES) TO APPENDIX A (ZONING ORDINANCE)
OF THE CULPEPER COUNTY CODE OF ORDINANCES**

WHEREAS, the Board of Supervisors of Culpeper County, Virginia, pursuant to general and specific authority granted to it by the Code of Virginia (1950), as amended, including but not limited to Sections 15.2-1427, 15.2-1433, and 15.2-2280 *et. seq.*, may adopt or amend ordinances regarding zoning consistent therewith;

WHEREAS, it is the Board's desire to adopt Article 17-7 (Standards and Procedures for Renewable Energy Generation/Utility Scale Solar Facilities) to Appendix A (Zoning Ordinance) of the Culpeper County Code of Ordinances. The adoption is intended to regulate utility scale energy generation uses in the County, including but not limited to; establishing (i) relevant definitions, (ii) a statement of intent, (iii) process for consideration, (iv) area regulations, (v) decommissioning provisions, (vi) application requirements, and (vii) permit conditions, etc; and,

WHEREAS, the adoption serves the general purpose of promoting the health, safety, or general welfare of the public, and other purposes as found in Va. Code Ann., Sec. 15.2-2283.

NOW, THEREFORE, BE IT ORDAINED that the Board of Supervisors of Culpeper County, Virginia, adopts Article 17-7 (Standards and Procedures for Renewable Energy Generation/Utility Scale Solar Facilities) to Appendix A (Zoning Ordinance) of the Culpeper County Code of Ordinances.

BE IT SO ORDAINED THIS 7TH DAY OF FEBRUARY, 2023.

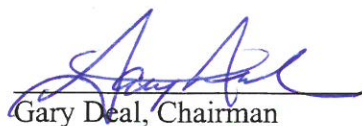
VOTING AYE: CAMPBELL, GUGINO, ROSENBERGER, UNDERWOOD

VOTING NAY: BATES, DEAL, DURR

ABSTAINING: NONE

ABSENT: NONE

Witness this signature and seal.



Gary Deal, Chairman

Board of Supervisors of Culpeper County, Virginia

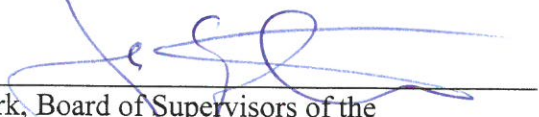
Date: February 7, 2023

ATTEST:



John C. Egertson, Clerk

The undersigned Clerk of the Board of Supervisors of the County of Culpeper, Virginia, hereby certifies that the foregoing constitutes a true and correct copy of an Ordinance adopted by the Board of Supervisors of the County of Culpeper, Virginia at a regular meeting held on the 7th day of February, 2023.



Clerk, Board of Supervisors of the
County of Culpeper, Virginia

For Information:

County Administrator

County Attorney

Planning and Zoning Director

Article 17-7 Standards and Procedures for Renewable Energy Generation/Utility Scale Solar Facilities.

17-7-1 Definitions: The following definitions shall apply in this Article 17, Section 17-7.

17-7-1.2 Concentrating Solar-Thermal Power Systems (CSP) – Technology, including but not limited to, mirrors and power tower type systems used to generate electricity by converting energy from sunlight to thermal energy used to power a turbine.

17-7-1.3 Decommissioning – The process of removing from active service; To deactivate and shut down.

17-7-1.4 Decommissioning Plan – A plan to disconnect, remove, and properly dispose of equipment, facilities, devices, and materials.

17-7-1.5 Utility Scale Solar Facility - A renewable energy project that generates electricity from sunlight that will be used to provide electricity to a utility provider and/or customer.

17-7-1.6 Viewshed Analysis – The process of identifying locations that are visible from one or more observations points. Viewshed analysis may also be referred to as a line of sight or visibility analysis.

17-7-2 Statement of Intent: It is the intent of this Article 17, Section 17-7 to:

17.7-2.1 Establish a proper balance for energy generation needs and projects that are representative of Culpeper County's footprint on the electrical grid.

17-7-2.2 Establish parameters for renewable energy generation facilities so as to limit "utility scale solar sprawl" in order to preserve farmland, protect historic resources, and ensure that such development is compatible with neighboring properties.

17-7-2.3 Provide criteria to be addressed in the siting of any renewable energy facility that generates electricity from solar resources. The criteria shall provide for the protection of the County in a manner consistent with the goals of the Commonwealth to promote the generation of solar energy resources.

17-7-2.4 Include provisions establishing requirements upon the siting of any renewable energy facility, including but not limited to provisions limiting noise, requiring buffer areas and setbacks, ensuring limits on mass grading, and addressing generation facility decommissioning.

17-7-2.5 Be consistent with the provisions of the Commonwealth Clean Energy Policy, where appropriate, pursuant to Title 45.2, Chapter 17, Section 1708 (Role of local governments in achieving objectives of the Commonwealth Clean Energy Policy) as amended.

17-7-3 General Applicability; Conditional Use Permit Required. The requirements set forth in this Article 17, Section 17-7 shall govern the location of renewable energy generation facilities including, but not limited to: utility scale solar facilities. These provisions are intended to govern any energy generation facility that produces electricity that will be sold to or used by a utility provider or for the wholesale market. A conditional use permit shall be required for such facilities as required in the underlying zoning district in which these facilities may be located.

These provisions are not intended to govern renewable energy facilities and/or accessory structures (*with emphasis*) that are producing the electricity needs for the direct, actual, and onsite use of the associated properties, e.g., structures such as roof top solar panels, ground mounted solar arrays used exclusively by the property upon which a facility is located.

17-7-4 Area Regulations.

17-7-4.1 Project Area Regulations: The maximum project area for any facility, which includes panels and all associated equipment, shall be no more than three hundred (300) acres.

17-7-4.2 Height Regulations: Structures may be erected up to a maximum height of fourteen (14) feet from the finished ground elevation. This height limit does not apply to any associated aerial electric lines and/or substation equipment that may be erected in association with a utility scale solar project.

17-7-4.3 Setback Regulations: All structures and above ground equipment associated with any project shall be located a minimum of two hundred (200) feet from (i) any street right-of-way and (ii) from all side and rear property lines and boundaries. This setback requirement shall not prevent any required landscaping being located closer than 200 feet from any street and side and rear property lines and boundaries.

17-7-5 Decommissioning Provisions: Either at the end of its lifespan or in the event of inactivity for more than twelve (12) consecutive months, a permitted utility scale solar facility must and shall be decommissioned in accordance with Article 17, Section 17-7 and all other applicable local, state, and federal laws and regulations. All energy generation equipment and associated/related equipment, including but not limited to, buildings, machinery, equipment, cabling, security barriers, roads, et. shall be removed. Permitholders shall restore site and soil conditions to pre-project conditions and levels. Decommissioning plans shall provide for and include the removal of all surface and subsurface features, plans to restore the land and soil of the project areas, and detailed information as to how all materials will be properly disposed of and/or recycled. Efforts shall be made to reduce the amount solar facility infrastructure that is anchored with concreted footings to the extent possible for ease of removal after the useful life of the facilities. Decommissioning plans shall be updated every three (3) years. The following decommissioning provisions shall also apply:

- a. Notice of inactivity- Permitholders and landowners shall be responsible for notifying the Zoning Administrator within (thirty) 30 days of a facility becoming inactive or when

a permitted facility no longer produces electric power for transmission by a public utility. Notification to the Zoning Administrator shall be provided in writing.

- b. If a permitted facility remains inactive for more than twelve (12) consecutive months, the permit may be subject to revocation; provided, however, that, if during the twelve-month period and at the time of potential revocation, the Permitholders and/or landowners can sufficiently demonstrate to the Board of Supervisors that they are diligently working to restore the permitted facility to active operation following an act or acts of force majeure and that restoration to active operation may be accomplished within a reasonable time under the circumstances, permit may not be revoked in the discretion of the Board of Supervisors.
- c. Decommissioning process- Upon completion of a facility's lifespan or following revocation or other lawful termination /end of a conditional use permit, the facility shall be decommissioned, and the site shall be returned to the condition which existed prior to construction of the facility, including removal of all equipment and debris except any substation that is deemed critical infrastructure to the electrical grid.
- d. Trenches or other borings or excavations made in association with the facility shall be filled and compacted at the time of decommissioning.
- e. A decommissioning plan shall be provided by the Applicants, Permitholders, and/or landowners; all lawfully requisite permits shall be obtained prior to conducting decommissioning activities.
- f. All decommissioning activities shall be completed within nine (9) months of the due date established hereunder subsection 17-7-5(a) for providing a notice of inactivity to the Zoning Administrator or nine (9) months from the date a notice of inactivity is actually provided to the Zoning Administrator, whichever is sooner.
- g. If a facility is not decommissioned timely and in accordance with all of the provisions of Article 17, Sec. 17-7 and all applicable local, state, and federal laws and regulations, the County may cause the removal of the facility, with costs being borne by the Permitholders and landowners, with such liability and responsibility being joint and several.
- h. Components of a facility removed from a site during and/or attendant to decommissioning shall be handled and disposed of in compliance with all applicable local, state, and federal law and regulations. Applicants, permitholders, and landowners shall re-use and/or recycling components, including utilizing any "extended producer responsibility" programs offered by vendors of a particular component, as opposed to and over landfill disposal.

- i. In no event, shall any hardware, parts, structures, components, or any portions of a project or facility that are damaged, replaced, or decommissioned be brought to or disposed of in a landfill or solid waste transfer station in Culpeper County, Virginia.
- j. A surety agreement and attendant financial or bond instrument and guarantee for decommissioning, in a form acceptable to the County Attorney, and in an amount as determined sufficient and set by the Board of Supervisors, shall be submitted prior to the issuance of any construction or building permits, and land disturbance permits. Surety amounts shall be reviewed every three (3) years and adjusted appropriately to account for inflation, the market for the pertinent acts of decommissioning, other relevant cost variables, etc. Surety agreements and guarantees shall expressly specify that all Permitholders and all landowners are responsible for decommissioning in accordance with Article 17, Section 17-7 and all applicable local, state, and federal laws and regulations - jointly and severally.

Article 17-7-5.1 Decommissioning Surety: An itemized and detailed decommissioning cost estimate shall be provided with the conditional use permit application for a facility/project. Prior to the issuance of any construction, building, and land disturbing permits for a permitted facility/project, the Permitholders and landowners shall enter into a surety agreement for decommissioning and post surety in a form acceptable to the County Attorney, and in an amount determined sufficient and set by the Board of Supervisors. The following provisions shall apply to the decommissioning surety:

- a. The aforementioned decommissioning cost estimate and surety amount shall be reviewed and considered by an independent professional engineer, as selected by the County Administrator or his designee, for comment and recommendation. The independent professional engineer shall be paid for by the Applicant.
- b. The amount of the requisite surety, thereafter, shall be set by the Board of Supervisors. Any required surety is intended to account for a reasonable and sufficient estimate of the projected gross cost of decommissioning a facility. In no event will credit for estimated recycled or salvage material values be used in the calculation of surety amounts or to reduce the amount of a decommissioning surety.
- c. Every three (3) years from the date of issuance of a permit, an independent professional engineer, as selected by the County Administrator and to be paid for by the Permitholders, shall review the surety amount and shall determine whether it should be revised, according to inflation, the market for pertinent acts of decommissioning, and other relevant cost variables with regard to decommissioning to ensure that the posted surety will cover any projected gross cost.
- d. Surety amounts shall cover costs associated with reclaiming the land for agricultural and/or forestry use, where previously established. This shall include but is not limited to estimates to mitigate any heavy metal or herbicide residues. Surety amounts shall also include costs required to restore soil properties that are essential to supporting crop productivity, where appropriate, as determined by the Board of Supervisors.

- e. Surety instruments and funds shall be released, only after decommissioning in accordance with Article 17, Section 17-7 and all other applicable local, state and federal law and regulations, is complete, as determined by the Board of Supervisors, and a detailed report has been submitted to the County Administrator, or his designee, demonstrating full compliance with all decommissioning requirements to the satisfaction of the County Administrator, or his designee.

Article 17-7-6 Special Provisions for Utility Scale Solar Generation Facilities: The following provisions shall apply to each utility scale solar facility and conditional use permit attendant thereto that is issued.

- a. Use Permit is nontransferable. Any permit issued shall be granted solely for the subject property for operation of a utility scale solar facility. This conditional use permit shall be binding on any successors, assignees, current or future lessee, sub-lessee, or owner of the renewable energy facility. The permit shall not be assignable to a third party absent the written consent of the Board of Supervisors of Culpeper County. It is important that successors-in-interest be on written notice of the Permit and its terms and conditions, and the approved terms and conditions are legally binding on all successors-in-interest, including successor utility companies.

Applicants and Permitholders shall provide and keep current at all times, in writing, their contact information and relational charts to the County Administrator, or his designee, with a mandatory copy to the County Attorney, regarding business addresses, telephone numbers, contact email addresses, business structure and affiliations, including but not limited to their affiliations, members, parent company, and subsidiaries prior to issuance of a land disturbance permit and at all times thereafter. The County shall be notified promptly and within no more thirty (30) days of any change in business addresses, telephone numbers, contact email addresses, business structure and affiliations, business ownership, including but not limited to their affiliations, members, parent company, and subsidiaries.

- b. Term Limit. The term limit for facilities shall be determined through the conditional use permit process.
- c. Access. Access to the site for inspections shall be accommodated for staff and/or other appropriate County officials with a 24-hour notice to the applicant.
- d. Maintenance of site features. All site features, including landscaping, fencing, stormwater management facilities, etc. shall be properly maintained throughout the life of the permit. Maintenance of such features shall be guaranteed by a surety agreement as determined by an independent landscape architect or professional engineer chosen and approved by the County Administrator but paid for by the Applicants and/or Permitholders. Surety in a form acceptable to the Culpeper Attorney and in an amount determined sufficient and set by the Board of Supervisors is required.

- e. Submission of site plan. A site plan in accordance with Article 20 of Appendix A of the Culpeper County Code shall be submitted prior to issuance of any building permits. The County may choose to contract with a third-party plan reviewer to help with the site plan review process. All fees associated with any third-party plan review shall be paid by the Applicants, Permitholders, and/or successors-in-interest. Site plans shall reflect and properly illustrate all conditions as set forth in the conditional use permit.

- f. Fire & EMS coordination and training. Permitholders shall work proactively with the Director of Emergency Services and the local volunteer Fire/EMS Chiefs (first and second due) to develop an Emergency Response Plan which will include an agreed-upon set of procedures and protocols for managing risk of fire and for responding in the event of an emergency at the facility (i) at the time of and during construction, (ii) post-construction and during the course of regular operations, and, (iii) at the time of and during decommissioning.

The Applicants, Permitholders, and successors-in-interest, at a minimum, at all times shall provide and be responsible for, and keep current:

1. Emergency communications direction, including but not limited to emergency phone numbers and key points of contact.
 2. Special training for the County's local (career and volunteer) fire and emergency services personnel, including occasional tours of the site to ensure awareness and familiarity of the site and equipment, as well as points of ingress/egress, by the emergency response entities.
 3. Designated shut off procedures and identified locations for equipment shut off.
 4. Maps outlining the location of key equipment, such as the location of lockboxes, inverters, transformers, system/electrical cut-off switches, and points of ingress/egress at the facility.
 5. An Emergency Response Plan shall be submitted and reviewed in conjunction with the permit application materials and shall be adopted and required as part of the conditional use permit process and site plan approval process.
 6. A designated fire lane shall be provided for emergency access to and through the site and shall be shown on submitted preliminary plans indicating construction details of such access and adopted as part of the conditional use permit process and the site plan approval process.
 7. Training shall be provided and updated (i) whenever significant modifications and/or repairs are made to the facility and (ii) at the request of a local Fire/EMS Chief (first and second due) and/or the County's Emergency Services Director.
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- g. Noise. All construction activities shall be limited to the hours of 8:00 a.m. to 6:00 p.m. or sunset, whichever occurs earlier, Monday-Saturday and will be prohibited on Sundays. This condition shall apply to noise generated during the construction of the facility, its ongoing operation and maintenance, any replacement of equipment, and at the time of the decommissioning of the facility, including but not limited to deliveries of material and/or

equipment. This restriction shall not apply to emergency repairs (e.g., storm damage or other force majeure) that are critical and necessary to the facility providing power.

- h. Entrance requirements. The following conditions shall apply to the property entrances:
 - 1. The applicant shall obtain all required permits from VDOT and complete all required improvements to the property entrances prior to issuance of a land disturbance permit.
 - 2. In the event that there is damage to the adjoining properties as a result of ingress/egress of construction vehicles, the applicant shall remedy all damage in full prior to issuance of a final inspection for the project.
 - 3. Access roads are to be marked with identifying signage.

- i. Signage. No signage of any type may be placed on the facility other than notices, warnings, and identification information required by law. During construction only, limited signage may be permitted to identify the companies performing the construction and to provide notice to the general public. This shall not prohibit the installation of any required signage as part of the approved traffic impact mitigation plan as required.

- j. Security/Fencing. The facility should be enclosed by security fencing not less than six (6) feet in height. The type of fencing utilized at the site shall be in keeping with the area character. For example, board fencing may be a more suitable security fencing which more closely matches area character and/or improves aesthetics. However, any fencing utilized shall be required to meet the standards of the National Electric Code and other applicable local, state, and federal laws and regulations. To the extent possible, all required fencing shall be placed behind planned perimeter landscaping.

- k. Lighting. Lighting shall be the minimum necessary for safety and/or security purposes and shall use shielded fixtures to minimize off-site glare. Any utilized lighting shall comply with Article 32 of the Zoning Ordinance. The full site plan shall include a photometric plan that depicts the location, type, power, and predicted lighting levels of each permanent and semi-permanent fixture.

- l. Structures. Any proposed structures, including but not limited to panels, inverters, substations, etc. shall be of a neutral color, so as to reduce visual obtrusiveness. Any supporting electrical and mechanical equipment such as racking for the panels, inverters, etc. must be of a neutral color that is identical to, or closely compatible with, the color of the supporting structure, so as to make related equipment visually unobtrusive.

- m. Annual Notices.
 - 1. Permitholders shall provide a written annual statement of activity to the County Administrator, or his designee, which shall confirm and detail activity and electricity generation, including contribution to the power grid, at the site. This will help ensure that the facility is still actively producing electricity for the power grid.

2. Permitholders shall provide a written annual report to the County Administrator, or his designee, identifying what if any equipment (panels, inverters, etc.) has been replaced and provide specific information regarding such replacement.

3. Permitholders shall provide the County Administrator, or his designee, a written annual report(s) or other official government documentation from the Department of Environmental Quality that sufficiently demonstrate that all permits including but not limited to permits issued under the Virginia Stormwater Management Program (VSMP) are still active and being maintained in good standing.

4. Permitholders shall provide the County with a perpetual Erosion and Sediment Control and/or stormwater management facility maintenance agreement ensuring all Erosion and Sediment Control and Stormwater management facilities are properly maintained. The Permit Holder shall provide the County with records of all required inspections and maintenance work performed on such facilities. This shall be provided at a minimum on an annual basis or sooner as otherwise required or requested by the County or State.

- n. Violation of Conditions. Notices of Violation shall be sent to Permitholders, landowners and/or other successors-in-interest if there is evidence that suggests the use is not in conformance with any of the adopted conditions of permit approval, the Zoning Ordinance including but not limited to Article 17, Sec. 17-7, and/or any other applicable law for which the Zoning Administrator may issue notices. If a violation remains after notice of violation is received, any continued violation of any of the conditions of permit approval, the Zoning Ordinance including but not limited to Article 17, Sec. 17-7, and/or any other applicable law for which the Zoning Administrator may issue notices, shall be grounds for revocation of the conditional use permit and any other penalties as allowed under Article 23 (Violations and Penalties), and any other applicable local, state, and/or federal law and regulations.
- o. Liability Insurance. The Board of Supervisors shall determine through the conditional use permit application process whether and what types of liability insurance are required for a particular facility/ project. The type of insurance and amount shall be determined and set by the Board of Supervisors. The insurance documents and policies shall be in a form approved by the County Attorney.
- p. Erosion and Sediment Control Plan. Permitholders shall submit prior to the issuance of any land disturbance permits a proposed erosion and sediment control plan in accordance with Chapter 8 of the Culpeper County Code and the Virginia Erosion and Sediment Control Handbook (VESCH). Permitholders shall also provide evidence of any and all required state and/or federal permits prior to the issuance of a land disturbance permit. The erosion and sediment control plan shall:
1. Adhere to the Virginia Erosion and Sedimentation Control Regulations and the Virginia Erosion and Sedimentation Control Handbook (a/k/a the "Green Book").
 2. Provide that no topsoil will be removed from the facility/site but instead will be used onsite to establish ground cover.
 3. Incorporate riparian buffers of at least a minimum of 100 feet from the top-of-bank of all

perennial watercourses. Larger watercourses and water bodies as determined by the Board of Supervisors may require larger riparian buffers. Riparian buffers shall also include any and all associated steep slopes and other environmentally sensitive features in relation to the perennial watercourses.

4. Incorporate a protocol developed in coordination with the County Administrator, or his designee, Culpeper County Soil and Water Conservation District, and Virginia Department of Environmental Quality ("DEQ") that specifies the phased construction of designated units of land so that the total area of disturbed land at any one time is appropriately limited given the nature of the construction activities, the size of the Project, the topography and water resources of and in the project area, and the erosion and sediment controls to be employed. The protocol will be designed to ensure that ground cover is expeditiously established, and appropriate site stabilization achieved throughout construction.
 5. Plan shall indicate any area of disturbance that is denuded of vegetation shall be stabilized within fourteen (14) days.
 6. Final phasing plan shall be fully determined with the submission of the full site plan. 'Fully stabilized' shall mean at least 80% vegetative cover. A preliminary phasing plan shall be submitted as part of the conditional use permit process and review.
 7. Include sufficient surety to guarantee that funding is available to implement and maintain all required erosion and sediment control measures.
 8. Provide for the funding of any as needed a third-party erosion and sediment control inspector during the period of construction. Any as needed third-party erosion and sediment control inspector, while paid for by the Applicant, Permitholders and/or any successor-in-interest, shall be selected and managed by the County Administrator, or his designee.
- q. Vegetation Management Plan. The Applicant, Permit holders and/or successors-in-interest shall submit a preliminary proposed vegetation management plan at time of submittal of the conditional use permit application, and also a final proposed plan for ground cover within the fence lines of the facility/project to the County Administrator, or his designee, for review and approval as part of the full site plan, which shall:
1. Describe in detail the design and type of ground cover to be used, which will consist primarily of native grasses and associated low-growing species.
 2. The plan shall include a description of how any existing tree and vegetation cover will be removed, reused, or otherwise disposed of. This plan shall mention whether any burning of vegetation will be needed and detail when and how this is to be performed.
 3. Include a general plan and schedule for managing the growth of the vegetation over the operational life of the facility so as to maintain a neat and clean appearance.
 4. Include measures to prevent and control noxious weeds and invasive species.
 5. Emphasize mowing and other mechanical means as the primary method of managing vegetation growth.
 6. Identify any class of herbicide to be used and provide that use of any such herbicide will be in accordance with its approved label.
 7. Identify the quantity and type of herbicides expected to be used annually for the Facility.
 8. Provide that only biodegradable soap and water, and no other chemicals, may be used to clean the surface of solar panels.

9. Provide for the review by the County Administrator, or his designee, of any proposed significant changes to the vegetation management plan during the operational life of the facility/project.
- r. Protection of Soils. In addition to using only biodegradable soap and water to clean solar panels and complying with the above limitations on herbicides, Applicants, Permitholders, and successors-in-interest shall take the following steps to ensure the protection of soils from the operation of the facility/project:
1. Promptly report, orally and in writing, to the County Administrator, or his designee, and within twenty-four (24) hours of becoming aware of an issue as to (1) any breakage or loss of integrity of any component that has the potential to result in hazardous materials reaching and/or spilling upon the ground surface; and (2) any actual spillage of fluid other than water to the ground surface, such as the leakage from an inverter or transformer cooling oil. Within seven (7) days following reports made hereunder, the Applicants, Permitholders, and/or successors shall provide a written, follow-up report to the County Administrator, or his designee, that describes in detail the incident, the area affected, and all of the measures taken to respond to, remediate, and remedy the situation.
 2. Take representative soil samples from the project area prior to land disturbance activities for the project, and then again at the end of the first year of operation to establish a baseline of constituents important for agricultural and forestry productivity and compare the results to paired samples of those constituents from the same locations taken at the start of decommissioning. Any significant difference that may adversely affect agricultural and forestry productivity and that is reasonably attributable to the operation of the Facility shall be addressed as part of Applicant's obligation to return the area to substantially the condition that existed prior to construction.
 - a. Grid sampling techniques shall be used to determine soil conditions. There should be a minimum of eight (8) boreholes performed per 5 megawatts of the general area of a proposed facility.
 - b. Borings shall also be performed wherever stormwater dams are proposed and also where structures and facilities are to be located.
 - c. Soil samples should continue to be taken and analyzed and submitted to the County every five (5) years after the first year of operation.
 3. A sealed dry-waste container shall be maintained at the Facility for the disposal of any damaged solar panels.
- s. Reconstruction.
1. Permits issued authorize only the initial construction, operation and decommissioning of the Facility and does not authorize the reconstruction or substantial change in location of the major land-disturbing components of the Facility, such as the collection yard, pilings, racking, roads, buried collection lines, and fencing. Any such reconstruction may be authorized only pursuant to the County's requirements at the time applicable to new projects.
 2. This requirement does not apply to routine maintenance, repair and replacement of components and does not preclude the wholesale replacement of operating components of the Project not involving significant land disturbance, such as the replacement of operating components of the collection yard, solar panels, inverters, and pyranometers. Any equipment replacement program that will result in significant truck traffic potentially disruptive to neighbors shall be undertaken only after approval by the County

Administrator and/or his designee of a traffic management plan and shall be limited to the hours of 8:00 a.m. to 6:00 p.m. or sunset whichever occurs earlier, Monday through Saturday.

- t. Panel Specifications and Composition. At the time of conditional use permit application, the applicant shall provide the County with the general size and type of panel that is being proposed.
 - 1. At the time of site plan approval, the Permit holder shall provide to the County Administrator and/or his designee, with a copy to the County Attorney, a written panel specification disclosure document that includes the composition, toxicological information, and the physical and chemical properties of all of the solar panels being utilized for the Project.
- u. Substantial upgrades and/or changes in design and/or operation. Any substantial upgrades or changes made to the design or operation of the solar facility and/or the Project that are planned shall be disclosed to the County Administrator and/or his designee at least (ninety) 90 days before the intended implementation of the upgrades or changes – except as provided herein. Any substantial upgrades and/or changes resulting solely from a bona fide emergency and force majeure shall be disclosed no later than (sixty) 60 days thereafter and shall be reviewed every two years for adequacy.
- v. Blasting. A geotechnical report shall be submitted with the conditional use permit documentation. This report will help determine if blasting will be necessary to construct the facility. If blasting is deemed to be necessary, the report shall indicate what types of blasting methods will be used. A pre-blast survey shall be performed to indicate all potential impacts within a minimum of 1 mile from the proposed blasting area.
 - 1. The applicant shall supply to the County Administrator and/or his designee a plan of how the blasting and potential impacts will be properly measured and monitored to ensure no damage is done to off-site or adjacent properties including but not limited to structures, wells, agricultural operations, commercial operations, etc.
 - 2. As needed, the County may hire a third-party consultant to review, monitor and regulate any planned blasting activities. The applicant shall reimburse the County for all fees associated with the third-party costs.
- w. Groundwater and Waterway Protection Measures. All energy generation facilities shall install a testing well downstream from the proposed facility on project property. The owner of the facility shall conduct a baseline water testing prior to construction and thereafter on an annual basis during the life of the project. The baseline water testing shall be performed in all waterways located on the project property. This testing shall occur on all waterways before such waterway exits the project property boundaries. The facility owner shall submit each report to the County Administrator and/or his designee. If it is determined that from the report that the groundwater has been contaminated the facility owner shall immediately develop and submit a remediation plan. The Board may also after a negative groundwater finding attributable to the Project revoke the Permit and use Decommissioning sureties in place to decommission the facility.

Article 17-7-7. Application Requirements. The following items are required as part of the conditional use permit review process and shall be submitted with the initial application submission. Further documents and updated information will be required with submission of final site plan.

- a. Interconnection and Feasibility Study. The applicant must provide written comments from the relevant electric company regarding the capacity of the transmission lines as part of any use permit application. An applicant can satisfy this requirement by submitting proof of application for interconnection to the electricity system.
- b. Viewshed Analysis. Each Conditional Use Permit application shall provide a viewshed analysis. The analysis shall reflect how much and if the proposed project will be seen from all public roads, parks, facilities, adjacent residential structures as well any structures or historic properties located within one (1) mile radius. The analysis shall at a minimum provide both an East to West and a North to South evaluation and account for four (4) seasons.
- c. Landscaping Plan. The intent of any landscaping plan is to provide buffering, screening of adjacent uses such as residential dwellings, public facilities and or resources, historic properties and resources, and public transportation corridors, etc. The following conditions shall govern the installation of landscaping in accordance with the approved plan:
 1. A Preliminary Landscaping Plan shall be submitted, reviewed and approved in conjunction with the Conditional Use Permit review and approval.
 2. The preliminary landscape plan shall reflect all existing vegetation and shall include a tree inventory indicating all trees that are to be saved and potentially used for screening, buffering and visual enhancement of the facility.
 3. All landscaping shown on the approved landscaping plan shall be installed and shall be in good condition prior to issuance of a Certificate of Occupancy and/or final inspection and prior to beginning production of electric power.
 4. In the event that the applicant requires a minor deviation from the approved landscaping plan or site plan, such deviation shall be provided on a revised plan sheet for review and approval by the County Administrator and/or his designee.
 5. In areas where there is not at least 100' of a native timber buffer remaining on the project parcel, a minimum of a double row of evergreens shall be planted within any required setback and/or buffer area. All native timber buffers are subject to review and approval by the County Administrator and/or his designee. The use of native timber and natural screening is preferable. Such evergreens shall be planted, at a minimum, on fifteen (15) foot centers, with rows offset. The evergreens installed shall have an anticipated mature height of thirty (30) to forty (40) feet. The composition of this landscape buffer may be a mixture of evergreens and/or deciduous trees as deemed appropriate by the Board of Supervisors through the Permit review process. These evergreens shall be planted during the appropriate time of year, prior to the completion of construction. The composition and layout above is suggested as a typical planting arrangement, however the County reserves the right to modify this depending on the circumstances.
 6. Evergreen plantings shall have a minimum beginning planting height of 6 feet or taller where deemed appropriate by the Board of Supervisors. Any deciduous tree shall have a minimum caliper of two to two and one-half inches measured six inches above final grade at the time of planting.
 7. All landscaping will be reviewed by the County Administrator and/or his designee

following installation, at one-year completion, and as necessary after this to ensure the landscaping is being maintained.

8. A surety agreement for landscape maintenance in a form acceptable to the County Attorney shall be submitted and approved prior to the issuance of any land disturbance permits. The amount of the surety shall be determined by an independent landscape architect selected and compensated by the Applicant but approved by the County Administrator and/or his designee. The amount of the surety shall be equal to a reasonable estimate of the amount needed to establish, and following establishment, to maintain the landscaping required by the approved landscaping plan for five (5) years after initial installation. Once the landscaping has been successfully established, the surety amount may be reduced to that needed for maintenance thereafter. The surety will be fully released only after decommissioning is complete.
9. The County reserves the right to impose conditions on the site plan approval which specify species of landscaping, for example pollinator species.
10. The use of herbicides and pesticides shall be limited.

d. Traffic Impact Analysis and Construction Traffic Management Mitigation Plan. The Applicant shall submit a proposed construction traffic impact analysis and management mitigation plan to the County Administrator and/or his designee for review and approval as part of the Conditional Use Permit review. The construction traffic impact analysis and management mitigation plan shall:

1. Provide vehicle type and trip estimates, propose steps to manage traffic safely and minimize inconvenience to the travelling public as well as minimize any potential roadway damage.
2. Provide procedures for communication with area residents about construction and anticipated traffic conditions.
3. Prohibit any personnel associated with the Facility, while working on the construction of the Facility, from parking their vehicles at locations other than the Facility. Provide onsite parking for all associated construction related activities. Offsite parking and use of shuttles from offsite parking areas may be utilized if approved in advance by the County Administrator and/or his designee.
4. Provide for truck deliveries to be avoided during the periods that school buses are scheduled to use the roads in the vicinity of the Facility.
5. Provide an assessment of existing road conditions that will be used during construction. This assessment shall include roadway condition, type of surface, width, any potential sight distance issues with the geometrics of the road. All existing or planned intersections, commercial entrances, median breaks, pavement markings, driveways, or other roadway features potentially affecting traffic flow for all roads proposed to be accessed for the proposed development as well as all intersections and driveways internal to the development shall be considered and either shown or clearly noted on a scaled plan submitted with the traffic impact analysis and mitigation plan.
6. The assessment shall include core sampling of existing roads to be used for construction purposes to ensure roads can support heavy truck traffic. A technical assessment shall be performed to determine road depths and capacities. The report shall also include specific recommendations for any necessary road improvements to accommodate planned construction traffic.
7. Identify in the plan specific improvements that need to be made to ensure safe,

- adequate access to and from the construction site.
8. Provide a surety in a form acceptable to the County Attorney to the Virginia Department of Transportation and to the County of Culpeper that will provide security for any road damage that is caused by construction traffic for the Facility.
 9. The developer shall be responsible for paying all review fees required by the Virginia Department of Transportation for the review of traffic impact statements. Such fees shall be submitted by check paid directly to the Virginia Department of Transportation.
- e. Natural Resource Inventory. The applicant shall prepare and submit a natural resource inventory as part of the Conditional Use Permit process. The inventory shall meet the following requirements:
1. The inventory shall be prepared and certified by a professional qualified to perform environmental inventories. Evidence of the professional qualifications of the person preparing the inventory shall be submitted as a part of the inventory.
 2. The inventory shall contain a plan sheet that clearly depicts the extent and location of any sensitive or environmentally significant features and areas. For each feature and area, descriptive information such as: flood plains; tree lines to be impacted (including the limits of clearing and where buffers will be installed); slope percentages (with topography shown at five-foot contour intervals); wetlands classification; groundwater to be impacted (to include ponds, lakes, stream, rivers, etc.); soil type; habitat (including endangered native plant and animal life); etc. shall be provided. The plan sheet shall include a statement that all associated Virginia Department of Environmental Quality permits be obtained.
 3. The inventory shall also contain a narrative element that describes and defines the relative values of the natural resources which are found to be present on the site, including flora and fauna.
- f. Wildlife Access Corridor. The applicant shall submit with the conditional use permit on any project greater than fifty (50) acres a plan indicating how wildlife access corridors will be maintained during construction and completion of the project.
- g. Erosion and Sediment Control Plan. A preliminary phasing plan including a narrative shall be submitted as part of the Conditional Use Permit review in accordance with VESH requirements.
- h. Stormwater Management Plan. A preliminary stormwater management plan and study shall be submitted as part of the Conditional Use Permit review. This plan shall include a geotechnical report or study to indicate soil conditions and indicate planned facilities can be properly installed. . The plan should indicate drainage divides with approximate size and volume of stormwater facilities needed.
1. The preliminary plan shall provide an adequate outfall analysis for all existing structures and culverts.
 2. The plan shall also analyze necessary hydrology.
 3. All stormwater calculations shall ensure that all solar facility infrastructure including panel area, racking systems, pilings, footings, inverters and pads, etc. is considered impervious for stormwater management purposes.

- i. Geotechnical Analysis. A geotechnical analysis shall be submitted at the time of the conditional use permit application. A report shall be submitted that will show results of test borings to be performed by a professional engineer. Enough test borings shall be conducted to fully understand the subject property's soil and/or rock conditions to properly and preliminarily determine where stormwater features may be installed without the requirement of blasting. This report will also indicate how many panel racking systems will be installed and whether by pile driving, drilling, etc. A final geotechnical analysis and report shall be submitted with final site plan approval and include all revisions and updates determined through the conditional use permit process.

- j. Floodplain Analysis. Each Conditional Use Permit shall include a preliminary floodplain analysis that will identify all existing FEMA designated floodplain areas. The analysis shall determine and illustrate that the proposed project will not increase the height of the 100 year or one percent annual chance flood. The analysis shall include and study the impact if any of all existing road crossings, culverts, bridges, etc. that are on or adjacent to the project area. Any subsequent site plan shall fully demonstrate that the 100-year or one percent annual chance flood is not being negatively impacted on the project area or adjacent waterways and properties as well as the onsite or adjacent road network.

- k. Glare Analysis. Culpeper County desires to protect its interests at the Culpeper Regional Airport. Any conditional use permit application for a utility scale solar facility shall include the data necessary to perform an analysis using the Solar Glare Hazardous Analysis Tool (SGHAT) available from the Federal Aviation Administration.

- l. Local Fiscal Impact and Analysis. The applicant shall provide information with the conditional use permit submission that demonstrates the local economic benefits of the project or a cost/benefit analysis and at a minimum the following areas shall be addressed:
 - 1. The analysis shall provide anticipated direct revenues from real estate and personal property taxes.
 - 2. The analysis shall share what local resources (fire, rescue, law enforcement, etc.) may be needed to serve the Project and what efforts are being made to mitigate such service demands.
 - 3. An assessment of the short- and long-term economic impact of the proposed development. If the development is replacing an existing enterprise, including agriculture and forestry, an assessment of the impact the current enterprise has on the local economy and how the local economy will be impacted by the loss of the existing enterprise.

- m. Historic Resource Impact Analysis. In accordance with objectives and goals in the Comprehensive Plan, the purpose of the historic resource impact analysis is to identify, preserve, and protect significant historic resources of Culpeper County. The historic resource impact analysis for a proposed utility scale solar installation should identify historic resources to be impacted including, but not limited to locally identified historic areas, sites and structures, all historic places designated by the state, and all historic places designated by the National Register of Historic Places to be submitted with the conditional use permit.

If resources are identified in the impact analysis, the applicant shall prepare a mitigation plan on how these resources will be preserved, protected and/or enhanced. The following requirements shall be followed at a minimum in regard to this analysis:

1. Archaeological sites.
 - a. A Phase I archaeological study, as defined by the Virginia Department of Historic Resources in Guidelines for Archaeological Investigations in Virginia Department of Historic Resources (1996, as amended), shall be undertaken for all developments described above.
 - b. If, based on the "Guidelines for Preparing Archaeological Resource Management Reports" of the Virginia Department of Historic Resources, the Phase I study indicates the desirability for additional studies, a Phase II (as defined by the Virginia Department of Historic Resources, above) and, if warranted, a Phase III (as defined by the Virginia Department of Historic Resources, above) study of the site shall also be completed. The recommendations of such studies shall be incorporated into the plan of development and any clearing, grading, or construction activities and to be submitted with final site plan.
 - c. Alternatively, instead of performing additional studies, the archaeological resource may be preserved in place provided, wherever that the county shall require that sufficient study analyses are performed which shall determine the location al extent of the resource so as to ensure its future accessibility.
2. Architectural structures.
 - a. The Secretary of the Interior's Standards for the Rehabilitation and Guidelines for Rehabilitating Historic Buildings shall be used in performing appropriate architectural studies or analyses of standing structures.
 - b. In the case of demolition of historic standing structures, the county may require that a set of measured drawings be prepared by a licensed architect and filed with the county and the state historic preservation office prior to demolition occurring.
3. All archaeological and architectural studies shall be submitted to the county for review and approval and shall be made a part of any development plan approval.