

## 907.28 Solar Farm (Large scale, ground-mounted Solar Power Energy System)

- A. Zoning Districts: RA (Conditional Use)  
IL and IH (Permitted Use)
- B. Preamble: A large scale Solar Farm containing ground-mounted solar power electric generation structures, may be permitted in districts as designated in the Table of Permitted and Conditional Uses, subject to the following requirements:
- (1) Site Considerations:
    - (a) Height: Solar energy system structures and related equipment shall not exceed fifteen (15) feet in height.
    - (b) Setback: Solar energy system structures and related equipment must meet the minimum zoning setback for the zoning district in which it is located, or 100 feet, whichever is strictest. A 150 foot setback shall be required from wetlands identified by State or Federal agencies. A ½ mile setback shall be required from the property line of the nearest existing large scale solar power energy facility.
    - (c) The setback for any building or parking area proposed to serve the Solar Farm shall be fifty (50) feet or as otherwise required, whichever is strictest, from any street right-of-way and any continuous property line that is used or zoned for residential purposes or located within the Highway Corridor Overlay District .
    - (d) The setback for any building and parking area proposed to serve the Solar Farm shall be in keeping with that required by the zoning district as it applies to any street right-of-way and any contiguous property line that is used or zoned for nonresidential purposes.
    - (e) Maximum allowed acreage for any approved project shall not exceed 100 acres. No more than one project may be approved for each individual parcel.
    - (f) By mowing or other means, grass or weeds on the project site shall not exceed 12 inches in height.
    - (g) A drainage study, in conjunction with Perquimans County Soil and Water Conservation, shall be performed on each site, and results provided to the Planning Board and Board of County Commissioners. This study will detail any removal or re-routing of existing farm ditches; the drainage impacts to any adjacent swamps or streams; and drainage impacts to adjacent properties.
  - (2) Lighting: The project shall utilize minimal lighting. No lighting other than normal security lighting and that required by government agencies shall be permitted.
  - (3) Screening:
    - (a) General: Solar energy system structures and related equipment and buildings shall be screened from routine view from public rights-of-way, existing residential uses and adjacent properties zoned Residential Agriculture, Historic Agriculture, Rural Agricultural, or Commercial Zoning Districts

using the County's Buffers and Screening standards currently found in Article XVIII, Sections 1802 and 1803. Included in these screening options are berms which create an attractive blind barrier as dictated in Section 1803.

- (b) Highway Corridor Overlay Districts: When located adjacent to the Highway Corridor Overlay District, screening is required which completely screens from view the solar energy system panels and related equipment. Such screening shall be an opaque durable wall or fence and access gate(s) at least seven (7) feet high in addition to a minimum fifteen (15) foot wide vegetated strip along any property line adjacent to or within five hundred (500) feet of the Highway Corridor Overlay District. Said access gate shall be screened in the same manner as the above-mentioned wall or fence. This vegetated strip shall consist of a naturally wooded area or planted with a mix of evergreens and deciduous trees and shrubs to simulate a naturally wooded area within three (3) years.
  - (c) To ensure proper maintenance of vegetative and other screening methods, a cash bond equal to the initial cost of installing buffers will be required to be held by Perquimans County until project decommissioning.
- (4) Operational Considerations: Any access gate which affords views from an existing residence or from within the Highway Corridor Overlay District must be kept closed and locked at any time the Solar Farm is not occupied by the operator for preventive maintenance, repair and similar activities, etc.
- (5) Application Requirements:
- (a) Submit Site Plan prepared in accordance with current Site Plan Requirements of Section 509 and denoting the dimensions of the subject property, proposed solar farm location, including the arrangement of solar panels, distance from the proposed site improvements to all property lines, and location of proposed driveway(s). No portion of the Solar Farm may encroach into the required setbacks or any buffer area.
  - (b) The Site Plan should also show the location of any required buffers as outlined in Sections 1803 and 1804.
  - (c) Submit horizontal and vertical (elevation) to-scale drawings with dimensions. The drawings must show the location of the system on the property.
  - (d) State and local storm water permits may be required subject to Article V Site Plan and other requirements as applicable.
  - (e) If applicable, the applicant must apply to and receive from the North Carolina Department of Transportation (NCDOT) a driveway permit, or submit documentation from NCDOT that the existing site access is acceptable for the proposed use prior to final project approval.

- (6) Approved Solar Components: Solar energy system components must have a UL listing and must be designed with anti-reflective coating(s).
- (7) Compliance with Building Code: All active solar energy systems shall meet all requirements of the North Carolina State Building Code and shall be inspected by a Perquimans County Building Inspector.
- (8) Compliance with National Electric Code: All photovoltaic systems shall comply with the National Electrical Code, current edition.
- (9) Decommissioning: Following a six month period in which no electricity is generated, the permit holder will have six (6) months to complete decommissioning of the large scale solar energy facility. As part of the contractual agreement between the developer and the utility purchasing the power produced, both parties will be required to notify Perquimans County within the time frames listed above if the project ceases or the utility stops purchasing power. The power purchasing agreement detailing such language will be provided to the County upon its execution.

Decommissioning includes removal of solar panels, support columns, fences, buffers, buildings, cabling, electrical components, and any other associated facilities down to 36 inches below grade. A decommissioning study showing the total cost, not including salvage value, shall be provided and updated every five (5) years. A cash bond equal to this amount will be required to be held by Perquimans County until project decommissioning.

(10) Transfer of Ownership:

Any solar farm permitted under the rules and regulations identified in this section that is sold or transferred to another entity is still bound to the rules and regulations as stated in this section, any state or federal regulations, as well as any additional regulations imposed during the Conditional Use Permit process, Technical Review Committee process, or the Building Permit process.