

**PLANNING STAFF REPORT
SPECIAL USE PERMIT**

SUMMARY:

Hearing Date: August 20, 2018
Applicant: Crooked Run Solar, LLC
Property Owners: Pauline Dunne et al.;
 Harold Lee Pollock Trustee for James Bryan Peterson et al.;
 Mauricio Garcia Rodriguez et al.;
 Aleta C. Whaley
Case Number: SUP-2018-1 Major Revision

Land Use Proposed: Crooked Run Solar, LLC, applicant, on behalf of Pauline Dunne et al., Harold Lee Pollock Trustee for James Bryan Peterson et al., Mauricio Garcia Rodriguez et al., and Aleta C. Whaley, owners, is requesting the approval of a Major Revision to an existing Special Use Permit (SUP #507-2017) for the construction and operation of an Other Electric Power Generation (NAICS 221119) facility, more specifically, a solar farm.

Property Record Number and Location: There are six (6) tracts associated with this revision at approximately ±565 acres, with a total of approximately ±1,046 acres. The subject properties are located approximately ±330 feet south of the intersection of NC HWY 11 and Courtney Road (private) along the eastern and southern sides of Courtney Road (private), and on the western side of Watha Road (SR 1313) in the Union Township. The subject properties may be further identified by Pender County PINS: 3303-68-7702-0000, 3303-58-8457-0000, 3304-21-8773-0000, 3304-81-4284-0000, 3304-50-3899-0000, and 3304-41-8560-0000.

Zoning District of Property: The subject property is zoned RA, Rural Agricultural zoning district and according to the Pender County Unified Development Ordinance §5.2.3 Table of Permitted Uses; Other Electric Power Generation (NAICS 221119) is permitted via Special Use Permit in the RA, Rural Agricultural zoning district.

PROJECT HISTORY:

On April 18, 2017, a Special Use Permit (SUP 507-2017) was approved by the Pender County Board of County Commissioners for the construction and operation of an Other Electric Power Generation (NAICS 221119) facility. This approval was for an approximately ±481 acre solar farm located to the west of Watha Road (SR 1313) on Pender County PIN 3303-76-6584-0000 (Attachment 1). This property remains undeveloped as vacant farmland and wooded areas.

Approximately thirty-five (35) acres of the subject property falls within Watha's extraterritorial jurisdiction (ETJ). Project manager, Shane Shields, stated via email that the Town of Watha indicated they would not require any additional requirements for the project. Planning Staff spoke with a Watha building inspector who requested that the Town of Watha would relinquish their jurisdiction over the portion of this project located within the town. Shane Shields stated via email that after speaking with the mayor of Watha, the sentiment was confirmed that the portion of the project that was within the Town of Watha would be reviewed by Pender County Planning Staff. Therefore, all building permits after final zoning will be obtained through Pender County.

PROJECT DESCRIPTION:

The proposed Major Revision to SUP 507-2017 will add approximately ± 565 acres to create a total solar project area of approximately $\pm 1,046$ acres. According to the site plan, of the $\pm 1,046$ acres, which includes the previously approved Special Use Permit 507-2017 (April 18, 2017) acreage, the preliminary estimated solar area will be approximately ± 602 acres. The previously approved parcel, as well as the proposed Major Revision parcels are shown on Attachment 2. The size of overall lease area and the estimated solar area vary drastically because of the extensive range of wetlands and jurisdictional ditches within the total project area.

The ± 565 acre subject parcels are currently occupied by vacant farmland and wooded areas. The requested revision includes additional acreage for a solar farm that will contain rows of Photovoltaic (PV) cell panels mounted on posts set in the ground. These rows of panels are referred to as "solar arrays." The solar arrays will be fixed in place facing south in order to receive the maximum amount of solar energy. Structural frames, also referred to as racks, are driven into the ground with steel beams on which PV panels are mounted. There will be several inverters and transformer assemblies constructed on concrete pads. Solar components will comply with the current edition of the National Electric Code, be UL listed (or equivalent), and designed with an anti-reflective coating. The power generated from the solar farm will be sold to Duke Energy Progress for use by consumers to replace energy produced from a non-renewable source.

Hours of Operation

There will be no daily staff used to operate the solar farm. Employees will visit the site once a week or even less frequently for routine maintenance checks of the arrays and the property. The solar farm will operate unmanned and will be operational when the sun is available. According to the applicant's narrative, the slight hum of electrical transformers, invertors, and the substation delivering solar power to the power grid is the only sound emitted during daylight hours. At night, when the sun is not available, there is no energy being generated and no sound on the site.

Landscape and Buffers

All landscape and buffers are to be approved in accordance with Section 8.2.7, Project Boundary Buffer, of the Pender County Unified Development Ordinance. All commercial or uses other than residential uses (excluding industrial uses) in the Residential Districts shall provide a Type A-Buffer along all street boundaries, a Type C-Buffer along all boundaries adjacent to single family residential uses or residential lots with a parcel size of less than one (1) acre and when a single-family structure is within fifty (50) feet of the boundary of the development, and a Type B-Buffer along all other non-street boundaries.

The applicant proposes a Type A-3 Buffer along the front property line, which is adjacent to Watha Road (SR 1313), as well as along the property line adjacent to Courtney Drive (private). Please note that the site plan incorrectly labels Courtney Drive (private) as Doc Smith Road (SR 1320) but will be corrected during the Major Site Development Plan review process. This Type A-3 Buffer will contain a twenty-five (25) foot wide strip with 1 canopy tree, 2 understory trees, and either a grass cover of at least 98% coverage (except within 4 feet of the base of any tree) or 21 shrubs per 100 linear feet. According to the applicant, surrounding neighbors requested a Type B-3 Buffer along the northern property boundary from the NC Department of Transportation property east towards Watha Road (SR 1313). This Type B-3 Buffer will contain a twenty (20) foot wide strip with 1 canopy tree, 2 understory trees and either a grass cover of at least 98% coverage (except within 4 feet of the base of any tree or shrub) or 15 shrubs per 100 linear feet. A Type B-1 Buffer is proposed along all other sides of the properties with a ten (10) foot wide strip with 3

canopy trees, 4 understory trees, and 98% grass cover (except within 4 feet of the base of any tree), per 100 linear feet.

Per Section 8.1.5 of the Pender County Unified Development Ordinance, existing native habitat or plant material located within the proposed landscaping or buffer area that meets the requirements of these regulations may be counted toward the total buffer required between adjoining land uses, or toward total landscaping requirements. Therefore, existing vegetation on the subject parcels will be utilized where applicable. The applicant has provided a site plan with sufficient buffering to meet the standards of the Pender County Unified Development Ordinance.

Prior to issuing zoning approval for the Major Site Development Plan, a landscape plan must be submitted by the applicant that shows a detailed layout of the vegetation and its proximity to the fence that will surround the solar farm.

Driveway Access

The applicant's site plan shows direct access to the site (Pender County PIN 3304-81-4284-0000; Mauricio Garcia Rodriguez property) via Watha Road (SR 1313). This driveway access is approximately $\pm 2,500$ feet (0.47 miles) southeast of the intersection of NC HWY 11 and Watha Road (SR 1313) or approximately $\pm 2,750$ feet (0.52 miles) northwest of the intersection of Watha Road (SR 1313) and Johnson Nursery Road (SR 1314). The applicant's site plan also shows access to the site (Pender County PIN 3304-21-8773-0000; Harold Lee Pollock Trustee for James Bryan Peterson) via a private farm road approximately $\pm 1,093$ feet (0.21 miles) east of the intersection of NC HWY 11 and Willard Road (SR 1001). All proposed driveways are subject to review and approval by the NCDOT through a driveway permit which may be required at the Major Site Development Plan submittal.

The active area of the proposed solar farm will be enclosed by a six foot (6') high fence and gated for security purposes. Access codes to the gate will be provided to local police, fire, and emergency service providers.

Utilities

The proposed project does not include any water or wastewater services. There are currently three (3) Overhead Electrical Easements that traverse the subject properties, all of which have existing overhead transmission lines. The solar farm will have a point of interconnection towards the southern portion of Pender County PIN 3303-76-6584-0000, which is the original parcel included in the approved Special Use Permit 507-2017. This interconnection ties the solar arrays to the overhead transmission lines, which transmits the generated power to the substation. This substation is proposed to be located towards the center of the abovementioned parcel. Once the generated power reaches the substation, the substation distributes the generated power back into the energy grid for use by the consumer. According to the applicant, the entire solar farm is proposed to be a 105 megawatt (MW) facility at full build-out.

Environmental

According to the applicant's site plan, there appears to be wetlands located on portions of all subject properties. Any disturbance within these wetlands is subject to the review and approval of the United States Army Corps of Engineers. Further, all development within jurisdictional wetlands requires review and approval from the United States Army Corps of Engineers. Any development within these areas may be subject to the permit requirements of Section 404 of the Clean Water Act.

According to the North Carolina Flood Risk Information System (NCFRIS), the subject properties are not located within a designated Special Flood Hazard Area.

Solar Farm Considerations

At the point of which the project is no longer operational for 12 months, considerations shall be made for disassembling and dismantling the equipment to ensure the site is vacant. This is accomplished through a Decommissioning Plan. If the site ceases to produce energy on a continuous basis for 12 months, it will be considered abandoned unless the current responsible party (or parties) with ownership interest provides substantial evidence (updated every 6 months after 12 months of no energy production) to the Zoning Administrator of the intent to maintain and reinstate the operation of that facility.

As required by the Pender County Unified Development Ordinance, Crooked Run Solar, LLC guarantees the solar farm shall be removed, at the owner’s expense, within one hundred and eighty (180) days of determination by the Planning Department that the facility is no longer being maintained in an operable state of good repair or is no longer supplying solar power.

Removal shall be considered for all non-utility owned equipment, conduit, structures, fencing, roads, and foundations. Such can be captured in a Decommissioning Plan recorded within the Pender County Register of Deeds prior to final electrical inspection of the facility. If the responsible party (or parties) fails to comply, the Zoning Administrator may remove the equipment from the site, sell any removed materials, and initiate judicial proceedings or take any other steps legally authorized against the responsible parties to recover the costs required to remove the facility and restore the site to a non-hazardous condition.

The active area of the proposed solar farm will be enclosed by a six foot (6’) high fence and gated for security purposes. Access codes to the gate will be provided to local police, fire, and emergency service providers.

Prior to the issuance of final zoning approval, a site development plan must be submitted and approved in accordance with applicable provisions of the Pender County Unified Development Ordinance. Additionally, the proposal is subject to all other applicable federal, state, and local permits and approvals.

Use Type	Ref NAICS	Zoning Districts									
		RA	RP	RM	MH	PD	GB	OI	IT	GI	EC
MISCELLANEOUS USES											
Other Electrical Power Generation	221119	S	S			S			P	P	

EVALUATION:

- A. Public Notifications:** Advertisements for the proposal have been placed in the Pender-Topsail Post & Voice. Adjacent owners within five hundred feet (500’) of the subject parcel were notified by first class mail; as well as a sign advertising the public hearing was placed on the subject property.
- B. Basis for Granting SUP:** Approval procedures are located in Section 3.12.3 of Unified Development Ordinance and revocation procedures are located Section 3.12.4 of Unified Development Ordinance. See Attachment 3 for approval procedures (§3.12.3 of the Unified Development Ordinance) and revocation procedures (§3.12.4 of the Unified Development Ordinance).

- C. Unified Development Ordinance Compliance:** The property is currently zoned RA, Rural Agricultural; according to the Pender County Unified Development Ordinance §5.2.3 Table of Permitted Uses; solar farms are permitted via Special Use Permit in the RA, Rural Agricultural zoning district.
- D. 2010 Comprehensive Land Use Plan Compliance:** The subject parcels are designated as Rural Growth. Rural Growth areas are intended to protect agricultural and forestry operations that are a major part of the County's economic base and that are key to preservation of the County's rural landscape. Major job-creating activities that are compatible with farms, forestry and very low-density development are appropriate. Uses that would typically be allowed in Rural Growth areas include very low-density residential development on one acre or greater size lots; agriculture, forestry, churches; very limited nonresidential uses - commercial, office, or public/institutional - meeting locational criteria. Locational criteria for non-residential uses in Rural Growth areas include frontage and access to a major State highway or secondary road, location at a major rural intersection, proximity to similar existing non-residential uses, and spatial separation from non-compatible uses such as existing residential development. Currently, Rural Agricultural areas comprise approximately 423,799 acres (79%) of the land area within the Pender County zoning jurisdiction.

The SUP request is supported by two (2) policies within the 2010 Comprehensive Land Use Plan and is in compliance with the Rural Growth Land Use Classification:

Policy 1A.1.5 – The County supports a pro-business/pro-growth attitude, balanced by a concern for preserving the natural assets and quality of life factors that make the area attractive to visitors and permanent residents alike.

Policy 8A.1.5 – Encourage alternative energy development as a viable land use and standards, as necessary, to ensure minimal impact on surrounding land uses.

This Major Revision of an existing Special Use Permit (507-2017) request does not conflict with any goals and policies in the 2010 Pender County Comprehensive Land Use Plan.

- E. Existing Land Use in Area:** There are six (6) tracts associated with this Major Revision request totaling ±565 acres and are currently occupied by vacant farmland and wooded areas. There are several single-family homes directly to the North (adjacent to Courtney Drive [private] and NC HWY 11) and to the east, adjacent to Watha Road (SR 1313). Johnson Family Farm is also currently operated on the eastern side of Watha Road (SR 1313). The majority of the land to the direct south is currently wooded area or being used as timber land. The land to the west is currently wooded area and operational farmland. The Wilmington to Raleigh abandoned railway line intersects two (2) of the six (6) subject parcels (PINS 3304-81-4284-0000 and 3303-76-6584-0000).
- F. Site Access Conditions:** The applicant's site plan shows direct access to the site (Pender County PIN 3304-81-4284-0000; Mauricio Garcia Rodriguez property) via Watha Road (SR 1313). This driveway access is approximately ±2,500 feet (0.47 miles) southeast of the intersection of NC HWY 11 and Watha Road (SR 1313) or approximately ±2,750 feet (0.52 miles) northwest of the intersection of Watha Road (SR 1313) and Johnson Nursery Road (SR 1314). The applicant's site plan also shows access to the site (Pender County PIN 3304-21-8773-0000; Harold Lee Pollock Trustee for James Bryan Peterson) via a private farm road approximately ±1,093 feet (0.21 miles) east of the intersection of NC HWY 11 and Willard Road (SR 1001). All proposed driveways are subject to review and approval by the NCDOT through a driveway permit which may be required at the Major Site Development Plan submittal.

G. Conditions To Consider In Issuing the Special Use Permit For This Project:

1. The project shall comply with all requirements of the Pender County Unified Developed Ordinance.
2. The applicant shall meet all other local, state, and federal regulations.
3. The obligations imposed by this permit will be the responsibility of the property owners and operator and shall continue in effect for the duration of this permit.
4. In any case where the Special Use Permit or the conditions of a Special Use Permit have not been or are not being complied with, the Administrator may initiate a notice of violation for the provisions of this Ordinance and the conditions of the Special Use Permit not in compliance, or the Administrator may initiate notice of a public hearing to consider revocation of the permit by the Board of Commissioners or both actions may be initiated.
5. Any violations of the conditions of this permit, confirmed by the Zoning Administrator shall result in this permit becoming void, if not corrected within 30 days of receipt of the notice of violation.
6. The facility must be fenced surrounding the entire project bounds.
7. Prior to final zoning approval, a Decommissioning Plan shall be recorded within the Pender County Register of Deeds. The plan shall identify and establish procedures for removal of equipment, conduit, structures, fencing, roads, and foundations.
8. A site that ceases to produce energy on a continuous basis for 12 months will be considered abandoned unless the current responsible party (or parties) with ownership interest provides substantial evidence (updated every 6 months after 12 months of no energy production) to the Zoning Administrator of the intent to maintain and reinstate the operation of that facility. Upon determination of abandonment, the Zoning Administrator shall notify the party (or parties) responsible they must remove the facility and restore the site to its condition prior to development of the site within three hundred and sixty (360) days of notice by the Zoning Administrator.
9. If the responsible party (or parties) fails to comply, the Zoning Administrator may remove the equipment from the site, sell any removed materials, and initiate judicial proceedings or take any other steps legally authorized against the responsible parties to recover the costs required to remove the facility and restore the site to a non-hazardous condition.
10. Any expansions of solar farm acreage shall require a revision to the Special Use Permit approval.
11. All vehicle ingress and egress, including construction traffic, must utilize the proposed site access located along Watha Road (SR1313), as shown on the SUP-2018-1 site plan.
12. All conditions imposed by Special Use Permit 507-2017 shall remain in effect.