

Statement of Justification in Support of Special Use Permit Application  
Crooked Run Solar, LLC  
Doc Smith Road and NC 11 S, Willard, NC, 28478

## Project Narrative

This Special Use Permit application is in support of a proposed Other Electric Power Generation facility, Crooked Run Solar, to be located at Doc Smith Road and NC 11 S, Willard, NC, 28478. The site will have access off of NC-11 S as well as from Watha Road. The Other Electric Power Generation facility 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. This configuration contains no moving parts. 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 Other Electric Power Generation facility will be sold to Duke Energy Progress for use by consumers to replace energy produced from a non-renewable source.

While each site is unique, Crooked Run Solar will use standard construction and operation procedures used for our other solar energy facilities in the United States. The construction of the proposed Other Electric Power Generation facility is expected to take approximately six to eight months. Crooked Run Solar will be a simple construction that employs the following basic equipment: solar PV panels; inverters; transformers; wires and conductor cables; structural racking system for PV modules; and perimeter fencing. Most sites require minimal grading, and an entire facility can often be installed with minimal soil disturbance. Structural frames, also referred to as racks, are driven into the ground with steel beams on which PV panels are mounted. The inverters and transformers, which receive the power from the solar panels, are mounted on top of concrete pads.

## Approval Standards

The use is listed among the special uses in the district for which the application is made, or is similar in character to those listed in that district.

The proposed Other Electric Power Generation facility is permitted in Article 5.2.3 of the Pender County Unified Development Ordinance. The proposed Other Electric Power Generation facility will comply with all of the requirements in Article 3.12 of the Unified Development Ordinance, as illustrated in the attached site plan. The proposed Other Electric Power Generation facility will meet all required setbacks. No structure will exceed a height of fifteen feet (15').

The requested use will not impair the integrity or character of the surrounding or adjoining districts, nor adversely affect the safety, health, morals or welfare of the community or of the immediate neighbors of the property.

The proposed Other Electric Power Generation facility will not endanger the public health or safety of Pender County. The site will generate almost no traffic. Employees will visit the site once a week or even less frequently

for routine maintenance of the arrays and the property. The solar panels that comprise the solar arrays are made primarily of glass; they do not contain dangerous materials, nor do they emit dust, noxious fumes or liquids. The active area of the Other Electric Power Generation facility 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. Vehicular access to the site is adequate for the use proposed and for emergency services. The facility shall meet all requirements of the North Carolina State Building Code.

The proposed use will not constitute a nuisance or hazard.

The proposed Other Electric Power Generation facility will not constitute a nuisance or hazard. Solar farms make good neighbors. They are quiet. The solar arrays have no moving parts. The only sound occurs during daylight hours with the quiet hum of electrical transformers, invertors, and the substation delivering solar power to the power grid. At night, when the sun is not available, there is no energy being created and no sound on the site. Solar farms generate fewer vehicles trips than the average home. Employees visit the site once a week or even less frequently. Solar panels are designed to absorb light, rather than reflect it, which mitigates glare concerns for adjoining properties.

The requested use will be in conformity with the Pender Land Use Plan and other official plans or policies adopted by the Board of County Commissioners.

The proposed Other Electric Power Generation facility will be in conformity with the Pender County Land Use Plan and in harmony with the area in which it will be located. Surrounding properties are being utilized as rural and agricultural. The proposed Other Electric Power Generation facility is a low-impact use consistent with the land use pattern in the area today. Solar farms are quiet and they do not create noise, dust or odor as traditional farms can. Solar panels are lower in height than a typical home. After construction, they generate fewer trips than one single-family home. Allowing the property to develop as a solar farm will maintain the rural character of the area while providing a sustainable benefit to the community.

Adequate utilities, access roads, drainage, sanitation, and other necessary facilities have been or are being provided.

Adequate utilities, access roads, drainage, sanitation and other necessary facilities are being provided. The active area of the proposed Other Electric Power Generation facility 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. Vehicular access to the site is adequate for the use proposed and for emergency services. There will be no buildings or employees on the property so there is no need for sewage disposal facilities, solid waste, or water on the site.

Adequate measures have been taken or will be taken to provide ingress and egress so designed as to minimize the traffic congestion in the public roads.

The proposed Other Electric Power Generation facility will not adversely impact traffic circulation on or in the vicinity of the site. The site will generate almost no traffic. After construction, the site will generate fewer trips

than one single-family home. The solar farm will not be staffed daily, and employees are expected to visit the property weekly or less frequently for maintenance. The site will have access from Doc Smith Road.

That the special use shall, in all other respects, conform to the applicable regulations of the district in which it is located.

The proposed Other Electric Power Generation facility shall conform to the applicable regulations of the district in which it is located. The proposed Other Electric Power Generation facility will comply with all of the requirements in Article 3.12 of the Unified Development Ordinance, as illustrated in the attached site plan. The proposed Other Electric Power Generation facility will meet all required setbacks. No structure will exceed a height of fifteen feet (15').

That the proposed use shall not adversely affect surrounding uses and shall be placed on a lot of sufficient size to satisfy the space requirements of such use.

The proposed Other Electric Power Generation facility will not substantially injure the value of adjoining or abutting property. Solar farms are quiet and have no moving parts. The only sound produced occurs during daylight hours with the quiet hum of electrical transformers and invertors delivering solar power to the grid. At night, when the sun is not available, there is no energy being created and no sound on the site. The solar panels are designed to absorb light, rather than reflect it, which mitigates glare concerns for adjoining properties. The use shall be placed on a lot of sufficient size to satisfy the space requirements, as shown in the attached site plan.

## Decommissioning Plan

As required by the Pender County Unified Development Ordinance, Crooked Run Solar, LLC guarantees the Other Electric Power Generation facility 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.

For these reasons, we respectfully request approval of the proposed Special Use Permit.