

DOCKET NO. SP-5448, SUB 0

BY ELECTRONIC SUBMISSION

April 2, 2015

Gail L. Mount
Chief Clerk
North Carolina Utilities Commission
430 North Salisbury Street
Raleigh, North Carolina 27603

Re: Docket No. SP-5448, Sub 0
Duke Energy Renewables NC Solar, LLC – Application for a Certificate
of Public Convenience and Necessity

Dear Clerk Mount:

Enclosed for Duke Energy Renewables NC Solar LLC is an Application for a Certificate of Public Convenience and Necessity. Application Exhibits 5, 7(a), 7(b), 7(c), and 8(a) are marked confidential and are submitted under seal because these documents contain proprietary and confidential information pursuant to NC Gen. Stat. § 132-1.2.

Thank you for your assistance

Sincerely,

A handwritten signature in black ink, appearing to read 'B. Stallman', with a stylized flourish at the end.

Brian Stallman

Enclosure

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. SP-5448, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of the Application of Duke	)	APPLICATION FOR A
Energy Renewables NC Solar, LLC For	)	CERTIFICATE OF PUBLIC
a Certificate of Public Convenience and	)	CONVENIENCE AND NECESSITY
Necessity	)	

Duke Energy Renewables NC Solar, LLC (“DER NC Solar” or the “Applicant”) hereby applies to the North Carolina Utilities Commission (the “Commission”) pursuant to G.S. § 62-110.1 and Commission Rule R8-64 for a Certificate of Public Convenience and Necessity authorizing construction of an 80.0-megawatt (“MW”) solar facility (the “Facility”) to be located in Currituck County.

In support of its application, the Applicant provides the Commission the attached eight exhibits in compliance with Rule R8-64.

**Duke Energy Renewables NC Solar, LLC
Application Exhibit 1**

- i. The Applicant's full and correct name, business address, and business telephone number are:

Duke Energy Renewables NC Solar, LLC
Attn: Brian Stallman, Vice President
139 E. Fourth Street
Cincinnati, OH 45202
Phone: (513) 287-2026

The electronic mailing address for purposes of this filing is:
Brian.Stallman@duke-energy.com

- ii. Duke Energy Renewables NC Solar, LLC is a Limited Liability Company that was formed on February 25, 2010 in Delaware, with a Certificate of Authority in North Carolina on August 20, 2012. Brian Stallman is duly authorized to act as a corporate agent for the purposes of this application. Correspondence, documents, and filings regarding this application should be sent as follows. The Applicant consents to electronic service of filings related to this application.

Brian Stallman, Vice President
Duke Energy Renewables NC Solar, LLC
139 E. Fourth Street
Cincinnati, OH 45202

Phone: (513) 287-2026
Email: Brian.Stallman@duke-energy.com

with copies to:

Name Brian Kennedy, Renewables Development Executive
Phone: 513 287-2295
Email: brian.kennedy2@duke-energy.com

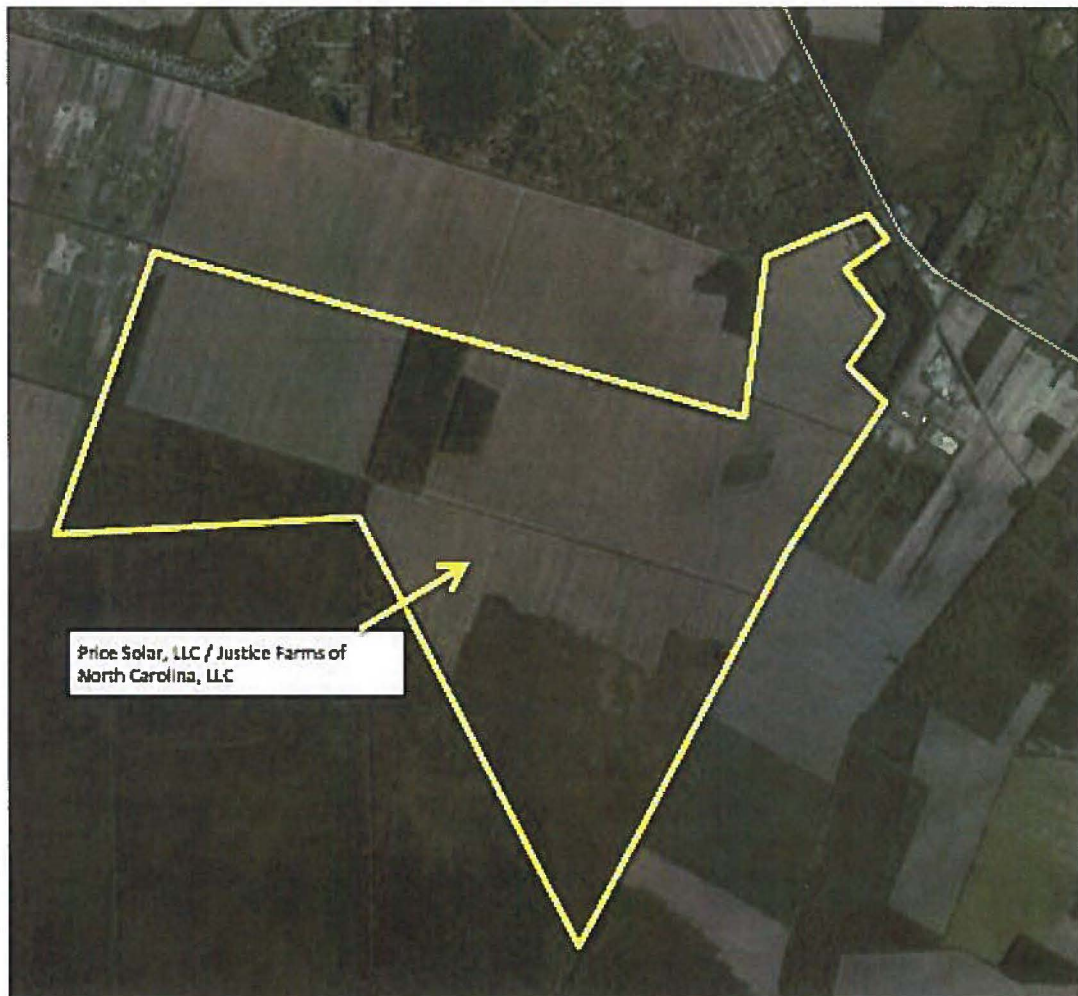
- iii. Duke Energy Renewables NC Solar, LLC will be the owner of the Facility and shall enter into a site control agreement with Price Solar, LLC, the entity that will be purchasing the property from Justice Farms of North Carolina, LLC (the current owner of the site).

Duke Energy Renewables NC Solar, LLC
Application Exhibit 2

- i. See maps attached as **Attachment 1 to Exhibit 2** showing A) an aerial view of the site with landowners identified; B) location of major equipment (solar panels), and C) a general location site map. The final site layout will depend on design considerations, consultation with Dominion North Carolina Power (DNCP), and required permits.
- ii. An E911 street address has not been assigned to the Facility at this time. The applicant will notify the Commission of the E911 street address when it is received. The facility will be located at approximately 1384 - 1390 Caratoke Highway in Moyock, Currituck County, North Carolina. The GPS coordinates of the center of the facility site are: 36.471060, -76.155368.

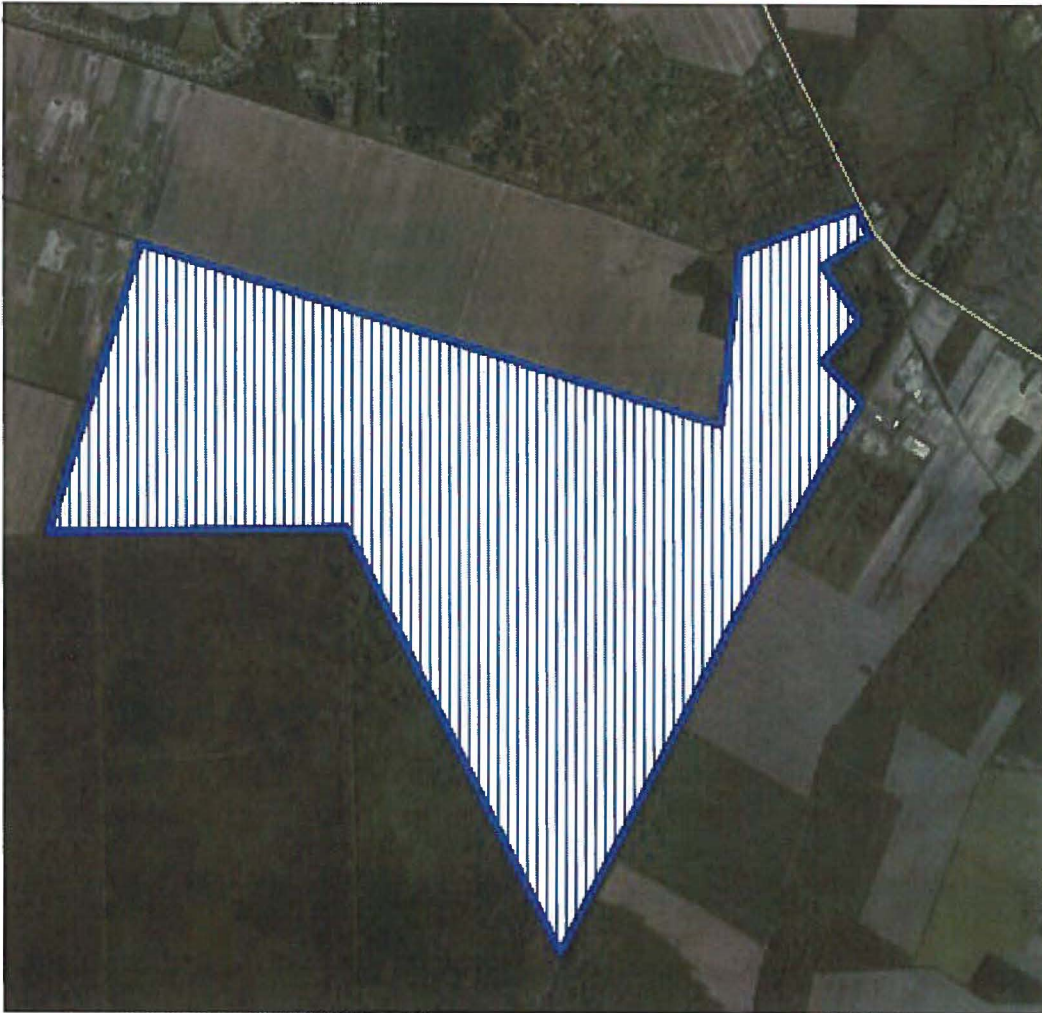
**Duke Energy Renewables NC Solar, LLC
CPCN Attachment 1 to Exhibit 2: MAPS**

- A. Site map of Duke Energy Renewables NC Solar, LLC with property owners identified.



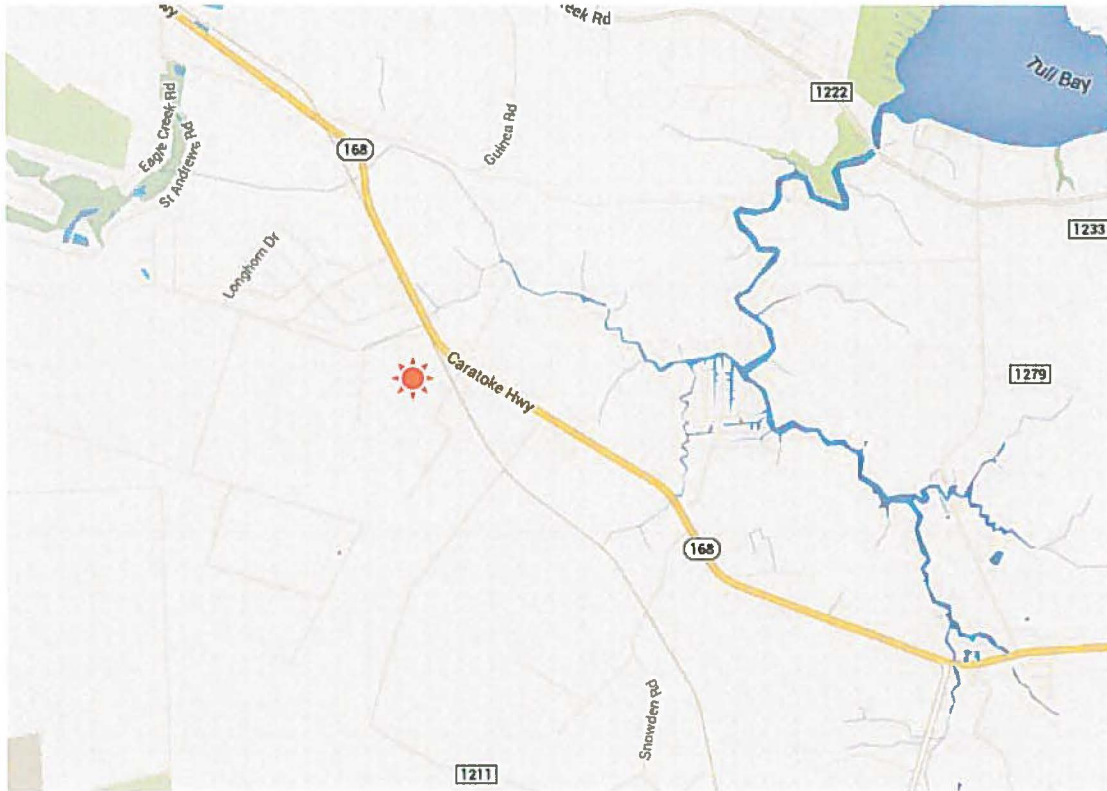
**Duke Energy Renewables NC Solar, LLC
CPCN Attachment 1 to Exhibit 2: MAPS**

B. Site map of Duke Energy Renewables NC Solar, LLC showing panel layout.



**Duke Energy Renewables NC Solar, LLC
CPCN Attachment 1 to Exhibit 2: MAPS**

C. General Location Map of Duke Energy Renewables NC Solar, LLC (site is highlighted with a sun symbol)



Duke Energy Renewables NC Solar, LLC
Application Exhibit 3

- i. The Facility will be an 80.0-MW_{AC} photovoltaic ("PV") array. The source of its power is solar energy.
- ii. The Facility is a single-axis tracking, ground-mounted solar photovoltaic power plant consisting of approximately 367,213 solar PV modules and will utilize fifty-four (54) 1.56 MW inverters set to 1.482 MW each.
- iii. The maximum gross power production capacity of the Facility will be 80 MW_{AC} and the projected maximum net power production capacity is 80 MW_{AC}. Solar is an intermittent energy source, and therefore, the maximum dependable capacity is 0 MW. The nameplate capacity of the Facility will be 80 MW_{AC}.
- iv. The Facility is projected to come online in phases with the complete system online by December 31, 2015.
- v. The Applicant is in discussions to sell the output through a negotiated Power Purchase Agreement (PPA) to DNCP or to one or more retail customers in deregulated states that allow for such sales, or to sell the output in the PJM market.
- vi. No arrangements for wheeling have been made at this time. It is anticipated that, if the output is sold to retail customers in deregulated states that allow for such sales pursuant to a PPA, wheeling arrangements will be made.
- vii. No arrangements for firm, non-firm or emergency generation have been made at this time.
- viii. The service life of the equipment is expected to be a minimum of twenty (20) years.
- ix. The projected annual sales of the Facility are 192,263,235 kWh.
- x. The Applicant will produce Renewable Energy Certificates. The Applicant anticipates either participating in the North Carolina Renewable Energy Tracking System or in the tracking system of other states in the PJM territory.

Duke Energy Renewables NC Solar, LLC
Application Exhibit 4

- i. The Applicant will file for self-certification as a Qualifying Facility (QF) with the Federal Energy Regulatory Commission (FERC). The Applicant is seeking the benefits of 16 U.S.C. 824a-3 with the exception of the right to sell energy or capacity from its facility to DNCP. Applicant is aware that FERC entered an Order granting DNCP's application to terminate its obligation to purchase from QFs with a net capacity in excess of 20 MW on July 17, 2008. Therefore, the Applicant is seeking only certain benefits of a QF, such as the right to interconnect and purchase certain services and the right to relief from regulatory burdens such as compliance with certain requirements of the Public Utility Holding Company Act.

The following is a complete list of all federal and state licenses, permits and exemptions required for construction and operation of the generation facility:

- FERC Form 556
 - Order granting market based authority from FERC (Sec 205 of the Federal Power Act)
 - North Carolina Dept. of Environmental and Natural Resources (NCDENR) Approval of erosion and sedimentation control plans.
 - North Carolina Dept. of Environmental and Natural Resources (NCDENR) – Stormwater Management Permit
 - N.C. Department of Transportation – Driveway Permit
 - N.C. Department of Transportation – Utilities Encroachment Easement
 - Currituck County – Conditional Use Permit
 - Currituck County – Electrical/Building Permit
- ii. The Applicant will file a copy of the federal and state licenses, permits and exemptions, if any are received, once they are obtained.

Duke Energy Renewables NC Solar, LLC
Application Exhibit 5

The projected cost of the Facility is filed under seal as **Confidential Attachment 1 to Exhibit 5** because it constitutes confidential and proprietary information within the scope of G.S. § 132-1.2.

**Duke Energy Renewables NC Solar, LLC
Application Exhibit 6**

- a. The applicant is currently negotiating terms with SunEnergy1 to develop, design, and construct the project. SunEnergy1, LLC (SE1) develops, owns and operates solar photovoltaic (PV) facilities, including rooftop and ground-mount facilities SE1 has developed more than 200 MW of solar PV. By 2016, SE1 anticipates developing as much as 100 MW of additional solar PV, approximately one-third of which will be owned and operated by SE1.

The company's professional team works closely with manufacturers, utilities and industry groups to improve safety, performance and cost efficiency. The company's employees work closely with UL, NEC, NFPA-70E, and other government agencies to ensure that safety in the solar industry continues to improve.

Kenny Habul is the President, CEO and Founder of SE1. He established himself as a leader in the field of sustainable construction technologies. Prior to forming SunEnergy1, Habul was a partner in Habul Brothers Luxury Home Construction, one of the most prominent and innovative builders in Queensland, Australia. There he gained vast experience in commercial and residential construction and formed a passion for sustainable construction practices and solar energy.

Bradley Fite is SunEnergy1's Chief Operations Officer (COO) and holds an Unlimited/Master Electrical License in multiple states. He is certified through Underwriter's Laboratory (UL) as a professional PV installer and holds several certifications through the North American Board of Certified Energy Practitioners (NABCEP). He is an active member of IEEE, NFPA, and works closely with utilities and manufacturers to stay on the leading edge of the PV industry. Fite is directly involved with all aspects of the company and oversees projects from initial development through construction and operations and maintenance. He has over 20 years of construction experience and has built more than 200 MW AC of solar PV projects.

Joel Sossamon is SE1's Director of Project Management. He has held his unlimited electrical license in the state of North Carolina for more than three decades and is responsible for the overall management of the solar installation projects for SE1, from ground-mount systems to rooftop arrays. He brings more than 40 years of electrical contracting experience in both commercial and industrial settings.

Duke Energy Renewable Services, LLC will operate the site after completion.

Duke Energy Renewables, part of Duke Energy's Commercial Businesses, is a leader in developing innovative wind and solar energy solutions for customers throughout the United States. Since 2007, Duke Energy Renewables has invested more than \$2.5 billion to rapidly grow its portfolio of zero-emission generating assets.

Duke Energy Renewables owns 15 U.S. wind farms that are in operation or under construction, representing nearly 1,800 megawatts of capacity. The company's commercial solar power business owns more than a dozen photovoltaic generating facilities across the country. Duke Energy Renewables is dedicated to helping utilities, electric cooperatives and municipalities deliver affordable, reliable and clean energy to their customers.

Duke Energy, headquartered in Charlotte, N.C., is a Fortune 500 company traded on the New York Stock Exchange under the symbol DUK. More information about the company is available at <http://www.duke-energy.com/>.

- b. No regulated utility will be involved in the actual operation of the Facility.
- c. The Applicant requests a waiver of the requirement to obtain a statement from electric utility to which the applicant plans to sell the electricity to be generated because the Applicant has not yet determined to what entity or entities the output from the Facility will be sold. As noted in response to item v in Exhibit 3, the Applicant is pursuing several options for sale of the output, only one of which is a negotiated PPA with DNCP.

Duke Energy Renewables NC Solar, LLC
Application Exhibit 7

- a. The most current balance sheet for Duke Energy Renewables NC Solar, LLC is filed under seal as **Confidential Attachment 1 to Exhibit 7** because it constitutes confidential and proprietary information within the scope of G.S. § 132-1.2.
- b. The most current income statement of Duke Energy Renewables NC Solar, LLC is filed under seal as **Confidential Attachment 2 to Exhibit 7** because it constitutes confidential and proprietary information within the scope of G.S. § 132-1.2.
- c. A projected financial model is filed under seal as **Confidential Attachment 3 to Exhibit 7** because it constitutes confidential and proprietary information within the scope of G.S. § 132-1.2.
- d. There are no confirmed financing arrangements at this time.

Duke Energy Renewables NC Solar, LLC
Application Exhibit 8

- a. A simulation reflecting the anticipated kilowatt and kilowatt-hour outputs, on-peak and off-peak, for each month of the year, including a statement of the specific on-peak and off-peak hours underlying the quantification, is filed under seal as **Confidential Attachment 1 to Exhibit 8** because it constitutes confidential and proprietary information within the scope of G.S. § 132-1.2.
- b. The Facility is a solar photovoltaic array and the energy input is solar. The output of electrical generation will be sold under a PPA to either DNCP or to one or more retail customers in deregulated states that allow for such sales, or will be sold into the PJM market.
- c. No fuel supply arrangements are required for the Facility.