



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

May 15, 2020

Ms. Kimberley A. Campbell, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

Re: Docket No. EMP-109, Sub 0 – Application for a Certificate of Public Convenience and Necessity to Construct a 20-MW Solar Facility in Camden County, North Carolina

Dear Ms. Campbell:

In connection with the above-referenced docket, we transmit herewith for filing on behalf of the Public Staff the testimony of Jay B. Lucas, Utilities Engineer, Electric Division.

By copy of this letter, we are forwarding a copy of the redacted version to all parties of record by electronic delivery. The confidential version will be provided to those parties that have entered into a confidentiality agreement.

Sincerely,

/s/ Megan Jost  
Staff Attorney  
[megan.jost@psncuc.nc.gov](mailto:megan.jost@psncuc.nc.gov)

MJ/cla

Attachment(s)

<b>Executive Director</b> (919) 733-2435	<b>Communications</b> (919) 733-5610	<b>Economic Research</b> (919) 733-2267	<b>Legal</b> (919) 733-6110	<b>Transportation</b> (919) 733-7766
<b>Accounting</b> (919) 733-4279	<b>Consumer Services</b> (919) 733-9277	<b>Electric</b> (919) 733-2267	<b>Natural Gas</b> (919) 733-4326	<b>Water</b> (919) 733-5610

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May 15 2020

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. EMP-109, SUB 0

In the Matter of	)	
Application of Camden Solar LLC for a	)	TESTIMONY OF
Certificate of Public Convenience and	)	JAY B. LUCAS
Necessity to Construct a 20-MW Solar	)	PUBLIC STAFF – NORTH
Facility in Camden County, North	)	CAROLINA UTILITIES
Carolina	)	COMMISSION

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. EMP-109, SUB 0**

**Testimony of Jay B. Lucas  
On Behalf of the Public Staff  
North Carolina Utilities Commission**

**May 15, 2020**

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND**  
2 **PRESENT POSITION.**

3 A. My name is Jay B. Lucas. My business address is 430 North  
4 Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am an  
5 engineer with the Electric Division of the Public Staff – North Carolina  
6 Utilities Commission.

7 **Q. BRIEFLY STATE YOUR QUALIFICATIONS AND DUTIES.**

8 A. My qualifications and duties are included in Appendix A.

9 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

10 A. The purpose of my testimony is to make recommendations to the  
11 Commission on the request for a Certificate of Public Convenience  
12 and Necessity (CPCN) filed on April 1, 2020, by Camden Solar LLC  
13 (Applicant) to construct a 20-megawatt AC (MW<sub>AC</sub>) solar photovoltaic  
14 (PV) merchant electric generating facility in Camden County, North  
15 Carolina (the Facility). My testimony also provides the Public Staff's

1 position on the estimated cost of network upgrades that would be  
2 necessary for the Facility to interconnect to the grid.

3 **Q. PLEASE BRIEFLY DESCRIBE THE PROPOSED GENERATION**  
4 **FACILITY.**

5 A. The Applicant proposes to construct a 20-MW<sub>AC</sub> solar PV electric  
6 generating facility in Camden County, North Carolina. The  
7 Commission previously issued a CPCN for the Facility on August 1,  
8 2017, in Docket No. SP-8831, Sub 0, as a qualifying facility pursuant  
9 to Commission Rule R8-64. The Applicant now intends to operate the  
10 Facility as a merchant power plant under Commission Rule R8-63.  
11 Therefore, the Applicant requests that the Commission cancel the  
12 CPCN issued in Docket No. SP-8831, Sub 0, and issue a new CPCN  
13 in the present docket pursuant to Commission Rule R8-63.

14 The Facility's inverters will provide alternating current at 34,500 volts  
15 (34.5 kV) which it will step up to 115 kV in order to connect to an  
16 existing Dominion Energy North Carolina (DENC) transmission line.  
17 The Applicant expects the yearly generation to be approximately  
18 51,731 megawatt-hours. Solar is an intermittent energy source;  
19 therefore, the maximum dependable capacity of the Facility is 0 MW.  
20 The expected life of the Facility is a minimum of 20 years.

21 **Q. HAS THE APPLICANT SHOWN A NEED FOR ITS PROPOSED**  
22 **FACILITY?**

1 A. Yes. The Facility will interconnect with the transmission system of  
2 DENC, which is a member of PJM. The Applicant stated it is actively  
3 negotiating power purchase agreements (PPAs) with a group of  
4 investment-grade off-takers for all of the Facility's output and is  
5 expecting the PPAs to be executed in the third quarter of 2020.

6 The Applicant anticipates contracting the sale of energy, capacity,  
7 and renewable energy certificates from the Facility within the PJM  
8 market. The Applicant provided a chart in Schedule 4 to its  
9 Application produced by the Business Renewables Center<sup>1</sup> that  
10 projects corporate demand for renewable energy in PJM to be strong  
11 over the next few years.

12 In addition, on August 29, 2019, in Docket No. E-100, Sub 157,  
13 DENC filed an update to its Integrated Resource Plan that indicates  
14 it is planning for the development of 5,400 MW of solar generation  
15 by 2044. Appendix 2H of the update indicates that summer peak  
16 demand will increase through 2034. Appendix 2I indicates that  
17 energy consumption will increase through 2034 as well.

18 **Q. HAS THE APPLICANT COMPLIED WITH THE COMMISSION'S**  
19 **FILING REQUIREMENTS?**

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<sup>1</sup> The Business Renewables Center is a member-based platform that streamlines and accelerates corporate purchasing of off-site, large-scale wind and solar energy. It was founded in 2014 in coordination with the Rocky Mountain Institute (RMI), corporations, project developers, and intermediaries. <https://businessrenewables.org/>

1 A. Yes. The Public Staff reviewed the application and the direct  
2 testimony of the Applicant's witness, Whitney Rubin, and determined  
3 that the application is complete.

4 On April 15, 2020, the Public Staff filed a Notice of Completeness  
5 pursuant to Commission Rule R8-63(d) and requested that the  
6 Commission issue a procedural order granting the Applicant's  
7 Request for Modified Procedural Schedule filed in the present docket  
8 on April 7, 2020.

9 On April 24, 2020, the Commission issued an Order Requiring Filing  
10 of Testimony, Establishing Procedural Guidelines, and Requiring  
11 Public Notice (Procedural Order) in which it denied in part and  
12 granted in part the Applicant's Request for Modified Procedural  
13 Schedule. The Commission denied the Applicant's request that the  
14 Commission schedule an expert witness hearing only if an intervenor  
15 opposed the application. The Commission also denied the  
16 Applicant's request that the Commission follow the procedure set  
17 forth in Commission Rule R8-64(c) for applications for CPCNs for  
18 non-merchant facilities, which requires an applicant to publish notice  
19 of an application, but a hearing is only scheduled by the Commission  
20 if a complaint is received within 10 days after the last date of the  
21 publication of notice. The Commission granted the Applicant's  
22 request not to require further review by the State Clearinghouse

1 because the facility previously underwent Clearinghouse review in  
2 Docket No. SP-8831, Sub 0, and the site plan had not changed since  
3 that time.

4 **Q. HAS THE APPLICANT PROVIDED ANY TESTIMONY**  
5 **REGARDING NETWORK UPGRADES?**

6 A. Yes. The direct testimony of Ms. Rubin stated that the Facility would  
7 require network upgrades at an estimated cost of **[BEGIN**  
8 **CONFIDENTIAL]** ██████████ **[END CONFIDENTIAL]**. Ms. Rubin  
9 further indicated that the Applicant will be funding the entire cost of  
10 these upgrades and does not expect to receive reimbursement of  
11 those costs from PJM, DENC, or DENC's ratepayers.

12 **Q. DOES THE PUBLIC STAFF HAVE ANY CONCERNS REGARDING**  
13 **THE APPLICANT'S TESTIMONY ON NETWORK UPGRADES?**

14 A. Not at this time. The Applicant has allayed the Public Staff's concerns  
15 regarding the potential for significant network upgrade costs that  
16 could ultimately be borne by the using and consuming public.  
17 However, if this potential arises in the future, the Public Staff would  
18 re-evaluate its position on this issue.

19 **Q. WHAT IS THE PUBLIC STAFF'S RECOMMENDATION ON THE**  
20 **APPLICATION FOR A CPCN?**

1 A. The Public Staff recommends that the Commission cancel the CPCN  
2 issued in Docket No. SP-8831, Sub 0, and issue a new CPCN in the  
3 present docket pursuant subject to the following conditions:

4 1. The Applicant shall construct and operate the Facility in strict  
5 accordance with applicable laws and regulations, including  
6 any local zoning and environmental permitting requirements;

7 2. The CPCN shall be subject to Commission Rule  
8 R8-63(e) and all orders, rules and regulations as are now or  
9 may hereafter be lawfully made by the Commission;

10 3. The Applicant shall file with the Commission in this docket a  
11 progress report and any revisions in the cost estimates for the  
12 construction of the Facility on an annual basis, including any  
13 costs for network upgrades; and

14 4. The Applicant shall notify the Commission and the Public Staff  
15 within 30 days of becoming aware of any significant changes  
16 to the cost or cost allocation of any network upgrades.

17 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

18 A. Yes, it does.



**QUALIFICATIONS AND EXPERIENCE**

JAY B. LUCAS

I graduated from the Virginia Military Institute in 1985, earning a Bachelor of Science Degree in Civil Engineering. Afterwards, I served for four years as an engineer in the Air Force performing many civil and environmental engineering tasks. I left the Air Force in 1989 and attended the Virginia Polytechnic Institute and State University (Virginia Tech), earning a Master of Science degree in Environmental Engineering. After completing my graduate degree, I worked for an engineering consulting firm and worked for the North Carolina Department of Environmental Quality in its water quality programs. Since joining the Public Staff in January 2000, I have worked on utility cost recovery, renewable energy program management, customer complaints, and other aspects of utility regulation. I am a licensed Professional Engineer in North Carolina.