

BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
RALEIGH, NORTH CAROLINA

PITT SOLAR, LLC
DOCKET NO. EMP-102, SUB 1

PRE-FILED DIRECT TESTIMONY
OF
LINDA NWADIKE

September 28, 2021

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INTRODUCTION

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Linda Nwadike. I am the Director of Permitting and Community Relations for SunEnergy1, LLC (“SunEnergy1” or the “Company”), the parent and an affiliate of the Applicant Pitt Solar, LLC (“Pitt Solar” “Pitt Solar Phase 1” or “Applicant”). Pitt Solar is a North Carolina limited liability company that was formed on September 25, 2020. My business address is 192 Raceway Drive, Mooresville, North Carolina 28117. I previously filed direct and supplemental testimonies in this docket on behalf of the Applicant and in support of the issuance of the requested Certificate of Public Convenience and Necessity (a “CPCN”).

Q. PLEASE IDENTIFY THE PARENT COMPANY OF THE APPLICANT.

A. SunEnergy1 has been and remains the parent company of the Applicant, Pitt Solar, LLC.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

A. Yes, I submitted the pre-filed Direct Testimony that was filed in this docket with the original application submitted on August 10, 2020 (hereinafter the “Original Application”), and the pre-filed Supplemental Testimonies that was filed in this docket on October 16, 2020 and June 1, 2021, in addition to a pre-file reply testimony that was filed on July 22, 2021. I have also provided testimony in support of the application for a Certificate of Public Convenience and Necessity (“CPCN”) for Merchant Plant and filed applicable construction Progress Reports for the following applicants for the indicated project; Albemarle Beach Solar, LLC (NCUC Docket EMP-103), Oak Solar, LLC (NCUC

1 Docket EMP 112), Cherry Solar, LLC (NCUC Docket EMP 115) and Shawboro East Ridge
2 Solar, LLC (NCUC Docket EMP 117).

3

4 **Q. WHAT IS THE PURPOSE OF THIS PRE-FILED SUPPLEMENTAL DIRECT TESTIMONY NOW**
5 **BEING SUBMITTED IN THIS PROCEEDING?**

6 A. The purpose of this pre-filed Supplemental Direct Testimony is to update my previous
7 testimonies in this docket based on the order issued by the Commission dated
8 September 14, 2021, directing that “Pitt Solar, LLC shall file an amended application by
9 September 28, 2021, reflecting a two-stage or bifurcated process for the Commission to
10 consider the two different portions of the proposed Facility, including provision of a
11 separate Sub number within the EMP-102 docket for consideration of the second portion
12 of the proposed Facility”.

13

14 **Q. HAS YOUR EDUCATION AND PROFESSIONAL EXPERIENCE CHANGED SINCE THE FILING OF**
15 **YOUR PRE-FILED DIRECT TESTIMONY SUPPORTING THE ORIGINAL APPLICATION?**

16 A. No. I obtained a Bachelor of Science degree in Chemical Engineering with a concentration
17 in Biological Technology, and I am a licensed project manager professional. The
18 remainder of my background information is the same as was provided in my pre-filed
19 direct testimony submitted in August 2020. I incorporate that portion of my pre-filed
20 testimony from August into this testimony.

21

22 **Q. HAVE YOUR CURRENT RESPONSIBILITIES WITH SUNENERGY1 CHANGED SINCE YOUR PRE-**
23 **FILED DIRECT TESTIMONY WAS SUBMITTED IN AUGUST 2020.**

1

2 A. No, not materially. My current employment responsibilities remain the same as those I
3 described in the pre-filed testimony submitted in August 2020. I also hereby incorporate
4 that portion of my pre-filed testimony from August into this testimony.

5

6

COMPANY BACKGROUND AND PROJECT FINANCE

7 Q. HAVE THERE BEEN ANY SUBSTANTIAL CHANGES WITH REGARD TO THE COMPANY'S
8 PERSONNEL, TECHNICAL EXPERIENCE, AND FINANCIAL CAPABILITY TO OWN AND
9 OPERATE THE PROJECT, AS YOU DESCRIBED THOSE IN YOUR TESTIMONY SUMITTED IN
10 AUGUST 2020?

11 A. No, not materially. SunEnergy1 remains a top U.S. solar developer, owner, and operator
12 of utility-scale solar projects, with over 1 GW of installed solar power. SunEnergy1 has
13 pioneered large-scale solar power on the East Coast for nearly a decade and has
14 developed numerous record-breaking solar projects in the Southeast region. SunEnergy1
15 is vertically integrated and controls all stages of development in-house. I also hereby
16 incorporate that portion of my pre-filed testimony from August into this testimony.

17

18

SITE AND FACILITY DESCRIPTION

19 Q. FOCUSING ON YOUR DIRECT TESTIMONY FILED IN AUGUST TO SUPPORT THE ORIGINAL
20 APPLICATION, HOW HAS THE PROJECT THAT IS THE SUBJECT OF THE AMENDED
21 APPLICATION CHANGED FROM THAT DESCRIBED IN THE ORIGINAL APPLICATION?

22

1 A. The general location of the project has not changed, the project is still located East of NC
2 11 South and North of NC 30 in the Town of Bethel, Pitt County, North Carolina.
3 However, based on order issued by the Commission dated September 14, 2021 that Pitt
4 Solar, LLC shall file an amended application by September 28, 2021, reflecting a two-
5 stage or bifurcated process for the Commission to consider the two different portions of
6 the proposed Facility therefore the site plan has changed.

7

8 The Project now reflects a two-stage construction process as the 150 MW facility has
9 been divided into two project phases to adhere to the Commission' order. Construction
10 of an 80 MW under this docket, Pitt Solar Docket EMP-102, Sub 1, will take place first and
11 it coincides with PJM queue AC1-189. While construction of a 70 MW section under Pitt
12 Solar phase 2 as described and permitted in Docket EMP-102, Sub 2, will take place
13 second and coincides with PJM queue AF2-080. The amended application for Pitt solar
14 phase 2 will be submitted under NCUC Docket EMP-102, Sub 2. Pitt Solar phase 1 is
15 located on some of the parcels that formed a part of the site as proposed in the Original
16 Application.

17

18 Environmental analysis has been conducted in parallel to this CPCN application process
19 and some environmental attributes were found. Therefore, the original footprint of the
20 entire site became smaller, which resulted in additional parcels being added to Phase 2 of
21 the project, now pending under EMP-102 Sub 2 docket. See Schedule 2-2 attached to the
22 Amended Application, in EMP-102, Sub 2.

23

1 Q. WHAT IS THE CURRENT LAND USE AND ANTICIPATED USE?

2 A. The project will be located on several parcels in Pitt County and Town of Bethel, North
3 Carolina as shown on layout map attached to the Application as Schedule 2-2. The site is
4 comprised of rural land, some of which is utilized for agricultural purposes. SunEnergy1's
5 affiliate, Group Three Holdings, LLC, owns a portion of the site; additionally, Christopher
6 & Georgia James, Country Farms, LLC, The Bunting Farms, Inc., Charlie & Elizabeth
7 Manning, Patsy White & Carrie Gurganus and Wallace & Jeffrey James, each own or claim
8 to own some or all of the other portions of the site for the project. The above-mentioned
9 landowners have provided Pitt Solar with the right to develop and use the property for
10 solar energy purposes, including the installation of solar panels, inverters, transformers,
11 and other elements of the facility described in the Application.

12

13 Q. WHAT IS THE FACILITY'S ANTICIPATED ELECTRICITY PRODUCTION CAPACITY?

14 A. The maximum gross power production capacity of Pitt Solar Phase 1 facility will be 80
15 MW.

16

17 Q. PLEASE DESCRIBE THE BASIC COMPONENTS OF THE FACILITY.

18 A. Pitt Solar Phase 1 is an 80-MW PV array, and the sole source of its power is solar energy.
19 The facility will be a fixed tilt ground-mounted solar PV system, and the facility will be
20 comprised of solar arrays, inverters, generator step-up ("GSU") transformers, racking,
21 posts, wiring, utility poles, communication poles, security camera, collector station, and
22 accessories. A color map showing the proposed site boundary, layout with all major

1 equipment, roads, and, and electric facilities is attached to Exhibit 2 of the Application as
2 Schedule 2-2.

3

4 Q. PLEASE DESCRIBE THE TRANSMISSION FACILITIES TO WHICH THE FACILITY WILL
5 INTERCONNECT AND HOW THE PROJECT WILL BE INTERCONNECTED TO THE GRID?

6 A. The Pitt Solar facility will interconnect with the Dominion Transmission system via a new
7 three breaker ring bus switching station connecting to the Elmont-Greenwood DP 115 KV
8 line #59. This new switching station will be adjacent to the Dominion transmission line on
9 land Pitt Solar has acquired for this generating facility. The generator collector substation
10 will be adjacent to the new Dominion switching station.

11 A diagram showing the point of interconnection and the location of the collector station
12 is attached to the application as Schedule 2-2.

13

14 NEED FOR THE FACILITY

15 Q. PLEASE EXPLAIN THE NEED FOR THE PROPOSED 80 MW FACILITY.

16 A. Pitt Solar will interconnect with the Dominion Energy transmission grid, providing the
17 merchant plant with direct access to PJM, a Regional Transmission Organization (“RTO”)
18 in which Dominion participates.

19 Pitt Solar believes that there are strong market conditions in the PJM market that will
20 create sustainable off-take for its power production. Demand for renewable energy is
21 expected to increase in the southeast over the expected lifetime of the project.
22 Additionally, as was explained in my Supplemental Testimony in this docket filed on
23 October 16, 2020, the Applicant reached a PPA with a Fortune 100 company. I hereby

1 incorporate that portion of my pre-filed testimony from August and supplemental
2 testimony of October into this testimony.

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4

REGULATORY APPROVALS AND PERMITS

5 Q. DOES PITT COUNTY OR THE TOWN OF BETHEL HAVE A SOLAR ENERGY ORDINANCE?

6 A. Yes. Pitt County has a Solar Energy facility portion (Section EEEE) of its planning &
7 development services ordinance No. 14. The Solar Development Ordinance was adopted
8 by the Pitt County Board of Commissioners pursuant to the authority and provisions of
9 N.C. Gen. Stat. § 153A-121 (general ordinance-making power), N.C. Gen. Stat. § 153A-340
10 (grant of power), and other applicable law, provided nothing shall be interpreted to
11 conflict with or supersede any provision of N.C. Gen. Stat. § 153A-144 (limitations on
12 regulating solar collectors).

13

14 Q. DESCRIBE THE PERMITS AND APPROVALS YOU ANTICIPATE WILL BE NECESSARY TO
15 COMMENCE CONSTRUCTION OF THE FACILITY.

16 A. Pitt Solar has obtained the Zoning Compliance from the Town of Bethel and Conditional
17 Use Permit (CUP) from Pitt County as required by the Town of Bethel and Pitt County
18 zoning requirements. The Town of Bethel and Pitt County Board of Commissioners have
19 final authority to approve Zoning Permit and Conditional Use Permit respectively. A copy
20 of the approved Zoning Compliance and CUP from the Town of Bethel and Pitt County
21 are attached and included in Schedule 2-3. In addition, Pitt Solar will also have to obtain
22 a Building Permit from Pitt County.

1 full-time construction jobs. Pitt Solar expects to hire up to 500 workers for the duration
2 of the first construction phase. Increased economic activity in the area is expected to
3 increase revenue for local hotels, restaurants, service stores, and other vendors.
4

5 **Q. WHAT ARE THE EXPECTED ENVIRONMENTAL IMPACTS OF THE SMALLER FACILITY?**

6 A. By design and by its nature as a solar PV facility, the facility will provide clean renewable
7 power with minimal environmental impacts. The facility will create no air or water
8 emissions and no environmental contamination. There will be no noise impact outside of
9 the fence line. At the end of the facility's useful life, materials can be recycled or sold for
10 scrap, and the land can be returned to agricultural use.
11

12 **RESPONSES TO THE COMMISSION'S SUPPLEMENTAL QUESTIONS**

13 **Q. TURNING TO THE SUPPLEMENTAL TESTIMONY YOU FILED ON OCTOBER 16, 2020 and**
14 **June 1, 2021, CAN YOU EXPLAIN BRIEFLY HOW THE PREVIOUS RESPONSES OF THE**
15 **APPLICANT WOULD HAVE CHANGED FOR PURPOSES OF THE AMENDED APPLICATION?**

16 A. Yes, I can. The project as described in the Original Application and Supplemental
17 Testimonies was made up of two PJM queues, AC1-189, and AF2-080. The 80 MW project
18 proposed in the Phase 1 of the Amended Application corresponds to PJM Queue AC1-
19 189. So, for example, the testimony and exhibits relating to that PJM Queue identifier
20 AC1-189 that was submitted on October 16, 2020, such as Exhibits 2, 3, 4, 5 to that
21 testimony, represents, respectively, the LCOT, Feasibility Study, System Impact Study,
22 and Facilities Study for the 80 MW facility proposed in the Amended Application. The
23 studies and testimony relating to AF2-080 in the October filing corresponds to the

1 portion of the project for which Pitt Solar Phase 2 under EMP-102 SUB 2 has become
2 responsible.

3 The transmission upgrades for the 80 MW phase of the Facility (PJM Queue AC1-189) are
4 currently estimated by PJM to be \$8,922,829. The PJM cost estimate will be reduced in
5 part because Pitt Solar has opted to self-build some of the attachment facilities that were
6 included in the original study at an estimated cost in the PJM Study of \$685,295, and
7 opted to self-build the new switching station, which had an estimated cost in the PJM
8 study of \$6,474,940. The Duke Affected System cost estimate for PJM Queue AC1-189 is
9 currently \$31,285,275. The Applicant understands that American Beech Solar, LLC has
10 entered into an Affected System Operating Agreement with Duke to request and pay for
11 this scope of work.

12 The responses of the Applicant to the other supplemental questions posed by the
13 Commission can be inferred from my previous testimony of October 16, 2020 and June 1,
14 2021.

15

16 **Q. DOES THIS CONCLUDE YOUR PREFILED SUPPLEMENTAL DIRECT TESTIMONY IN SUPPORT**
17 **OF THE AMENDED APPLICATOIN OF PITT SOLAR PHASE 1?**

18 **A. Yes.**

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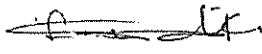
STATE OF NORTH CAROLINA

COUNTY OF IREDELL

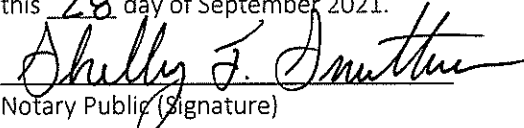
VERIFICATION

I, Linda Nwadike, being first duly sworn, depose and say that I am duly authorized to act on behalf of Pitt Solar, LLC as Director of Permitting and Community Relations for SunEnergy1, LLC, the parent, and an affiliate of the Petitioner; that I have read the foregoing Pre-Filed Direct Testimony and that the same is true and accurate to my personal knowledge and belief except where otherwise indicated, and in those instances, I believe my answers to be true.

This 28 day of September 2021.



Linda Nwadike
SunEnergy1, LLC

Sworn to and subscribed to before me
this 28 day of September 2021.


Notary Public (Signature)
Shelby F. Smithwick

Notary Public (Printed)
My Commission Expires: 3/27/23

