

BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
RALEIGH, NORTH CAROLINA

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

REPLY TESTIMONY
OF
LINDA NWADIKE

OCTOBER 25, 2021

INTRODUCTION

Q. THE RECORD IN THIS PROCEEDING CONFIRMS THAT YOU HAVE SUBMITTED MULTIPLE ROUNDS OF PRE-FILED TESTIMONY IN THIS DOCKET INVOLVING A PROPOSED MERCHANT ELECTRIC GENERATION PLANT TO BE SITED IN PITT COUNTY, WITHIN THE NORTH CAROLINA RETAIL ELECTRIC SERVICE TERRITORY OF VIRGINIA ELECTRIC POWER COMPANY, D/B/A DOMINION NORTH CAROLINA ENERGY ("DENC"). WHAT IS THE PURPOSE OF THE REPLY TESTIMONY YOU ARE SUBMITTING TODAY IN THIS DOCKET?

A. In response to the Commission's order in this docket entered on September 14, 2021 (the "September Order"), Pitt Solar, LLC (the "Applicant"), timely filed its amended application reducing the size of the proposed facility in this docket to 80 MW, corresponding to the portion of the originally proposed facility that has been grouped for study purposes into PJM Cluster AC1 (originally described as "Phase 1"). Pitt Solar also contemporaneously filed a new, separate application for the 70 MW portion of the originally proposed facility that has been grouped for study purposes into PJM cluster AF2, which was docketed with this Commission as EMP-102, Sub 2.

On October 19, 2021, the Public Staff, in response to the September Order and subsequent extension orders, and after reviewing the amended and new applications of Pitt Solar, filed the Second Supplemental Testimony of Dustin R. Metz.

The purpose of my Reply testimony is to respond on behalf of the Applicant to the Second Supplemental Testimony submitted by Public Staff witness Metz.

Q. FOCUSING ON THE LANGUAGE OF ORDERING PARAGRAPH 2 OF THE COMMISSION'S SEPTEMBER ORDER, DOES THE PUBLIC STAFF HAVE A VIEW ON WHETHER THE

1 COMMISSION SHOULD BIFURCATE THE APPLICATION IN THIS PROCEEDING TO ALLOW
2 THE COMMISSION TO CONSIDER THE TWO DIFFERENT PORTIONS OF THE PROPOSED
3 FACILITY SEPARATELY?

4 A. Yes. Public Staff Witness Metz testifies on pages 4 and 5 of his Second
5 Supplemental Testimony that the Public Staff agrees with the bifurcation of the two
6 phases of the project in this specific instance. As made clear in my testimony in support
7 of the Applicant's amended application filed in September, Pitt Solar also agrees to the
8 bifurcation of the two phases of the originally proposed facility into two separate
9 applications in two separate dockets for two separate Certificates of Public Convenience
10 and Necessity ("CPCN").
11

12 Q. FOCUSING ON THE SAME PARAGRAPH OF THE SEPTEMBER ORDER, DOES BIFURCATION
13 RAISE ANY ISSUES OR CONCERNS FOR THE PUBLIC STAFF?

14 A. No. Witness Metz, on page 5 of his Second Supplemental Testimony, confirms
15 that "[t]he Public Staff has no concerns about bifurcation itself...". Although Witness
16 Metz expresses some new concerns in his most recent testimony, those concerns do not
17 result from the bifurcation of the originally proposed facility into separate applications
18 and dockets.
19

20 Q. AND, FOCUSING SOLELY ON THE THIRD TOPIC IDENTIFIED IN THE SAME PARAGRAPH OF
21 THE SEPTEMBER ORDER, DOES BIFURCATION CHANGE THE PUBLIC STAFF'S ANALYSES AS
22 TO EITHER PORTION OF THE ORIGINALLY PROPOSED FACILITY?

1 A. Witness Metz responds to that question on page 5 of his Second Supplemental
2 Testimony, testifying that “[b]ifurcation does not change my other analyses.”
3

4 Q. IN LIGHT OF THE RESPONSES OF WITNESS METZ TO THE THREE TOPICS IDENTIFIED IN
5 THE SEPTEMBER ORDER, WHY IS THE APPLICANT SUBMITTING REPLY TESTIMONY?

6 A. The Commission in the September Order said that it was not persuaded that it
7 should hold this proceeding “in abeyance indefinitely” as the Public Staff was
8 recommending at that time.

9 The Commission also expressly found in the September Order that “...there is
10 sufficient information in the record for the Commission to consider and render a decision
11 as to the 80 MW Phase 1 portion of the Facility.” September Order, p. 7.

12 But the Public Staff now opposes issuance of a CPCN to the Applicant, for the
13 reasons advanced in Witness Metz’s Second Supplemental Testimony, which appear to
14 arise primarily from the decision of the FERC to reject as unjust and unreasonable the
15 Affected System Operating Agreement (“ASOA”) signed by Duke Energy Progress (“DEP”) with the developer of another solar merchant plant, American Beach Solar, LLC. This
16 Commission already issued a CPCN to the developer of that proposed project, which also
17 was to be located in DENC’s retail service territory, was also studied in the AC1 cluster,
18 and was also shown to require the same network updates to the Battleboro-Rocky Mount
19 line segment on the DEP system.
20

21 Following the decision of the FERC on October 1, 2021, and apparently based on
22 the Public Staff’s conclusion that “[t]he FERC’s ruling indicates a strong likelihood that
23 affected system costs paid by generators will have to be reimbursed by DEP, and

1 therefore by its captive ratepayers, going forward...”, the Public Staff now recommends
2 that the Commission deny the application of Pitt Solar for a CPCN as to the 80 MW facility
3 that has been studied as part of PJM’s AC1 cluster.

4 Pitt Solar submits this reply testimony to refute the Public Staff recommendation
5 that the Commission deny the Applicant’s CPCN due to the October 1, 2021 FERC Ruling
6 in the American Beech Solar proceeding. The FERC ruling was a single decision based on a
7 single generation resource. In its ruling the FERC acknowledged that the decision of
8 whether to approve a non-conforming ASOA was subject to a fact-specific analysis.
9 Additionally, in that American Beech case, DEP did not meet its burden under Section 205
10 of the Federal Power Act, but that does not mean that DEP would not be able to make
11 such a showing in a future proceeding.

12 Additionally, denial of this CPCN would be inconsistent with the NCUC’s
13 conclusions and actions on the other PJM AC1 cluster applications, as CPCN’s have
14 already been granted not only to American Beech but also for Edgecombe Solar and
15 Halifax County Solar, all of which will need to have upgrades made to the same segment
16 of line on the DEP system. Pitt Solar did not trigger the requirement for the \$31 million in
17 affected system upgrades, as this upgrade is required if any of the PJM AC1 cluster
18 projects studied by DEP, as the affected system, moves forward. Moreover, PJM issued a
19 revised System Upgrade Study Report in October 2021 where PJM confirmed that the
20 Battleboro – Rocky Mount upgrade is still required to maintain system reliability. Finally,
21 it would be discriminatory and unfair to grant CPCNs for Edgecombe Solar and Halifax
22 County Solar but not Pitt Solar, particularly when Pitt Solar has agreed in previous

1 testimonies that it is responsible for all affected system Network Upgrade Costs assigned
2 to the Applicant's facility, if any, without reimbursement.

3 The Public Staff, through Witness Metz, also recommended alternatively, should
4 the Commission decide to approve the amended application of Pitt Solar for the 80 MW
5 facility, that the Commission impose three new conditions on the CPCN, over and above
6 the conditions proposed by the Public Staff that the Applicant has repeatedly stated that
7 it would accept.

8 Pitt Solar would like to state, In that regard, that if the Commission decides to
9 issue the requested CPCN, the Applicant does not object to the addition of the three (3)
10 new conditions proposed by the Public Staff on page 17 of Witness Metz's Second
11 Supplemental Testimony. The Applicant also reiterates its acceptance of the conditions
12 that were proposed in testimony submitted by Witness Metz in 2020, when the Public
13 Staff supported the issuance of a CPCN to Pitt Solar. Therefore, Pitt Solar respectfully
14 urges the Commission to proceed to decision and issue the requested CPCN for the 80
15 MW facility described in the amended application, subject to the accepted conditions.

16
17 **Q. DOES THE APPLICANT INSIST THAT AFFECTED SYSTEM UPGRADE COSTS ON THE DEP**
18 **SYSTEM BE SUBJECT TO REIMBURSEMENT BY DEP AS A PRECONDITION TO ITS**
19 **CONSTRUCTION OF THE PROPOSED 80 MW FACILITY?**

20 **A.** No. The Applicant is an affiliate of SunEnergy1 ("SE1"). SE1 has overseen the
21 development of many solar projects interconnected to the transmission system operated
22 by PJM. In many cases the involved transmission was "independent" under FERC
23 principles, such that the applicable FERC-approved tariffs provided that the costs of

1 upgrades to the interconnecting network operated by PJM, and/or to the transmission
2 network of an “affected system” nearby, be paid by SE1 or its affiliate, without
3 reimbursement. In all instances the SE1 affiliate, as the interconnection customer, agreed
4 to pay for the network upgrade costs resulting from its interconnection of its project,
5 including upgrade costs on affected systems, without obtaining a commitment to be
6 reimbursed for the payments made to the interconnecting network, or to the owner of
7 an affected transmission system.

8 The Applicant would like to reiterate that it previously confirmed its willingness
9 to pay DEP’s projected \$31 million in system upgrade costs without reimbursement. If
10 the upgrade costs were not previously paid or committed to be paid by a prior developer
11 in the PJM AC1 queue, the Applicant agreed to sign an AOSA that required Pitt Solar to
12 pay such costs to DEP, without including any reimbursement obligation on the part of
13 DEP as a non-independent transmission operator.

14 The FERC, however, apparently believes that allowing DEP to file and use a large
15 generator AOSA without a reimbursement obligation would undermine federal law and
16 policy favoring wholesale competition in the generation segment of the electric industry,
17 and the formation of new, independent generators to foster such wholesale competition.
18 The FERC clearly fears that non-independent transmission operators such as DEP/DEC will
19 use control over transmission assets and the interconnection process to gain advantages
20 in the market for the output of current or future generation assets, to the detriment of
21 independent owners of generation resources or proposed generation resources who do
22 not own or operate transmission assets.

1 The Applicant does not believe it is fair or reasonable for its requested 80 MW
2 CPCN to be denied, or for it to risk the future revocation of a CPCN for the 80 MW facility,
3 because the FERC may intend to aggressively enforce this aspect of its Order 2003 (or
4 Order 2003A).

5
6 Q. DOES THE PUBLIC STAFF EXPLAIN ITS CONCERNS WITH THE FERC DECISION REGARDING
7 THE OBLIGATION OF DEP TO REIMBURSE THE PAYMENTS INITIALLY MADE BY AN
8 INTERCONNECTION CUSTOMER ON THE TRANSMISSION SYSTEM OWNED BY DENC THAT
9 DEP FORECASTS WILL REQUIRE IT TO INCUR NETWORK UPGRADE COSTS AS AN "AFFECTED
10 SYSTEM"?

11 A. Yes. in the words of Witness Metz, with respect to merchant plant generation "located
12 within the PJM footprint of DENC", the Public Staff is concerned that "captive ratepayers
13 ultimately will be responsible for affected system costs necessary to interconnect
14 merchant plant generators *without ratepayers directly receiving the energy or capacity*
15 *from the generators...*" Second Supplemental Testimony, pp 10 -11 (emphasis added). If
16 the Public Staff's recommendation is that the dispositive factor for issuance of a CPCN
17 that requires network upgrades should be whether the retail ratepayers of DEP (or DEC),
18 or some other incumbent public utility, will actually receive the energy or capacity output
19 of a proposed generation resource, it will be difficult or impossible to achieve the pro-
20 competition goals as to the ownership and operation of generation resources that the
21 FERC's interconnection policies are intended to promote. Incumbent utilities effectively
22 will determine which generation resources will be built through the exercise of their
23 purchasing policies and practices.

1 Q. LOOKING AT PAGE 13 OF WITNESS METZ'S SECOND SUPPLEMENTAL TESTIMONY, THE
2 PUBLIC STAFF APPEARS TO BELIEVE THAT MERCHANT POWER PLANTS SHOULD BE
3 LOCATED NEARER LOAD CENTERS AND NOT "ON THE OUTER EDGES OF THE
4 [INTERCONNECTING] SYSTEM, "BECAUSE SUCH MERCHANT PLANTS MAY NOT BE
5 "BENEFICIAL TO EFFICIENT LONG-TERM UTILITY PLANNING". AS A PROPOSED DEVELOPER
6 OF MERCHANT PLANTS, WHAT IS THE APPLICANT'S RESPONSE TO THESE CONCERNS?

7 A. First, most load centers either are, or are located within, densely populated
8 areas. The cost of land in most densely populated areas typically make it cost prohibitive
9 to acquire and develop a sufficiently large site to erect a utility-scale solar generation
10 resource as a merchant developer. Such increased development costs may make the site
11 incapable of being financed, because there is no assurance of recovery of the sunk costs
12 for the acquisition and construction of a merchant plant by its developer. Only a utility
13 assured of revenues from captive rate payers would likely be willing or able to finance
14 large solar generation resources located in densely populated areas near load centers.

15 Moreover, a merchant plant developer typically is regarded as reducing its risk by
16 locating generation resources on or near the "seams" or boundaries separating different
17 wholesale markets. The duration of the initial outtake contracts for a merchant plant
18 developer may not match the useful life of its proposed generation resource. Locating a
19 production plant near a seam or boundary increases the potential options for selling the
20 output of the facility in its later years, rather than "locking-in" the resource into servicing
21 a single wholesale market.

22 Similarly, the suggestion that increases in congestion and congestion-related
23 charges are or may be beneficial "to North Carolina" would appear to run directly

1 counter to the FERC's goal of attracting additional investment in transmission facilities, so
2 as to promote more competition in the generation segment of the industry. Additionally,
3 PJM manages congestion through generation dispatch, and the risk is on the generator,
4 because the generator on the wrong side of congestion will risk not being dispatched.
5

6 Q. WHAT IS THE RESPONSE OF THE APPLICANT TO THE CONCERNS EXPRESSED BY WITNESS
7 METZ REGARDING UNCERTAINTIES ARISING FROM THE RISK THAT ONE OR MORE OF THE
8 PROJECTS IN THE PJM QUEUES WILL WITHDRAW OR NOT GO FORWARD, AND HOW
9 THAT IMPACTS THE ECONOMICS OF THE PROPOSED 80 MW FACILITY IN PJM CLUSTER
10 AC1?

11 A. Using queue activity data from 2011 through October 8, 2021, on pages 13
12 through 16 of his Second Supplemental Testimony, Witness Metz describes the
13 quantities of capacity included within PJM's interconnection queue that are in service,
14 still active, or that have been withdrawn or suspended over that period of ten-plus years.
15 He then uses the uncertainties arising from proposals across the DENC service territory in
16 this State to identify three basis concerns about how those general concerns may affect
17 the \$31 million of upgrades on the one transmission line segment on the DEP system
18 impacted by the AC1 cluster.

19 The Applicant respectfully submits that these uncertainties were among those
20 which the bifurcation process was intended to "cabin" by deferring consideration of a
21 CPCN as to the 70 MW portion of the plant that is now the subject of the application for a
22 separate CPCN in EMP-102, Sub 2. The Commission has already found that it has
23 sufficient information to proceed to rule on the application for a CPCN to construct the

1 80 MW facility studied as part of PJM cluster AC1. Pitt Solar respectfully urges the
2 Commission, for the reasons provided in all of the testimony and filings in this docket
3 submitted by the Applicant, to grant the Applicant the CPCN requested in its Amended
4 Application.

5
6 Q. WHAT IS THE RESPONSE FROM THE APPLICANT TO MR. METZ'S RECOMMENDATION FOR
7 A JOINT STUDY TO EVALUATE THE IMMEDIATE TIE LINE(S) THAT ARE BEING IMPACTED BY
8 CONTINGENT UPGRADES DUE TO THE INCREASING VOLUMES OF MERCHANT POWER
9 PLANTS PROPOSED TO BE LOCATED IN THE DENC SERVICE AREA WITHIN NORTH
10 CAROLINA?

11 A. The Applicant does not believe this Commission needs the results of such a study
12 to rule on the Applicant's amended application for approval of the requested 80 MW
13 CPCN. PJM's current process is to identify to DEP all merchant power plants in North
14 Carolina or outside of the state of North Carolina that overload DENC – DEP tie lines. This
15 expanded study to enable a long-term view of this part of the electrical system should
16 not be deemed relevant to this CPCN application by a AC1 cluster participant. The
17 Battleboro – Rocky Mount line upgrade has been identified as necessary for the PJM AC1
18 cluster for some time, and the NCUC has already approved CPCNs for two merchant
19 generators in this cluster (EMP-101 for Edgecombe Solar and EMP-107 for Halifax County
20 Solar). Pitt Solar does not trigger any additional DEP system upgrades other than what is
21 already required to operate these previously approved merchant generation facilities.
22 Therefore, it seems only fair that the Applicant should likewise be granted a CPCN,
23 without discrimination, given the willingness to accept all the proposed conditions

1 identified in my testimony. Finally, the Applicant reiterates for the record that
2 construction of the project over the next several months will benefit the community
3 surrounding the proposed facility during construction and afterwards, and that the
4 Applicant has contractual/financial obligations to construct and operate the project as
5 soon as possible, and would like to proceed in its efforts to meet those obligations.
6

7 Q. DOES THAT CONCLUDE YOUR REPLY TESTIMONY?


8 A. Yes.
9
10
11

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 Reply 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.

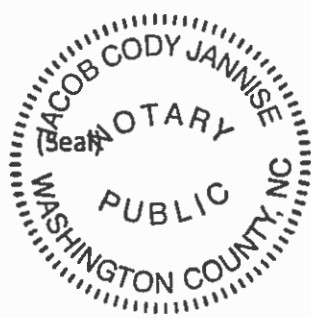
This 25 day of October, 2021.


Linda Nwadike
SunEnergy1, LLC

Sworn to and subscribed to before me
this 25 day of October, 2021.


Notary Public (Signature)

Jacob Cody Jannise
Notary Public (Printed)



My Commission Expires: March 16, 2024