

BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
RALEIGH, NORTH CAROLINA

CHERRY SOLAR, LLC  
DOCKET NO. EMP-115 Sub 0

REPLY SUPPLEMENTAL TESTIMONY  
OF  
LINDA NWADIKE

January 13, 2022

INTRODUCTION

Q. WHAT IS THE PURPOSE OF THE REPLY SUPPLEMENTAL TESTIMONY YOU ARE SUBMITTING TODAY IN THIS DOCKET?

A. The purpose of my reply supplemental testimony is to respond on behalf of the Applicant Cherry Solar, LLC ("the Applicant") to the supplemental testimony submitted by Public Staff witness Mr. Jay Lucas (Lucas) in this docket on December 17, 2021.

Q. WHAT IS THE APPLICANT'S RESPONSE TO WITNESS LUCAS'S STATEMENT, STARTING ON PAGE 4 OF HIS FILING, THAT IT "...IS OF PARTICULAR CONCERN IF THE COST OF THE UPGRADES COULD POTENTIALLY BE BORNE BY CUSTOMERS WHO WILL NOT RECEIVE THE ENERGY PRODUCED; DEP COULD BUILD AFFECTED SYSTEM UPGRADES THAT GO UNUSED FOR EXTENDED PERIODS OF TIME IF SOME INTERCONNECTON PROJECTS WITHDRAW FROM THE QUEUE LATE IN THE REVIEW PROCESS"?

A. The Applicant acknowledges, as the Interconnection Customer, that it is responsible for all affected system Network Upgrade costs assigned to the Applicant's proposed facility, if any, without reimbursement, and that the ratepayers should not bear any cost associated with the construction of the Applicant's proposed facility, or its interconnection. The Applicant is willing to pay its fair share of the affected system Network Upgrade costs if the projects in earlier study queues, in front of the Applicant's queue number, were to drop out and withdraw from the queue, such that the Applicant became the first in line for payment of the costs of required network upgrades.

1 Additionally, any affected system upgrade built by DEP for a solar facility is initially paid  
2 by the developer. Therefore, the statement made by Public Staff that “DEP could build  
3 affected system upgrades that go unused for extended periods of time if some  
4 interconnection projects withdraw from the queue later in the review process” is  
5 inaccurate, because it is very unlikely that a merchant developer will pay for upgrades  
6 and then not use them. The solar facility developer would have conducted or received  
7 various studies and identified that the project is financially feasible prior to signing any  
8 contract with DEP and handing over hundreds of thousands or millions of dollars to DEP  
9 to build any affected system upgrades. It does not make business or practical sense for a  
10 developer to pay for the affected system upgrades and thereafter withdraw from the  
11 queue without using those upgrades.

12  
13 Also, unlike Texas, North Carolina’s electric transmission system is not an electric  
14 transmission island, but instead is part of the Eastern Interconnect that overlays and  
15 serves regions from Florida up into Canada. As history bears witness, previous system  
16 events that happen in one part of this interconnected system can impact other parts of  
17 the system, even those parts thousands of miles away. The last DEP Affected System  
18 Operating Agreement which required an upgrade of the Battleboro – Rocky Mount line  
19 was triggered by a PJM merchant generator (Southampton Solar), as the owner of a  
20 resource located in Boykins, Virginia. Denial of North Carolina applications by developers  
21 of merchant generators may slow the pace of DEP Affected System upgrades briefly, but  
22 merchant generation projects outside of North Carolina will continue to cause impacts on  
23 the North Carolina electric transmission system. And in the interim, North Carolina

1 foregoes the benefits of such developments, which tend to be reaped in less wealthy,  
2 less developed counties where such resources typically are located.  
3

4 Q. WHAT IS THE APPLICANT'S RESPONSE TO WITNESS LUCAS'S STATEMENT, STARTING ON  
5 PAGE 8 OF HIS FILING, THAT "...DEP MAY NEED TO REPLACE NETWORK UPGRADES BUILT  
6 TO ACCOMMODATE ONE CLUSTER WITH TRANSMISSION ASSETS OF AN EVEN HIGHER  
7 CAPACITY IN ORDER TO ACCOMMODATE A LATER CLUSTER... DEP MUST UPGRADE ITS  
8 PORTION OF THE ROCKY MOUNT-BATTLEBORO LINE TO ACCCOMODATE CHERRY SOLAR  
9 AND THE OTHER FOUR DEP AC1 FACILITIES. HOWEVER, THERE IS ONE LARGE PROJECT IN  
10 A LATER PJM CLUSTER THAT COULD POTENTIALLY REQUIRE DEP TO FUTHER UPGRADE  
11 ITS PORTION OF THE ROCKY MOUNT-BATTLEBORO LINE, A 2640-MW WIND ENERGY  
12 FACILITY TO BE BUILT OFF THE COAST OF VIRGINIA (AF1-123, -124, AND -125)"?

13  
14 A. The Applicant is alarmed that Public Staff does not acknowledge the benefits of having  
15 network upgrades made to support new resources, even if such network upgrades are  
16 replaced later to accommodate a larger capacity project that is proposed afterwards.  
17 There are resiliency benefits. Construction of Cherry Solar as one of several relatively  
18 small generators increases the system resiliency by ensuring a single event, such as a gas  
19 pipeline outage, does not cripple the generation fleet servicing this part of the system.  
20

21 There also are congestion benefits. If system congestion were an issue caused by  
22 transmission elements that can no longer allow for the free flow in electricity, then the  
23 likely result would be an increase in the cost of energy for the load, as the grid operators

1 must dispatch higher cost generation to avoid the congestion. Reducing congestion  
2 allows for the least cost generation to feed all the system load, wherever located. The  
3 above-mentioned attributes, in addition to system reliability, green energy, and boosts to  
4 the local economy, are items the Applicant believes the Public Staff needs to consider,  
5 and which support the construction of this facility. This additional resource and the  
6 related transmission system upgrades will help the rate payers in this State in the long  
7 run.

8  
9 Finally, future replacement of network upgrades is necessary in any event. Upgrades are  
10 needed not only for an affected generation or related transmission project, but also to  
11 support the anticipated peak load growth in the region. As shown in the PJM load  
12 forecast discussed in the Applicant's Amended Application dated September 28, 2021,  
13 regarding the need for this proposed resource, additional load is forecast for PJM and the  
14 portion of North Carolina served by DEP and Dominion Utilities.

- 15  
16 **Q. WHAT IS THE RESPONSE FROM THE APPLICANT TO MR. LUCAS'S RECOMMENDATION**  
17 **THAT THE COMMISSION DENY THE CPCN APPLICATION FOR THE FOLLOWING REASONS:**  
18  
19 i. IT IS LIKELY THAT DEP CUSTOMERS WILL ULTIMATELY BE RESPONSIBLE FOR \$31  
20 MILLION IN AFFECTED SYSTEM UPGRADES THAT ARE NOT NEEDED FOR RELIABLE  
21 SERVICE.  
22  
23 ii. THE \$31 MILLION IN UPGRADES COULD SIT IDLE FOR EXTENDED PERIODS OF  
24 TIME BECAUSE SOME PROJECTS ENTER THE PJM QUEUE AND LATER WITHDRAW.  
25  
26 iii. FUTURE PROJECTS IN PJM MAY RESULT IN THE EARLY RETIREMENT OF SOME OR  
27 ALL OF THE \$31 MILLION IN AC1-CAUSED UPGRADES LONG BEFORE THE END OF  
28 THEIR SERVICE LIFE AND INSTALL LARGER AND MORE COSTLY UPGRADES,  
THEREBY UNDULY ECONOMICALLY BURDENING DEP'S CAPTIVE CUSTOMERS.

1 A. The Applicant believes that it has met the requirements of this Commission and the  
2 Public Utilities Act to obtain the requested certificate to build the facility. Moreover,  
3 denial of this CPCN would be inconsistent with the NCUC's actions on some of the other  
4 PJM AC1 cluster applications. CPCNs have already been granted for Edgecombe Solar and  
5 Halifax County Solar. Cherry Solar does not trigger the requirement for the \$31 million in  
6 affected system upgrades on the relevant line, as these upgrades are required if any of  
7 the PJM AC1 cluster studied by DEP moves forward. PJM issued a revised System  
8 Upgrade Study Report in October 2021 where PJM confirmed that the Battleboro – Rocky  
9 Mount upgrade is still required to maintain system reliability.

10  
11 Additionally, the Applicant has done everything possible to address the Public Staff's  
12 concerns by acknowledging, as the Interconnection Customer, that it is responsible for all  
13 affected system Network Upgrade costs assigned to the Applicant's proposed facility, if  
14 any, without reimbursement, and that the ratepayers should not bear the cost of the  
15 Applicant's proposed facility.

16  
17 The Applicant is willing to pay for the affected system Network Upgrade costs if the  
18 projects in earlier study queues, in front of the Applicant's queue number, were to drop  
19 out and withdraw from the queue, such that the Applicant became the first in line.

20  
21 Therefore, if an Applicant is willing to pay its fair share of the applicable affected system  
22 network upgrade costs without regard to whether there will be any reimbursement, the  
23 concerns raised by Public Staff are no longer applicable.

1

2

3

4

5

6

7

Q. DOES THE APPLICANT ACCEPT THE THREE CONDITIONS RECOMMENDED BY WITNESS  
LUCAS AT PAGES 9 AND 10 OF HIS TESTIMONY AS AN ALTERNATIVE RECOMMENDATION  
IN THE EVENT THAT THE COMMISSION APPROVES THE APPLICANT'S CPCN APPLICATION?

8

9

10

A. Yes, the Applicant is willing to accept a CPCN issued by the Commission subject to the  
three conditions stated on page 10 in the pre-filed testimony of public staff Witness  
Lucas on December 17, 2021.

11

12

13

14

Q. DOES THAT CONCLUDE YOUR REPLY SUPPLEMENTAL TESTIMONY?

15

A. Yes.

STATE OF NORTH CAROLINA

COUNTY OF IREDELL

VERIFICATION

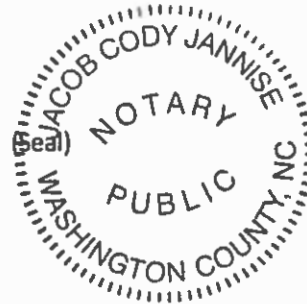
I, Linda Nwadike, being first duly sworn, depose and say that I am duly authorized to act on behalf of Cherry Solar, LLC as Director of Permitting and Community Relations for SunEnergy1, LLC, the parent, and an affiliate of the Petitioner; that I have read the foregoing Pre-Filed Reply Supplemental Testimony, 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 13 day of January 2022.



Linda Nwadike  
SunEnergy1, LLC

Sworn to and subscribed to before me  
this 13 day of January 2022.

  
Notary Public (Signature)  
Notary Public (Printed)

My Commission Expires: November 2024