

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. EMP-102, SUB 1

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
Application of Pitt Solar, LLC, for)	ORDER REQUIRING
a Certificate of Public Convenience and)	AMENDMENT OF THE
Necessity to Construct a 150-MW Solar)	APPLICATION AND REVISING
Facility in Pitt County, North Carolina)	PROCEDURAL SCHEDULE

BY THE COMMISSION: On August 10, 2020, Pitt Solar, LLC (Applicant) filed an application pursuant to N.C. Gen. Stat. § 62-110.1 and Commission Rule R8-63 for a certificate of public convenience and necessity (CPCN) to construct a solar photovoltaic (PV) electric generating facility with a capacity of up to 150 MW_{AC} to be located in Pitt County, North Carolina and to be operated as a merchant generating facility (the Facility). The Facility will interconnect with Dominion Energy North Carolina (DENC), giving it access to the PJM Regional Transmission Organization.

PROCEDURAL HISTORY

On August 19, 2020, the Public Staff filed a Notice of Completeness stating that it had reviewed the Application and considers the application to be complete.

On October 5, 2020, the Commission issued an Order Scheduling Hearings, Requiring the Filing of Testimony, Establishing Procedural Guidelines, and Requiring Public Notice.

On October 16, 2020, the Applicant filed the supplemental prefiled testimony of witness Nwadike.

On October 23, 2020, the Applicant filed a Notice of Name Change and Motion to Amend Application and Caption.

On October 26, 2020, the Public Staff filed a Motion for Extension of Time.

On October 30, 2020, the Commission issued an Order Granting Extensions of Time and Canceling Expert Witness Hearing.

On November 12, 2020, the Applicant filed its Affidavit of Publication, the Public Staff filed the testimony of witness Metz, and the State Clearinghouse filed its comments.

On November 16, 2020, the Commission held a public witness hearing via videoconference.

On December 16, 2020, the Applicant filed a Verified Motion to Excuse Witnesses, Admit Testimony and Exhibits, and Cancel Hearing.

On May 7, 2021, the Commission issued an Order Requiring Further Additional Testimony.

On June 1, 2021, the Applicant filed prefiled supplemental testimony of witness Nwadike.

On July 7, 2021, the Public Staff filed prefiled supplemental testimony of witness Metz.

On July 22, 2021, the Applicant filed the prefiled reply testimony of witness Nwadike.

On August 10, 2021, the Applicant filed a Motion to Excuse Witnesses, Admit Testimony and Exhibits and Cancel Evidentiary Hearing.

DISCUSSION AND CONCLUSIONS

Witness Nwadike, in her prefiled supplemental testimony filed on October 16, 2020, testifies that 80 MW of the proposed Facility is in the PJM Facility Study for Queue AC1 (Phase 1), which indicates necessary DENC and DE Virginia network upgrades. The additional 70 MW of the proposed Facility is in the AF2 cluster (Phase 2). According to witness Nwadike, Phase 1 of the Facility has received all PJM interconnection studies (feasibility, system impact, and facilities). Duke Energy Progress, LLC (DEP) has issued a Generator Interconnection Affected System Study Report that identifies five projects in the PJM AC1 queue, including Phase 1, as triggering an overload on the Battleboro-Rocky Mount 115kV line. Phase 2 has received a Feasibility Study and the System Impact Study. The PJM Facility Study for Phase 2 is expected in October 2022. Witness Nwadike's October 16, 2020 testimony includes exhibits showing a confidential LCOT for the Phase 1 portion of the proposed Facility and a significantly higher confidential projected LCOT amount for both Phase 1 and 2 of the Facility.

Public Staff witness Metz, in his testimony filed on November 12, 2020, testifies that the Applicant's LCOT calculations were too low for several reasons. First, the application is for a CPCN for 150 MW, but witness Nwadike's Exhibit 1 addressed only the initial 80 MW of Phase 1, so it did not provide the full potential LCOT unless the Applicant is only seeking approval for the first phase. Second, witness Metz states that Nwadike's Exhibit 1 did not include any affected system costs from the DEP AC1 Report, which should be included because the Facility almost certainly cannot operate at 80 MW without the DEP upgrade. Given the speculative nature of projects dropping out of the queue, the costs should be assigned to the "next up" for any project in the overall queue.

Third, the Phase 1 Feasibility Study Report lists significant network upgrade costs but witness Metz stated it was premature to accurately identify any costs for an LCOT calculation and that the System Impact Study would provide more accurate network upgrade costs. Witness Metz asserts that it is not clear whether the Feasibility Study Report for Phase 2 of the Facility assumes that all previous PJM cluster upgrade costs have been completed. Further, given the uncertainty of projects dropping out of earlier queues, more upgrades could be moved onto the AF2 cluster, increasing the overall costs, or costs could decrease. The increase in North Carolina-specific requests to interconnect in PJM's North Carolina Transmission area adds to the uncertainty.

In his November 12, 2020, testimony, witness Metz states that the Public Staff is concerned that: (1) the large amount of solar capacity in PJM's North Carolina queue could trigger many millions of dollars of affected system upgrades that DEP's customers would have to pay for but not need for reliable electric service; (2) the Virginia Clean Economy Act could lead to more renewable energy facilities located in or close to North Carolina, increasing the risk for more affected system upgrades for DEP and possibly Duke Energy Carolinas, LLC (DEC, together with DEP, Duke); (3) because of future clusters, upgrades to accommodate an earlier cluster could soon need to be replaced with even greater transmission assets long before the end of their normal service life.

The Public Staff supports Duke's change to its Affected Systems Process that became effective on October 1, 2020 and eliminates the reimbursement for interconnection customers that were assigned affected system network upgrades in Duke's service territory.

The Public Staff, in witness Metz's November 12, 2020, testimony, recommends that the Commission grant Pitt Solar the CPCN, subject to the following conditions:

- i. The Applicant notify the Commission within 30 days of any change any revisions (sic) in the cost estimates for the construction of the Facility itself, interconnection facilities, network upgrades, or affected system costs within 30 days of becoming aware of such revisions. Once the Commission is notified, then subsequent steps and actions along with a respective timeline for additional actions can be defined on an as needed basis.
- ii. That the Applicant file a copy of an executed Affected System Operating Agreement (ASOA) with the Commission at the same time such filing is made at FERC (at least 61 days prior to commencing construction on the upgrades).
- iii. That the Applicant file a verified statement acknowledging that under Duke's Affected Systems Business Procedure and PJM's OATT, the Interconnection Customer is responsible for all affected system Network Upgrade Costs assigned to the Applicant's facility, if any, without reimbursement.

Witness Metz adds that if at any time the Applicant should seek reimbursement for any interconnection facilities, network upgrade costs, affected system costs, or other costs, the Public Staff recommends that the Commission deny or revoke the CPCN. If the Duke OATT is changed to allow reimbursement of those costs, the Commission should weigh the costs to be borne by DEP's customers with the generation needs in the state and/or region.

In the Applicant's prefiled supplemental testimony of witness Nwadike, filed on June 1, 2021, in response to the Commission's May 7, 2021 Order Requiring Further Additional Testimony, witness Nwadike states that the Applicant has filed in this docket all PJM studies relating to the Phase 1 of the proposed Facility, and that between the filing of the application and the supplemental testimony, the only additional study that became available for the proposed Facility was the PJM System Impact Study relating to Phase 2. Witness Nwadike further states that the Applicant expects to receive the Facility Study for Phase 2 around October 2022, which will be the last PJM study for Phase 2 of the Facility.

Witness Nwadike states that the transmission upgrades for the Phase 2 of the Facility are estimated by PJM to be \$8,922,829. The Applicant anticipates that number being reduced because Pitt Solar has decided to self-build some of the attachment facilities (\$685,295) and the new switching station (\$6,474,940). The affected system cost estimate for the Duke system is \$31,285,275; the Applicant understands that American Beech Solar has entered an ASOA with Duke to request and pay for this work.

The PJM System Impact Study identifies the transmission upgrades for Phase 1 as \$18,414,197 and estimates Duke's Affected System costs at \$1,383,864. The Applicant has not entered an Affected System Study with Duke for the Phase 1 portion of the Facility. Witness Nwadike stated that the Applicant, in response to the Commission's order, recalculated the LCOT for the entire 150 MW Facility. The Applicant revised the PJM Network Upgrades for the full 150 MW Facility based on the estimates in the latest studies.

Witness Nwadike states that the Applicant will accept a CPCN issued with the Public Staff conditions and acknowledges that under Duke's Affected Systems Business Procedure and PJM's OATT, the Applicant is responsible for all affected system and network upgrade costs assigned to the proposed Facility and does not plan to seek reimbursement for those costs. However, witness Nwadike states that it cannot consent to a CPCN issued subject to revocation based on future policy decisions made by others over whom the Applicant has no control, such as other project developers, the Commission, or FERC. Such a constraint would make it difficult, if not impossible, to obtain project financing at a reasonable cost and would cause extreme difficulties for managing the development of the Facility.

The Applicant, through witness Nwadike, suggests that the Commission consider issuing the CPCN with conditions. The CPCN could have a condition stating that construction of the Phase 1 could commence subject to the Public Staff conditions.

Another condition could state that construction on Phase 2 cannot begin until the Applicant submits the Facilities Study it is awaiting from PJM and provides any changes in estimated costs to the Commission. Witness Nwadike offers another alternative—that the Commission issue the CPCN in stages based on the two different PJM queues involved. The CPCN for Phase 1 could be issued subject to the Public Staff conditions and to the Commission’s continuing jurisdiction over the still-pending application for Phase 2 of the proposed Facility. This would enable the Applicant to commence construction of Phase 1 while continuing to receive updated cost information related to Phase 2, including changes to network upgrade or affected system costs, which it would report in this docket. The Applicant believes that issuance of the CPCN with conditions or in phases is better than revocation of an issued CPCN, or the denial of the Phase 2 portion of the application. The Applicant would not have to undergo the expense and time of an entirely new application once the additional cost information is available.

In the Public Staff’s July 7, 2021, supplemental testimony of witness Metz, he states that the conditions proposed in his original testimony are still in the best interest of North Carolina ratepayers. However, the Public Staff recommends that the Commission hold the entire application in abeyance for two reasons: (1) it is uncertain whether affected system upgrades will be paid for by the Applicant or the affected system utility’s electric customers, this question being the subject of an open proceeding at FERC; and (2) network upgrades and affected system upgrades for Phase 2 are unknown. The Public Staff asserts that it is premature to issue a CPCN, even one with conditions, before total network upgrade costs and affected system study costs for a project’s particular PJM cluster are available.

Witness Metz asserts that the affected system upgrades identified in the PJM studies for the Facility are only for the vicinity of the connection for PJM and DEP and do not reflect upgrades that may be required further away on DEP’s transmission system. Witness Metz notes that estimates of the affected system costs for the Phase 1 cluster have more than doubled and may still increase or decrease. DEP has not completed an affected system study or cost estimate for the Phase 2 cluster, and there will likely be additional affected system costs for DEP. Witness Metz notes that unknown affected system upgrades create risks for DEP ratepayers. PJM usually allocates costs among projects and clusters, but DEP currently assigns affected system costs to the first project to trigger the upgrades. If projects withdraw from a PJM cluster, costs could shift to another project. The Public Staff believes that if system impacts or cost recovery for the Facility changes significantly after the Commission issues a CPCN, it would be appropriate to re-evaluate the Facility and determine whether it is still in the public interest.

Regarding the Applicant’s LCOT calculations, witness Metz states in his July 7, 2021, supplemental testimony that the Applicant’s method for calculating the LCOT is generally consistent with the Public Staff’s method. However, the affected system upgrade costs created by PJM’s AF2 cluster are unknown and therefore the LCOT for Phase 2 of the Facility cannot be calculated at this time. The Public Staff believes that interconnection cost estimates for any AF2 project are currently too speculative to rely on for LCOT calculations.

Witness Metz again discusses Duke's October 1, 2020, revision to its ASOA template that assigns the costs of affected system network upgrades directly to the interconnection customer and eliminates Duke's prior policy of repayment to the interconnection customer for the affected system costs. In response to the revision of the ASOA, Edgecombe Solar, LLC filed a complaint at FERC alleging that the revision is inconsistent with Duke's OATT. Witness Metz notes that on June 25, 2021, in Docket No. EMP-108, Sub 0, American Beech Solar filed a motion to stay its proceeding in front of this Commission until the FERC issues an order resolving the issues raised in the Edgecombe Solar FERC complaint. Witness Metz points out that American Beech, in its proceeding, had agreed to the same Public Staff conditions to issuance of its CPCN that the Public Staff recommends for Pitt Solar. If DEP's policy of assigning affected system costs to the Applicant is upheld at FERC and there is no risk that ratepayers will pay network upgrade costs, the Public Staff supports issuance of a CPCN to the Applicant Pitt Solar. If Edgecombe prevails at FERC and the Applicant is eligible for reimbursement of affected system costs, the Public Staff recommends that the Commission require the Applicant to file separate applications for each phase of the Facility and provide a separate analysis and LCOT for each phase.

Witness Nwadike, in the Applicant's July 22, 2021, reply testimony, states that the Applicant continues to agree to the proposed Public Staff conditions, and that the Applicant has acknowledged that currently the Applicant, as the interconnection customer, is responsible for all affected system network upgrade costs assigned to the proposed Facility without reimbursements. However, the Applicant does not want to obtain a CPCN, begin construction, and then have the CPCN revoked based on future policy or business decisions made by entities that the Applicant does not control.

Witness Nwadike states that the Public Staff's recommendation that the Commission hold this application in abeyance because of uncertainty surrounding affected system upgrades is inconsistent with prior Public Staff positions on projects in the AC1 cluster, two of which the Public Staff supported, and the Commission approved. Witness Nwadike lists five projects in the AC1 cluster that would each require DEP to rebuild the Battleboro-Rocky Mount 115kV transmission line. PJM's reanalysis of the AC1 cluster indicates that that transmission line will have to be rebuilt if any of the five projects move forward. The Commission has approved two of those projects, which witness Nwadike states means that there are no additional DEP affected system upgrades. If projects in front of Applicant's Phase 1 portion drop out and withdraw from the queue, the Applicant will have to pay for all the affected system network upgrade costs since it is next in line and has obligations to construct and operate the project. If the earlier projects do not withdraw, the Applicant will pay its fair share of the affected system costs.

The Applicant objects to the Public Staff recommendation to postpone the issuance of a CPCN for any portion of the proposed Facility. The FERC complaint was not filed by the Applicant and the Applicant is not a part of that proceeding. The Applicant is not the sole cost causer for affected system upgrades, and it will pay its fair share of the affected system impact costs. Approving the CPCN's for other AC1 cluster projects and then putting this application in indefinite abeyance is inconsistent and anticompetitive.

Witness Nwadike asserts that all cost estimates that PJM/Dominion and DEP have provided are estimates which by their nature contain a certain amount of uncertainty. The cost risk is borne by the Applicant and putting this project in abeyance could result in PJM withdrawing the AC1 queue position associated with Phase 1 of this project.

The Applicant agrees that PJM's AF2 cluster estimated costs are not a valuable benchmark. PJM will rerun those studies after participants in earlier PJM queue clusters decide whether to move forward. If network upgrade costs prove too expensive, the Applicant can, under the PJM tariff, reduce the size of the project to lessen the network upgrade impact, or decide to not move forward with an ISA for Phase 2 of the Facility. Witness Nwadike reiterates that the Applicant is willing to proceed with the Commission's approval and issuance of a CPCN for just Phase 1 of the project, eliminating or deferring concerns about uncertainties associated with the AF2 cluster. Witness Nwadike further reiterates that the Applicant is responsible for all costs identified in the PJM-issued ISA with no recovery. The Applicant will not seek recovery from DEP for any affected system upgrade costs, and the proposed conditions already accepted by the Applicant establish consequences if the Applicant were to do so.

In the Applicant's August 10, 2021, Renewed Motion to Excuse Witnesses, Admit Testimony and Exhibits, and Cancel Evidentiary Hearing, or, Alternatively, Request to Schedule Evidentiary Hearing, the Applicant asks the Commission to either (1) excuse witnesses, admit prefiled testimony and exhibits into the record and cancel further hearings on the CPCN application, or (2) schedule a hearing to receive all prefiled testimony and exhibits into evidence in order to permit the Commission to rule on the CPCN application, subject to the Public Staff conditions and an additional condition or option to split the two portions of the proposed Facility as recommended by the Applicant in its June 1, 2021 testimony. The Applicant states that the Commission could issue the CPCN allowing the Applicant to only commence construction on the 80 MW Phase 1 portion and defer construction on the remaining 70 MW Phase 2 portion until the Applicant submits the Facilities Study it is awaiting from PJM. Alternatively, the Commission could issue the CPCN in stages based on the two different PJM queues involved, deferring a decision on the Phase 2 portion.

The Applicant states that there are no disputed facts regarding the Phase 1 portion of the proposed Facility that would require an evidentiary hearing for the Commission to make a decision. The Public Staff takes no position on the Applicant's motion. The Applicant states that it faces significant adverse economic consequences from a failure to timely construct and operate the Phase 1 portion of the Facility.

The Commission is not persuaded that it should hold this proceeding in abeyance indefinitely, as the Public Staff recommends. Further, the Commission finds that there is sufficient information in the record for the Commission to consider and render a decision as to the 80 MW Phase 1 portion of the Facility. The Applicant appears willing to proceed with the Phase 1 portion of the Facility while necessary studies continue on the Phase 2 portion, should the Commission, after full consideration of the record, issue a CPCN for just the Phase 1 portion.

The Commission will not amend an application for a CPCN on its own motion and needs a full and comprehensive record before it on each portion of the proposed Facility and on the somewhat unusual procedural step of separating the Commission's consideration of the two portions. To that end, the Commission orders the Applicant to amend its application to reflect a two-stage or bifurcated process for the Commission to consider the two different portions of the proposed Facility and to provide for a separate Sub number within the EMP-102 docket for consideration of the Phase 2 portion. The Applicant shall file its amended application by September 28, 2021. The Public Staff shall file supplemental testimony only on the limited questions of the Public Staff's views on whether the proceeding should be bifurcated to allow the Commission to consider the two different portions of the proposed Facility separately, any issues or concerns bifurcation raises with the Public Staff, and whether bifurcation changes the Public Staff's analysis or recommendations as to either portion of the proposed Facility. The Public Staff shall file this supplemental testimony by October 5, 2021. The Applicant shall file reply testimony to the Public Staff's supplemental testimony, if any, by October 11, 2021.

IT IS, THEREFORE, ORDERED as follows:

1. Pitt Solar, LLC shall file an amended application by September 28, 2021, reflecting a two-stage or bifurcated process for the Commission to consider the two different portions of the proposed Facility, including provision of a separate Sub number within the EMP-102 docket for consideration of the second portion of the proposed Facility;

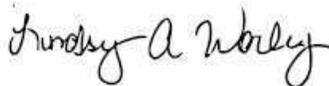
2. The Public Staff shall, by October 5, 2021, file supplemental testimony only on the limited questions of the Public Staff's views on whether the Commission should bifurcate the proceeding to allow the Commission to consider the two different portions of the proposed Facility separately, any issues or concerns bifurcation raises with the Public Staff, and whether bifurcation changes the Public Staff's analysis or recommendations as to either portion of the proposed Facility; and

3. The Applicant shall file reply testimony to the Public Staff's supplemental testimony, if any, by October 11, 2021,

ISSUED BY ORDER OF THE COMMISSION.

This the 14th day of September, 2021.

NORTH CAROLINA UTILITIES COMMISSION



Lindsey A. Worley, Acting Deputy Clerk