

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. EMP-115, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application of Cherry Solar, LLC, for a)	
Certificate of Public Convenience and)	ORDER GRANTING CERTIFICATE
Necessity to Construct a 180-MW Solar)	OF PUBLIC CONVENIENCE AND
Facility in Northampton County,)	NECESSITY
North Carolina)	

BY THE COMMISSION: On November 13, 2020, Cherry Solar, LLC, (Cherry Solar or Applicant), filed an application (Application) pursuant to N.C. Gen. Stat. § 62-110.1 and Commission Rule 8-63 for a certificate of public convenience and necessity (CPCN) to construct a 180-MWac solar photovoltaic (PV) electric generating facility (Facility) to be located in Northampton County, North Carolina, and to be operated as a merchant generating facility.

On November 24, 2020, the Public Staff – North Carolina Utilities Commission (Public Staff) filed a Notice of Completeness stating that it had reviewed the Application and considered the Application to be complete and requesting that the Commission issue a procedural order.

On December 18, 2020, the Commission issued an Order Scheduling Hearings, Requiring Filing of Testimony, Establishing Procedural Guidelines, and Requiring Public Notice (Scheduling Order).

Also on December 18, 2020, Commission Staff sent a copy of the Scheduling Order to the State Clearinghouse of the North Carolina Department of Administration (State Clearinghouse).

On January 21, 2021, Cherry Solar filed an Affidavit of Publication stating that notice of the public witness hearing was published in the Roanoke—Chowan News-Herald on December 23 and 30, 2020, and January 6 and 13, 2021.

On January 25, 2021, the State Clearinghouse filed comments in the docket and requested additional information before its concurrence with the Application. Specifically, the North Carolina Department of Natural and Cultural Resources State Historic Preservation Office (NC SHPO) recommended that, before any ground disturbing activities within the project area, there be a comprehensive archaeological survey to identify and evaluate the significance of archaeological sites and cemeteries that may be damaged or destroyed by the proposed project.

On January 26, 2021, the Presiding Commissioner issued an Order Canceling Public Witness Hearing.

On March 11, 2021, the Applicant filed the supplemental testimony of witness Linda Nwadike.

On March 31, 2021, the Presiding Commissioner issued an Order Rescheduling Hearing and Providing Remote Hearing Procedures, which rescheduled the expert witness hearing in the docket.

On April 14, 2021, the Public Staff filed the direct testimony of witness Jay Lucas wherein the Public Staff recommended that the Commission grant the CPCN subject to certain conditions.

On April 28, 2021, Cherry Solar filed a letter in the docket indicating that it would not object to the issuance of the requested CPCN subject to the conditions recommended in Public Staff witness Lucas' testimony (April 28, 2021 Letter). In that letter, the Applicant also confirmed that it had engaged consultants to perform the archaeological study of the proposed site that NC SHPO had requested and stated that it would file the study relating to the proposed site in the docket once it was complete.

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

On May 19, 2021, the Presiding Commissioner issued an Order Canceling Expert Witness Hearing.

On November 4, 2021, the Public Staff filed a Motion for Leave to File Supplemental Testimony.

On November 5, 2021, the Presiding Commissioner issued an Order Granting Public Staff Motion to File Supplemental Testimony.

On December 17, 2021, the Public Staff filed the supplemental testimony of witness Lucas. In that testimony, the Public Staff recommended that the Commission deny the Application. The Public Staff also recommended conditions for the Commission to impose if it granted the CPCN to Cherry Solar.

On January 13, 2022, Cherry Solar filed the supplemental reply testimony of witness Nwadike.

On October 3, 2023, the State Clearinghouse filed a letter in this docket with attached comments. Due to the nature of the comments, the State Clearinghouse stated that it has determined that no further State Clearinghouse review action on the Commission's part is needed for compliance with the North Carolina Environmental Policy Act (NCEPA).

On October 6, 2023, the Presiding Commissioner issued an Order Requiring Proposed Orders.

On October 10, 2023, Cherry Solar filed the Cherry Solar Phase 1 Archaeological Survey, Northampton County, North Carolina, ER No. 20-2522.

On October 24, 2023, Cherry Solar filed a Notice of Withdrawal of Counsel and Substitution of Counsel.

On October 27, 2023, both Cherry Solar and the Public Staff filed proposed orders.

Also on October 27, 2023, Cherry Solar filed an updated site plan for the project.

Also on October 27, 2023, the Public Staff filed a confidential letter in the docket providing information regarding the levelized cost of transmission (LCOT) calculations for PJM Network Upgrades (PJM Upgrades) allocated to Cherry Solar and recommending that the Commission approve the CPCN subject to conditions. Cherry Solar did not dispute the Public Staff's LCOT calculations. The Public Staff requested that the Commission move into the record the LCOT calculations for Cherry Solar's PJM Upgrades to provide more comprehensive information regarding the costs of the Facility.

On April 3, 2024, Cherry Solar filed amended versions of its Interconnection Service Agreement (ISA) and its Interconnection Construction Service Agreement (ICSA) with PJM. According to Cherry Solar, the only changes from the agreements previously filed are the contact information for the Applicant and the milestone schedule for construction activities under the revised Agreements. The revised Agreements do not reflect any changes in Network Upgrade Costs or other costs associated with the Applicant's project.

On April 11, 2024, the Commission issued an Order Requiring Additional Cost Information directing Cherry Solar to file, on or before May 13, 2024, updated cost information including: (1) the cost of the generating plant; (2) the cost of the interconnection facilities; (3) the cost of Network Upgrades; and (4) the cost of Affected System Upgrades. Cherry Solar was also directed to provide an updated LCOT calculation assuming that its Facility is responsible for all Affected System Costs necessitated by the facilities in its interconnection cluster, regardless of whether any of those costs presently are assigned or allocated to the Facility or to any other facility in the cluster, or whether any facility has a signed Affected System Operator Agreement (ASOA), and using the expected annual generator output in MWh of only the Facility. Finally, the Commission directed Cherry Solar to update the Commission on the date on which the Facility is anticipated to be placed in service, or the anticipated time period in which the Facility realistically could be placed in service upon receipt of a CPCN.

On April 24, 2024, Cherry Solar filed public and confidential versions of the additional cost information that the Commission had required (April 24 Filing).

FINDINGS OF FACT

1. Cherry Solar is a limited liability company organized under the laws of North Carolina. Cherry Solar maintains an office at 212 South Tryon Street, Suite 100, Charlotte, North Carolina 28281, with its principal place of business located at 595 Summer Street, 4th Floor, Stamford, Connecticut 06901.

2. In compliance with N.C. Gen. Stat. § 62-111.1 and Commission Rule R8-63, Cherry Solar filed with the Commission an Application for a CPCN for the construction of a single-axis tracking solar photovoltaic generating Facility totaling approximately 180 MW of capacity, on portions of approximately 1,425 acres of land in Northampton County, North Carolina.

3. The Applicant has met all requirements for publication of notice.

4. Cherry Solar is financially and operationally able to undertake the construction and operation of the Facility.

5. Cherry Solar will enter into a shared facility agreement with an adjacent solar generating facility, Oak Solar LLC (Oak Solar), in order to use the interconnection facilities that are built to accommodate Oak Solar. Oak Solar is affiliated with Cherry Solar's parent company, SunEnergy1, LLC (SunEnergy1). Oak Solar will construct a new 230 kV attachment transmission line between its solar site and the Virginia Electric and Power Company d/b/a Dominion Energy North Carolina (DENC) Thelma substation. The new transmission line will be approximately one mile long and will be located in a new right of way adjacent to the existing DENC 500 kV transmission line. The transmission line will connect into a new substation at the generation site and will feed into the existing DENC Thelma substation. The line will go directly into the parcel used for the Oak Solar facility. The estimated cost of the shared Attachment Facilities is \$1,175,217.

6. The State Clearinghouse has concluded that no further action by Cherry Solar is necessary to comply with the NCEMPA.

7. Cherry Solar is part of the PJM AC1 interconnection cluster. The Network Upgrade costs allocated to the Facility for upgrades on PJM's system are \$1,817,391.

8. The Facility contributes to an overload on the Duke Energy Progress, LLC (DEP) Battleboro – Rocky Mount 115 kV line. The costs to mitigate the overload are approximately \$30 million (the DEP Upgrade).

9. The Applicant provided to the Commission confidential construction costs and the confidential LCOT for the Affected System Upgrades for the Facility. The Public Staff provided to the Commission the confidential LCOT for PJM Network Upgrades.

10. Cherry Solar has entered into a long-term Power Purchase Agreement (PPA) with a Fortune 100 company for the output of renewable power production and the associated Renewable Energy Certificates (RECs).

11. PJM has projected regional load growth and regional generation requirements.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-3

These findings of fact are essentially informational, procedural, and jurisdictional in nature and are not in dispute. The Application, including the testimony, supplemental testimony, and reply supplemental testimony of Cherry Solar witness Nwadike, and the Affidavit of Publication support these findings.

Cherry Solar filed a copy of the Articles of Organization for Cherry Solar, LLC, filed with the North Carolina Secretary of State on September 24, 2020, in the docket on November 13, 2020, as an exhibit to the CPCN Application.

An examination of the Application and the testimony and exhibits of Cherry Solar's witness confirms that Cherry Solar has complied with all filing requirements of the law and Commission rules associated with applying for a certificate to construct a merchant plant in North Carolina.

On January 21, 2021, Cherry Solar filed an Affidavit of Publication stating that notice of the public witness hearing for this docket was published in the Roanoke—Chowan News-Herald on December 23 and 30, 2020 and January 6 and 13, 2021. The Commission concludes that Cherry Solar timely and adequately filed the Public Notice.

On October 27, 2023, Cherry Solar filed an updated site plan notifying the Commission of a change in the site plan involving reallocation of a parcel of land that was part of the planned layout of Cherry Solar's sister project, which holds a CPCN issued in Docket No. EMP-112, Sub 0 (Oak Solar), which will allow Cherry Solar to avoid construction on potentially sensitive areas of the project site. Cherry Solar explains that an updated site plan for Oak Solar demonstrates that increases in the efficiency of solar PV modules and other components have enabled Oak Solar to reduce the footprint of that facility while still achieving the same projected output. This efficiency freed up a 972-acre parcel of land, which Cherry Solar desires to reallocate to the Cherry Solar facility. Cherry Solar notes that this will be a reallocation of land from an already-certificated facility to another project. The State Clearinghouse has already reviewed construction of a solar facility on the land in question, and there has been public notice and an opportunity for comment. Cherry Solar states that the proposed revision to Cherry Solar's site plan therefore should not require further public notice or Clearinghouse review. The Commission agrees that the Cherry Solar project has had adequate public notice and opportunity for comment.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 4

The evidence supporting this finding of fact is in the Application and the testimony of Cherry Solar witness Nwadike. No party disputes this finding.

According to witness Nwadike's testimony, SunEnergy1 is the parent company of Cherry Solar. Also according to witness Nwadike, SunEnergy1 is a top U.S. solar developer, owner, and operator of utility-scale solar projects with over 1 GW of installed solar power. SunEnergy1 has pioneered large-scale solar power on the East Coast for several years and has developed record-breaking solar projects in the Southeast. It is vertically integrated and controls all stages of development in-house. Witness Nwadike states that SunEnergy1's team works closely with manufacturers, utilities, and industry groups to ensure the safety, performance, and cost efficiency of its projects. SunEnergy1 employees work with sponsors of the National Electric Code, members of the National Fire Protection Association, and pertinent government agencies to ensure that safety standards and compliance activities in the solar industry continue to improve.

Based on the foregoing, the Commission concludes that SunEnergy1's experience in the construction and operational control of solar energy facilities demonstrates that Cherry Solar has the financial and operational capabilities necessary to successfully construct the Facility.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 5

The evidence supporting this finding of fact is in the Application (including the Exhibit 3 Description of Need), the testimony of Cherry Solar witness Nwadike, the testimony of Public Staff witness Lucas, and the April 24 Filing.

Cherry Solar witness Nwadike states that Cherry Solar will enter into a shared facility agreement with Oak Solar, an adjacent solar generating facility that is also affiliated with SunEnergy1 and use the interconnection facilities that are built to accommodate Oak Solar. The April 24 Filing reiterated that Cherry Solar will share interconnection facilities and Attachment Facilities that Oak Solar will construct. The estimated cost of the shared Attachment Facilities is \$1,175,217. Oak Solar will construct a new 230 kV attachment transmission line between its solar site and the DENC Thelma substation. The new transmission line will be approximately one mile long and will be located in a new right of way adjacent to the existing DENC 500 kV transmission line. It will connect into a new substation at the generation site and will feed into the existing Thelma substation. An easement will be required from DENC for the right of way leaving Thelma substation and crossing Clements and Baker Islands. The line will then continue north and go directly into the Oak Solar parcel.

According to witness Nwadike, the project will be located on several parcels of land in Northampton County. The site is comprised of rural land, some of which is used for agricultural purposes. Seven different landowners have provided Cherry Solar with the right to develop and use the property for solar energy purposes, including the installation

of solar panels, inverters, transformers, and other necessary elements of the facility. Cherry Solar included a site plan for the proposed project, which it later updated.

Witness Nwadike describes the Facility as a 180-MW PV array, with its sole source of power being solar energy. The Facility will be a single-axis tracking, ground-mounted solar PV system, and the Facility will be comprised of solar arrays, inverters, generator step-up (GSU) transformers, racking, posts, wiring, utility poles, communication poles, security camera, and accessories.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 6

The evidence supporting this finding of fact is in the State Clearinghouse comments filed on January 25, 2021, and on October 3, 2023.

On January 25, 2021, the State Clearinghouse filed comments in the docket and requested additional information before its concurrence with the Application. Specifically, the NC SHPO recommended that there be a comprehensive archaeological survey to identify and evaluate the significance of archaeological sites and cemeteries that may be damaged or destroyed by the proposed project.

On October 3, 2023, the State Clearinghouse filed a letter in this docket with attached comments. Due to the nature of the comments, the State Clearinghouse stated that it has determined that no further State Clearinghouse review action on the Commission's part is needed for compliance with the NCEPA.

Considering the foregoing, the Commission concludes that Cherry Solar has complied with the NCEPA and that nothing in the Act precludes issuance of the CPCN.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 7-11

The evidence for these findings of fact is found in the Application, the direct, supplemental, and reply supplemental testimony of Cherry Solar witness Nwadike, the direct and supplemental testimony of Public Staff witness Lucas, and the April 24 Filing.

N.C.G.S. § 62-110.1(a) provides that no generating facility may be constructed without first obtaining from the Commission a certificate stating that public convenience and necessity requires, or will require, such construction. Commission Rule R8-63(b)(3) requires a merchant plant application to include a description of the need for the facility in the "state and/or region." This requirement is an outgrowth of the 1991 Empire Power Company case in Docket No. SP-91, Sub 0. In 2001, the Commission initiated a generic proceeding in Docket No. E-100, Sub 85, to consider changes in the certification requirements for merchant plants. As impetus for its Order at that time, the Commission cited the Energy Policy Act of 1992, which encouraged independent power production and competition in the wholesale power market through the creation of exempt wholesale generators and the ability of the Federal Energy Regulatory Commission (FERC) to issue wheeling orders requiring utilities to allow access to their transmission grids for wholesale

power transactions. Order Initiating Further Proceedings, *Investigation of Certification Requirements for New Generating Capacity in North Carolina*, No. E-100, Sub 85, at 3 (N.C.U.C. February 7, 2001). In the E-100, Sub 85 Order, the Commission ordered the Public Staff to file a proposal for certification requirements for merchant plants. *Id.*

In its proposal, the Public Staff recommended that the Commission address in its proceeding how the public convenience and necessity for an independent power producer (IPP) would be demonstrated “when the facility is intended in whole or in part to serve:

...

- b. Load outside of North Carolina, on varying bases and for varying duration.”

Public Staff’s Initial Comments, *Investigation of Certification Requirements for New Generating Facilities*, No. E-100, Sub 85, at 8 (January 10, 2000).

In its Order adopting the certification rule, the Commission stated “[i]t is the Commission’s intent to facilitate, and not to frustrate, merchant plant development. Given the present statutory framework, the Commission is not in a position to abandon any showing of need or to create a presumption of need. However, the Commission believes that a flexible standard for the showing of need is appropriate.” Order Adopting Rule, *Investigation of Certification Requirements for New Generating Facilities*, No. E-100, Sub 85, at 7 (N.C.U.C. May 21, 2001). Although previously emphasized in the order adopting the certification rule, the Commission emphasizes again that the analysis of whether the public convenience and necessity requires the construction of a specific merchant facility is flexible and, to this end, must focus on the facts and circumstances presented by the application and, additionally, must evolve as North Carolina’s electric system evolves. Thus, while it remains the case that it is not the Commission’s intent to frustrate merchant plant development, it also remains the Commission’s obligation to determine whether granting an application for a CPCN is in the public interest. See Order Granting Certificate, *Application of Rowan Generating Company, LLC, for a Certificate of Public Convenience and Necessity to Construct a Generating Facility in Rowan County, North Carolina*, No. EMP-3, Sub 0, at 8 (N.C.U.C. October 12, 2001) (stating that the Commission is “mindful that issues regarding the appropriate amount of merchant plant generation in the State remain to be decided.”).

The Commission has explained that “the very reason the CPCN statute was enacted was to stop the costly overexpansion of facilities to serve areas that did not need them.” *Id.* at 17; see also *High Rock Lake Ass’n*, 97 N.C. App. at 140-41, 245 S.E.2d at 790; *State ex rel. Utils. Comm’n v. Empire Power*, 112 N.C. App. 265, 280, 435 S.E.2d 553, 561 (1994). The Commission has noted, based on policies established explicitly in N.C.G.S. § 62-2, that the “legislature intends the Commission to encourage cost-efficient siting of generation facilities, and thus that the Commission has the authority to consider all costs borne as a result of that siting decision.” *Id.* at 17-18.

In fulfilling these obligations imposed by statute and rule, the Commission has determined, in the context of CPCN applications for merchant plant facilities, that “it is appropriate for the Commission to consider the total construction costs of a facility, including the cost to interconnect and to construct any necessary transmission Network Upgrades, when determining the public convenience and necessity of a proposed new generating facility.” See Order Denying Certificate of Public Convenience and Necessity for Merchant Plant Generating Facility, *In the Matter of Application of Friesian Holdings, LLC for a Certificate of Convenience and Necessity to Construct a 70-MW Solar Facility in Scotland County, North Carolina*, No. EMP-105 Sub 0, at 6 (N.C.U.C. June 11, 2020), *aff’d State ex rel. Utils. Comm’n v. Friesian Holdings, LLC*, 281 N.C. App. 391, 869 S.E.2d 327 (2022). Further, the Commission has decided, at the present time, that “the use of the levelized cost of transmission (LCOT) provides a benchmark as to the reasonableness of the transmission Network Upgrade cost associated with interconnecting a proposed new generating facility.” *Id.*

In this proceeding, Cherry Solar witness Nwadike testified that there are six PJM Network Upgrades in PJM queue AC1-086, totaling \$2,676,883, for which Cherry Solar was allocated cost responsibility. As the record developed, that figure was adjusted downward to \$1,817,391 and it appears that there are now only two Network Upgrades required for the Facility: (1) Upgrade #n6220, installation of a second back-to-back breaker between existing line positions #241 and #2141 at the Lakeview Substation; and (2) Upgrade #n6118, replacement of Battleboro Substation terminal equipment on the line to Rocky Mt. Substation.

Regarding Affected Systems, PJM’s System Impact Study (SIS) identified a contribution to an overload on the Battleboro—Rocky Mount 115 kV tie line. Cherry Solar entered into an Affected System Facilities Study with DEP. The resulting report that DEP issued identified \$23,204,593 in costs to mitigate the overload on the Rocky Mount—Battleboro tie line but, according to witness Nwadike, it did not identify projects in the AC1-086 queue as triggering the necessary upgrades. PJM’s Interconnection Study Agreement did not require Cherry Solar to resolve the overload.

In direct testimony filed on April 14, 2021, Public Staff witness Lucas recommended that the Commission grant Cherry Solar a CPCN with conditions. However, witness Lucas expressed concern that unneeded upgrades do not serve the public, especially when the costs for those upgrades are borne by customers who do not use the energy from the facilities connecting to PJM. Witness Lucas also raised the question of whether Affected System Upgrades, once performed, could go unused if interconnection projects withdraw from the queue late in the process or whether upgrades to accommodate one cluster may need to be replaced with additional transmission before the end of their normal service life in order to accommodate future clusters, resulting in stranded costs.

The Public Staff later filed a Motion for Leave to File Supplemental Testimony given ongoing litigation at the FERC on the question of reimbursement for Affected System Upgrades, and how FERC’s decision in that litigation may impact this proceeding. The Public Staff filed the supplemental testimony of witness Lucas on December 17, 2021.

Witness Lucas stated in that testimony that the DEP Affected System Costs have increased to \$31,285,275. Witness Lucas had made his prior recommendation assuming that DEP's customers would not bear the costs of fixing the overload on the Rocky Mount—Battleboro line, but because of FERC's actions it was possible that those costs could be passed to DEP ratepayers instead of to Cherry Solar.¹ The Public Staff recommended that the Commission deny the CPCN application. The Public Staff also recommended conditions for the Commission to impose if it did decide to approve the CPCN application.

In reply testimony of Cherry Solar witness Nwadike, filed on January 13, 2022, Cherry Solar agreed to the conditions to the CPCN that the Public Staff proposed. Further, Cherry Solar rebutted other Public Staff concerns, stating that it would agree to bear all Affected System Costs for addressing the Rocky Mount—Battleboro overload. Cherry Solar asserted that solar developers have little incentive to pay for upgrades and then not use them, that Affected System Upgrades are important for resiliency of the grid and contribute to reducing transmission congestion, that load growth in PJM will drive replacement of Network Upgrades (in addition to merchant generation), and that denying the CPCN would be inconsistent with the Commission's orders granting certificates to other merchant plant facilities constructed in DENC territory.

In the confidential letter that it filed on October 27, 2023, the Public Staff (with Cherry Solar's consent) provided confidential LCOT calculations for the PJM Network Upgrades allocated to Cherry Solar and requested that the Commission admit those calculations into the record. The Public Staff stated that because of recent developments related to filings at FERC of ASOAs between DEP and other developers of North Carolina-sited projects in PJM's AC1 cluster, it no longer expects that Cherry Solar will be responsible for the Affected Systems Costs attributable to the AC1 cluster. The Public Staff recommended approval of the requested CPCN, subject to the following conditions:

1. The Applicant shall construct and operate the Facility in strict accordance with applicable laws and regulations, including any local zoning and environmental permitting requirements.
2. The CPCN shall be subject to Commission Rule R8-63(e) and all orders, rules, and regulations as are now or may hereafter be lawfully made by the Commission.
3. The Applicant shall file with the Commission in this docket any significant revisions in the cost estimates for the construction of the facility, interconnection

¹ On October 21, 2021, FERC rejected an ASOA between DEP and American Beech, LLC, that provided that American Beech would not be reimbursed for costs of upgrading the Rocky Mount—Battleboro line. Witness Lucas stated that, had that ASOA remained in effect, the Public Staff's concerns that DEP customers would have to pay for transmission upgrades that they do not need would have been alleviated. In the Public Staff's view, however, FERC's rejection of the ASOA conveyed FERC's position that DEP customers must ultimately reimburse merchant generators for Affected System Costs that those generators incur, and if DEP and American Beech did not execute a new ASOA acceptable to FERC, the Affected System Upgrades necessary to accommodate the AC1 facilities could be passed to Cherry Solar.

facilities, Network Upgrades, of Affected System Upgrades, or any other significant change in costs, within 30 days of becoming aware of such revisions.

4. The Applicant shall file a copy of any executed ASOA with the Commission at the same time such filing is made at the FERC (at least 61 days prior to commencement of construction of the upgrades).
5. If at any time the Applicant seeks reimbursement for any interconnection facilities, Network Upgrade Costs, Affected System Costs, or other costs required to allow energization and operation of the Facility, the Applicant shall notify the Commission no later than 60 days before seeking reimbursement.

Cherry Solar provided, in its April 24 filing, the most recent confidential LCOT calculation for the Facility accounting for the DEP Affected System Upgrades. As noted above, the Public Staff provided a confidential LCOT calculation for only the PJM Network Upgrades, the costs of which, as the Public Staff noted, are borne solely by the Applicant. Regarding Affected System Costs, Cherry Solar states that it is not a party to any agreement with DEP regarding the DEP Upgrade, and that DEP does not update Cherry Solar on the cost or status of that upgrade. Cherry Solar provided information from the North Carolina Transmission Planning Collaborative's February 2024 report on the state of Duke's local transmission plan. That report states that the estimated cost of the DEP Upgrade is \$30 million, and that the upgrade is under construction with a planned in-service date of June 1, 2025. Cherry Solar provided a confidential LCOT based on this cost figure and considering only the expected annual output of Cherry Solar.

Cherry Solar emphasizes its position that the figure overstates the actual cost (per kWh of generation) of transmission upgrades required for the Cherry Solar Facility. Cherry Solar notes that the Affected System Study DEP conducted in December 2020 identified five AC1 projects that depend on the DEP Upgrade. The Commission has granted three of those projects CPCNs. The LCOT figure Cherry Solar presented represents a theoretical worst-case-scenario LCOT if all other projects that depend on the DEP Upgrade, including those in later clusters, were to withdraw. Therefore, Cherry Solar argues, it represents an unrealistically conservative estimate of the actual LCOT for Affected System Upgrades required for Cherry Solar. However, the Commission disagrees. Should the other facilities that depend on the DEP Upgrade elect, for whatever reason, not to proceed to construction and be placed in service, then Cherry Solar could bear the entire cost of the DEP Upgrade.

The Commission is persuaded by the evidence in the record that the LCOT for the Facility is not unreasonable and not higher than the LCOT for facilities for which the Commission has granted CPCNs in the past. See Order Issuing Certificate for Merchant Generating Facility, *Application of Oak Trail Solar, LLC, for a Certificate of Public Convenience and Necessity to Construct a 100 MW Solar Facility in Currituck County, North Carolina*, No. EMP-114, Sub 0 (N.C.U.C. Oct. 8, 2021); Order Granting Certificates and Accepting Registration, *Application of Timbermill Wind, LLC, for a Certificate of Public Convenience and Necessity to Construct a Merchant Plan Wind Energy Facility in Chowan County, North Carolina, and Registration as a New Renewable Energy Facility*,

No. EMP-118, Sub 0 (N.C.U.C. May 4, 2022); and Order Granting Certificate of Public Convenience and Necessity, *Application of Sweetleaf Solar, LLC for a Certificate of Public Convenience and Necessity to Construct a 94 MW Solar Facility in Halifax County, North Carolina*, No. EMP-111, Sub 0 (N.C.U.C. Sept. 13, 2023). In view of the total cost of the Facility, including the Network Upgrades and the DEP Affected System Upgrade Costs, the Commission concludes, although not without reservation, that the siting of the Applicant's Facility in this area is not inconsistent with the Commission's obligation under N.C.G.S. § 62-110.1(d) for the provision of "reliable, efficient, and economical service" in the region.

The Commission also considers the long-term energy and capacity needs in the State and the region, and system reliability concerns. The Commission notes that the annual net energy in the Dominion zone of PJM is expected to grow by 1.5% per year over the next ten years and by 1.3% per year over the next 15 years.

After having carefully considered and weighed the evidence presented in this proceeding and using a case-specific and flexible standard, the Commission concludes that granting the CPCN for the Facility is in the public convenience and necessity. However, as the Public Staff recommends, the Commission will condition the certificate in the manner described below to ensure that the Commission is notified of any future material revisions in the cost estimates for any costs, including but not limited to, Network Upgrades, Attachment Facilities, and Affected System Upgrades.

IT IS, THEREFORE, ORDERED that a CPCN is hereby granted to Cherry Solar, LLC for the construction of a solar energy facility of up to 180 MW in Northampton County, North Carolina, subject to the following conditions:

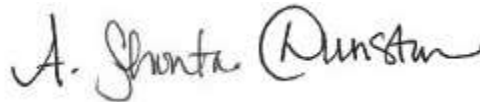
- (i) The Applicant shall construct and operate the Facility in strict accordance with applicable laws and regulations, including any local zoning and environmental permitting requirements.
- (ii) The CPCN shall be subject to Commission Rule R8-63(e) and all orders, rules, and regulations as are now or may hereafter be lawfully made by the Commission.
- (iii) The Applicant shall file with the Commission in this docket any significant revisions in the cost estimates for the construction of the facility, interconnection facilities, Network Upgrades, of Affected System Upgrades, or any other significant change in costs, within 30 days of becoming aware of such revisions.
- (iv) The Applicant shall file a copy of any executed ASOA with the Commission at the same time such filing is made at the FERC (at least 61 days prior to commencement of construction of the upgrades).

- (v) If at any time the Applicant seeks reimbursement for any interconnection facilities, Network Upgrade Costs, Affected System Costs, or other costs required to allow energization and operation of the Facility, the Applicant shall notify the Commission no later than 60 days before seeking reimbursement.

ISSUED BY ORDER OF THE COMMISSION.

This the 17th day of May, 2024.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "A. Shonta Dunston". The signature is written in a cursive, flowing style.

A. Shonta Dunston, Chief Clerk

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. EMP-115, SUB 0

KNOW ALL PERSONS BY THESE PRESENTS THAT

CHERRY SOLAR, LLC

192 Raceway Drive
 Mooresville, NC 28117

Is hereby issued this

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY PURSUANT TO
N.C. GEN. STAT. § 62-110.1

For a 180 MW solar energy facility

located


at 922 Oak Grove Church Road, 1315 Oak Grove Church Road, 105 Crossvine Lane,
and 610 Cherry Tree Road, Gaston, NC

subject to receipt of all federal and state permits as required by existing and
future regulations prior to beginning construction and further subject to all other orders,
rules, regulations, and conditions as are now or may hereafter be lawfully made by the
North Carolina Utilities Commission

ISSUED BY ORDER OF THE COMMISSION.

This the 17th day of May, 2024.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "A. Shonta Dunston". The signature is written in a cursive, flowing style.

A. Shonta Dunston, Chief Clerk