



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

October 27, 2023

Ms. A. Shonta Dunston, Chief Clerk  
North Carolina Utilities Commission  
4326 Mail Service Center  
Raleigh, North Carolina 27699-4300

Re: Docket No. EMP-115, Sub 0 - Application of Cherry Solar, LLC for a  
Certificate of Public Convenience and Necessity to Construct a 180-MW  
Solar Facility in Northampton County, North Carolina

Dear Ms. Dunston:

Attached for filing on behalf of the Public Staff in the above-referenced docket is  
the public version of the proposed order. Confidential information, located on pages 7 and  
13, has been redacted.

Sincerely,

/s/ Nadia L. Luhr  
Staff Attorney  
[nadia.luhr@psncuc.nc.gov](mailto:nadia.luhr@psncuc.nc.gov)

Attachment

cc: Parties of Record

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Oct 27 2023

**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	)	
Necessity to Construct a 180-MW Solar Facility	)	<b>PROPOSED ORDER</b>
in Northampton County, North Carolina	)	<b>OF THE PUBLIC STAFF</b>

BY THE COMMISSION: On November 13, 2020, Cherry Solar, LLC (Cherry Solar or 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 180-megawatt (MW) solar photovoltaic (PV) electric generating facility in Northampton County, North Carolina. Also on November 13, 2020, Cherry Solar filed the direct testimony of witness Linda Nwadike.

On November 24, 2020, the Public Staff filed a Notice of Completeness, stating that it had reviewed the CPCN application as required by Commission Rule R8-63(d) and considered the application to be complete.

On December 18, 2020, the Commission issued an Order Scheduling Hearings, Requiring Filing of Testimony, Establishing Procedural Guidelines, and Requiring Public Notice. The scheduling order (1) scheduled a public witness hearing for January 27, 2021; (2) scheduled a hearing for May 27, 2021, for the purpose of receiving expert witness testimony from the parties regarding the application; (3) required the Applicant to file additional testimony addressing

questions provided in the scheduling order on or before March 11, 2021; (4) required the direct testimony and exhibits of the Public Staff and other intervenors to be filed on or before April 15, 2021; (5) provided that the Applicant may file rebuttal testimony and exhibits on or before April 29, 2021; and (6) required the Applicant to publish public notice of the application and to file affidavits of publication.

On January 21, 2021, the Applicant filed its Affidavit of Publication.

On January 25, 2021, the State Clearinghouse filed comments. The cover letter indicated that the Department of Cultural Resources had requested additional information for further review and comment and requested that the Applicant provide supplemental information.

On January 26, 2021, the Commission cancelled the public witness hearing scheduled for January 27, 2021.

On March 11, 2021, Cherry Solar filed the supplemental testimony and exhibits of witness Nwadike.

On March 31, 2021, the Commission issued an order rescheduling the expert witness hearing for May 26, 2021.

On April 14, 2021, the Public Staff filed the testimony and exhibit of witness Jay B. Lucas. His testimony recommended that the Commission approve the application for a CPCN subject to certain conditions.

On April 28, 2021, Cherry Solar filed a Letter of No Objection in lieu of rebuttal testimony, stating that the Applicant will not object to the issuance of the requested CPCN subject to the conditions recommended in the testimony of Public Staff witness Lucas.

On May 10, 2021, Cherry Solar filed a motion requesting that the Commission admit into evidence all prefiled testimony and exhibits, excuse witnesses from appearing at the expert witness hearing, cancel the expert witness hearing, and issue the CPCN as requested by the Applicant, subject to the conditions identified in the testimony of Public Staff witness Lucas. The motion further stated that the Public Staff consents to the Commission granting the relief requested by the Applicant.

On May 19, 2021, the Commission issued an order cancelling the expert witness hearing scheduled for May 26, 2021.

On November 4, 2021, the Public Staff filed a motion for leave to file supplemental testimony. The Public Staff explained that on October 1, 2021, the Federal Energy Regulatory Commission (FERC) rejected an Affected System Operator Agreement (ASOA) between DEP and another interconnection customer, American Beech (NCUC Docket No. EMP-108, Sub 0) in Docket No. ER21-1955-002. On November 1, 2021, DEP filed a Request for Rehearing with FERC, requesting that FERC reconsider its October 1, 2021 order addressing the ASOA between DEP and American Beech. The Public Staff stated that FERC's rejection of the ASOA between DEP and American Beech may impact future

ASOAs and reimbursements between DEP and other generators, including Cherry Solar. Therefore, the Public Staff sought to file supplemental testimony after reviewing FERC's response to the Request for Rehearing. The Public Staff requests that it be allowed to file supplemental testimony on or before December 17, 2021, and that the Applicant be allowed to file reply testimony on or before January 13, 2022.

On November 5, 2021, the Commission issued an order allowing the Public Staff to file supplemental testimony on or before December 17, 2021, and allowing Cherry Solar to file reply testimony on or before January 13, 2022.

On December 17, 2021, the Public Staff filed the supplemental testimony and exhibits of witness Lucas, recommending that the Commission deny the CPCN or, if the Commission issues the CPCN, that the Commission do so subject to certain conditions.

On January 13, 2022, Cherry Solar filed the reply supplemental testimony of witness Nwadike, stating that the requested CPCN should be granted and that the Applicant is willing to accept a CPCN subject to the conditions listed in the December 17, 2021 supplemental testimony of witness Lucas.

On May 5, 2023, the Applicant filed a motion requesting that the Commission take judicial notice of a March 23, 2023 letter from the North Carolina Department of Natural and Cultural Resources lifting its request for an administrative hold in this proceeding, and order that a duplicate copy of the letter be deemed filed in this proceeding as of April 11, 2023. The motion also requested

that the Commission direct the parties to submit proposed orders on Cherry Solar's application for a CPCN.

On October 3, 2023, the State Clearinghouse filed comments. The cover letter indicated that, because of the nature of the comments, no further State Clearinghouse review action by the Commission was required for compliance with the North Carolina Environmental Policy Act.

On October 6, 2023, the Commission issued an order requiring the Applicant to submit the archaeological survey pertaining to the project site on or before October 11, 2023, and requiring that the parties file proposed orders on or before October 27, 2023.

On October 10, 2023, the Applicant filed the Cherry Solar Phase I Archaeological Survey issued on February 6, 2023.

On October 27, 2023, the Public Staff filed a letter stating that while the record contains a calculation of the levelized cost of transmission (LCOT) for the PJM network upgrades and DEP affected system upgrades, combined, attributable to the Cherry Solar project, it does not contain an LCOT calculation for only the PJM network upgrades, the costs of which are borne solely by the Applicant. The Public Staff added that it believes this information would be beneficial to the Commission in its consideration of the Application and indicated that it was authorized to represent that the Applicant agrees with the calculation and does not object to its inclusion in the record. In addition, the Public Staff stated that because of recent developments connected with filings at FERC of ASOAs

entered into between DEP and other developers of North Carolina-sited projects in PJM cluster AC1, it is no longer expected that Cherry Solar will be responsible for the affected system costs attributable to the AC1 cluster. Edgecombe Solar LLC, which currently holds a CPCN, has assumed cost responsibility for the affected system upgrades necessitated by the AC1 cluster, the costs of which will be reimbursed by DEP ratepayers. The letter explained that there are currently no affected system costs assigned to Cherry Solar, and the Public Staff now recommends approval of the CPCN requested in this proceeding, subject to conditions. The Public Staff further stated that it was authorized to represent that the Applicant is agreeable to the issuance of a CPCN subject to the conditions recommended by the Public Staff in its October 27, 2023 letter.

### **FINDINGS OF FACT**

1. Cherry Solar is a North Carolina limited liability company. SunEnergy1, LLC (SunEnergy1), is the direct parent and affiliate of Cherry Solar and is registered to do business in the State of North Carolina.

2. In compliance with N.C.G.S. § 62-110.1 and Commission Rule R8-63, the Applicant filed with the Commission an application for a CPCN authorizing the construction of a solar PV electric generating facility located on 922 Oak Grove Church Road, 1315 Oak Grove Church Road, 105 Crossvine Lane, and 610 Cherry Tree Road, in the town of Gaston, Northampton County, North Carolina.

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

4. The facility will be a 180-MW<sub>AC</sub> PV array with ground-mounted, single-axis tracking.

5. The facility will be interconnected to the grid operated by Dominion Energy North Carolina (DENC).

6. No further State Clearinghouse review action by the Commission is required for compliance with the North Carolina Environmental Policy Act.

7. Cherry Solar is financially and operationally able to undertake the construction and operation of the facility.

8. Cherry Solar has cost responsibility for \$2,676,883 in PJM network upgrade costs, which will be funded by Cherry Solar without reimbursement from PJM or DENC.

9. The facility has a Levelized Cost of Transmission (LCOT) of **[BEGIN CONFIDENTIAL]** [REDACTED] **[END CONFIDENTIAL]** per megawatt-hour (MWh) based on its allocated costs for PJM system upgrades.

10. There are currently no affected system costs assigned to Cherry Solar.

11. Cherry Solar has shown a need for the facility based on projected load growth in the PJM region and projections for demand for renewable energy within the PJM market and in the Southeast.



12. Cherry Solar has entered into a power purchase agreement (PPA) for the output of the proposed facility and the associated Renewable Energy Certificates (RECs).

#### **EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-5**

These findings of fact are essentially informational, procedural, and jurisdictional in nature and are not in dispute. These findings are supported by the application and the testimony of Cherry Solar witness Nwadike.

The Commission notes that in its application filed on November 13, 2020, Cherry Solar estimated that construction would begin during the first quarter of 2023, and that commercial operation would be achieved by the fourth quarter of 2023. Adherence to these dates is no longer possible due to the passage of time since the filing of Cherry Solar's application, but the Commission has received no updated timelines from the Applicant.

#### **EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 6**

The evidence supporting this finding of fact is located in the State Clearinghouse comments filed in this docket.

On January 25, 2021, the State Clearinghouse filed comments indicating that the Department of Cultural Resources had requested additional information from the Applicant. In its April 28, 2021 Letter of No Objection, Cherry Solar stated that it had engaged with a consultant to perform the archaeological study

requested by the Department of Cultural Resources. The Cherry Solar Phase I Archaeological Survey was filed in the docket on October 10, 2023.

On October 3, 2023, the State Clearinghouse filed comments. The cover letter indicated that, because of the nature of the comments, no further State Clearinghouse review action by the Commission was required for compliance with the North Carolina Environmental Policy Act. No further filings have been made in this docket by the State Clearinghouse.

Based on the foregoing and the entire record in this proceeding, the Commission concludes that no further State Clearinghouse review action by the Commission is required for compliance with the North Carolina Environmental Policy Act.

#### **EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7**

The evidence supporting this finding of fact is located in the application and the testimony of Cherry Solar witness Nwadike. This finding of fact is not disputed by any party.

SunEnergy1 is a direct parent and affiliate of Cherry Solar. Cherry Solar witness Nwadike testified regarding SunEnergy1's technical experience and financial capabilities to own and operate the project. She stated that SunEnergy1 is a top U.S. solar developer, owner, and operator of utility-scale solar projects, with over 1 GW of installed solar power. She added that SunEnergy1 is vertically integrated and controls all stages of development in-house. In Schedule 1-3, filed

with its application, Cherry Solar provided a table of SunEnergy1's completed solar generating facilities in the Southeastern Electric Reliability Council (SERC) region, listing 37 projects. Schedule 1-4 shows that SunEnergy1 also had 13 projects, including Cherry Solar, that were in development in the SERC region at the time of the filing of the application. Financial statements for SunEnergy1 were provided as Confidential Schedule 1-2.

Based on the foregoing and the entire record in this proceeding, the Commission concludes that Cherry Solar is financially and operationally able to undertake the construction and operation of the facility.

#### **EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 8-12**

The evidence supporting these findings of fact is located in the application, the testimony and exhibits of Cherry Solar witness Nwadike, and the testimony and exhibits of Public Staff witness Lucas.

N.C.G.S. § 62-110.1(e) states that "no certificate shall be granted unless the Commission has approved the estimated construction costs and made a finding that the construction will be consistent with the Commission's plan for expansion of electric generating capacity." Commission Rule R8-63(b)(3) also 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, which requires an independent power producer (IPP) to obtain a contract or a written commitment from a utility to demonstrate need.

In 2001, the Commission initiated a generic proceeding in Docket No. E-100, Sub 85 to consider changes to the certification requirements for merchant plants. As impetus for its Order Initiating Further Proceedings, 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 FERC to issue wheeling orders requiring utilities to allow access to their transmission grids for wholesale power transactions.<sup>1</sup> The Commission also cited FERC Order 2000 as “encouraging the formation of regional transmission organizations which would operate interconnected transmission systems, reduce the cost of transmitting power to more distant markets, and further enhance wholesale competition.”<sup>2</sup> In comments in the E-100, Sub 85 docket discussing certification requirements for merchant plants, the Public Staff recommended that the Commission address in its proceeding how the public convenience and necessity for an IPP would be demonstrated “when the facility is intended in whole or in part to serve . . . load outside of North Carolina, on varying bases and for varying duration.”<sup>3</sup>

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

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<sup>1</sup> Order Initiating Further Proceedings, *Investigation of Certification Requirements for New Generating Capacity in North Carolina*, Docket No. E-100, Sub 85, at 3 (N.C.U.C. Feb. 7, 2001).

<sup>2</sup> *Id.*

<sup>3</sup> Public Staff’s Initial Comments, *Investigation of Certification Requirements for New Generating Facilities*, Docket No. E-100, Sub 85, at 8 (N.C.U.C. Jan. 10, 2000).

Commission believes that a flexible standard for the showing of need is appropriate.”<sup>4</sup>

The Commission has determined in previous merchant plant proceedings 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.”<sup>5</sup>

The Commission has also determined 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.”<sup>6</sup> Further, 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.”<sup>7</sup> Lastly, 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

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<sup>4</sup> 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).

<sup>5</sup> 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*, Docket No. EMP-105, Sub 0, at 6 (N.C.U.C. June 11, 2020); *State ex rel. Utils. Comm’n v. Friesian Holdings, LLC*, 281 N.C. App. 391 (2022) (affirming the Commission’s order in Docket No. EMP-105, Sub 0).

<sup>6</sup> *Id.*

<sup>7</sup> *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).

facilities, and thus that the Commission has the authority to consider all costs borne as a result of that siting decision.”<sup>8</sup>

The proposed Cherry Solar facility holds one position in the PJM interconnection queue: AC1-086. The Generation Interconnection System Impact Study Report for Queue Project AC1-086 was revised by PJM in August 2020 and is attached to witness Nwadike’s March 10, 2021 Supplemental Testimony as Exhibit 2. In her testimony, witness Nwadike explained that the PJM system upgrades for the Cherry Solar facility were estimated to be \$2,676,883.

The LCOT for the allocated cost of PJM system upgrades, as estimated by the Public Staff and agreed to by the Applicant, is estimated to be **[BEGIN CONFIDENTIAL]** [REDACTED] **[END CONFIDENTIAL]**. Public Staff witness Lucas did not provide any testimony with concerns regarding the PJM network upgrade costs. Because these system upgrades are part of the PJM system, Cherry Solar will be responsible for paying these interconnection-related costs and there is no cost allocation to ratepayers. For this reason, the estimated LCOT for PJM network upgrades in this proceeding does not raise concerns for the Commission.

In her supplemental testimony, Cherry Solar witness Nwadike explained that DEP had identified five AC1 queue projects, including Cherry Solar, as contributing to an overload on the Rocky Mount-Battleboro 115 kV transmission line, resulting in affected system costs of approximately \$23,204,593 attributable to the AC1 cluster. As explained by Public Staff witness Lucas in his supplemental

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<sup>8</sup> *Id.* at 17-18.

testimony and Exhibit 2 to that testimony, DEP later increased this estimate to approximately \$31,285,275.

The Commission notes that Edgecombe Solar LLC (Edgecombe),<sup>9</sup> another project in the AC1 cluster, signed an ASOA with DEP providing for the estimated \$31,285,275 upgrade.<sup>10</sup> This ASOA, filed with both the Commission (Docket No. E-100, Sub 170) and FERC on May 6, 2022, provides for reimbursement to Edgecombe of the affected system costs and was accepted by FERC on July 5, 2022.<sup>11</sup> DEP filed this ASOA with FERC unexecuted and is actively litigating the issue of whether it is appropriate for FERC to require DEP to provide reimbursement.<sup>12</sup> If DEP builds the affected system upgrades to interconnect Edgecombe, there will be no marginal cost to interconnect the Cherry Solar facility or the other AC1 cluster projects. Therefore, the evidence before the Commission is that there are currently no affected system costs assigned to Cherry Solar.

In its analysis of public convenience and necessity in the context of merchant generating facilities, the Commission has considered the long-term energy and capacity needs in the State and region, as well as system reliability concerns. As described in Exhibit 3 to the application, the project will interconnect with the DENC transmission grid, providing it with direct access to PJM, which coordinates the movement of electricity through all or parts of Delaware, Illinois,

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<sup>9</sup> NCUC Docket No. EMP-101, Sub 0.

<sup>10</sup> See FERC Docket No. ER22-1807.

<sup>11</sup> *Order Accepting Affected System Operator Agreement*, FERC Docket No. ER22-1807 (July 5, 2022).

<sup>12</sup> See *Copy of Petition for Review*, FERC Docket No. ER22-1807 (Nov. 3, 2022).

Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia. Exhibit 3 to the application also states that forecasts of the quantities of renewable power to be purchased within the PJM market over the next several years, and elsewhere in the southeastern United States, reflect a strong public need for additional utility-scale solar power production. According to Exhibit 3 to the application, summer peak load for PJM's Dominion zone is projected to grow by 1.2% per year over the next ten years, and by 1.0% per year over the next 15 years. Winter peak load in PJM's Dominion zone is expected to grow by 1.4% per year over the next ten years, and by 1.2% per year over the next 15 years. In addition, the annual net energy in PJM's Dominion zone 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.

Furthermore, as stated in the November 13, 2020 testimony of witness Nwadike, Cherry Solar has entered into a long-term PPA with a Fortune 100 company for the output of the renewable power production and the associated RECs.

As the history of Commission Rule R8-63(b)(3) described above makes clear, the statement of need requirement is a "flexible standard" that is consistent with the Commission's Order Adopting Rule in Docket No. E-100, Sub 85 issued on May 21, 2001. When considering the demonstration of need, the Commission must also weigh the costs of the facility, whether and to what extent those costs may be borne by ratepayers, and the benefits provided to those incurring the costs



in determining the need for the facility. Therefore, for all the reasons explained in this Order, the Commission finds that the construction of the facility is in the public interest and meets the public convenience and necessity as required by N.C.G.S. § 62-110.1. However, the certificate will be conditioned in the manner described below to ensure that the Commission is notified of any future material revisions in the cost estimates for the interconnection facilities and network upgrades, including network upgrades on affected systems.

IT IS, THEREFORE, ORDERED as follows:

That a certificate of public convenience and necessity shall be issued to Cherry Solar, LLC, for the construction of a 180-MW<sub>AC</sub> solar PV merchant generating facility to be located in Northampton County, North Carolina. This certificate, once granted, shall be 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 itself, interconnection facilities, network upgrades, or 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 Affected System Operating Agreement with the Commission at the same time such filing is made at the Federal Energy Regulatory Commission (at least 61 days prior to commencing 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.

ISSUED BY ORDER OF THE COMMISSION.

This the \_\_\_\_ day of \_\_\_\_\_ 2023.

NORTH CAROLINA UTILITIES COMMISSION

A. Shonta Dunston, Chief Clerk



## CERTIFICATE OF SERVICE

I certify that a copy of the foregoing proposed order has been served on all parties of record or their attorneys, or both, in accordance with Commission Rule R1-39, by United States mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 27th day of October, 2023.

Electronically submitted  
/s/ Nadia L. Luhr  
Staff Attorney