## STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. EMP-101, SUB 0

## BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
Application of Edgecombe Solar LLC for a	) ORDER ISSUING CERTIFICATE
Certificate of Public Convenience and Necessity	) FOR MERCHANT GENERATING
to Construct a 75-MW Solar Facility in	) FACILITY
Edgecombe County, North Carolina	)

BY THE COMMISSION: On October 5, 2018, Edgecombe 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 75-MW<sub>AC</sub> solar photovoltaic (PV) electric generating facility (Facility) in Edgecombe County, North Carolina. The Applicant also filed a registration statement pursuant to Commission Rule R8-66, seeking registration of the facility as a new renewable energy facility.

On October 16, 2018, the Public Staff filed a Notice of Completeness stating that the Public Staff has reviewed the application as required by Commission Rule R8-63(d), and that the Public Staff considers the application to be complete. The Public Staff further requested that the Commission issue a procedural order setting the application for hearing, requiring public notice, and addressing other procedural matters.

On November 8, 2018, the Commission issued an Order Scheduling Hearing, Requiring Testimony, Establishing Procedural Guidelines and Requiring Public Notice (Scheduling Order). The Scheduling Order, among other things, scheduled a public witness hearing and an expert witness hearing for the purpose of receiving testimony regarding the application.

On December 18, 2018, the Applicant filed an affidavit of publication, evidencing that the Applicant caused to be published notice of the hearing in the Rocky Mount Telegram as required by the Scheduling Order.

On December 28, 2018, the State Clearinghouse filed comments recommending that prior to the initiation of any ground disturbing activities within the project area, a comprehensive archaeological survey of the project area be conducted by an experienced archeologist, due to location of the proposed site of the Facility being located in an area that has a "high probability for containing precolonial American Indian archeological sites" and that "archeological sites associated with the plantation of General William Ruffin Cox are likely present in the parcel."

On December 31, 2018, the Public Staff filed the Affidavit of Evan D. Lawrence an engineer in the Electric Division of the Public Staff. In the Affidavit, affiant Lawrence stated, that upon review of the application, the Public Staff concluded that the Applicant satisfied the requirements of N.C. Gen. State § 62-110.1 and Commission Rule R8-63 for a CPCN. Further, the Public Staff recommended the Commission issue a CPCN to the Applicant with certain conditions.

The Commission did not receive complaints regarding the Facility within the time set forth in the Scheduling Order. On January 2, 2019, acting through a Hearing Examiner, the Commission issued an order canceling the hearing scheduled for the purpose of receiving public witness testimony.

On January 3, 2019, the Applicant filed a motion requesting the hearing scheduled for the purpose of receiving expert witness testimony be canceled. To support its motion, the Applicant noted that as no petitions to intervene were filed in the docket, the only parties to the docket are the Applicant and the Public Staff, and that the Public Staff recommended the Commission issue the Applicant's request for a CPCN.

On January 8, 2019, the Commission issued an order canceling the hearing scheduled for the purpose of receiving expert witness testimony in this docket.

On November 19, 2019, the Applicant filed a motion requesting that the Commission permit the Applicant to proceed with limited construction activities, including the construction of minimal pile installations and associated erosion control measures on portions of the site of the proposed facility. The Motion described the archeological study activity undertaken by the Applicant to address the State Clearinghouse comments.

On December 2, 2019, the Commission issued an Order Allowing Limited Construction with Conditions, granting the Applicant the authority to engage in construction of minimal pile installations and associated erosion control measures on portions of the site of the proposed Facility that have been determined to be ineligible for inclusion on the National Register of Historic Places subject to certain conditions set forth in the Order.

On July 29, 2020, the Public Staff filed a Motion for an Order Requiring the Filing of Supplemental Testimony, stating that the Public Staff had learned that Duke Energy Progress, LLC (DEP) had recently conducted an affected system interconnection for the PJM Interconnection Cluster AC1 (AC1 Cluster). The Facility is part of the AC1 Cluster. The Public Staff requested that the Commission require the Applicant to file additional testimony addressing the affected system study costs and further requested that the Commission refrain from issuing an order on the Applicant's request for a CPCN until the supplemental testimony is filed.

On August 3, 2020, the State Clearinghouse filed comments stating that no further State Clearinghouse review is required.

On August 17, 2020, the Applicant filed the supplemental testimony of Ryan Van Portfliet in response to the Public Staff's Motion for an Order Requiring the Filing of Supplemental Testimony.

On August 20, 2020, the Commission issued an Order Requiring the Filing of Additional Testimony directing the Public Staff to file testimony addressing the Applicant's August 17, 2020 supplemental testimony, and allowing the Applicant an opportunity to file reply testimony on the Public Staff's testimony.

On September 4, 2020, the Public Staff filed the testimony of Evan D. Lawrence.

On September 8, 2020, the Applicant filed a letter stating that it has no reply comments to the Public Staff's September 4, 2020 testimony. The Applicant further stated that it consents to the conditions outlined by the Public Staff in its testimony.

After careful consideration, the Commission finds good cause to approve the application and issue the requested CPCN for the Facility, subject to the conditions recommended by the Public Staff.

In reaching this determination, the Commission finds that the uncontested evidence demonstrates that there is a need for the Facility in the region, in accord with the provisions of Commission Rule R8-63(b)(3). Supporting this finding is the Applicant's verified application and the testimony of Applicant's witness Portfliet, which speaks to the significant need for solar developments in the PJM Interconnection (PJM) region. Witness Portfliet provided supplemental testimony on August 18, 2020, in which he stated that the output of the Facility is fully committed under an executed power purchase agreement to a counterparty with electrical load in North Carolina.

The Commission has also reviewed this application in light of its mandate under N.C.G.S. § 62-110.1. Section 62-110.1(c) requires that the Commission analyze and plan for the long-range need for generating resources in North Carolina and evaluate CPCN applications for new generating facilities in North Carolina in light of such analysis and plan. At the time of its Application, Edgecombe Solar noted that the 2018 Integrated Resource Plan (IRP) of Dominion Energy North Carolina (DENC) forecast that DENC's load is increasing and indicated retirement of existing generation. The Applicant further noted that the Alternative Plans in the 2018 DENC IRP called for additional solar facilities. Thus, the undisputed evidence of record demonstrates that the energy and capacity to be provided by the Facility are needed to support immediate and future load growth in DENC's service territory, and it does not appear that the Facility will have a material impact on the long-range balance of demand for electricity and the generation resources available to meet that demand in North Carolina

Further, consistent with the plain language of N.C.G.S. § 62-110.1(e), the Commission has considered the construction costs associated with the construction of the Facility. Specifically, the statue provides that, "[a]s a condition for receiving a certificate, the applicant shall file an estimate of construction costs in such detail as the

Commission may require . . . and no certificate shall be granted unless the Commission has approved the estimated construction costs and made a finding that construction will be consistent with the Commission's plan for expansion of electric generating capacity." N.C.G.S. § 62-110.1(e) The Commission has evaluated the construction costs for the facility, including the cost of the generating plant, as well as the network upgrade costs on the PJM system and on the DEP system.

In his supplemental testimony filed on August 18, 2020, Applicant witness Portfliet noted that the Interconnection Service Agreement between the Applicant and PJM obligates the Applicant to pay a total cost of \$7,838,834, including \$7,304,118 in network upgrade costs. The Public Staff does not dispute or raise any concerns regarding the costs of the Facility.

Applicant witness Portfliet also noted in his supplemental testimony that DEP has conducted an Affected System Study Report (ASSR) showing the five proposed facilities in the PJM AC1 cluster contribute to an overload on the DEP Rocky Mount-Battleboro 115kV line resulting in the need for \$23,2104,593 in network upgrades for the line. Witness Portfliet noted that the Applicant's facility is in the AC1 cluster. Further, witness Portfliet noted that the overload on the DEP Rocky Mount-Battleboro 115kV line was previously assigned to a different PJM cluster pursuant to an ASSR previously conducted and that the Applicant is unsure of whether that previous study is valid. Witness Portfliet asserted that if the identified DEP network upgrades are constructed, no single facility in the AC1 cluster, or any other PJM cluster, would be the "first to cause" the upgrades, and that any costs would be allocated among the multiple facilities that benefit from the upgrades.

Regardless of its assertion that the DEP network upgrades could be allocated among multiple facilities, the Applicant provided a calculation of the levelized cost of transmission (LCOT) of the DEP network upgrades, assuming the Applicant would bear the full cost of those upgrades. The LCOT calculated by witness Portfliet, showing only the energy from the Facility is \$6.00/MWh.

Public Staff witness Lawrence reviewed the LCOT calculation of the Applicant and noted that the calculation reflected only the costs of the DEP network upgrades and did not reflect the additional upgrades that may be required on PJM's system.

Public Staff witness Lawrence noted the difficulty of determining the total cost of proposed generating facility projects, both due to the cluster study process and the "fluid nature" of projects falling out of and coming into the queue on a continual basis. Witness Lawrence states that the "Public Staff finds itself increasingly being asked to provide a recommendation to the Commission on approval of a CPCN application before the need for potential network upgrades and the associated costs are fully studied or understood by any party." Ultimately though, the Public Staff recommends the Applicant's request for a CPCN be granted, 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 a progress report on the construction of the Facility on an annual basis; and
- (4) The Applicant shall file with the Commission in this docket any revisions in the cost estimates for the construction of the Facility or any network upgrades within 30 days of becoming aware of such revisions.

In its June 11, 2020 order in Docket No. EMP-105, Sub 0, denying the application by Friesian Holdings, LLC (Friesian) for a CPCN for a merchant generating facility, the Commission stated it is appropriate to use the LCOT as a benchmark as to the reasonableness of the transmission network upgrade costs associated with interconnecting a new generating facility. The LCOT allows for a comparison of the relative magnitude of transmission investments required to interconnect generation facilities.

Although the LCOT calculation provided by the Applicant fails to include both the DEP network system upgrades and the PJM network upgrades, the PJM network system upgrades are included in witness Portfliet's supplemental testimony. Based on the evidence of record in the record, the Commission determines that an LCOT calculation including both the cost of the DEP network system upgrades and the cost of the PJM network upgrades is not unreasonably out of line with the 2019 Lawrence Berkeley National Laboratory interconnection cost study (LBNL Study), on which the Commission has relied to place LCOT calculations in perspective with data from other balancing authorities. In view of the total cost of the Facility, the Commission concludes that the siting of the Applicant's facility in this area is not inconsistent with the Commission's obligation under N.C. Gen. Stat. § 62-110.1(d) for the provisions of "reliable, efficient and economical service" in the state.

For the foregoing reasons, the Commission finds and concludes that the Facility is in the public convenience and necessity as required by N.C.G.S. § 62-110.1 and that the Application should be granted.

Further, the Commission is of the opinion that the conditions proposed by the Public Staff are appropriate and should be imposed on the certificate.

## IT IS, THEREFORE, ORDERED as follows:

1. That a certificate of public convenience and necessity shall be, and is hereby, issued to Edgecombe Solar LLC for the construction of a 75-MW<sub>AC</sub> solar PV

merchant generating facility to be located in Edgecombe County, North Carolina, and to be operated as a merchant plant. This certificate is subject to the following conditions:

- Edgecombe Solar LLC will construct and operate the generating facility in strict accordance with applicable laws and regulations, including any local zoning and environmental permitting requirements;
- (b) Edgecombe Solar LLC will not assert that the issuance of the certificate in any way constitutes authority to exercise any power of eminent domain, and it will abstain from attempting to exercise such power;
- (c) The certificate is subject to Commission Rule R8-63 and all orders, rules, regulations and conditions as are now or may hereafter be lawfully made by the Commission;
- (d) Edgecombe Solar LLC shall file with the Commission in this docket a progress report on the construction of the Facility on an annual basis; and
- (e) Edgecombe Solar LLC shall file with the Commission in this docket any revisions in the cost estimates for the construction of the Facility or the construction of any network upgrades within 30 days of becoming aware of such revisions.
- 2. That Appendix A hereto shall constitute the certificate of public convenience and necessity issued for the Facility.

ISSUED BY ORDER OF THE COMMISSION.

This the 13th day of November, 2020.

NORTH CAROLINA UTILITIES COMMISSION

Janice H. Fulmore, Deputy Clerk

## STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. EMP-101, SUB 0

Edgecombe Solar LLC One South Wacker Drive, Suite 1800 Chicago, IL 60606

is hereby issued this

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

for a 75-MW<sub>AC</sub> solar photovoltaic electric generating facility

located

on 600 acres of land on the north side of US Highway 64 Alternate West, east of the intersection with April Lane, and west of the intersection with Alston Lane, near Kingsboro, in Edgecombe County, North Carolina,

subject to all 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 13th day of November, 2020.

NORTH CAROLINA UTILITIES COMMISSION

Janice H. Fulmore, Deputy Clerk