

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. EMP-108, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application of American Beech Solar LLC,)	ORDER GRANTING
for a Certificate of Public Convenience and)	CERTIFICATE OF PUBLIC
Necessity to Construct a 140 MW Solar)	CONVENIENCE AND NECESSITY
Facility in Halifax County, North Carolina)	WITH CONDITIONS

BY THE COMMISSION: On January 28, 2020, American Beech Solar, LLC (American Beech 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 110 MW solar facility (Facility) in Halifax County, North Carolina. Changes to the planned Facility later resulted in it being increased to a 140 MW Facility, but American Beech did not expand the area of the project that was included in the Public Notice of the original application.

On February 6, 2020, the Public Staff filed a Notice of Completeness stating that it had reviewed the application in EMP-108, Sub 0 and considered the application to be complete and requesting that the Commission issue a procedural order.

On March 12, 2020, the Commission issued an Order Scheduling Hearings, Requiring Filing of Testimony, Establishing Procedural Guidelines, and Requiring Public Notice (March 12 Order).

On April 15, 2020, The Public Staff filed public and confidential versions of the testimony of witness Jay B. Lucas. Witness Lucas stated that American Beech has demonstrated a need for the Facility and had met the Commission's filing requirements. At that time, the Public Staff did not have concerns about Network Upgrades and recommended that the Commission grant the CPCN subject to conditions.

On April 20, 2020, the State Clearinghouse of the North Carolina Department of Administration (State Clearinghouse) filed comments in the docket indicating that it had determined that no further State Clearinghouse review action was necessary for compliance with the North Carolina Environmental Policy Act (NCEPA).

On May 6, 2020, the State Clearinghouse filed additional comments in the docket and indicated that American Beech should consider those comments in project development. The State Clearinghouse concurred that 41 newly recorded archaeological sites identified in American Beech's archaeological report and site forms are not likely to be eligible for listing in the National Register of Historic Places.

On May 15, 2020, the Commission issued an Order Canceling Hearings and Rescheduling Public Witness Hearing and Requiring Public Notice (May 15 Order).

On June 9, 2020, the Applicant filed an Affidavit of Publication stating that notice of the Application in this docket appeared in the Daily Herald, a daily newspaper of general circulation in Roanoke Rapids, Halifax County, North Carolina, in four successive weeks, in compliance with the Commission's May 15 Order.

On June 19, 2020, the Commission issued an Order Canceling Public Witness Hearing.

On June 22, 2020, the Commission issued an Order Requiring Additional Testimony seeking the Applicant's responses to certain questions and establishing a schedule for the Public Staff to file testimony and exhibits on those same questions and for the Applicant to file rebuttal testimony and exhibits. The questions addressed the Levelized Cost of Transmission (LCOT) for any transmission system upgrades or modifications, interconnection studies, Affected System studies, the sale of energy and capacity to distribution utilities, and PPA agreements.

On July 9, 2020, the Applicant filed public and confidential versions of the prefiled supplemental testimony of witness Whitney Rubin, with attachments.

On July 22, 2020, the Public Staff filed the supplemental testimony of witness Lucas and filed some confidential pages separately.

On July 29, 2020, the Applicant filed the prefiled supplemental reply testimony of witness Rubin.

On September 8, 2020, the State Clearinghouse filed additional comments again indicating that no further State Clearinghouse review action was necessary for compliance with the NCEPA.

On November 17, 2020, the Public Staff filed a Motion for Leave to File Supplemental Testimony to consider filings in Docket No. E-100, Sub 170, *Investigation of Interconnection Issues Related to Electric Merchant Generating Facilities* and filed the second supplemental testimony of witness Lucas. Witness Lucas stated concerns of the Public Staff that a higher volume of projects in PJM Interconnection's (PJM) interconnection queue would cause Affected System Upgrade costs that DEP ratepayers would bear. Witness Lucas recommended additional conditions on approval of the CPCN to address the Public Staff concern.

On December 9, 2020, the State Clearinghouse filed additional comments in the docket stating that the Department of Cultural Resources had requested additional information about the proposed project and how the Applicant proposes to avoid and protect cemeteries during and after construction of the Facility.

On December 16, 2020, the Applicant filed a letter stating that it did not intend to file further testimony in response to the Public Staff's second supplemental testimony and stated that it would not object to the issuance of its CPCN subject to the conditions recommended in witness Lucas's testimony.

On January 27, 2021, the State Clearinghouse filed additional comments in the docket stating its position that no further action was necessary to comply with the NCEPA.

On June 25, 2021, the Applicant filed a Motion to Stay, requesting that the Commission stay the matter pending the decision of the Federal Energy Regulatory Commission (FERC) on the question of whether interconnection customers that construct Affected System Upgrades on DEP's system are entitled to reimbursement of the costs of those upgrades.

On August 9, 2021, the Commission issued an Order Denying Stay and Requesting Further Information (August 9 Order). In that Order, the Commission disagreed with the Applicant that a stay pending resolution of the FERC proceeding was necessary. The Commission specified information which the Applicant was to provide "when available," but no later than when the Applicant received an Interconnection Service Agreement (ISA) for Phase 2 of the Facility. The requested information included interconnection studies, Affected System Upgrade cost studies, a narrative explanation of the full cost of transmission upgrades for both the 80 MW Phase 1 and the 30 MW Phase 2, and a recalculated LCOT for the entire Facility that included the upgrade costs for the entire Facility and affected utility systems.

On May 20, 2022, the Applicant filed a Consent Motion for Procedural Order. The Applicant stated that it had received final interconnection studies and agreements for the proposed Facility and that Edgecombe Solar Energy, LLC (Edgecombe), the developer of another facility in the AC1 Cluster, has entered an ASOA with DEP providing for the construction of Affected System Upgrades that are required to interconnect certain AC1 and AC2 projects. Thus, the Applicant stated that it had sufficient information to provide additional testimony addressing the Commission's questions from the August 9 Order.

On May 24, 2022, the Applicant filed the testimony and exhibits of witness Michael Stanton.

On June 8, 2022, the Commission issued an Order Scheduling Hearing and the Filing of Testimony (June 8 Order).

On June 27, 2022, in accordance with the June 8 Order, the Public Staff filed the third supplemental testimony of witness Lucas. Witness Lucas expressed concern that the LCOT may not be an appropriate measure of construction costs for American Beech's Facility because the underlying assumption when using the LCOT is that customers paying for an upgrade also receive the energy while, for this proposed Facility, the Applicant will deliver to PJM's competitive wholesale market. Witness Lucas continued to recommend approval of the Application with certain conditions.

On July 14, 2022, the Applicant filed the supplemental reply testimony of witness Stanton. Witness Stanton stated that American Beech agrees to the Public Staff's proposed conditions on its CPCN, with some clarifications.

On July 27, 2022, the Applicant, with the consent of the Public Staff, filed a Consent Motion to Cancel Expert Witness Hearing. The Applicant moved the Commission for an order canceling the expert witness hearing scheduled for August 2, 2022, and accepting into the record all prefiled testimony and exhibits of the Applicant and the Public Staff. American Beech noted that it had accepted the conditions to its CPCN proposed by the Public Staff and urged the Commission to decide the Application based on the record. The Applicant noted that no parties had intervened or submitted written complaints regarding the proposed Facility; the only parties to the docket are the Applicant and the Public Staff.

On July 29, 2022, the Commission issued an Order Granting Motion to Cancel Expert Witness Hearing and Requiring Filing of Additional Evidence.

On August 5, 2022, the Applicant filed additional comments regarding supplemental Levelized Cost of Transmission (LCOT) calculations.

On August 12, 2022, the Public Staff filed a letter in the docket stating that it had reviewed the Applicant's comments and supporting documents filed on August 5, 2022, and does not disagree with the LCOT calculations the Applicant presented.

On August 26, 2022, the Commission issued an order (August 26 Order) requiring that the parties to this proceeding file proposed orders or briefs by September 26, 2022.

On September 26, 2022, the Commission issued an Order Granting Extension of Time wherein, at the request of the Public Staff, it extended the deadline for the filing of proposed orders or briefs to October 3, 2022.

On October 3, 2022, American Beech and the Public Staff filed proposed orders in this proceeding.

FINDINGS OF FACT

1. American Beech Solar, LLC (American Beech) is a North Carolina limited liability company with its principal place of business in Charlotte, North Carolina. BayWa r.e. Solar Projects, LLC (BayWa Solar) is a Delaware limited liability company with its principal place of business in Irvine, California. BayWa Solar is a wholly owned subsidiary of BayWa R.E. Development, LLC, a Delaware limited liability company (BayWa Development). BayWa Solar is the sole member of BayWa Development, which is the sole member of American Beech. BayWa Development and BayWa Solar are wholly owned subsidiaries of the same parent company, BayWa AG.

2. In compliance with N.C.G.S. § 62-111.1 and Commission Rule R8-63, the Applicant filed with the Commission an application for a CPCN authorizing the construction

of the Facility on 23 parcels of land along portions of Thirteen Bridges Road, Sorietown Road, Old 125 Road, Bynum's Bridge Road, and Sand Pit Road. Twelve different landowners own the 3,070 acres outside Scotland Neck in Halifax County, North Carolina. The Applicant has obtained easements from a thirteenth landowner that connect parts of the project.

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

4. American Beech is financially and operationally able to undertake the construction and operation of the Facility.

5. The Facility is a solar energy facility and will be interconnected to the transmission grid owned by Dominion Energy North Carolina (DENC). American Beech proposes to interconnect 140 MW of solar generation capacity to the DENC transmission grid and to sell wholesale power from the Facility located within the PJM footprint. The Facility maintains three positions in the PJM interconnection queue, each of which corresponds to a portion of the planned capacity of the Facility. Eighty MW of capacity was studied in the AC1 cluster (queue positions AC1-098/AC1-099) and another 80 MW was studied in the subsequent AC2 cluster (queue positions AC2-083/AC2-084). The AC2-083 position representing 20 MW of generating capacity was dropped, leaving only the 60 MW AC2-084 position in the AC2 cluster. The queue positions in the AC1 cluster (80 MW of capacity) represent Phase 1 of the Facility, while the 60 MW of capacity in the AC2 cluster represents Phase 2 of the Facility. Both phases share the same point of interconnection. American Beech entered into an updated ISA and an updated Interconnection Construction Service Agreement (ICSA) to incorporate all three queue positions in March 2022 and May 2022, respectively. Those agreements supersede earlier agreements. The Facility will interconnect with the DENC transmission system that PJM operates via a new three breaker ring bus switching station that connects on Dawson Crossroads—South Justice Branch 115 kV line after a new step-up transformer.

6. The Facility is currently expected to start construction around the first quarter of 2024 with a commercial operation date in approximately the second quarter of 2025.

7. The State Clearinghouse has concluded that that no further action by American Beech is necessary to comply with the North Carolina Environmental Policy Act.

8. American Beech has a fully executed ISA and ICSA with DENC and PJM. Under the terms of those agreements, American Beech is responsible for \$7,260,942 in interconnection costs that American Beech will fund without reimbursement from DENC or PJM.

9. The total Affected System Upgrade costs for the PJM AC1 Cluster for reconductoring of the DEP Rocky Mount—Battleboro 115 kV line (the DEP Upgrade) are estimated at \$31,285,275. Edgecombe and DEP entered an ASOA for that work that was filed with FERC and with this Commission (in Docket No. E-100, Sub 170) on May 6, 2022.

10. The LCOT for the PJM Network Upgrades and Attachment Facilities is \$1.46/MWh. The LCOT for Affected System Upgrade costs on the DEP system if the Applicant were to be the only party in the AC1 and AC2 clusters funding the DEP Upgrade is \$6.28/MWh.

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

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. These findings are supported by the Application and the testimony of American Beech witnesses Rubin and Stanton.

The Applicant filed a copy of the Articles of Organization for American Beech Solar, LLC, filed with the North Carolina Secretary of State on August 10, 2016, in the docket on January 28, 2020, as an exhibit to the Facility CPCN Application.

An examination of the Application and testimony and exhibits of American Beech's witnesses confirms that the Applicant 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 June 9, 2020, American Beech filed the Affidavit of Publication showing that The Daily Herald published the Public Notice as proscribed by the Commission in its March 12 Order in four successive weeks on May 19, 2020, May 26, 2020, June 2, 2020, and June 9, 2020. The Commission concludes that the Applicant timely and adequately published the Public Notice.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 4

The evidence supporting this finding of fact is in the Application and the testimony of American Beech witness Rubin. This finding is not disputed by any party.

American Beech is a wholly owned subsidiary of BayWa Development, a Delaware limited liability company. BayWa Development is a wholly owned subsidiary of BayWa Solar. BayWa Development and BayWa Solar are wholly owned subsidiaries of the same parent company, BayWa AG.

According to American Beech witness Rubin's testimony, BayWa Solar has the experience to build, own, and operate solar power generation facilities. It has developed, sold, or has in its development pipeline 46 solar facilities throughout the United States and expects eventually to develop approximately 1.2 gigawatts of capacity across the United States. BayWa Solar also has the financial capacity to build and operate the Facility. The development of the project is funded by BayWa Solar through intra-company loans provided by the parent company BayWa AG, whose consolidated financial statements for 2019 were provided with the Application. BayWa Solar intends to obtain a

construction loan from a third-party lender before purchasing major equipment or beginning construction. During construction, it will raise tax equity, additional cash equity, and term debt. The loan will be retired when the project becomes operational with proceeds from term debt and tax equity. BayWa Solar has the capability to arrange adequate financing, insurance, guarantees, security, and other assurances for the project's development, construction, and operation.

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

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 5-6

The evidence supporting these findings of fact is in the Application, the testimony of American Beech witnesses Rubin and Stanton, and the testimony of Public Staff witness Lucas.

According to the Application and the testimony of American Beech witness Rubin, American Beech will locate the Facility on approximately 3,070 acres of privately owned land outside of Scotland Neck in Halifax County, North Carolina. The project will include approximately 1,800 fenced acres of this land plus land outside the fence that the Applicant will use for screening and other project needs. A site plan for the proposed project was included as an exhibit with the CPCN Application and later as an exhibit to the testimony of witness Stanton. The Applicant originally planned to construct the Facility in two phases, with respective AC capacities of 80 MW and 30 MW. American Beech later consolidated the two phases of the project for construction purposes and increased the size of the second phase to 60 MW, which brought the total capacity of the proposed Facility to 140 MW. The Facility as now planned will have approximately 38 inverters and 353,160 photovoltaic solar modules. American Beech currently expects to begin construction around the first quarter of 2024 with a commercial operation date in approximately the second quarter of 2025.

The Facility will interconnect to the DENC transmission grid via a three-breaker ring bus switching station that connects on Dawson Crossroads — South Justice Branch 115 kV line after a new step-up transformer.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7

The evidence supporting this finding of fact is in the State Clearinghouse comments filed between April 20, 2020, and January 27, 2021.

On April 20, 2020, the North Carolina Department of Administration (NDCOA), through the State Clearinghouse, filed a letter in the docket that included comments from multiple state agencies and stated that no further State Clearinghouse review action was needed for compliance with the NCEPA. On May 6, 2020, the State Clearinghouse filed additional comments from the State Historic Preservation Office (SHPO) and requested

that the Applicant consider those comments during project development. On September 8, 2020, the State Clearinghouse filed additional comments from SHPO and stated that no further State Clearinghouse review action was necessary for compliance with NCEPA.

On December 9, 2020, the State Clearinghouse filed a letter in the docket that included additional SHPO comments and requested additional information from the Applicant. On January 7, 2021, the State Clearinghouse filed a final letter in the docket that included comments from SHPO indicating that the Applicant had addressed its concerns. The letter stated that no further State Clearinghouse review was necessary for compliance with NCEPA.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACTS NOS. 8-11

The evidence supporting these findings of fact is in the Application, the testimony of American Beech witnesses Rubin and Stanton, the additional comments regarding supplemental LCOT calculations that the Applicant filed on August 5, 2022, and the testimony and exhibits of Public Staff witness Lucas.

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. N.C.G.S. § 62-110.1(e) provides further 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. 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 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).

Further, the Commission 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.” *Id.* 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 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.”).

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, 2022-NCCOA-32, 869 S.E.2d 327, 2022 N.C. App. LEXIS 37. 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.*

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 Poser*, 112 N.C. App. 265, 280, 435 S.E.2d 553, 561 (1994).

The Commission also 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 this instance, the Application and later-filed testimony in the proceeding provides the total cost for the Facility includes \$7,260,942 in work that will be required to interconnect both phases of the Facility, which breaks down to \$587,538 in Attachment Facilities and \$6,673,402 in Network Upgrades. American Beech originally entered an ISA and an ICSA for the AC1 cluster queue positions in March of 2020. Those agreements specified the work that would be necessary to interconnect Phase 1 of the Facility. Interconnection work under those agreements was suspended at American Beech’s request while PJM conducted additional studies of the Phase 2 positions. PJM finished that work in early 2022, and American Beech entered an updated ISA and ICSA to incorporate all three queue positions (AC1-098/AC1-099 and AC2-084) in March 2022 and May 2022.

American Beech also entered into an Affected System Operating Agreement (ASOA) with Duke Energy Progress, LLC (DEP) on May 21, 2021 (the DEP ASOA). The DEP ASOA provided for the reconductoring of DEP’s Rocky Mount—Battleboro 115 kV line (the DEP Upgrade) to mitigate overloads caused by American Beech and several other AC1 cluster projects, including the Edgecombe facility. The DEP ASOA is no longer in effect; DEP filed for FERC approval of the DEP ASOA on May 20, 2021. On October 1, 2021, FERC rejected the DEP ASOA, stating that it deviated from FERC precedent requiring system operators to reimburse interconnection customers for Network Upgrade costs. FERC directed DEP to file a revised ASOA that included reimbursement of the Affected System Upgrade costs and to begin construction of the upgrade. American Beech states that it signed the DEP ASOA, despite believing that it was unreasonable for DEP to require American Beech to execute an ASOA that did not provide for reimbursement of Affected System Upgrade costs, because it understood that failure to do so would result in substantial delays of the interconnection of its project.

American Beech has not entered a successor ASOA. The parties in the AC1 cluster had explored the possibility of sharing the up-front costs of the DEP Upgrade even before American Beech entered the DEP ASOA, but American Beech has stated that DEP will only enter an ASOA with a single counterparty. After FERC rejected the DEP ASOA, American Beech and Edgecombe discussed the DEP Upgrade and concluded that Edgecombe would be a better counterparty to the ASOA because it is farther along in the construction and interconnection processes. Edgecombe and DEP entered an ASOA, which was filed with FERC and with this Commission on May 6, 2022. Witness Stanton’s testimony indicates that American Beech and Edgecombe are negotiating an agreement pursuant to which American Beech would provide a portion of up-front funding for the Affected System Upgrade costs on the DEP system and would receive a proportional share of any reimbursements. Further, witness Stanton states that Edgecombe’s ASOA appears substantially similar to American Beech’s DEP ASOA that FERC rejected. The ASOA indicates that the estimated cost for the construction of the DEP Affected System Upgrades is \$31,285,275. American Beech does not anticipate receiving any additional studies or agreements pertaining to interconnection or upgrade costs for its proposed Facility.

Pursuant to the terms of its ISA and the applicable regulatory paradigm, American Beech will bear all costs associated with the interconnection of the Facility to the DENC transmission system, including costs associated with the Network Upgrades on the transmission system operated by PJM. Additionally, American Beech will bear all costs associated with the construction of the generating Facility. The Applicant provides that the LCOT for the PJM Network Upgrades is \$1.46/MWh including the Attachment Facilities. As Public Staff witness Lucas notes, American Beech, not North Carolina ratepayers of DENC or DEP, will pay the cost of the Network Upgrades and Attachment Facilities.

Regarding the LCOT for the DEP Affected System Upgrade costs, in its August 5 comments American Beech provided an LCOT for three different scenarios: (1) \$6.28/MWh if American Beech alone funded these DEP Affected System Upgrades; (2) \$4.09/MWh if American Beech and Edgecombe jointly funded these DEP Affected System Upgrades; and (3) \$1.58/MWh if American Beech, Edgecombe, and all other AC1/AC2 cluster projects funded these DEP Affected System Upgrades. The LCOT figures for the second and third scenarios are within the range of benchmark LCOT values cited by Public Staff witness Lucas in his July 22, 2020 supplemental testimony, and the LCOT figure for the first scenario is higher but not unreasonable and not significantly higher than the LCOT for facilities for which the Commission has granted a CPCN in the past. See Order Issuing Certificate for Merchant Generating Facility, *Application of Edgecombe Solar LLC for a Certificate of Public Convenience and Necessity to Construct a 75-MW Solar Facility in Edgecombe County, North Carolina*, Docket No. EMP-101, Sub 0 (N.C.U.C. Nov. 13, 2020), where Commission issued a CPCN to Edgecombe based on a \$6.00/MWh LCOT for the same DEP Upgrade required for the American Beech Facility.

American Beech witness Stanton states that the final Affected System Upgrade cost LCOT calculation could be lower (\$1.05/MWh) if it included other interconnecting solar projects.

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.

Based on the history of the ASOA process regarding the PJM AC1 Cluster, the Commission is not persuaded that the issue regarding the DEP Affected System Upgrade costs to be borne by American Beech is resolved. Additionally, the Commission remains concerned that regardless of how many interconnecting solar projects are allocated a share of the Affected System Upgrade costs, DEP ratepayers will reimburse all of those costs (with interest) and will not receive any of the power supplied by these projects. As testified by American Beech witness Rubin, the Applicant has explored opportunities for offtake from the Facility, including responding to a DENC request for proposals as well as engaging in conversation with potential corporate buyers, and corporate purchases of energy and renewable energy credits from solar facilities in the southeast market of PJM are projected to increase over the next few years. Thus, while the record suggests this Facility is likely destined to serve the need of a corporate offtaker in the PJM region, the record provides little to no evidence of any specific benefit to DEP ratepayers from the transmission infrastructure for which they must pay so that the electricity may reach the

corporate buyer. Nonetheless, the Commission is persuaded by the testimony of the Public Staff that even if American Beech were to upfront fund the entirety of these costs, the LCOT for the Facility is not unreasonable and not significantly higher than the LCOT for facilities for which the Commission has granted a CPCN in the past. In view of the total cost of the Facility including the Network Upgrades and Attachment Facilities and the DEP Affected System Upgrade Costs, the Commission, although not without reservation, concludes 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 provisions of "reliable, efficient and economical service" in the region.

After having carefully considered and weighed the evidence presented in this proceeding and using a case-specific and flexible standard, the Commission concludes, though with some reservation as discussed above, that granting the CPCN for the Facility is in the public convenience and necessity. However, as recommended by the Public Staff, 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 any costs, including but not limited to, Network Upgrades, Attachment Facilities, and Affected System Upgrades.

IT IS, THEREFORE ORDERED as follows:

1. A CPCN is hereby granted to American Beech for the construction of a solar energy facility of up to 140 MW to be located in Halifax 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 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 before construction on the upgrades begins).

(iv) The Applicant shall file with the Commission in this docket any significant revisions in the cost estimates for the construction of the Facility itself, Attachment Facilities, Network Upgrades, or Affected System Upgrades, or any other significant change in costs, within 30 days of becoming aware of such revisions.

(v) If at any time the Applicant seeks reimbursement for any Attachment Facilities, Network Upgrade costs, Affected System Upgrade 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 31st day of January, 2023.

NORTH CAROLINA UTILITIES COMMISSION

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

A. Shonta Dunston, Chief Clerk