

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-2, SUB 1369

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of
Application of Duke Energy Progress, LLC,)
for a Certificate of Public Convenience and) ORDER GRANTING CERTIFICATE
Necessity to Construct a 67 MW Solar) OF PUBLIC CONVENIENCE AND
Photovoltaic Electric Generating Facility in) NECESSITY
Wayne County, North Carolina)

HEARD: Monday, October 13, 2025, at 1:30 p.m., Commission Hearing Room 2115,
Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE: Commissioner Floyd B. McKissick, Jr., Presiding; Chairman William M.
Brawley; and Commissioners Karen M. Kemerait, Tommy Tucker, and
Donald R. van der Vaart

APPEARANCES:

For Duke Energy Progress, LLC:

Jason A. Higginbotham, Duke Energy Corporation, 525 South Tryon Street,
Charlotte, North Carolina 28202

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Suite 115, Raleigh, North Carolina 27609

For the Using and Consuming Public:

Anne M. Keyworth and Nadia Luhr, Public Staff – North Carolina Utilities
Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699

BY THE COMMISSION: On January 16, 2025, Duke Energy Progress, LLC (DEP), filed an application for a certificate of public convenience and necessity (CPCN) pursuant to N.C. Gen. Stat. § 62-110.1 and Commission Rule R8-61 (Application). Specifically, the Application sought the Commission’s authorization to construct and complete a 67-megawatt (MW) solar photovoltaic (PV) electric generator, paired with a 25 MW, 100 megawatt-hours (MWh) battery energy storage system (BESS), in Wayne County, North Carolina (Facility). DEP proposed the Facility in connection with the Commission’s December 30, 2022 Order Adopting Initial Carbon Plan and Providing Direction for Future Planning, Docket No. E-100, Sub 179 (Initial Carbon Plan Order), and the Commission’s

November 1, 2024 Order Accepting Stipulation, Granting Partial Waiver of Commission Rule R8-60A(d)(4), and Providing Further Direction for Future Planning, Docket No. E-100, Sub 190 (CPIRP Order).

In support of its Application, DEP filed the direct testimony and exhibits of Justin LaRoche, Director of Renewables Development. Also, pursuant to Commission Rule R8-61(b)(1)–(4), DEP filed supporting exhibits, including Exhibit 1A – which incorporated the Initial Carbon Plan Order and the CPIRP Order by reference, Exhibit 1B (Statement of Need), Exhibit 2 (Siting and Permitting Information), Exhibit 3 (Equipment and Cost Information), and Exhibit 4 (Construction Schedule and Other Facility Information) some of which is confidential.

Contemporaneously with its Application, DEP filed a registration statement for a new clean energy facility. The registration statement included certified attestations that: (1) the Facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources; (2) the Facility will be operated as a new clean energy facility; (3) DEP will not remarket or otherwise resell any renewable energy certificates (RECs) sold to an electric power supplier to comply with N.C.G.S. § 62-133.8; and (4) DEP will consent to the auditing of its books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers.

PROCEDURAL HISTORY

On January 30, 2025, DEP filed public and confidential versions of corrected Exhibit 3.

On February 11, 2025, DEP filed a corrected Appendix 1 to Exhibit 2 and a supplement to Exhibit 5. The corrected Appendix 1 to Exhibit 2 included comments on the Preliminary Site Layout diagram which had been inadvertently omitted from the original filing. The supplement to Exhibit 5 corrected a formatting error on the Registration Statement for the Facility.

On March 21, 2025, the Commission issued an Order Scheduling Hearings, Establishing Procedural and Filing Requirements, and Requiring Public Notice (Scheduling Order), which, among other things, scheduled a public hearing for the purpose of receiving public witness testimony on DEP's Application for May 12, 2025, in Wayne County, subject to cancellation if no significant protests were received by May 5, 2025. The Commission required DEP to provide public notice of the Application in a newspaper having general circulation in Wayne County once a week for four successive weeks with the first publication being at least 30 days prior to the public witness hearing, and to file affidavits of publication on or before the date of the public witness hearing.

On March 27, 2025, DEP filed a corrected Exhibit 5, which corrected discrepancies and errors in the original Exhibit 5 as well as the supplement to Exhibit 5 filed on February 11, 2025.

On April 24, 2025, DEP filed a supplement to Exhibit 4 regarding the risk factors that DEP considered and evaluated in planning the Facility and confirming that the Facility will be designed and constructed to be capable of operating at the lowest temperature ever recorded in the area using information from the National Weather Service Automated Surface Observing System.

On May 8, 2025, DEP filed its Affidavit of Publication establishing that it had filed the public notice in the Goldsboro News-Argus, a newspaper having general circulation in Wayne County, on April 3, April 10, April 17, and April 24, 2025.

On May 9, 2025, the Commission issued an Order Canceling Public Witness Hearing because no significant protests were filed in the docket by the deadline established in the Scheduling Order.

On May 21, 2025, DEP filed a second corrected Exhibit 5, which incorporated corrections to Exhibit 5 filed on March 27, 2025, and included a fully executed verification page which had been inadvertently omitted from the March 27 filing.

On June 17, 2025, the North Carolina Department of Administration, through the State Clearinghouse, filed a letter in the docket stating that it had reviewed the environmental impact information for the proposed facility and that no further State Clearinghouse review was required.

On August 18, 2025, the Public Staff filed public and confidential versions of the direct testimony of witness Caleb A. Hill.

On September 4, 2025, DEP filed the rebuttal testimony of witness LaRoche.

On September 10, 2025, DEP and the Public Staff filed a Joint Motion to Excuse Witnesses, Cancel Expert Witness Hearing, and Admit Evidence.

On September 22, 2025, the Commission issued an Order Denying Joint Motion to Excuse Witnesses, Cancel Expert Witness Hearing, and Admit Evidence.

On October 13, 2025, the expert witness hearing was held as scheduled.

JURISDICTION

DEP is a public utility providing electric service to customers in its service area in North Carolina and is subject to the jurisdiction of the Commission.

The Commission has jurisdiction over DEP's Application. Pursuant to N.C.G.S. § 62110.1 and Commission Rule R8-61(b), a public utility must receive a CPCN before constructing an electric generating facility.

The Application is complete and consistent with the requirements of N.C.G.S. § 62-110.1 and Commission Rule R8-61(b).

STANDARD OF REVIEW

Evidentiary Proceedings

The Public Utilities Act, N.C.G.S. §§ 62-1 through -352, makes clear, “[f]or the purpose of conducting hearings, making decisions and issuing orders, and in formal investigations where a record is made of testimony under oath, the Commission shall be deemed to exercise functions judicial in nature” N.C.G.S. § 62-60. In conducting this proceeding, the Commission has acted in a judicial capacity by developing a record of evidence and making its decisions based on that record, consistent with its authority in N.C.G.S. § 62-60.

When acting in a judicial capacity, the Commission must apply the rules of evidence “in so far as practicable[.]” N.C.G.S. § 62-65(a). The Commission may in its discretion exclude incompetent, irrelevant, immaterial, and unduly repetitious or cumulative evidence. *Id.* Further, “[a]ll evidence, including records and documents in the possession of the Commission of which it desires to avail itself, shall be made a part of the record in the case by definite reference thereto at the hearing.” *Id.*

The Commission determines the appropriate weight it will give to the evidence of record and sources of which it has taken judicial notice. Ultimately, the Commission must base its decisions upon competent, material, and substantial evidence it derives through consideration of the whole record. *Id.*

CPIRP

Enacted in 2021, N.C.G.S. § 62-110.9 (Carbon Plan Statute) establishes a carbon dioxide emissions reduction mandate for certain electric generating facilities in North Carolina. Specifically, the Carbon Plan Statute requires the Commission to develop a plan (Carbon Plan, and as consolidated with integrated resource planning (IRP) activities pursuant to N.C.G.S. § 62-110.1(c), CPIRP) with DEP, Duke Energy Carolinas, LLC (DEC and together with DEP, Duke), and stakeholders to take all reasonable steps to achieve carbon dioxide neutrality by the year 2050. N.C.G.S. § 62-110.9. As originally enacted, and prior to its amendment by Session Law 2025-78, the Carbon Plan Statute also required the achievement of a 70% reduction in the emissions of carbon dioxide in the State from 2005 levels by 2030 (Interim Target), such date being subject to extension under certain specified circumstances. The CPIRP is reviewed biennially through a process established by Commission Rule R8-60A.

In regard to new solar resources, subsection (2)b of the Carbon Plan Statute requires that 55% of the total capacity (MW AC) of any new solar generation selected by the Commission as part of the Carbon Plan be supplied from solar energy facilities that are utility built- or purchased by the utility from third parties and owned and operated and

recovered on a cost-of-service basis by the soliciting electric public utility. N.C.G.S. § 62-110.9(2)b.

Consistent with the Carbon Plan Statute, the Commission's Initial Carbon Plan Order directed Duke, in pertinent part, to target the procurement of 2,350 MW of new solar during the 2023–2024 period. Initial Carbon Plan Order ¶¶ 19.

Duke submitted its proposed 2023–2024 CPIRP for Commission review in Docket No. E100, Sub 190. See Verified Petition For Approval of 2023–2024 Carbon Plan and Integrated Resource Plans of Duke Energy Carolinas, LLC, and Duke Energy Progress, LLC, *Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC, 2023 Biennial Carbon Plan and Integrated Resource Plans*, No. E-100, Sub 190 (Aug. 17, 2023); see also Verified Amended Petition For Approval of 2023–2024 Carbon Plan and Integrated Resource Plans, *Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC, 2023 Biennial Carbon Plan and Integrated Resource Plans*, No. E-100, Sub 190 (Jan. 31, 2024).

The Commission's CPIRP Order directed Duke to take reasonable steps to pursue the development and procurement of an additional 6,460 MW of solar and 1,225 MW of paired storage to be procured by 2031. 2024 CPRIP Order ¶¶ 19–22.

CPCN

No public utility shall begin the construction of an electric generating facility to be directly or indirectly used for the furnishing of public utility service without first obtaining from the Commission a certificate that public convenience and necessity requires, or will require, such construction. N.C.G.S. § 62-110.1(a). Commission Rule R8-61 establishes the application requirements for a CPCN. Rule R8-61(a)–(b). When acting upon any application for a CPCN, the Commission must consider the analysis of the long-range needs for expansion of electric generating facilities applicable to the applicant. N.C.G.S. § 62-110.1(c). In addition, the Commission must consider the applicant's arrangements with other electric utilities for the interchange of power, pooling of plant, purchase of power and other methods for providing reliable, efficient, and economical electric service. *Id.* at (d). As a condition for receiving a CPCN, the applicant must file an estimate of construction costs in such detail as the Commission may require, and the Commission cannot grant a CPCN application unless it 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. *Id.* at (e). Finally, the Commission may grant an application for a CPCN by certain electric public utilities, including DEP, only if the applicant demonstrates and the Commission finds the following: (1) that the proposed generating facility is part of the least cost path to achieve compliance with the authorized carbon reduction goal set forth in the Carbon Plan Statute; (2) that the proposed generating facility will maintain or improve upon the adequacy and reliability of the existing grid; (3) that the other resources listed in N.C.G.S. § 62-110.9(1) (power generation, transmission and distribution, grid modernization, storage, energy efficiency measures, demand-side management, and the latest technological

breakthroughs) would not establish or maintain a more cost-effective and reliable generation system consistent with the Carbon Plan Statute; and (4) that the construction and operation of the proposed generating facility is in the public interest. N.C.G.S. § 62-110.1(e). The North Carolina Supreme Court has instructed that

The doctrine of convenience and necessity has been the subject of much judicial consideration. No set rule can be used as a yardstick and applied to all cases alike. This doctrine is a relative or elastic theory rather than an abstract or absolute rule. The facts in each case must be separately considered and from those facts it must be determined whether or not public convenience and necessity require a given service to be performed or dispensed with The convenience and necessity required are those of the public and not of an individual or individuals.

State ex rel. N.C. Utils. Comm'n v. Casey, 245 N.C. 297, 302, 96 S.E.2d 8, 12 (1957) (internal citations omitted).

Based upon the Application, the testimony and exhibits received into evidence, and the entire record, the Commission makes the following

FINDINGS OF FACT

1. DEP proposes to construct and operate the Facility, consisting of an approximately 67 MW alternating current (AC), 87 MW direct current (DC), solar PV electric generator, paired with a 25 MW, 100 MWh BESS, including PV modules affixed to a single-axis racking system, solar inverters, electric protection and switching equipment, and step-up transformers, for the generation of electricity.

2. The Facility will be located on land secured by seven lease agreements in Wayne County, North Carolina. The site is comprised of approximately 866 acres between the cities of Goldsboro and Kinston. The Facility will interconnect to the existing Lee – Wommack 230 kV DEP transmission line.

3. DEP plans to begin the construction of the Facility in 2029 with an estimated in-service date of 2030.

4. The North Carolina Department of Administration, through the State Clearinghouse, stated that it reviewed the environmental impact information for the proposed facility and that no further State Clearinghouse review was required.

5. The proposed Facility was bid into Duke's 2023 competitive solar procurement (2023 Solar RFP) by Renewable Energy Services, LLC, to the utility ownership track (UOT) as an asset transfer proposal. The Facility was selected through a competitive solicitation process consistent with the Initial Carbon Plan Order.

6. Public Staff witness Hill testified that the Facility was selected in the 2023 Solar RFP as a cost-effective resource to fulfill the resource needs of the state, was

considered competitive against other UOT bids in the 2023 Solar RFP, and will support the goals and objectives of the Carbon Plan Statute.

7. DEP witness LaRoche testified that the Facility will contribute to meeting the energy needs of the DEP system.

8. Public Staff witness Hill testified that PJM Interconnection, LLC (PJM) has completed its affected system study for the Facility and determined that no affected system upgrades are required.

9. DEP witness LaRoche testified that the proposed Facility will contribute to the solar procurement goals of the Initial Carbon Plan Order and the 2024 CIPRP Order, which constitute DEP's near-term action plan representing the solar generation it must deploy to meet the carbon dioxide reduction target established in the Carbon Plan Statute, and will enable DEP to provide clean and reliable energy to customers.

10. DEP witness LaRoche and Public Staff witness Hill testified that there is a need for the Facility.

11. The Facility is part of the least cost path to achieve compliance with the authorized carbon reduction goals set forth in the Carbon Plan Statute; the Facility will maintain or improve upon the adequacy and reliability of the existing grid; and the construction and operation of the Proposed Facility is in the public interest.

12. As compared to the Facility, the other resources listed in N.C.G.S. § 62-110.9(1) (power generation, transmission and distribution, grid modernization, storage, energy efficiency measures, demand-side management, and the latest technological breakthroughs) would not establish or maintain a more cost-effective and reliable generation system consistent with the Carbon Plan Statute.

13. DEP provided an estimate of construction costs for the proposed Facility.

14. DEP's construction plan is designed to construct the proposed Facility on the timeline necessary to meet the planning need for new solar generation identified in the Initial Carbon Plan Order and the 2024 CIPRP Order.

15. Public Staff witness Hill testified that the costs of the proposed Facility will be treated as traditional rate base items and recovery will be based on the jurisdictional allocation factors requested by DEP in the rate case in which it seeks cost recovery.

16. The Public Staff recommended that the Commission grant the CPCN subject to the condition that DEP shall construct and operate the Facility in strict accordance with applicable laws and regulations, including any local zoning and environmental permitting requirements. The Public Staff also recommended that the Commission accept the registration of the Solar Facility as a new clean energy facility.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1–4

The evidence supporting these findings of fact is contained in the Application; the direct and rebuttal testimony of DEP witness LaRoche; the direct testimony of Public Staff witness Hill; and the entire record in this proceeding.

Witness LaRoche testified that the proposed Facility will consist of an approximately 67 MW AC solar PV electric generator with a paired 25 MW BESS, including PV modules affixed to a single axis racking system, solar inverters, electric protection and switching equipment, and step-up transformers. Tr. at 19. Additional equipment to support the Facility will include circuit breakers, combiners, surge attestors, conductors, disconnect switches, and cabling. *Id.*

The Facility will be located in Wayne County, North Carolina, on leased land comprising approximately 866 acres between the cities of Goldsboro and Kinston. Tr. at 43; Appl. Ex. X. DEP expects the Facility to produce approximately 131,631 MWh in the first year of operations, and that the Facility will have an expected service life of 35 years. Tr. at 43.

Witness LaRoche testified that DEP's Application provides all information required by the Commission's rules and that Exhibit 2 of the Application contains a complete list of all required federal, state, and local approvals, including siting and permitting approvals, the current status of each required approval, and confirmation that the Facility will be designed in accordance with State of North Carolina environmental requirements regarding materials. *Id.* at 24. Exhibit 2 also indicated that the Facility will interconnect with the existing Lee – Wommack 230 kV North DEP transmission line. Tr. at 29; Appl. Ex. 2.

Witness LaRoche testified that DEP anticipates beginning construction in 2029 and expects the Facility to be placed into service in 2030. Tr. at 25.

Public Staff witness Hill testified that the State Clearinghouse comments for the Facility indicated that no further action is required for compliance with the North Carolina Environmental Policy Act. *Id.* at 44. The Public Staff recommended that the Commission grant the CPCN with the condition that DEP construct and operate the Facility in strict compliance with applicable laws and regulations, including any local zoning and environmental permitting requirements. *Id.* at 49.

On rebuttal, DEP witness LaRoche stated that DEP accepts the Public Staff's recommended condition and testified that DEP plans to comply with all applicable statutes and regulations in its construction and operation of the Facility. *Id.* at 63.

Discussion and Conclusions

Based on the foregoing competent, material, and substantial evidence, the Commission concludes that DEP's Application is complete and consistent with the

requirements of the Public Utilities Act and Commission Rule R8-61. DEP included extensive supporting testimony and several exhibits with its Application, including: (1) Exhibit 1A supporting the need for the proposed Facility, which included the Initial Carbon Plan Order, the CPIRP itself along with its Supplemental Planning Analysis, and the CPRIP Order; (2) Exhibit 1B containing additional resource planning information supporting the need for the proposed Facility; (3) Exhibit 2 containing siting and permitting information; (4) Confidential Exhibit 3 containing cost information; and (5) Exhibit 4 containing construction information. These exhibits collectively provide the information that Rule R8-61(b) requires. The Commission is persuaded that the Application is thorough and contains the information the Commission requires to make its determinations.

In its Scheduling Order in this proceeding, the Commission ordered that its Chief Clerk deliver copies of the Application and the Public Notice to the Clearinghouse Coordinator of the Office of Policy and Planning of the Department of Administration for distribution by the Coordinator to State agencies having an interest in the Application. Scheduling Order at Ordering ¶ 9. As noted by the Public Staff, on June 17, 2025, the State Clearinghouse filed a letter in the docket indicating that the Application had been reviewed through the State Clearinghouse under the provisions of the North Carolina Environmental Policy Act and that no further action was required. Therefore, the Commission concludes that DEP has satisfied all State Clearinghouse requirements that must be satisfied before beginning construction of the Facility.

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

The evidence supporting these findings of fact is contained in DEP's Application; the direct testimony of DEP witness LaRoche; the direct testimony of Public Staff witness Hill; and the entire record in this proceeding.

Witness LaRoche testified that on January 27, 2023, Duke filed a motion requesting that the Commission open new dockets regarding Duke's 2023 Solar Procurement proposal and the future 2024 Solar Procurement proposal and allow Duke the option of proposing to conduct those procurement programs via a Resource Solicitation Cluster (RSC) instead of the 2023 Definitive Interconnection System Impact Study (DISIS). Tr. at 21. On February 1, 2023, the Commission issued an Order Initiating Proceeding and Requesting Comments in Docket Nos. E-2, Sub 1317 and E-7, Sub 1290 to consider Duke's anticipated Solar Procurement proposal. Appl. at 4. Witness LaRoche explained that on April 6, 2023, Duke filed the 2023 Solar RFP with the Commission based upon the final target volume of 1,435 MW of new solar resources with at least 300 MW located in DEP's and DEC's Balancing Authority Areas. Tr. at 21. The 2023 Solar RFP sought to procure solar and solar paired with storage facilities under two parallel tracks, the UOT and the power purchase agreement (PPA) track. *Id.* at 21–22. Witness LaRoche stated that the 2023 Solar RFP utilized a competitive solicitation process under Duke's solar program that was based on the RFP process established in Duke's 2022 Solar Procurement Program in Docket Nos. E-2, Sub 1297 and E-7, Sub 1268. *Id.* at 22. Duke retained Charles River Associates to serve as the Independent Evaluator (IE) for

the 2023 Solar RFP and monitor all aspects of the solicitation process from issuance to bid selection. *Id.*

The proposed Facility was bid into the 2023 Solar RFP to the UOT as an Asset Transfer proposal and was evaluated and selected through the competitive solicitation process. *Id.* at 23. Witness LaRoche stated that the 2023 Solar RFP complies with the Commission's directive in the Initial Carbon Plan Order to procure new solar generation. *Id.*

Public Staff witness Hill testified that the Public Staff was closely involved in the development and administration of the 2023 RFP and believes the competitive process procured cost-effective generation to meet growing load. *Id.* at 48. Public Staff witness Hill also testified that the general need for cost-effective solar resources was demonstrated through the Carbon Plan Order and the CPIRP Order, and that the need for the proposed Facility was demonstrated through the 2023 RFP competitive procurement process. *Id.* at 46.

Discussion and Conclusions

Based on the foregoing competent, material, and substantial evidence, the Commission concludes that the proposed Facility was competitively sourced to meet the needs identified in the Initial Carbon Plan Order and the CPIRP Order and is thus part of the least cost path to compliance with those orders and with the mandates of the Carbon Plan Statute.

The Commission notes that the 2023 Solar RFP was subject to the monitoring of the IE, who filed with the Commission its 2023 Solar and Solar Paired with Storage Procurement Post-Solicitation Report on July 31, 2024, in Docket Nos. E-2, Sub 1317 and E-7, Sub 1290, which identified projects that were selected through the competitive solicitation process, including the Facility. *Id.* at 23. The Commission finds persuasive the testimony from Public Staff witness Hill that selection of the Facility through the competitive RFP process demonstrates that the Facility is a cost competitive resource. *Id.* at 48.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 7–12

The evidence supporting these findings of fact is contained in DEP's Application; the direct testimony of DEP witness LaRoche; the direct testimony of Public Staff witness Hill; and the entire record in this proceeding.

DEP witness LaRoche testified to the need for the Facility, noting that the Facility will contribute to DEP's compliance with the carbon dioxide reduction targets established in the Carbon Plan Statute and will enable DEP to provide clean and reliable energy to customers. *Id.* at 20. As noted above, witness LaRoche testified that the Initial Carbon Plan Order established a 2023 solar resource procurement target volume of 1,435 MW, with at least 300 MW to be located in each (i.e., both DEP's and DEC's) balancing authority areas. *Id.* at 23. Witness LaRoche also noted that Duke's CPIRP includes

6,460 MW of solar and 1,225 MW of paired storage to be procured by 2031. *Id.* Witness LaRoche attested that the proposed Facility contributes to these solar procurement goals, which constitute DEP's near-term action plan representing the solar generation it must deploy to meet the carbon dioxide reduction targets established in the Carbon Plan Statute. *Id.* at 23–24.

DEP's Exhibit 1B stated that, while PV solar installations provide little to no capacity value at the time of DEP's winter peak, solar does add generation diversity to the system while providing valuable energy with zero fuel cost, and that solar paired with battery storage provides greater capacity value to the system at the time of winter peak. Appl. Ex. 1B. The Facility will have a service life of 35 years and will contribute to meeting the energy needs of the DEP system. *Id.* As previously stated, the Facility is projected to produce approximately 131,631 MWh in its first year of operation, which corresponds to an approximate 22.4% net capacity factor. *Id.*

Public Staff witness Hill confirmed the need for the Facility. Tr. at 46. Witness Hill also explained that he reviewed DEP's 2023 Resource Solicitation Cluster Phase 3 Report, which indicated the need for an affected system study for PJM for the Facility. *Id.* at 45. Witness Hill stated that the results of PJM's affected system study for the Facility indicate that no affected system upgrades are required. *Id.* at 45–46.

Discussion and Conclusions

Based on the foregoing competent, material, and substantial evidence, the Commission concludes that the Facility is in the public convenience and necessity. The Commission concludes that there is a need for the Facility as the Facility was selected during the 2023 Solar RFP and meets the Commission's directives in the Initial Carbon Plan Order and the 2024 CPIRP Order regarding procurement of new solar. The Commission finds persuasive evidence supporting the need for the Facility in Exhibit 1A to the Application, which includes the Initial Carbon Plan Order, Duke's CPIRP, and the 2024 CPIRP Order, and Exhibit 1B, which contains additional resource planning information. As noted by witness LaRoche, in the Initial Carbon Plan Order, the Commission recognized that solar resources will have a critical role in meeting the carbon dioxide emissions reductions mandates of the Carbon Plan Statute. *Id.* at 20. The Commission directed Duke in the Initial Carbon Plan Order to target 2,350 MW of solar and solar paired with storage to be procured over the 2023 and 2024 procurements including 600 MW of solar paired with storage. *Id.* at 23. Further, the Initial Carbon Plan Order established the 2023 Solar RFP with a final target volume of 1,435 MW with at least 300 MW located in DEP and DEC's balancing authority areas. *Id.* DEP's 2023 CPIRP filing included 6,460 of solar and 1,225 MW of paired storage to be procured by 2031, representing Duke's proposed near-term action plan for procuring the solar generation needed to meet the carbon dioxide reduction mandates established in the Carbon Plan Statute. Appl. Ex. 1B. The 2024 CPIRP Order reinforced the need for cost-effective solar resources and directed Duke to target the procurement of an additional 3,460 MW of new solar resources during the 2025 to 2026 timeframe. *Id.* When determining the need for this proposed Facility, the Commission gives substantial weight to the fact that the MW

capacity from the Facility will count towards the solar generation target of the Initial Carbon Plan Order and will diversify DEP's generation resources. *Id.*

The Commission finds that generation facilities, such as the Facility, are needed to reach the solar procurement targets directed by Commission in the Initial Carbon Plan Order and the CPIRP Order. By bidding the proposed Facility into the 2023 Solar RFP on the UOT, DEP is taking necessary steps to accomplish what the Commission has directed it to do. The Commission gives substantial weight to this context and to the fact that the Facility was selected as a cost-competitive resource when considering whether the proposed Facility will serve the public convenience and necessity.

The Commission further concludes that the Facility will contribute to meeting the energy needs of the DEP system. N.C.G.S. § 62-110.1 provides for the orderly expansion of electric generating capacity to create a reliable and economical power supply and to avoid the costly overbuilding of generation resources. See *State ex rel. Utils. Comm'n v. Empire Power Co.*, 112 N.C. App. 265, 278 (1993), *disc. rev. denied*, 335 N.C. 564 (1994); *State ex rel. Utils. Comm'n v. High Rock Lake Ass'n*, 37 N.C. App. 138, 141, *disc. rev. denied*, 295 N.C. 646 (1978). As noted in the Application, while PV solar installations provide little if any capacity value to the system at the time of a utility's winter peak, solar generation does add diversity to the system and provides valuable energy with no accompanying fuel cost, and the Facility, which is paired with battery storage, provides greater capacity value to the system at the time of DEP's system winter peak. Appl. Ex. 1B. The Commission finds persuasive Appendix 1 to DEP's Application, which is the Final Request for Proposal for 2023 Solar RFP, in which DEP explained that the 2023 Solar RFP Program was being implemented jointly by DEP and DEC on a system-wide basis and was targeting the procurement of solar facilities directly interconnected to the DEC or DEP transmission system in North Carolina or South Carolina to "reliably serve the Companies' customers' future energy needs." Appl. at 56.

The Commission notes that PJM has determined that no affected system upgrades are required for the Facility, which also supports a conclusion that the Facility will serve the public convenience and necessity. *Id.* at 45–46.

Pursuant to N.C.G.S. § 62-110.1(e), the Commission is required to condition approval of DEP's Application upon a finding that (1) that the proposed generating facility is part of the least cost path to achieve compliance with the authorized carbon reduction goal set forth in the Carbon Plan Statute; (2) that the proposed generating facility will maintain or improve upon the adequacy and reliability of the existing grid; (3) that the other resources listed in N.C.G.S. § 62-110.9(1) (power generation, transmission and distribution, grid modernization, storage, energy efficiency measures, demand-side management, and the latest technological breakthroughs) would not establish or maintain a more cost-effective and reliable generation system consistent with the Carbon Plan Statute; and (4) that the construction and operation of the proposed generating facility is in the public interest. N.C.G.S. § 62-110.1(e). The Commission concludes that all criteria have been met.

When evaluating an application for permission to construct a generating facility, the Commission must determine if the public convenience and necessity are best served by the generation option. The standard of public convenience and necessity is relative or elastic rather than abstract or absolute, and the facts of each case must be considered on their own merits. *State ex rel. Utils. Comm'n v. Casey*, 245 N.C. 297, 302 (1957). Subsections (c) through (f) of N.C.G.S. § 62-110.1 direct the Commission “to consider the present and future needs for power in the area, the extent, size, mix and location of the utility’s plants, arrangements for pooling or purchasing power, and the construction costs of the project before granting a [CPCN] for a new facility.” *High Rock Lake*, 37 N.C. App. at 140–41.

In reviewing and considering the Application, the Commission has considered these factors in considering whether the Facility will serve the public convenience and necessity. The Commission concludes that the Facility as proposed will serve the public convenience and necessity because it will serve the energy needs of DEP, the execution of the plan for these resources is a reasonable step to achieve the targeted reduction of carbon dioxide emissions, the Facility is consistent with the Initial Carbon Plan Order and CPIRP Order, and the timely completion of the Facility will provide benefits to ratepayers and play a significant role in developing solar capacity at levels consistent with the Carbon Plan goal. The Commission is aware that the General Assembly has amended the Carbon Plan statute to remove the interim target but notes that the Commission will take any impacts of that amendment under consideration in its next biannual CPIRP proceeding. In the context of this current CPCN proceeding, the Commission’s orders from the previous Carbon Plan and CPIRP proceedings remain in effect.

Also, the Commission has considered DEP’s analyses of its long-range needs for expansion of electric generating facilities, as set forth in the Initial Carbon Plan Order, the CPIRP as filed by Duke, and the CPIRP Order. The Commission concludes that the proposed Facility is consistent with those analyses, all of which, importantly, are developed to identify Duke’s least cost path to compliance with the Carbon Plan Statute. Further, as noted above, the Facility was bid into the 2023 Solar RFP and subject to a competitive process. The Commission therefore concludes that the proposed Facility is part of the least cost path to achieve compliance with the authorized carbon dioxide emissions reduction goal set forth in the Carbon Plan Statute and therefore meets the public convenience and necessity.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 13–15

The evidence supporting these findings of fact is contained in the Application; the testimony of DEP witness LaRoche; the direct testimony of Public Staff witness Hill; and the entire record in this proceeding.

The estimated cost to construct the proposed Facility is presented confidentially in Exhibit 3 to the Application. Appl. Ex. 3. The Application explained that the estimate includes Engineering, Procurement, and Construction, major equipment, labor, and associated permitting and development costs. *Id.*

Public Staff witness Hill also presented, confidentially, the cost estimate for the proposed Facility and the estimated annual operating expenses. Tr. at 44–45. Witness Hill noted that the costs of the proposed Facility will be treated as traditional rate base items and that recovery will be based on the jurisdictional allocation factors requested by DEP in the rate case in which it seeks cost recovery; the Public Staff will review the project expenditures for reasonableness and prudence when DEP requests cost recovery. *Id.* at 48–49.

Exhibit 4 to the Application included the construction schedule and other information about the proposed Facility. Appl. Ex. 4. The exhibit indicated that construction would be targeted to allow for completion of the project by 2030, assuming timely authorization to procure major equipment, timing of transmission interconnection facilities and network upgrades, and that necessary permits and approvals are obtained. *Id.* DEP witness LaRoche testified that DEP will conduct a competitive bid process for the major components and construction of the proposed Facility to ensure the lowest reasonable cost for customers. Tr. at 26.

Discussion and Conclusions

Based on the foregoing competent, material, and substantial evidence, the Commission concludes that DEP’s proposed construction cost estimate and anticipated operating costs for the facility are reasonable. The Commission notes that the Public Staff did not object to the proposed construction cost estimate or the anticipated operating costs in this proceeding but stated that it would review the project expenditures for reasonableness and prudence when DEP requests cost recovery. *Id.* at 48–49. The Commission makes clear that the issuance of this certificate does not obviate the need for DEP to demonstrate that the total project cost is both reasonable and prudent when it seeks cost recovery in a general rate case.

The Commission further notes that the statutory framework implies that the cost estimates presented in a CPCN application may change and provides for on-going oversight as well as future opportunity for challenge in a cost recovery proceeding. The Commission emphasizes that its approval of a CPCN does not constitute approval of the final construction costs and does not prejudice the right of any party to take issue with the treatment of the final costs for ratemaking purposes in a future proceeding. The Commission also notes that N.C.G.S. § 62-110.1(f) requires all utilities to file annual progress reports during construction, and the annual report must include any revisions to the estimated construction costs.

The Commission points out that DEP provided information regarding its proposed construction plans. Exhibit 4 to the Application indicated that DEP would target construction of the Facility to allow for completion of the project by 2030, assuming timely authorization to procure major equipment, timing of transmission interconnection facilities and network upgrades, and that necessary permits and approvals are obtained. Appl. Ex. 4. The Commission concludes that this is a reasonable timeframe that will further Duke’s compliance with the Carbon Plan Order and CPIRP Order, and with the applicable Carbon Plan Statute mandate for carbon dioxide emissions reductions.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 16

The evidence supporting this finding of fact is contained in the registration statement filed by DEP as Exhibit 5 to its Application and the testimony of Public Staff witness Hill and is uncontroverted. Public Staff witness Hill recommended that the Commission accept the registration of the Solar Facility as a new clean energy facility. Tr. at 49.

DEP's registration statement, filed in conformity with Commission Rule R8-66, contains all required information under the rule, including: (1) contact information for an agent of the registrant; (2) location of the proposed facility; (3) the nature of the clean energy facility (solar); (4) the nameplate capacity; (5) information about site ownership and DEP's legal interest in the site; (6) necessary federal and state licenses, permits, and exemptions; (7) anticipated in-service date; and (8) information about tracking of Renewable Energy Credits (RECs). The registration statement also included the required attestations, signed and notarized, that: (1) the Facility is in compliance with federal and state laws, regulations, and rules for the protection of the environment and the conservation of natural resources; (2) the Facility satisfies the requirements of N.C.G.S. § 133.8(a)(5) or (7) as a new clean energy facility and will be operated as a new clean energy facility; (3) that DEP is not under contract with NC GreenPower to sell its RECs emanating from the same electricity production being tracked in the North Carolina Renewable Energy Tracking System (NC-RETS) and any RECs sold to an electric power supplier to comply with N.C.G.S. § 63-133.8 will not be remarketed or resold for any other purpose; and (4) that the Public Staff may audit DEP's books and records insofar as they relate to transactions with North Carolina electric power suppliers. Appl. Ex. 5.

Discussion & Conclusion

Based on the foregoing competent, material, and substantial evidence, the Commission concludes that DEP's Registration Statement as a new clean energy facility is complete and consistent with the requirements of Commission Rule R8-66 and is therefore accepted. The Commission notes that DEP's Registration Statement included the information required by the rule and was consistent with numerous other Registration Statements filed by utilities and accepted by the Commission in the past. The Commission further gives substantial weight to the fact that the Public Staff recommended acceptance of the registration of the proposed Facility as a new clean energy facility. The Commission notes that Commission Rule R8-66 has been revised to comport with statutory changes, and that the term "new renewable energy facility" has been replaced with "new clean energy facility." The Commission will therefore refer to this Facility as a "new clean energy facility" in the ordering paragraphs below.

Given the Commission's determinations, discussed in this Order, that there is a resource need in DEP, that the proposed Facility is consistent with the Initial Carbon Plan Order, the CPIRP filing, and the CPIRP Order, that the proposed Facility will enable the reliable operation of DEP's system, that the estimated construction costs and operating costs are reasonable, the Commission concludes that the that construction of the

proposed Facility is required by the public convenience and necessity and that a CPCN for the proposed Facility will serve the public interest and should be, and hereby is, issued.

The Commission notes that the Public Staff recommends that the Commission approve the Application subject to DEP constructing and operating the Facility in compliance with all applicable laws and regulations, including local zoning and environmental permitting requirements. Tr. at 49. The Commission finds the Public Staff's recommended condition to be reasonable and appropriate and therefore approves the Application and issues the CPCN subject to this condition.

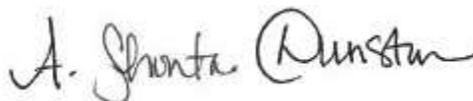
IT IS, THEREFORE, ORDERED as follows:

1. That the Application is approved and a CPCN for the proposed Facility is granted;
2. That DEP shall construct and operate the Facility in strict accordance with applicable laws and regulations including any local zoning and environmental permitting requirements;
3. That, in accordance with Commission Rule R8-61(c), DEP shall file an annual progress report describing any revisions in the cost estimate to construct the Facility with the first report due no later than one year from the issuance of this Order;
4. That the registration statement for the Facility as a new clean energy facility is accepted;
5. That DEP shall complete the annual certification as required by Commission Rule R8-66(b)(9) on or before April 1 of each year; and
6. That Appendix A shall constitute the CPCN issued to DEP for the Facility.

ISSUED BY ORDER OF THE COMMISSION.

This the 11th day of December 2025.

NORTH CAROLINA UTILITIES COMMISSION



A. Shonta Duston, Chief Clerk

Commissioner Donald van der Vaart dissents.

DOCKET NO. E-2, Sub 1369

Commissioner Donald van der Vaart, dissenting:

I respectfully dissent from the Commission's Order granting Duke Energy Progress, LLC's (DEP) application for a certificate of public convenience and Necessity (CPCN) to construct the Deerwood Solar Center, a 67 MW solar photovoltaic facility paired with a 25 MW/100 MWh battery energy storage system (BESS), in Wayne County, North Carolina (Application).

The majority once again approves of a solar-generating facility without performing the legally required analysis of whether the resource, as actually deployed on the grid, is the least-cost means of providing reliable electricity under N.C. Gen. Stat. § 62-110.1. The statutory directive could not be clearer: the Commission must determine — not infer, not assume, not defer — that a facility is both least cost and able to meet system reliability needs before authorizing construction. The record in this docket does not allow such a determination.

As I have articulated in prior dissents — most notably in my dissent in Docket No. E-2, Subs 1367–68368; and E-7, Sub 1324, order issued September 15, 2025, and my dissent in Docket No. E-2, Sub 1355, order issued October 15, 2025 — the Commission continues to approve intermittent renewable energy projects without adequately accounting for their full costs to ratepayers. I incorporate by reference the analysis and reasoning set forth in those prior dissents, particularly at pages 23–25 of the multi-docket order and pages 14–16 of the Sub 1355 order, where I detailed the statutory mandate under N.C.G.S. § 62-110.1 that any CPCN must ensure the proposed facility represents the least-cost form of reliable energy. The evidence in this docket, including DEP's Application, the testimony of Justin LaRoche, the Public Staff's evaluation by Caleb A. Hill, and the hearing transcript, once again fails to demonstrate compliance with this requirement.

DEP presented only the stand-alone costs of the Deerwood Solar Center's panels, racking, inverters, and batteries. These figures tell us what the plant costs when the sun is shining and the batteries are charged. They do not tell us what it costs to ensure power is available the other 79% of the time, when this facility contributes nothing to the grid. A generating resource that performs part-time cannot be evaluated against full-time sources based on part-time costs.

This is not an interpretive dispute. It is a matter of record. In Docket No. E-2, Sub 1355, DEP admitted under oath that when it presents cost data for standalone solar projects, "you're only going to cost the standalone solar facility," and that "no firming or regulating reserves are included in the cost." That admission renders the cost record in this docket facially incomplete.

In the same docket, DEP further acknowledged that solar is intermittent and requires firming resources to maintain reliability, including substantial regulating reserves to replace the loss of solar generation at sunset, during periods of cloud cover and at night. DEP even identified the combustion turbine as the reliability proxy for this firming

capacity. The Commission is left to speculate whether the combustion turbine that is already required to backup solar generation could, for example, deliver reliable power for less money without the added costs of this solar plant.

To summarize, DEP admits solar requires firming and DEP admits its cost submissions exclude firming. Both cannot be true in a lawful CPCN proceeding.

Again, what is needed is as follows:

1. The costs of firming resources necessary to provide reliable power when the solar facility does not generate electricity, such as during non-daylight hours, cloudy conditions, or periods of low solar irradiance. The 100 MWh battery provides limited duration support (approximately four hours at full capacity), leaving significant gaps that must be filled by dispatchable resources like natural gas plants or other backups. These firming costs, which could include additional generation capacity or energy imports, are borne by ratepayers but are not reflected in the project's evaluation.

2. Enhanced operations and maintenance (O&M) costs for dispatchable resources that must ramp up and down more frequently to compensate for the intermittency of solar output. This cycling imposes wear and tear on existing thermal plants thereby increasing maintenance expenses, reducing efficiency, and shortening equipment lifespans — costs that are externalized from the solar project's direct accounting but ultimately passed on to consumers.

3. The costs of specialized grid equipment required to accommodate the integration of this intermittent resource, including upgrades to transmission and distribution infrastructure for voltage regulation, frequency control, and grid stability. As solar penetration increases, these ancillary investments become essential, yet they are absent from the cost-benefit analysis presented here.

Furthermore, the project's costs and economic evaluations are explicitly tied to a 35-year operational life for the facility thereby reducing the stated cost to ratepayers. However, there is no accounting for battery replacement (or even capacity augmentation to address degradation) in the estimated facility costs. Lithium-ion batteries like those in the 25 MW/100 MWh BESS typically have a useful life of 10–15 years before significant degradation or replacement is needed, meaning at least two full replacements would likely be required over 35 years to maintain performance. Two replacements could easily add tens of millions of dollars to the cost of the project. Omitting these substantial future costs the presented cost-benefit analysis understates the long-term economic impact on ratepayers. This incomplete picture hinders the Commission's ability to make a fully informed determination that the Deerwood Solar Center is truly the least-cost option, potentially leading to approvals that do not align with the statutory emphasis on affordability and reliability over the facility's full lifespan.

The Public Staff's testimony acknowledges a "need for solar generation and battery resources in the DEP system" and notes the project's selection through a

Commission-accepted competitive RFP process. However, this falls short of the rigorous least-cost analysis demanded by statute. The Public Staff, tasked with representing the interests of the public, has failed in its duty to scrutinize DEP's application and demand the comprehensive cost data necessary for the Commission to fulfill its gatekeeping role.

The majority recites procurement processes, planning instruments, and generic policy goals as though they satisfy the statutory least-cost test. They do not. The Commission's duty is not to congratulate a utility for participating in an RFP or planning exercise; it is to determine, on evidence, that the resource being approved is the least-cost method of providing reliable service. That determination cannot be made when entire categories of acknowledged and required costs — firming, battery replacement, grid integration, cycling — are omitted.

Requiring a full accounting of system-wide costs in CPCN proceedings will not transform a CPCN proceeding into a mini-rate case or IRP update. Instead, such analysis simply comports with the plain language of N.C. G. S. § 62-110.1 which explicitly ties the issuance of a CPCN to public convenience and necessity, inherently including considerations of cost-effectiveness and reliability for the entire system, not just isolated project expenses. Had DEP and the Public Staff provided the information the law requires, following the law would not hamper the Commission's work at all. On the contrary, deferring these critical evaluations to future rate cases or IRPs abdicates our gatekeeping role, allowing potentially uneconomic projects to proceed and saddle ratepayers with irreversible costs. If the statute demands least-cost reliable energy, we cannot fulfill our duty by ignoring evidence of incomplete cost assessments; doing so turns the CPCN process into a rubber stamp rather than a substantive safeguard.

Ratepayers deserve a transparent accounting that ensures affordability and grid reliability, not approvals based on incomplete evaluations.

Until the applicant provides:

- the cost of firming resources required to make this facility operationally viable,
- the cost of increased cycling and O&M burden imposed on dispatchable units,
- the cost of battery replacement or repowering over the life of the resource, and
- the cost of grid modifications made necessary by intermittent generation.

This facility is not a resource, and I cannot find that it is the least-cost means of providing reliable electric service. For these reasons, consistent with my prior positions, I dissent from the granting of the CPCN.

/s/ Donald van der Vaart
Commissioner Donald van der Vaart

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-2, SUB 1369

Duke Energy Progress, LLC
410 S. Wilmington Street, NCRH 20
Raleigh, North Carolina 2760

is hereby issued this

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY PURSUANT TO
N.C.G.S. § 62-110.1

For a 67 MW solar photovoltaic electric generating facility paired with a 25.0 MW battery
energy storage system

located

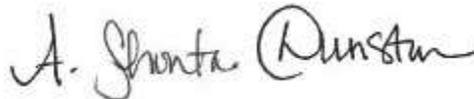
along Piney Grove Church Road near the intersection of Sutton Road SE, in Walnut
Creek, Wayne County, North Carolina

subject to receipt of all federal and state permits 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 11th day of December, 2025.

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