NORTH CAROLINA
PUBLIC STAFF
UTILITIES COMMISSION

May 20, 2024

Ms. A. Shonta Dunston, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

Re: Docket No. E-100, Sub 194 – Biennial Determination of Avoided Cost Rates for Electric Utility Purchases from Qualifying Facilities – 2023

Dear Ms. Dunston:

Attached for filing on behalf of the Public Staff, for consideration and adoption by the Commission, is the Separate Proposed Order of the Public Staff as to Dominion Energy North Carolina's (DENC) proposed avoided cost rates in the above-referenced docket. Contemporaneously with this filing, DENC is filing joint findings, evidence, and conclusions on the topics where DENC and the Public Staff do not have issues in dispute. The Public Staff's Separate Proposed Order addresses its individual position on the single issue that remains unresolved between DENC and the Public Staff in this proceeding.

By copy of this letter, we are forwarding a copy of this Separate Proposed Order to all parties of record by electronic delivery.

Sincerely,

Electronically submitted
/s/ Thomas J. Felling
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/s/ Anne M. Keyworth
anne.keyworth@psncuc.nc.gov

cc: Parties of Record

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STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-100, SUB 194

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Biennial Determination of Avoided Cost	)	**THE PUBLIC STAFF'S**
Rates for Electric Utility Purchases from	)	**SEPARATE PROPOSED**
Qualifying Facilities – 2023	)	**ORDER**

ADDITIONAL FINDINGS OF FACT

9. It is appropriate for DENC to recalculate its avoided energy rates proposed for Schedule 19-FP in this proceeding using IRP expansion plan E production cost models in place of expansion plan B.

10. DENC should use its expansion plan E production cost models for calculations used to determine costs incurred to integrate intermittent, non-dispatchable QFs in its service territory (re-dispatch charge or RDC).

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 9–10

The evidence supporting these findings of fact is found in DENC's Initial Statements, the Initial Statement of the Public Staff, DENC's Reply Comments, and the entire record herein.

Summary of the Comments

In its Initial Statement, DENC states that, in keeping with the 2021 Avoided Cost docket, DENC is filing two standard avoided cost rate schedules – Schedule 19-FP and Schedule 19-LMP. The methodology for DENC's calculation of total avoided energy rate cost reflected in Schedule 19-FP is based on the sum of four components: PLEXOS derived avoided energy rates, Locational Energy Value Impact, Fuel Hedging Benefit, and Re-dispatch costs. Of the four components used to determine DENC's total avoided energy rate costs, two components include analysis based on the selection of a generation expansion plan from DENC's most recent IRP. Those components are the PLEXOS derived avoided energy rates and the Re-dispatch costs. DENC's Initial Statement, pp. 2-4.

The Company stated that the starting point for the total avoided energy rate cost analysis is the PLEXOS base case, which includes the generation expansion plan B (Plan B) from the Company's most recent IRP filed on May 1, 2023, in Docket No. E-100, Sub 192. Regarding the Re-dispatch costs component, DENC explained that, as in the 2021 IRP Update, DENC took a chronological approach to modeling the re-dispatch cost by utilizing one build plan from its IRP and studying select years chosen based on when resources were introduced or retired in the build plan (Plan B for the 2023 IRP). DENC's Initial Statement, p. 12.

Concerning the RDC, DENC explains in its Initial Statement that in the Sub 158 Avoided Cost Case, it proposed to adjust avoided energy cost payments to intermittent non-dispatchable QFs to reflect the increase in system supply costs—specifically, re-dispatch costs—caused by these generators, and that the

Commission approved the proposed RDC, modified pursuant to DENC's agreement with the Public Staff, to be $0.78/MWh. In the Sub 167 Avoided Cost Case, the Commission approved DENC's proposal to continue to apply the $0.78/MWh RDC that was approved in the Sub 158 Order for purposes of Schedule 19-FP. In the Sub 175 proceeding, DENC updated its proposed RDC, which the Commission approved in the Sub 175 Order, finding the updated methodology to be an improvement from the one used previously. DENC Initial Statement, p. 12.

For this proceeding, DENC proposes an update to the RDC to accurately reflect its costs of the integration of intermittent, non-dispatchable QFs on its system using the same methodology that DENC used and the Commission approved in the Sub 175 proceeding. DENC states that as was the case in the Sub 175 proceeding, for the 2023 IRP, DENC took a chronological approach to modeling the re-dispatch cost, by utilizing one build plan from the 2023 IRP (Alternative Plan B) and studying select years chosen based on when resources were introduced or retired in the 2023 IRP Alternative Plan B build plan. For each simulation year, DENC performed a base case Aurora simulation by using the base hourly renewable generation profiles to establish the base case commitment decisions. Using these commitment decisions, the Company performed an additional 200 simulations but applied different hourly renewable profiles from NREL's historical weather patterns studies to reoptimize the system cost. For the 2023 re-dispatch analysis, the Company added onshore wind stochastics to the model and, because impacts to the DOM Zone were de minimis, discontinued modeling ISO New England and the New York ISO. DENC states that the total system cost for each simulation was compared to the base case system cost of the same year. This delta of the system cost is composed of the respective differences in fuel, variable operation and maintenance costs, emissions, and purchase/sale of energy and power costs. The re-dispatch cost is the delta of the system cost divided by DENC's expected total renewable generation. Based on these results, DENC constructed a generation re-dispatch cost curve for the entire Study Period reflected in the 2023 IRP. DENC calculated the average RDC for the ten years 2024-2033 to be $3.65/MWh and proposes to use this value to adjust the avoided energy cost payments made to intermittent non-dispatchable QFs under Schedule 19-FP. DENC Initial Statement, p. 12-14.

In its Initial Statement, the Public Staff notes that DENC does not have any requirements under House Bill 951 (Session Law 2021-165), but that the Commonwealth of Virginia promulgated its Virginia Clean Economy Act (VCEA) in 2020, which generally requires electric utilities to retire electric generating units located in Virginia that emit carbon to generate electricity, and to enter into agreements to purchase generating capacity located in Virginia derived from sunlight or onshore wind. The Public Staff stated that Plan B is a least-cost plan that only partially complies with the VCEA. In contrast, the Public Staff notes that expansion plan E (Plan E) from DENC's 2023 IRP is the least-cost plan that complies with the VCEA. The Public Staff notes that it recommended that the Commission not approve any of the DENC IRP plans but recommended that the Commission find DENC's short-term action plan reasonable for planning purposes.

Based on this prior recommendation, the Public Staff contends that Plan E is appropriate for use in calculating DENC's avoided energy rates in this proceeding and that DENC should recalculate its avoided energy costs utilizing Plan E. In response to DENC's proposed avoided energy rates contained in Schedule 19-FP, the Public Staff noted that it reviewed DENC's PLEXOS inputs and believes they are reasonable for the determination of DENC's avoided energy costs. Public Staff Initial Statement, pp. 9-10.

Although the Public Staff takes issue with the input data utilized by DENC in its RDC calculation, the Public Staff acknowledges that the calculation method applied by DENC in its RDC calculation is reasonable for use in this proceeding. Public Staff Initial Statement, p. 45.

In its Reply Comments, DENC notes that it continues to support expansion Plan B as the basis for calculating avoided energy rates proposed for Schedule 19-FP and that it would not be appropriate to base the rates on Alternative Plan E for several reasons. DENC states that it provided Plans B and D to show two alternatives to satisfying customer demand while also meeting the development targets of the VCEA - specifically, the targets for solar and storage resources and offshore wind, 970 MW of natural gas peaking capacity by 2028 for reliability purposes, and an additional 2,600 MW of offshore wind by 2032. DENC notes that the remaining resources for each plan are selected on a least-cost optimized basis. DENC also notes that Plan B allows PLEXOS to select unit retirement on a least-cost optimized basis, and that the model did not retire any generating units.

Further, DENC states that it developed Plans C and E to comply with the stipulation approved in the 2021 proceeding before the State Corporation Commission of Virginia concerning the Company's proposed Virginia Renewable Energy Portfolio Standard development plan. Consistent with this stipulation, Plans C and E least-cost optimize annual additions of resources to meet the Company's needs without regard to the development targets set forth in the VCEA. DENC speculated that one reason why the Public Staff may believe that Plan B "only partially" complies with the VCEA is thermal generators not being retired under Plan B. However, DENC states that the VCEA allows a utility to keep thermal generators online if their retirement would threaten reliability of electric service, which it contends represents a plausible VCEA compliant pathway. DENC contends that Plan B is VCEA compliant and does not differ from Plan E on thermal resource retirement over the 2024-2033 period used to determine avoided cost rates in this proceeding. DENC Reply Comments, pp. 4-6.

Other than the Public Staff, no other party to this proceeding commented on DENC's proposal to use Plan B for the purposes of calculating avoided energy rates.

Discussion and Conclusions

Based upon the foregoing and the entire record herein, the Commission concludes that the use of Plan E is appropriate to calculate DENC's energy rates for purposes of this proceeding. The Commission notes that Plan B relies on preserving existing generation, adding more carbon-emitting and carbon-free generation, and does not rely heavily on imported power. Unlike Plan B, Plan E eliminates all carbon-emitting generation by December 31, 2045, as required by the VCEA, with any remaining combustion turbines using hydrogen by that date.

The Company's compliance with the VCEA is not optional. Recognizing that 2045 reliability concerns that are currently speculative in nature may turn into future realities, the Commission is not convinced at this time that DENC's proposal to use Plan B for the calculation of avoided energy rates in this docket is compliant with the intent of the VCEA. The VCEA gives DENC the ability to request relief from the requirement to be 100% renewable by 2045 on the basis that the requirement would threaten the reliability or security of electric service to customers, *see* Va. Code § 56-585.5(B)(3), but – absent a determination from an IRP proceeding in this state or in Virginia that reliability will be threatened – the Commission cannot allow DENC to rely on this exception over 20 years in advance absent a robust showing that reliability is in fact threatened. DENC has not argued that its existing gas and coal plants will be required to remain in service for the purpose of maintaining reliability beyond the time periods established by the VCEA. Therefore, at this time and on this record, the Commission concludes that Plan E is most likely to meet the requirements and the intent of the VCEA and must be used to determine DENC's avoided cost rates, and that DENC should re-calculate its RDC accordingly.

IT IS, THEREFORE, ORDERED as follows:

1. That DENC's avoided energy rates are approved in this proceeding for Schedule 19-FP shall utilize DENC's IRP Plan E production cost models; and

2. That DENC's RDC for Schedule 19-FP in this proceeding shall utilize DENC's IRP Plan E production cost models.

ISSUED BY ORDER OF THE COMMISSION.

This the ____ day of ____, 2024.

NORTH CAROLINA UTILITIES COMMISSION

A. Shonta Dunston, Chief Clerk

CERTIFICATE OF SERVICE

I certify that a copy of this Separate Proposed Order has been served on all parties of record or their attorneys, or both, by United States mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 20th day of May, 2024.

<u>Electronically submitted</u>
/s/ Thomas J. Felling