

March 27, 2024

VIA ELECTRONIC FILING

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

Dear Ms. Dunston:

*Re: Reply Comments of Dominion Energy North Carolina
Docket No. E-100, Sub 194*

Dear Ms. Dunston:

On behalf of Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (the "Company"), enclosed for filing in the above-referenced proceeding is the Company's Reply Comments.

Thank you for your assistance with this matter. Feel free to contact me should you have any questions.

Very truly yours,

/s/Nick A. Dantonio

NAD/sbc
Enclosure

Cc: Lauren W. Biskie
Robert Josey
Anne Keysworth
Thomas Felling

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-100, SUB 194

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	REPLY COMMENTS OF DOMINION ENERGY NORTH CAROLINA
Biennial Determination of Avoided)	
Cost Rates for Electric Utility Purchases)	
from Qualifying Facilities – 2023)	

NOW COMES Virginia Electric and Power Company d/b/a Dominion Energy North Carolina (“DENC” or the “Company”) and, pursuant to the North Carolina Utilities Commission’s (“Commission”) February 6, 2024, *Order Granting Motion for Extension of Time to File Comments* issued in the above captioned docket submits these Reply Comments in response to the Initial Statement of the Public Staff, the Initial Comments of the Carolinas Clean Energy Business Alliance (“CCEBA”), and the Comments of the Attorney General’s Office (“AGO”) filed in this proceeding on February 21, 2024.

I. INTRODUCTION

With its Initial Statement and Exhibits submitted on November 1, 2023, in this proceeding (“Initial Statement”), DENC proposed updated avoided energy and capacity rates under its standard offer rate schedules, Schedule 19-FP and Schedule 19-LMP.

II. REPLY COMMENTS

A. The Public Staff agreed with or did not oppose the majority of the elements of the Company’s Initial Statement, and no other party took specific issue with DENC’s proposed avoided cost rates or terms.

As an initial matter, the Company notes that the Public Staff agrees with or does not oppose the majority of the elements of the Company’s Initial Statement. The Public

Staff agreed with the Company’s statement of its first year of undesignated capacity need,¹ combustion turbine (“CT”) cost calculation,² capacity rates,³ capacity credits for swine, poultry, and certain hydro qualifying facilities (“QFs”),⁴ continued elimination of the line loss adder,⁵ re-dispatch charge (“RDC”),⁶ RDC avoidance protocol,⁷ performance adjustment factor (“PAF”),⁸ and locational marginal price (“LMP”) adjustment.⁹

No other party to the proceeding took issue with the Company’s proposed energy and capacity rates, or any other portion of the Company’s Initial Statement, with the exception of the CCEBA comments regarding the consideration by the Company, Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC (“Duke Utilities” and together with the Company, the “Utilities”) of alternatives to the peaker method. The remainder of these reply comments address the Public Staff’s recommendation regarding the basis for the Company’s proposed avoided energy rates for Schedule 19-FP, CCEBA’s comments regarding the consideration of peaker method alternatives, and the AGO’s comments regarding the use of carbon pricing in avoided cost rates.

¹ Public Staff Initial Statement at 21.

² *Id.* at 22-23. The Public Staff’s comments with respect to the calculation of avoided capacity costs for purposes of future biennial avoided cost proceedings are addressed in Section C, below.

³ *Id.* at 30.

⁴ *Id.* at 33.

⁵ *Id.* at 42.

⁶ *Id.* at 45.

⁷ *Id.*

⁸ *Id.* at 46.

⁹ *Id.* at 48.

B. DENC’s Alternative Plan B is the most appropriate basis for calculation of avoided energy rates for Schedule 19-FP in this proceeding.

The Public Staff notes that DENC calculated avoided energy rates based on Alternative Plan B¹⁰ from its 2023 Integrated Resource Plan (“2023 Plan” or “2023 IRP”) filed on May 1, 2023, in Docket No. E-100, Sub 192. The Public Staff stated that “Plan B is a least-cost plan that only partially complies with the VCEA. Expansion Plan E is the least-cost plan that complies with the VCEA.”¹¹ It also clarified that while it did not recommend approval of the plans in the IRP case, it did “recommend that the Commission find DENC’s short-term action plan reasonable for planning purposes and these avoided cost rates are based on the energy and capacity needs of the utility over the next ten years”¹² and “therefore, the Public Staff believes that Plan E is appropriate for use in calculating its avoided energy rates in this proceeding.”¹³

The Public Staff also stated that while “the inputs into the model and the output data from the model are consistent with DENC’s 2023 IRP and are reasonable for the determination of DENC’s avoided energy costs,” “the Public Staff believes DENC should recalculate its avoided energy costs utilizing expansion plan “E” from its 2023 IRP, which is more consistent with Virginia law.”¹⁴ Finally, the Public Staff agreed with the Company’s “method for calculating avoided cost energy rates,” but again

¹⁰ The Company uses the term “Alternative Plan” in these reply comments, rather than “Expansion Plan” as termed by the Public Staff, for consistency with the terminology utilized in the 2023 IRP for each of the five scenarios (Alternative Plans A through E) for resource build-out and retirements over the next 25 years.

¹¹ Public Staff Initial Statement at 9.

¹² The (same) short-term action plan covers the next five years (*i.e.*, 2024 through 2029) and is incorporated in each of the Alternative Plans.

¹³ Public Staff Initial Statement. at 10, 51 (Recommendation 2).

¹⁴ *Id.* at 42.

recommended “that DENC use the results of its IRP Expansion Plan E as the cost basis for the rates.”¹⁵

The Company continues to support Alternative Plan B as the basis for calculating avoided energy rates proposed for Schedule 19-FP in this biennial proceeding. It would not be appropriate to base the rates on Alternative Plan E for several reasons as discussed further below.

For context, it is important to reiterate that each of the Alternative Plans included in the 2023 Plan was created with a specific objective in mind, whereas the full array of the Alternative Plans encompasses the Company’s outlook on the range of future scenarios at the time of the 2023 Plan’s filing.

The Company provided Alternative Plans B and D to show two alternatives to satisfying customer demand while also meeting the development targets of the Virginia Clean Energy Act of 2020 (“VCEA”).¹⁶ Specifically, the VCEA development targets for solar and storage resources and offshore wind are included in the PLEXOS model for both Plans B and D in order to ensure compliance with those requirements. Both Plans B and D include 970 MW of natural gas peaking capacity generation by 2028 for reliability reasons, and an additional 2,600 MW of offshore wind by 2032, consistent with the VCEA. The remaining resources for each plan are selected on a least-cost optimized basis. The difference between Plans B and D is the modeling of unit retirements. Plan B allows the PLEXOS model to select unit retirement years on a least-cost optimized basis, and the model did not retire any generating units, whereas in Plan D, unit retirement years are determined by the Company to retire all carbon-emitting units between 2039

¹⁵ *Id.* at 44.

¹⁶ Code of Virginia § 56-595.5 *et seq.*

and 2045, consistent with the target 2045 date set forth in the VCEA. For the 10-year avoided cost period, Plan B and Plan D have the same build out and retirement projects.

The Company developed Plans C and E to comply with the stipulation approved in the 2021 proceeding before the State Corporation Commission of Virginia (“VSCC”) concerning the Company’s proposed Virginia Renewable Energy Portfolio Standard (“RPS”) development plan.¹⁷ Consistent with that stipulation, as relevant here, Plans C and E least-cost optimize annual additions of new resources to meet the Company’s need for capacity, energy, and RECs based on the PJM Load Forecast, *without regard to the development targets* set forth in the VCEA. Plan C unit retirement dates match those of Plan B, and Plan E unit retirement dates match those of Plan D. In summary, Plans C and E are timing- and cost-optimized versions of Plans B and D, respectively.

These specific purposes and parameters are summarized in Table 1, below.

Table 1

	Plan A	Plan B	Plan C	Plan D	Plan E
Required by the VSCC	Yes	No	No	No	No
Load Forecast	PJM	PJM	PJM	PJM	PJM
Energy Efficiency	Least-cost	VCEA Compliant	VCEA Compliant	VCEA Compliant	VCEA Compliant
Unit Selection	Least-cost optimization	VCEA development targets, then least-cost optimization	Least-cost optimization	VCEA development targets, then least-cost optimization	Least-cost optimization
Retirements	Model optimized	Model optimized	Match Plan B	Glide path to carbon free by 2045	Match Plan D

¹⁷ Final Order, VSCC Case No. PUR-2021-00146 (Mar. 15, 2022) (approving stipulation pursuant to which the Company agreed to model two additional alternative plans that adhered to specified assumptions and constraints).

Although the Public Staff did not explicitly state why Plan B “only partially” complies with the VCEA, presumably the Public Staff takes issue with thermal generators not being retired under Plan B. However, the VCEA allows to keep thermal generators online if their retirement would threaten reliability of electric service.¹⁸ Therefore, Plan B represents a plausible VCEA compliant pathway if the Company’s thermal units are not retired because they would be needed to ensure system reliability. Notably, the Public Staff indicated its concern with reliability under Plans D and E in Docket No. E-100, Sub 192 regarding the Company’s 2023 Plan, even though Plans D and E retire thermal generators between 2039 and 2045, *i.e.*, several years after the 2024-2033 period at issue in this docket. As such, the Company emphasizes that neither of the Alternative Plans retires any thermal generators during the 2024-2033 time period and therefore that their retirement assumption differences after 2033 are not relevant for purposes of this proceeding.

In sum, Plan B is VCEA compliant and does not differ from the Plan E in terms of thermal resource retirements over the 2024-2033 period used to determine the avoided cost rates in this proceeding. Further, Plan B is well-studied, which makes it more reasonable to use in determining avoided cost rates in this proceeding. In contrast, Plan E (recommended by the Public Staff to determine the avoided cost rates in this proceeding) was designed as a sensitivity to the Company’s Plan D based on a stipulation in a Virginia RPS case. The Company continues to support its proposed avoided energy rates for

¹⁸ The VCEA mandates the retirement of carbon emitting generation in Virginia, except for biomass-fired units, by 2045 unless the Company petitions and the VSCC finds that a given retirement would threaten the reliability and security of electric services. *See* Va. Code § 56-585.5(B)(3).

Schedule 19-FP based on Alternative Plan B and asks that the Commission approve those rates for purposes of this biennial proceeding.

- C. For the next biennial proceeding, it is appropriate that the Company evaluate the appropriate CT class to utilize in determining avoided capacity cost based on its most recently filed IRP and operating experience, as it did in this case.**

With regard to the determination of avoided capacity cost, the Public Staff supported the use of F-frame combustion turbines (“CTs”) for purposes of this proceeding, noting that “H-class CTs currently have limited available data on their operations and actual construction costs.” The Public Staff also agreed with the Company’s general approach to calculating avoided capacity cost of applying adjustments to EIA published data, which aligns with IRP planning and typical CT build-out in each of the Utilities’ respective generation fleets.¹⁹

The Public Staff commented further that “[t]he EIA 2024 Report no longer provides cost estimates for an F-frame CT, but rather utilizes a 419 MW H-class CT.” The Public Staff stated that it “strongly supports the continued use of publicly available data for the cost of a CT. If no other publicly available cost data on an F-class CT is available, the Public Staff believes that it would be appropriate in the next avoided cost proceeding to utilize the advanced CT cost estimate from the EIA as the cost basis for avoided capacity, a position the Public Staff has taken in a prior avoided cost proceeding.”²⁰

¹⁹ For clarity, DENC used the following source document for the overnight cost of an F-Class CT (before adjustments made by DENC): “Cost and Performance Characteristics of New Generating Technologies, Annual Energy Outlook 2023,” published in March 2023. Specifically, DENC used the data associated with Region 14 (SERC Reliability Corporation/East – Carolinas SRCA). Region 16 (SERC Reliability Corporation/Central – Tennessee Valley SRCE) is outside of both North Carolina and the Company’s service territory; therefore, this data was not used by DENC.

²⁰ Public Staff Initial Statement at 22-23; see also *id.* at 14 and 51 (Recommendation 4).

At the direction of the Commission following the 2018 biennial avoided cost proceeding (Docket No. E-100, Sub 158), the Company worked with the Public Staff and the Duke Utilities to determine an appropriate public source for CT cost data, along with an acceptable framework for making limited adjustments to calculating generic CT costs. The Company recognizes the benefits of using available data points from the EIA – a highly regarded public source – as a starting point for generic CT cost estimates used for determination of the avoided capacity rates. This approach has yielded reasonable capacity costs that were calculated in a clear and consistent manner across the Utilities. The Company would like to continue this overall approach, but recognizes it is dependent on appropriate data being available. As the Company develops analyses supporting its avoided cost filings, it weighs the publicly available data from EIA against the Company’s significant knowledge and experience with developing and operating energy generating stations. Eventually, both public information on CT costs and the Company’s intelligence are consolidated to develop a capacity cost estimate used in avoided costs proceedings.

In order for the Company to be able to utilize a particular CT class to determine avoided capacity costs, sufficient information regarding the cost and performance of that CT class must be publicly available. Then the Company will make necessary and appropriate adjustments for energy value, location-based cost adjustments, and economies of scope/scale cost, as permitted by the Commission. At this time, the availability and depth of public data on advanced class CTs are limited, as the Public Staff acknowledges. Therefore, the Company believes that it would be appropriate to determine which specific CT class has the best publicly available data in 2025, *i.e.*, at the time it prepares the next

biennial avoided cost filing. The Company will then utilize that CT class to determine avoided capacity cost for the 2025 avoided cost proceeding.

The other contributing factor into which CT class to utilize for avoided capacity cost determinations is the Company's own expertise. The Company's operating experience is with F-class CTs, which informs its utilization of publicly available data on F-class generic CT costs and making DENC-specific adjustments to that data, consistently with the Commission's previous determinations. While DENC's 2023 Plan included F-class and not H-class CTs, the Company continues to review various types of generation resources for consideration in future IRPs. A number of factors may impact this evaluation, including air permit limitations, fuel availability, and ramping and turn down capabilities, among others. Based on these factors, the Company may include an advanced class CT in a future IRP. For purposes of these biennial avoided cost proceedings, however, the most prudent course is for DENC to review the available public information on CT costs and consider the most recently filed IRP in order to determine which CT class should be used in avoided capacity cost determinations. The Company will then utilize the CT class sufficiently covered by reliable publicly available data that can be used as the starting point for generic CT cost, and on which the Company has sufficient expertise that would allow it to make well supported and DENC specific cost adjustments. This is the approach the Company took in this proceeding and it is the Company's position that this approach is the most appropriate for future biennial avoided cost proceedings.

In sum, DENC does not oppose a potential use of H-class CTs in the future for the purposes of avoided cost determination for a generic CT in biennial avoided cost proceedings, as long as there is adequate and reliable public data available, and the

Company has sufficient expertise, to support the analysis. The Company is willing to review this issue with the Public Staff before filing its initial statement in the next biennial avoided cost proceeding.

D. CCEBA Recommendation Regarding the Peaker Method

In its initial comments, CCEBA contends that the Utilities' analyses of potential alternatives to the peaker method in response to the Commission's directive in the Sub 175 Order were insufficient.²¹ CCEBA recommends that the Commission direct a stakeholder process on this topic or, in the alternative, convene a technical conference or evidentiary hearing.²²

The Company fully considered alternatives to the peaker method in the course of preparing the avoided cost rates and terms proposed in this proceeding and discussed the results of that analysis in its Initial Statement. Specifically, the Company explained that its updated backflow analysis demonstrated that solar distributed generation ("DG") continued to exceed the load requirements of the circuits with solar DG-connected transformers. In other words, existing solar DG exceeded the Company's need in its North Carolina service area at this time. The Company also explained that even though FERC Order No. 872 amended FERC's PURPA implementation rules to allow establishing energy and/or capacity rates for QFs based on a price determined pursuant to a competitive solicitation process, the Company concluded that – due to the already existing over-supply of capacity in its North Carolina service area – it would not be appropriate to initiate a competitive solicitation process to procure additional capacity in this area. DENC

²¹ Order Establishing Standard Rates and Contract Terms for Qualifying Facilities at 14-15, Docket No. E-100, Sub 175 (Nov. 22, 2022).

²² CCEBA Comments at 1-7.

emphasized, and the Company highlights here, that it continues to offer the alternative method provided by Schedule 19-LMP; therefore, no incremental value to QFs or the Company would be created by offering an avoided cost rate calculated pursuant to (another) additional alternative methodology.²³ Neither CCEBA nor any party offered any response or propounded discovery to the Company's discussion of this topic.

In the instant proceeding, the Company responded to Public Staff discovery regarding the use of an advanced class CT in the peaker method; no other party submitted discovery to the Company on these topics. Importantly, the Company received no discovery requests regarding a potential introduction of alternatives to the peaker method, and no specific alternatives have been suggested in this proceeding, including by CCEBA in its comments. As this is a biennial proceeding, interested parties had ample time to pursue these topics within its framework, which has included phases for discovery, comments, and reply comments. Separate and additional proceedings to consider this issue are therefore not required.

Finally, CTs remain an appropriate baseline for calculating avoided capacity costs for the following reasons. First, the Company includes CTs in all five Alternative Plans included in its 2023 IRP. Notably, in its comments on the Company's 2023 IRP, the Public Staff recommends that DENC consider building an advanced class CT in North Carolina in the 2024 IRP.²⁴ Moreover, DENC procures incremental capacity from within PJM, which includes several states that allow the construction of CTs. PJM, in fact, uses the construction of a CT as part of its pricing for the demand curve used for capacity auctions.

²³ DENC Initial Statement at 17-18 (citing *Implementation Issues Under the Public Utility Regulatory Policies Act of 1978*, Order No. 872, 172 FERC ¶ 61,041 (2020)).

²⁴ See Comments of the Public Staff, at 6, Docket No. E-100, Sub 192 (Jan. 29, 2024).

DENC could also procure capacity via a power purchase agreement or tolling arrangement from a CT that is constructed in Virginia by a merchant operator. Given that DENC has multiple potential options to procure CT capacity and that no specific alternatives to the peaker method have been suggested by any party in biennial avoided cost proceedings following FERC Order No. 872 which, allowed for the introduction of such alternatives, there is no reason to have a stakeholder proceeding on this matter.

E. Clarification in Response to Attorney General’s Office Comments

In its initial comments, the AGO notes that “prior to Virginia’s withdrawal from the Regional Greenhouse Gas Initiative (RGGI), the Commission *allowed the use of carbon pricing in the avoided cost rates offered by Dominion Energy North Carolina (DENC).*”²⁵ For the purpose of clarity, the Company *accounted for* carbon pricing in its *modeling* of avoided energy costs in the Sub 175 Proceeding prior to Virginia’s withdrawal from RGGI.²⁶

III. CONCLUSION

WHEREFORE, Dominion Energy North Carolina respectfully requests that the Commission accept these Reply Comments and issue an order accepting the Company’s Initial Statement, including the avoided energy and capacity rates contained in Schedule 19-FP and Schedule 19-LMP as presented therein, and making such other determinations as are necessary and proper.

²⁵ Comments of the Attorney General’s Office, at 11, Docket No. E-100, Sub 194 (Feb. 21, 2024) (emphasis added).

²⁶ See Update to Initial Statement of Dominion Energy North Carolina, Docket No. E-100, Sub 194 (Jan. 9, 2024) (noting that the Company removed costs related to Virginia’s participation in RGGI from the calculation of avoided energy costs for the purposes of this proceeding and Virginia withdrew from RGGI at the end of 2023).

Respectfully submitted,

DOMINION ENERGY NORTH CAROLINA

By: /s/ Nick A. Dantonio

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March 27, 2024

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing *Reply Comments*, as filed in Docket No. E-100, Sub 194 was served electronically or via U.S. Mail, first-class postage prepaid, upon all parties of record.

This the 27th day of March, 2024.

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