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December 18, 2023

**VIA ELECTRONIC FILING**

Ms. A. Shonta Dunston, Chief Clerk  
North Carolina Utilities Commission  
Dobbs Building  
430 North Salisbury Street  
Raleigh, North Carolina 27603

**RE: Duke Energy Carolinas, LLC's and Duke Energy Progress, LLC's  
Plans for Development of Supplemental Portfolio Analysis and  
Supporting Testimony and Request for Adjustment to Procedural  
Schedule  
Docket No. E-100, Sub 190**

Dear Ms. Dunston:

Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP”) and, together with DEC, the “Companies”) hereby provide this update to the North Carolina Utilities Commission (“Commission”) regarding next steps in light of the Companies’ updated 2023 fall load forecast (“Updated 2023 Fall Load Forecast”) described in the Supplemental Direct Testimony of Glen A. Snider (“Supplemental Testimony”) filed with the Commission in the above-captioned docket on November 30, 2023.

As noted in the Supplemental Testimony, the Companies have engaged the Public Staff – North Carolina Utilities Commission (“Public Staff”) and other parties regarding the Updated 2023 Fall Load Forecast<sup>1</sup> and the need for further analysis in light of such forecast and its potential impact on the Companies’ 2023-2024 Carbon Plan and Integrated Resource Plan (“CPIRP” or “Plan”). The Companies hereby provide notice of their intent

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<sup>1</sup> The Supplemental Testimony highlighted for the Commission and all parties the recent substantial, material changes in the Companies’ load forecast since the preparation of the Companies’ Plan resulting primarily from the Carolinas’ recent economic development success. In the filing letter submitted with the Supplemental Testimony, the Companies indicated that they would make the updated load forecast information available via the ongoing discovery process in this docket. Consistent with that commitment, the Companies provided detailed workpapers supporting the Updated 2023 Fall Load Forecast to parties on December 8, 2023, as a supplemental response to Public Staff Data Request 1-7 (requesting all CPIRP workpapers).

to perform limited supplemental modeling and to submit additional portfolio analysis and supporting testimony in this proceeding based on the Updated 2023 Fall Load Forecast, as is further described herein. In addition, the Companies are proposing certain modifications to the anticipated procedural schedule of this proceeding in light of the supplemental filings, subject to the Commission's approval.

### **Supplemental Modeling and Additional Portfolio Analysis**

The Companies' Plan presented expansive modeling and portfolio analysis including three Core Portfolios, 13 Portfolio Variants, and 10 Sensitivity Analysis Portfolios.<sup>2</sup> The Companies' planned supplemental modeling and analysis will produce limited additional Portfolio Variants and Sensitivity Analysis Portfolios intended to inform the Commission's consideration of the Companies' proposed Near-Term Action Plan, as well as the intermediate- and long-term least cost pathways to achieving the State's carbon emissions reductions targets. The Public Staff supports the need for the Companies to perform supplemental modeling.

Attachment 1 to this letter provides an overview of the Companies' planned supplemental modeling scope and summarizes the limited alternative assumptions that will be incorporated into development of the additional Portfolio Variant and Sensitivity Analysis Portfolios. These limited alternative modeling assumptions are, in part, based on input from the Public Staff<sup>3</sup> and reflect additional information available and risks and opportunities identified since preparation of the Plan, including updated assumptions regarding natural gas fuel supply, resource availability, and financial assumptions, including resource costs. Aside from these identified adjustments, the Companies will follow the modeling methodology and approach utilized for the CPIRP as detailed in Chapter 2 (Methodology and Key Assumptions) and Appendix C (Quantitative Analysis) to the Plan.

Importantly, the additional portfolios and analysis do not supersede or otherwise negate the Companies' robust initial modeling provided in the initial CPIRP filing but instead will provide additional information for the Commission's and parties' consideration. Given the Carolinas' dynamic economic development success and other factors impacting the Plan, the Companies believe that a supplemental filing is appropriate. The Companies have now begun modeling the additional Variant and Sensitivity Analysis Portfolios and plan to file these supplemental portfolios, along with supporting supplemental testimony on January 31, 2024.

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<sup>2</sup> See Carolinas Resource Plan, Chapter 2 (Methodology and Key Assumptions) at 9-14 (describing Portfolio Variant and Sensitivity Analysis Portfolio modeling).

<sup>3</sup> For purposes of developing the proposed supplemental modeling and scoping the additional Portfolios, the Public Staff provided suggested changes to select modeling assumptions and the Companies have incorporated the vast majority of such suggestions.

## **Recommended Adjustments To Procedural Schedule**

Recognizing that parties will need an opportunity to respond to the planned supplemental modeling and additional portfolio analysis, the Companies are recommending the Commission approve a modified procedural schedule to provide the Commission and all parties more time to assess the impact of the Updated 2023 Fall Load Forecast and other updated assumptions included in the planned supplemental modeling. Specifically, the Companies respectfully request that the Commission adopt the following modifications to the anticipated procedural schedule in this proceeding:

- April 17, 2024 – Direct testimony of Public Staff and intervenors due.
- May 31, 2024 – Rebuttal testimony of the Companies due.
- June 17, 2024 – Expert witness hearing begins.

As compared to the schedule contemplated by Commission Rule R8-60A(g), the proposed dates provide a 50-day extension of time for the Public Staff and intervenors to file direct testimony and slightly shorten the period for the Companies to file rebuttal testimony from 45 to 43 days, while still maintaining a reasonable period of time for hearing preparation after the submittal of rebuttal testimony.

The Companies have shared the proposed schedule modifications with all parties. The Public Staff supports the proposed procedural schedule, while Carolina Industrial Group for Fair Utility Rates II & III, and Walmart, Inc. have authorized the Companies to represent that they do not oppose the recommended procedural schedule.<sup>4</sup>

Southern Alliance for Clean Energy, Sierra Club, and National Resources Defense Council, North Carolina Sustainable Energy Association, Carolinas Clean Energy Business Association, Clean Energy Buyers Association, and Total Energy Renewables USA, LLC have indicated objection or potential objections to the Companies' plans to submit limited supplemental modeling and recommended procedural schedule. Rather than attempt to summarize such positions, the Companies expect that such parties may elect to file responses in the docket, and the Companies will respond at that time if necessary. To the extent the Commission adopts a different schedule than the one proposed herein, the Companies request that any schedule compression be distributed evenly in the proposed schedule between the various deadlines.

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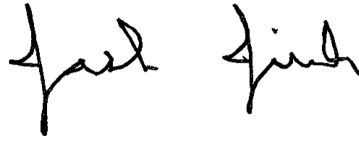
<sup>4</sup> Counsel for CIGFUR wishes to make the Commission and all parties aware of a scheduling conflict the week of July 8-12, 2024, and as such, CIGFUR would respectfully request that the expert witness hearing in this docket be scheduled to begin no later than June 17.

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If you have any questions, please do not hesitate to contact me. Thank you for your assistance with this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Jirak". The signature is written in a cursive style with a large initial "J" and a distinct "E" in the middle.

Jack E. Jirak

Enclosure

cc: Parties of Record

**Duke Energy 2023-2024 Carbon Plan and Integrated Resource Plan Supplemental Modeling and Portfolio Analysis  
Docket No. E-100, Sub 190**

<b>Planned Supplemental Analysis Scope and Input Assumptions to be Presented in January 31, 2024 Supplemental Filing with Accompanying Testimony</b>	
Analysis Scope:	<ul style="list-style-type: none"> <li>• Fall Forecast Supplemental Analysis – Additional modeling that integrates supplemental Updated 2023 Fall Load Forecast, financial assumptions, fuel supply, and resource availability.</li> <li>• Limited Supplemental Coal Retirement Analysis – Confirm coal retirement adjustments are supported with limited coal retirement analysis (conducted in parallel) based on supplemental inputs.</li> <li>• Utilize the CPIRP Analytical Process outlined Appendix C (Quantitative Analysis) for supplemental portfolio analysis.</li> <li>• Include associated PVRR for all supplemental analysis portfolios and Bill Impacts for limited portfolios.</li> <li>• Additional Sensitivities as needed and as analysis timeframe allows.</li> </ul>
Load Forecast(s):	<ul style="list-style-type: none"> <li>• Integrate “Updated 2023 Fall Load Forecast”                             <ul style="list-style-type: none"> <li>○ Update gross load and net load inclusive of economic development load and load modifiers (UEE, RS, EV, Voltage Control, Rate Design).</li> <li>○ Maintain 1% EE of Eligible Retail Sales – All projected incremental economic development load is expected to be opt-out, and would not impact EE forecast.</li> </ul> </li> <li>• Maintain 22% reserve margin requirements for each utility, and grow into the 22% reserve margin over time.</li> <li>• Perform Sensitivity of Continued Economic Growth.                             <ul style="list-style-type: none"> <li>○ May require increasing assumed resource availability.</li> </ul> </li> </ul>
Natural Gas Fuel Supply:	<ul style="list-style-type: none"> <li>• Utilize supplemental inputs for natural gas fuel supply and commodity pricing consistent with updated MVP and incremental natural gas fuel supply availability including basis adders, volumes, and associated FT costs.</li> </ul>

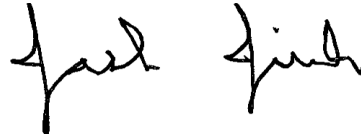
<p>Resource Costs:</p>	<ul style="list-style-type: none"> <li>• Utilize supplemental inputs for overnight and installed costs based on most recent generic information and revisions to escalation over project development, learning curves and application of learning curves and AFUDC.</li> <li>• Utilize supplemental inputs for anticipated scope of generic resources consistent with expectations for future projects.</li> <li>• Utilize supplemental inputs for generic transmission proxy as available.</li> <li>• Perform sensitivity analysis assessing impacts of resource costs higher than the supplemental inputs.</li> </ul>
<p>Resource Availability:</p>	<p>Supply-Side</p> <ul style="list-style-type: none"> <li>• Review and utilize supplemental inputs for resource availability to further reflect an executable plan and changes in incremental fuel availability.</li> </ul> <p>Demand-Side</p> <ul style="list-style-type: none"> <li>• Utilize supplemental inputs for DSM forecasts with updated project participation from incremental economic development load customers in existing DSM programs.</li> <li>• Perform sensitivity analysis assessing impacts of interruptible load programs for incremental economic development load customers.</li> </ul>
<p>Financial Assumptions:</p>	<ul style="list-style-type: none"> <li>• Utilize supplemental input to reflect current interest rate levels – Impacts installed costs and WACC/Discount Rate.</li> <li>• For bill impact analysis, model OSW, Bad Creek II and Nuclear as receiving CWIP in rate base.</li> </ul>
<p>Carbon Accounting and Constraints:</p>	<ul style="list-style-type: none"> <li>• Targeted interim compliance date for Fall Forecast Supplemental Analysis may extend past 2035 based on resource availability.</li> <li>• Recognize impact of siting limited number of new gas CC resources (1-2 units) in South Carolina on emissions accounting and portfolio cost and executability.</li> <li>• Create non-linear decrease in CO<sub>2</sub> emissions target from interim target to carbon neutrality.</li> </ul>
<p>Coal Retirements:</p>	<ul style="list-style-type: none"> <li>• Reflect retirement dates for Mayo, Marshall 3&amp;4 and Cliffside 5 consistent with Table F-1 for the Fall Forecast Supplemental Analysis.</li> <li>• Adjust Roxboro 4 retirement to 2029 and Roxboro 2 to 2034 consistent with updated GRR filing for Fall Forecast Supplemental Analysis.</li> </ul>

<p>Immediate-Term Projected Resources:</p>	<ul style="list-style-type: none"> <li>• Utilize supplemental inputs for projected capacity to reflect projects/resources the Companies are pursuing to support Immediate-term reserve margins and reflect current forecasts (updating information reflected in Tables C-11 and for solar, battery, and Lincoln CT 17 in the “Forecasted Supply-Side Resources” section of Appendix C).</li> </ul>
<p>Additional discussion to be included in Filing/Supplemental Testimony per Public Staff request:</p>	<ul style="list-style-type: none"> <li>• Address value of fuel diversity and how to quantify.</li> <li>• Discuss risk and Plan execution based on supplemental inputs and analysis.</li> <li>• Identify how Supplemental Analysis, in concert with initial portfolios, confirms/adjusts proposed NTAP and resources to be selected by Commission for Plan execution.</li> </ul>

**CERTIFICATE OF SERVICE**

I certify that copies of Duke Energy Carolinas, LLC's and Duke Energy Progress, LLC's Plans for Development of Supplemental Portfolio Analysis and Supporting Testimony and Request for Adjustment to Procedural Schedule filed today in Docket No. E-100, Sub 190, have been served by electronic mail, hand delivery, or by depositing a copy in the United States mail, postage prepaid, properly addressed to parties of record.

This the 18<sup>th</sup> day of December, 2023.



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