BAILEY DIXON

Christina D. Cress
Partner
ccress@bdixon.com

June 12, 2024

<u>Via Electronic Filing</u>
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 190
Duke Energy's Biennial Consolidated Carbon Plan and Integrated Resource Plans of Duke Energy Carolinas, LLC, and Duke Energy Progress, LLC, Pursuant to N.C.G.S. § 62-110.9 and § 62-110.1(c)

Dear Ms. Dunston:

Pursuant to the Commission's June 10, 2024 *Order Granting Extension of Time to File Technical Conference Presentation Materials*, enclosed please find a copy of the slide deck CIGFUR II & III witness Brian C. Collins intends to present on behalf of CIGFUR during the technical conference in this matter scheduled for June 17, 2024.

Please contact me directly should you have any questions.

Best regards,

<u>/s/ Christina D. Cress</u>
Electronically Submitted
Counsel for CIGFUR

cc: Parties of Record

CERTIFICATE OF SERVICE

The undersigned hereby certifies that she caused the foregoing letter to be served upon counsel of record for all parties to this proceeding, consistent with the Service List maintained by the NCUC Chief Clerk's office, by electronic mail.

This the 12th day of June, 2024.

/s/ Christina D. Cress
Christina D. Cress

Intervenor Testimony Technical Conference

Carolina Industrial Group for Fair Utility Rates II & III (CIGFUR)

June 17, 2024

CIGFUR’s Findings and Recommendations

- Duke’s preferred Pathway 3 in its CPIRP, updated in its Supplemental Analysis filed on January 31, 2024, results in the retirement of approximately 8,400 MW of coal fired generation on the Duke system by 2035.
- Because of the size of Duke’s system and the scale of new resources necessary to replace coal fired generation, this level of generation retirement and its timing raises legitimate concerns regarding customer impacts, both in terms of reliability and rates.
- As explicitly stated both in HB 951 and in the NCUC’s Order adopting its initial Carbon Plan, reliability is paramount.
- The importance of a reliable grid was particularly demonstrated by the events of Winter Storm Elliott in December 2022.

CIGFUR’s Findings and Recommendations, con’t.

- In this proceeding, Duke specifically requests the Commission affirm its modeling as reasonable and requests approval of certain Near-Term Action Planning (“NTAP”) items as reasonable and necessary to reliably serve electric loads under the changing energy landscape in North Carolina.

- With respect to its NTAP items, Duke is requesting Commission pre-approval to incur specific project development costs for certain long lead time resources, including onshore wind ($64.5 million), pumped hydro storage ($165 million), and advanced nuclear ($440 million).

CIGFUR’s Findings and Recommendations, con’t.

- The specific resources incremental to Duke’s August 2023 CPIRP filing that Duke included in its Supplemental Analysis amount to over 7 GW and now includes offshore wind, as well as additional natural gas fired capacity, solar, and battery storage.

- Duke claims that the primary reason for the January 31, 2024 Supplemental Analysis filing was due to what Duke considers expected extraordinary load growth on its system requiring incremental resources that it claims should now be included in its CPIRP as compared to its August 2023 filing.

CIGFUR's Findings and Recommendations, con't.

- According to Duke, the forecasted 2038 winter peak has increased from 35.5 GW in the August 2023 filing to 37.6 GW in the January 2024 filing, an increase of 2.1 GW or approximately 5%. The annual energy forecast has increased from 182 TWh to 206 TWh, an increase of 24 TWh or approximately 12%. This is a significant increase in expected load for both DEC and DEP's respective operations in North Carolina.

- The total cumulative capital spend for the CPIRP in Duke's August 2023 filing was $92 billion by 2038. In the January 2024 update, Duke now estimates its total cumulative capital spend by 2038 to be $128 billion. **This is a significant increase of approximately $36 billion, or approximately 39%, in a span of less than 6 months.**

CIGFUR's Findings and Recommendations, con't.

- In the August 2023 CPIRP filing, Duke estimated customer bill impacts growing at a Compound Annual Growth Rate ("CAGR") of approximately 2.2% for DEP and 2.9% for DEC for the period 2024-2038.
- In the January 2024 CPIRP supplemental analysis filing and update, Duke now estimates customer bill impacts growing at a CAGR of approximately 3.4% for DEP and 3.7% for DEC for the period 2024-2038. These are significant annual compounding increases.
- Duke's revised forecasted CAGRs result in cumulative customer bill increases of approximately **60% for DEP and 66% for DEC** by 2038 as compared to 2024 rate levels.
- These are significant bill impacts for customers, and do not even include all expected costs that Duke will incur for executing its Carbon Plan, nor do they include capital investments that are <u>unrelated</u> to Carbon Plan implementation. As a result, because these are not "all-in" cost estimates, **these already concerning rate impact estimates are conservative**.

CIGFUR’s Findings and Recommendations, con’t.

- For perspective, the current estimated customer bill impacts by 2038 vs. current rates in 2024 would amount to an approximate **$1.5 million per month bill increase** for a 50-MW industrial customer taking transmission service with a 90% load factor.
- Considering that these estimates are understated because they do not reflect all costs necessary to implement the Carbon Plan, nor costs unrelated to implementation of the Carbon Plan, the expected level of future bill increases for customers is staggering and should give the Commission great pause.
- The magnitude of the expected bill increases is a threat to the competitiveness of industrial customers in Duke’s service territories, not to mention a threat to Duke’s residential and commercial customers.

CIGFUR’s Findings and Recommendations, con’t.

- Along these lines, it should also be noted that Duke’s residential customers will see approximate increases of **$87 per month** by 2038 based on Duke’s estimated CAGRs in the January 31, 2024 supplemental filing. Again, these are extraordinary increases—and conservative estimates—and should cause the Commission to question whether Duke’s as-filed CPIRP constitutes “reasonable steps” as contemplated by the NCGA in HB 951.
- The actual customer rate impacts experienced by 2038 will likely be much higher because the CPIRP includes only estimated generic transmission costs and do not reflect the complete, actual transmission investment costs necessary to implement the Companies’ CPIRP. Furthermore, these impacts do not account for non-CPIRP investments in the Companies’ generation, transmission and distribution.

CIGFUR’s Findings and Recommendations, con’t.

- Regarding reliability, the present law requires that reliability should be maintained or improved. Because of the unprecedented level of intermittent resources planned for the Duke system to replace historically reliable coal fired generation, the Commission should be flexible and give the Company as much time as is required in meeting its emissions reductions.
- More time is needed for implementing the CPIRP due to uncertainty in load growth, resource costs, supply constraints, and the viability of new and unproven resource technologies to enable reliable operation of the Duke system.

CIGFUR's Findings and Recommendations, con't.

- Duke examined other Pathways for achieving a 70% carbon emissions reductions by 2030. However, there is increased cost and risk to reliability in meeting the interim 70% target by 2030. As a result, I recommend that the Commission **<u>not</u>** require Duke to meet the 70% emission reductions target by 2030 and instead focus on what steps, and timeline, are reasonable under the totality of the circumstances while complying with the requirement that reliability must be maintained or improved.
- Because of the risks and the uncertainties in implementing the CPIRP, Duke has recognized that its recommended 2035 target for 70% emissions reductions via its preferred Pathway 3 could be further extended into the future.
- The Commission has the discretion to determine optimal timing, as well as the appropriate generation and reserve mix to achieve the least cost path to compliance. Importantly, it must only take all ***reasonable*** steps to implement the Carbon Plan.

CIGFUR's Findings and Recommendations, con't.

- On top of the uncertainty regarding the assumptions in the CPIRP, one particularly troubling concern is the unknown impact if joint capacity planning had been performed by Duke on a combined basis for both DEP and DEC.
- The lack of joint planning by DEC and DEP is a significant impediment to developing a least cost plan for emission reductions that can be approved by the Commission.
- As a result of the discretion afforded the Commission and the requirement for the Commission to take only those *reasonable* steps in implementing the CPIRP, I recommend the Commission require Duke to model a scenario in which DEC and DEP are sharing capacity for planning purposes.
- This recommendation protects ratepayers from the risk of the Companies' overspending and overbuilding in the interim before a potential merger is consummated. Per the Companies' expectation, the merger would be effective approximately January 1, 2027.

CIGFUR’s Findings and Recommendations, con’t.

- Certainty should be reached regarding the merger of DEP and DEC as soon as possible to avoid Duke’s progression down a path that could have adverse consequences on customers in terms of both reliability and customer bill impacts if the optimal resources on a combined DEP and DEC joint planning basis are not selected for replacing coal-fired generation as part of the Near-Term Action Plan and/or otherwise.

- If this is not possible, the Commission should consider delaying the timeline for achieving the interim emissions reduction targets set forth in House Bill 951.

CIGFUR's Findings and Recommendations, con't.

- I also recommend that the Commission establish rate mitigation measures for customers with respect to CPIRP implementation to protect ratepayers from the unprecedented and extraordinary exposure of rate increases associated with CPIRP implementation.
- This is reasonable, important, and necessary for customer protection. Rate mitigation could be, for example, in the form of a rate phase-in over a specified period of time after Duke is granted an increase in a rate case to recover costs associated with implementing the Carbon Plan. Parameters regarding rate mitigation could be developed through collaboration with Duke, the Public Staff, and customers.

CIGFUR’s Findings and Recommendations, con’t.

- Though the Company is required to file an updated CPIRP every 2 years, the current environment is dynamic and in flux with respect to load growth, resource costs and availability, supply constraints, and resource technology development, creating uncertainty regarding reliability and bill impacts for customers.
- Therefore, I recommend that the Commission require updates from Duke every 6 months regarding the progress of the CPIRP. This is a reasonable requirement, especially in light of the extraordinary load increase that occurred less than 6 months after Duke’s CPIRP filing in August 2023, as well as the significant rate impacts Duke projects.

CIGFUR’s Findings and Recommendations, con’t.

- Specifically, I recommend that the Company be required to file with the Commission status reports every 6 months, identifying any major developments in the process.
- These reports should include an update to the approved Portfolio’s (or Portfolios’, as the case may be) Present Value of Revenue Requirement (“PVRR”), total capital spend, and estimated customer rate impacts. More frequent updates are needed on the process beyond just the 2-year updated formal filing.
- This would add another layer of customer protection and complement the biennial filing, warn the Commission if the circumstances have changed regarding the preferred CPIRP, and help the Commission and the Companies “check and adjust” sooner rather than later.

CIGFUR's Findings and Recommendations, con't.

- I also recommend that the Company include estimated rate impacts, on a class-by-class basis, in the proposed 6-month reports for all expected investment on its system, including not just the CPIRP-related investments but also the non-CPIRP investments.

- This would give the Commission a holistic view of the expected customer rate impacts on the horizon.