



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

May 28, 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 190 – 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:

Attached for filing on behalf of the Public Staff in the above-referenced docket is the **public version** of the testimony of Michelle M. Boswell of the Accounting Division of the Public Staff – North Carolina Utilities Commission.

By copy of this letter, I am forwarding a copy of the redacted version to all parties of record by electronic delivery. Confidential information is located on pages 14-15 and 21 of the testimony. The confidential version will be provided to those parties that have entered into a confidentiality agreement.

Sincerely,

Electronically submitted

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**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

**DOCKET NO. E-100, SUB 190**

In the Matter of  
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) )

**TESTIMONY OF  
MICHELLE M. BOSWELL  
PUBLIC STAFF –  
NORTH CAROLINA  
UTILITIES COMMISSION**

**May 28, 2024**

1 **Q. Please state your name, business address, and present**  
2 **position.**

3 A. My name is Michelle Boswell. My business address is 430 North  
4 Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am the  
5 Director of the Accounting Division of the Public Staff – North  
6 Carolina Utilities Commission (Public Staff).

7 **Q. Briefly state your qualifications and experience.**

8 A. A summary of my qualifications and experience is set forth as  
9 Appendix A to this testimony.

10 **Q. What is the purpose of your testimony?**

11 A. The purpose of my testimony is to provide the Commission with a  
12 summary of my review and investigation of the Verified Petition for  
13 Approval of Duke Energy Carolinas, LLC's (DEC) and Duke Energy  
14 Progress, LLC's (DEP and, together with DEC, Duke or the  
15 Companies) 2023-2024 Carbon Plan and Integrated Resource Plan  
16 (CPIRP) filed in Docket No. E-100, Sub 190, on August 17, 2023; the  
17 Companies' direct testimony filed on September 1, 2023; the  
18 Amended Petition and supplemental direct testimony filed by the  
19 Companies on January 31, 2024; and the Second Amended Petition  
20 filed by the Companies on April 30, 2024 (together with the initial

1 Verified Petition and the first Amended Petition referred to herein as  
2 the Petitions).

3 **Q. How is your testimony organized?**

4 A. My testimony is divided into the following sections:

5 I. Assurance of cost recoverability in an appropriate cost  
6 recovery proceeding;

7 II. Nuclear development project costs pursuant to N.C.  
8 Gen. Stat. § 62-110.7;

9 III. Inclusion of Construction Work in Progress (CWIP) in  
10 rate base;

11 IV. Cost recovery of “long lead time resources” ultimately  
12 determined not to be necessary to achieve the energy  
13 transition and the carbon dioxide (CO<sub>2</sub> or carbon)  
14 emission reduction targets of S.L. 2021-165 (referred  
15 to herein as House Bill 951 or HB 951), codified as  
16 N.C.G.S. § 62-110.9 (Section 110.9); and

17 V. The Energy Infrastructure Reinvestment (EIR) loan  
18 created by the Inflation Reduction Act (IRA).

1           **I.       ASSURANCE OF COST RECOVERABILITY IN AN**  
2           **APPROPRIATE COST RECOVERY PROCEEDING**

3   **Q.     Should the Commission approve Duke’s request to incur**  
4           **project development costs?**

5   **A.     Based on the recommendations of Public Staff witnesses Dustin R.**  
6           **Metz, Jeff Thomas, Evan D. Lawrence, and Jordan A. Nader, the**  
7           **Commission should approve the following near-term project**  
8           **development activities as described in the Companies’ Second**  
9           **Amended Petition filed on April 30, 2024:**

10           I.       Up to \$65.6 million related to onshore wind;

11           II.      Up to \$165 million related to pumped storage hydro;

12           III.     Up to \$75 million through 2024 plus an additional \$365  
13           million through 2026 for the development of advanced  
14           nuclear resources; and

15           IV.     Up to \$1.4 million related to the development of  
16           offshore wind.

1 **Q. Should the Commission’s approval of the project development**  
2 **costs constitute reasonable assurance of cost recoverability in**  
3 **a future cost recovery proceeding?**

4 A. Yes. In its December 22, 2022 Order Adopting Initial Carbon Plan  
5 and Providing Direction for Future Planning (Carbon Plan Order) in  
6 Docket No. E-100, Sub 179, the Commission stated that:

7 [C]onsistent with the Commission’s Lee Nuclear  
8 Station precedent, the Commission concludes that  
9 where it approves a request from Duke to incur initial  
10 project development costs for purposes of execution of  
11 the Carbon Plan, the Commission’s approval  
12 constitutes reasonable assurance of recoverability in a  
13 future cost recovery proceeding, even if the resource is  
14 ultimately not selected by the Commission for the  
15 Carbon Plan. However, any such approval does not  
16 amount to the approval of the reasonableness or  
17 prudence of specific project development activities or  
18 the recoverability of specific items of cost. For the  
19 avoidance of doubt, any Commission approval of a  
20 request from Duke to incur initial project development  
21 costs does not constitute “preapproval” of cost  
22 recovery. Rather the approval is indicative that the  
23 Commission finds such actions to be a reasonable and  
24 prudent step in furtherance of the Carbon Plan, but that  
25 cost recovery will be conditioned on a full review for  
26 reasonableness and prudence during the appropriate  
27 cost recovery proceeding. With the exception of the  
28 Commission’s approval of the nuclear project  
29 development costs pursuant to N.C.G.S. § 62-110.7,  
30 the Commission retains discretion to determine the  
31 appropriate ratemaking treatment for any authorized  
32 actions in a future general rate case proceeding.<sup>1</sup>

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<sup>1</sup> See Carbon Plan Order, at 29.

1 Based on the Carbon Plan Order, with the exception of nuclear  
2 project development costs pursuant to N.C.G.S. § 62-110.7, the  
3 Public Staff believes the Commission's approval of the overall project  
4 development costs for the purposes of execution of the Carbon Plan  
5 should provide reasonable assurance of cost recoverability in a  
6 future cost recovery proceeding. However, the Public Staff does not  
7 believe that this should be interpreted as approval of the  
8 reasonableness or prudence of specific project development  
9 activities or recoverability of specific items of cost, which should  
10 instead be determined during the appropriate cost recovery  
11 proceeding upon a full review of reasonableness and prudence.

12 **II. NUCLEAR DEVELOPMENT PROJECT COSTS**  
13 **PURSUANT TO N.C.G.S. § 62-110.7**

14 **Q. Is Duke's request to incur project development costs of up to**  
15 **\$75 million through 2024 and \$365 million through 2026 for the**  
16 **development of advanced nuclear resources eligible for special**  
17 **treatment under N.C.G.S. § 62-110.7?**

18 A. Based on the recommendation of Public Staff witness Metz, the  
19 nuclear project development costs of up to \$75 million through 2024  
20 and \$365 million through 2026 are eligible for special treatment  
21 under N.C.G.S. § 62-110.7. The Public Staff does not believe that  
22 any exceedance of the 2024 or 2026 amounts listed above would  
23 qualify for treatment under N.C.G.S. § 62-110.7 unless the

1 Companies filed a request for approval of additional costs and  
2 provided updated cost and status information and documentation  
3 necessary to support such approval.

4 **III. INCLUSION OF CWIP IN RATE BASE**

5 **Q. Should the Commission allow CWIP to be included in rate base**  
6 **for any of the activities the Companies have proposed?**

7 A. No. It is premature to allow CWIP to be included in rate base for the  
8 activities the Companies have proposed. Although the Companies  
9 did not include CWIP in their requests for relief, the Companies did  
10 assume the inclusion of CWIP in rate base in their rates calculations.

11 General Statute § 62-133(b)(1)(a) and (b) state that CWIP may be  
12 included in the cost of the public utility's property for reasonable and  
13 prudent expenditures for baseload electric generating facilities or if  
14 doing so is in the public interest and necessary to the financial  
15 stability of the utility. The inclusion of CWIP into rate base should be  
16 considered on a case-by-case basis during a general rate case  
17 proceeding in which the Companies have provided necessary  
18 supporting documentation for inclusion of the reasonable and  
19 prudent expenditures and the Public Staff and other intervenors have  
20 had the opportunity to audit such documentation.



1           **IV.     COST RECOVERY OF “LONG LEAD TIME RESOURCES”**  
2                   **ULTIMATELY DETERMINED NOT TO BE NECESSARY TO**  
3                   **ACHIEVE THE ENERGY TRANSITION AND THE CO<sub>2</sub> EMISSION**  
4                   **REDUCTION TARGETS OF HB 951**

5   **Q.     Should Duke be allowed cost recovery of “long lead time**  
6           **resources” ultimately determined not to be necessary to**  
7           **achieve the energy transition and CO<sub>2</sub> emission reduction**  
8           **targets of HB 951?**

9   **A.     In its Carbon Plan Order, the Commission stated that it was:**

10                    [N]ot preapproving any particular future ratemaking  
11                    treatment regardless of whether the plant is ultimately  
12                    never begun, abandoned, or completed. Instead, the  
13                    Commission retains full discretion to determine the  
14                    appropriate ratemaking treatment in a future general  
15                    rate case proceeding.<sup>2</sup>

16            Additionally, as stated in the Public Staff’s comments and testimony  
17            in Docket No. E-100, Sub 179, the Public Staff continues to believe  
18            it is premature to authorize any potential recovery of abandoned  
19            plant costs related to the Carbon Plan. In its Petitions, Duke requests  
20            that the Commission make a determination that, “in the event [that]  
21            long lead time resources are ultimately determined not to be  
22            necessary to achieve the energy transition and the CO<sub>2</sub> emission  
23            reduction targets of HB 951, such project development costs will be  
24            recoverable through base rates.”

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<sup>2</sup> See *id.*, at 97 and 103.

1 Prospective authorization to recover abandoned plant costs would  
2 remove critical checks on the Companies' spending that have  
3 historically helped ensure capital expenditures are reasonable and  
4 prudent throughout the life of a project. Requests for recovery of  
5 abandoned plant should be handled on a case-by-case basis and  
6 held to historical standards of treatment of abandoned plant.

7 With the exception of nuclear development costs pursuant to  
8 N.C.G.S. §62-110.7(d), the Public Staff recommends that the  
9 Commission retain its full discretion to determine the appropriate  
10 ratemaking treatment in a future general rate case proceeding once  
11 a project has ceased construction, when the reasonableness and  
12 prudence of specific costs can be reviewed by intervenors and  
13 determined by the Commission. The Public Staff recommends that  
14 specific nuclear development costs be considered for recovery  
15 pursuant to N.C.G.S. § 62-110.7(d) in the next general rate case  
16 proceeding where the appropriate return can be determined.



1 **Q. If the Companies were to submit a competitive EIR loan**  
2 **application for eligible projects, as described in Public Staff**  
3 **witness Thomas' testimony, how might an EIR loan create**  
4 **savings for ratepayers and support attainment of the 70%**  
5 **interim emission reduction target in North Carolina?**

6 A. As a financial instrument, an EIR loan would possess extremely  
7 favorable characteristics, which would lower the cost of eligible  
8 investments. These characteristics include:

9 i. A lower interest rate than what could otherwise be secured  
10 by the Companies, as low as the government's cost of  
11 borrowing plus 0.375%;

12 ii. Higher leverage than is normally obtainable through  
13 traditional financing, since the LPO can lend up to 80% of  
14 the cost of eligible projects; and

15 iii. Fixed rate lending for periods of up to 30 years, without  
16 prepayment penalties.

17 **Q. Which other utilities are applying for EIR loans and what**  
18 **information is available about their applications?**

19 A. Since the EIR application process is confidential, the full scale of  
20 utility applications to date is not publicly available. However, some  
21 utilities have made public declarations regarding their intention to

1 apply for EIR loans, and others have provided an indication of the  
2 scope of investments that are or will be included in their applications.  
3 The Public Staff is aware of the following utilities that have publicly  
4 declared their application or their intent to pursue EIR financing:

- 5 • Alliant Energy in Iowa submitted a Part 1 EIR loan  
6 application in August, 2023;<sup>3</sup>
- 7 • Wisconsin Power & Light, also an Alliant Energy company,  
8 indicated that it had submitted a Part 1 EIR loan  
9 application in August 2023 for all eligible projects in the  
10 utility's "clean energy blueprint," representing \$756 million  
11 for projects anticipated between 2023-2028 and indicating  
12 that EIR loan financing will save customers 1% compared  
13 to the costs of traditional utility debt financing;<sup>4</sup>
- 14 • Consumers Energy in Michigan indicated that it was  
15 working with the LPO to complete its Part 1 EIR loan  
16 application for a multi-billion dollar loan;<sup>5</sup>
- 17 • DTE Energy in Michigan agreed in a settlement agreement  
18 in its IRP proceeding to apply for federal funding for future  
19 capital or decommissioning costs associated with the  
20 Monroe Power Plant in lieu of traditional financing;<sup>6</sup>

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<sup>3</sup> See Docket No. RPU-2023-0002, "Direct Testimony of Niel E. Michek," The Iowa Utilities Board, October 12, 2023, *available at*: [https://wcc.efs.iowa.gov/cs/idcplg?IdcService=GET\\_FILE&allowInterrupt=1&RevisionSelectionMethod=latest&dDocName=2132247&noSaveAs=1](https://wcc.efs.iowa.gov/cs/idcplg?IdcService=GET_FILE&allowInterrupt=1&RevisionSelectionMethod=latest&dDocName=2132247&noSaveAs=1).

<sup>4</sup> See Docket No. 6680-UR-124, "Pre-filed Rebuttal Testimony of Neil E. Michek for Wisconsin Power and Light Company," The Public Service Commission of Wisconsin, September 19, 2023, *available at*: <https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=481059>.

<sup>5</sup> See Case U-21227, "Consumers Energy Company's Report on Activity Related to the Infrastructure Investment and Jobs Act of 2021," Michigan Public Service Commission, December 22, 2023, *available at*: <https://mi-psc.my.site.com/sfc/servlet.shepherd/version/download/0688y00000BDniNAAT>.

<sup>6</sup> See Case No. U-21193, "Settlement Agreement," Michigan Public Service Commission, July 12, 2023, *available at*: <https://mi-psc.my.site.com/sfc/servlet.shepherd/version/download/0688y000008TK2VAAW>.

- 1                   • Pacific Gas and Electric Company in California has  
2 applied for an EIR loan valuing approximately \$7 billion,  
3 which the utility intends to use to finance new transmission  
4 lines, converting existing transmission lines to a higher  
5 voltage, replacing overloaded transmission conductors  
6 with higher-capacity conductors, and supporting  
7 associated upgrades to substations and distribution  
8 capacity to enable serving increasing load and connecting  
9 more distributed energy resources like heat pumps, EVs,  
10 storage, and solar to the grid;<sup>7</sup> and,
- 11                   • Portland General Electric (PGE) in Oregon committed to  
12 allocating staff in 2024 to support the preparation of an EIR  
13 loan application, and the Oregon Public Utilities  
14 Commission approved a stipulated agreement for the  
15 utility's RFP on two conditions: (1) all RFP bids must  
16 include one price with and one price without assumed EIR  
17 financing, and that PGE must develop the rules or  
18 methodology for all bids to calculate this additional bid  
19 price as part of the RFP; and (2) PGE shall ensure that the  
20 independent evaluator will monitor and report PGE's  
21 progress on its EIR loan application as part of its closing  
22 report.<sup>8</sup>

23                   Although the DOE has announced conditional commitment for one  
24 loan,<sup>9</sup> the Public Staff is not aware of any information regarding the  
25 total volume of EIR loans that have been committed at the time of  
26 this testimony's filing. However, the LPO indicated in December

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<sup>7</sup> See Kavya Balaraman, "Roughly \$7B federal loan could offer PG&E 'cheap money' to upgrade electric grid in California," *Utility Dive*, July 6, 2023, available at: <https://www.utilitydive.com/news/pge-federal-doe-loan-program-grid-upgrade-california/685172/>.

<sup>8</sup> See Docket UM 2274, "Order No. 24-011," Public Utility Commission Of Oregon, January 12, 2024, available at: <https://apps.puc.state.or.us/orders/2024ords/24-011.pdf>.

<sup>9</sup> See "LPO Announces Conditional Commitment to Holtec Palisades to Finance the Restoration and Resumption of Service of 800-MW Nuclear Generating Station," U.S. Department of Energy Loan Programs Office, March 27, 2024, available at: <https://www.energy.gov/lpo/articles/lpo-announces-conditional-commitment-holtec-palisades-finance-restoration-and>.

1 2023 that the volume of EIR loan applications submitted or reviewed  
2 prior to submission at that time represented \$115 billion (roughly  
3 46% of the total loan authority).<sup>10</sup> This is not necessarily an indication  
4 of how much of the EIR loan authority has already been or will be  
5 committed to the current pool of applicants. However, together, these  
6 signals suggest that other investor-owned utilities across the country  
7 are concluding that the EIR loan program will be net beneficial and  
8 are applying for it in ways that will create savings for customers.

9 **Q. Please explain the ways in which Duke’s approach to utilizing**  
10 **the EIR may miss opportunities to capture the full ratepayer**  
11 **benefit offered by the EIR.**

12 A. Based upon discussions with the Companies, the Public Staff  
13 believes the Companies **[BEGIN CONFIDENTIAL]** [REDACTED]  
14 [REDACTED]  
15 [REDACTED]  
16 [REDACTED]  
17 [REDACTED]  
18 [REDACTED]

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<sup>10</sup> See “Webinar with Jigar Shah: Mapping our Path to Abundant, Accessible, and Economic Clean Energy,” RMI, December 12, 2023, available at: <https://rmi.org/event/webinar-abundant-accessible-and-economic-mapping-our-path-to-clean-energy/>.

1 [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [END  
2 CONFIDENTIAL] EIR-contingent compliance costs.<sup>11</sup>

3 **Q. How might Duke change its EIR approach so as to capture more**  
4 **benefits for ratepayers?**

5 A. Duke could increase the beneficial value of EIR for ratepayers by  
6 applying for the maximum amount of leverage available—up to 80%  
7 of the cost of eligible projects—and employing less equity in the  
8 capital stack for these projects. This would significantly lower the  
9 financing costs paid by ratepayers, which constitute a major portion  
10 of the revenue requirement for capital-intensive projects. To deliver  
11 these savings, Duke would also need to avoid decreasing reliance  
12 on corporate debt for other projects in favor of greater usage of  
13 equity, as such maneuvers would erode ratepayer benefits from the  
14 increased leverage available through EIR.

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<sup>11</sup> Such compliance costs are discussed in more detail in Public Staff witness Thomas’ testimony and include, for instance, review for compliance with the National Environmental Policy Act, which requires a consideration of environmental impacts; the Davis-Bacon Act of 1931, which established a requirement for paying the local prevailing wages on public works projects for laborers and mechanics; and the Cargo Preference Act of 1954, which requires that at least 50% of government cargo tonnage be transported on privately owned US-flag vessels.



1 **Q. What is off-balance sheet accounting and why is it important for**  
2 **regulators and utilities to consider with regard to EIR loan**  
3 **applications?**

4 A. EIR loans may be structured as off-balance sheet financing vehicles  
5 repaid through a dedicated bill surcharge. With off-balance sheet  
6 accounting, the utility's balance sheet capital structure is insulated  
7 from the debt held by a bankruptcy-remote special purpose-vehicle  
8 (SPV), since the major credit rating agencies calculate key credit  
9 metrics both with and without consolidation of the off-balance sheet  
10 debt and incorporate both these results into their overall rating of a  
11 borrowing entity. Thus, issuing EIR debt through an SPV can  
12 minimize negative credit rating implications that may otherwise be  
13 incurred if done via on-balance sheet financing.

14 Importantly, the LPO has indicated that it is amenable to utility EIR  
15 loan applications for off-balance sheet accounting so that utilities can  
16 take advantage of the opportunity to maximize the benefits of EIR  
17 loans.

18 **Q. Can you explain in more detail how ratepayers can benefit from**  
19 **high-leverage EIR borrowing?**

20 A. The implication of higher leverage borrowing is that the EIR borrower  
21 can displace not only corporate utility debt but also a portion of utility  
22 equity. Displacing a portion of utility equity can have a greater impact

1 on the savings potential offered by an EIR loan because the  
2 difference – or “spread” – between the cost (i.e., interest rate) of EIR  
3 debt and the cost of utility equity is much larger than the difference  
4 between the cost of utility debt and EIR debt.

5 Consider this example that RMI modeled concerning a utility that is  
6 proposing to build 1,800 megawatts (MW) of solar, 1,000 MW of  
7 wind, and 400 MW of battery storage by 2030.<sup>12</sup> RMI estimated that  
8 the total nominal costs of this portfolio would be \$4.78 billion. The  
9 utility also had plans to retire an older coal plant and to seek to  
10 securitize and recover \$513 million, inclusive of both the remaining  
11 plant balance and additional decommissioning costs and community  
12 transition funding. If traditional utility financing is used, the net  
13 present value (NPV) of ratepayer costs would be \$4.1 billion.

14 If the utility were to use EIR financing only to displace utility debt in  
15 the regulator-approved capital structure (48% of the capital stack),  
16 ratepayers would save approximately \$225 million (NPV), reflecting  
17 the lower interest rate on EIR debt compared with the utility’s  
18 corporate debt. However, if the utility maximizes the leverage  
19 available under EIR (80% of project cost), ratepayers would save

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<sup>12</sup> This example is discussed in the Ameren Missouri section of RMI’s May 24, 2024 analysis, available at: <https://rmi.org/maximizing-the-value-of-the-energy-infrastructure-reinvestment-program-for-utility-customers/>.

1           \$1.16 billion (NPV) compared with traditional utility financing. While  
2           these ratepayer benefits come at the expense of lower earnings for  
3           the utility, they are consistent with the least-cost mandate contained  
4           in HB 951. This level of leverage would require a dedicated ratepayer  
5           surcharge for some or all of the EIR repayment. Therefore, the Public  
6           Staff recommends that the Commission consider the use of off-  
7           balance sheet accounting, an SPV, and a dedicated rider for any  
8           potential high-leverage EIR loan secured by the Companies.

9   **Q.    What steps can Duke and the Commission take to unlock the**  
10   **benefits of high-leverage EIR borrowing?**

11   A.    The Public Staff recommends the following steps as a guiding  
12    framework:

13           1. *Identify a reinvestment portfolio of EIR-eligible projects.* The  
14           portfolio would include new clean energy projects, grid  
15           investments, or reinvestment in existing clean energy  
16           infrastructure that: a) meets the requirements to qualify for the  
17           EIR program; b) can meaningfully reduce utility emissions; and c)  
18           can complete construction by September 30, 2031.<sup>13</sup> Public Staff  
19           witness Thomas offers several recommendations for

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<sup>13</sup> The IRA requires that loans be approved by the end of September 2026, although loan disbursements and project construction are permissible through September 2031. See Public Law 117-169 (Aug. 16, 2022).

1 Commission and utility action that would support the identification  
2 of a portfolio of EIR-eligible projects that will maximize ratepayer  
3 savings in North Carolina.

4 2. *Request a high-leverage EIR loan.* The EIR loan could finance up  
5 to 80% of the total costs for the reinvestment portfolio and, if  
6 desired, be structured to use an off-balance sheet, bankruptcy-  
7 remote SPV to mitigate any potential negative credit rating  
8 implications.

9 3. *Introduce a dedicated non-bypassable surcharge* on customer  
10 bills to cover the cost of repaying the EIR loan to the SPV if an  
11 EIR loan is granted.

12 4. *Recover remaining balance of the portfolio at utility cost of capital*  
13 *if an EIR loan is granted.* Provide cost recovery of the remaining  
14 fraction of the reinvestment portfolio capital costs not recovered  
15 through the surcharge at the utility's cost of capital.

16 The Public Staff recommends that the Commission order the  
17 Companies to take the steps above and to file quarterly status  
18 reports of compliance with such steps.

1 Q. **Why are ratemaking and EIR loan structures important for the**  
2 **Commission to be aware of in the CPIRP?**

3 A. The CPIRP represents the singular opportunity to identify an  
4 investment portfolio of new clean energy projects, grid investments,  
5 or reinvestment in existing energy infrastructure that meets the  
6 requirements to qualify for the EIR program, can meaningfully reduce  
7 utility emissions, will be able to complete construction by September  
8 30, 2031, and can be incorporated into an application for an EIR loan  
9 in time for conditional approval prior to September 2026. As such,  
10 this CPIRP proceeding has significant bearing on the projects that  
11 will be included in Duke's applications.

12 For the reasons explained above, the structure of an EIR loan is  
13 equally as important as the portfolio of projects that will be financed  
14 by the loan. The next opportunity for the Commission to engage with  
15 the utilities on the structure of the loan is unlikely to occur until the  
16 due diligence to loan closing stage. The structure of the loan will  
17 impact the results of the Companies' net benefits analysis as it  
18 evaluates which investments to potentially include in an EIR  
19 application. As such, the Public Staff recommends that Duke file a  
20 report detailing the results of the Companies' analysis, including an  
21 EIR loan program structure(s) that assumes a higher leverage than  
22 otherwise allowed by the utilities' authorized capital structures prior  
23 to submitting a Part 1 EIR loan application.

1 Based on [BEGIN CONFIDENTIAL] [REDACTED]  
2 [REDACTED]  
3 [REDACTED]  
4 [REDACTED] [END CONFIDENTIAL]. Failure to consider  
5 this option may lead Duke to submit a suboptimal EIR loan  
6 application, failing to yield savings of a magnitude that it could have  
7 otherwise had, had the Companies considered a high-leverage loan  
8 using an SPV. In the worst possible case, Duke could inappropriately  
9 conclude that an EIR loan would not result in net benefits, leading  
10 the Companies to not apply. The impact of such an outcome would  
11 be that a meaningful opportunity to support attainment of North  
12 Carolina’s authorized carbon reduction goals at least cost to  
13 ratepayers will be foregone. Therefore, I reiterate the  
14 recommendation set forth in witness Thomas’ testimony that the  
15 Commission require the Companies to submit the results of the cost-  
16 benefit analysis and a detailed description of the methodology  
17 employed, and allow for comments from intervening parties, such  
18 that the Commission can determine whether Duke was reasonable  
19 in its decision-making processes.

1 **Q. What should the Commission's expectations be regarding**  
2 **Duke's pursuit of opportunities that may arise from tax**  
3 **incentives or federal funding?**

4 **A.** In its Carbon Plan Order, the Commission stated that it:

5 [H]as expected and will continue to expect Duke to  
6 pursue every opportunity that may arise through tax  
7 incentives or federal funding to benefit its customers.  
8 In fact, even since the outset of this proceeding merely  
9 14 months ago, we have experienced a bellwether for  
10 the significant escalation of the transformation and very  
11 likely a reduction in cost with the passage of the  
12 Inflation Reduction Act of 2022 (the IRA) on August 16,  
13 2022.<sup>14</sup>

14 The Public Staff emphasizes the importance of exploring these  
15 options in this proceeding to inform the Commission's decision-  
16 making regarding the near-term action plan and utility investments.  
17 However, the Public Staff also raises these issues so that the  
18 Commission may be prepared to investigate the Companies'  
19 approach to EIR in related future proceedings.

20 The expectation is for Duke to aggressively apply for any such  
21 funding that is cost-effective for the benefit of ratepayers.  
22 Additionally, to the extent that Duke chooses not to pursue such  
23 funding, the Public Staff recommends that Duke provide sufficient  
24 justification for why not doing so was prudent.

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<sup>14</sup> See Carbon Plan Order, at 9.

- 1 Q. Does this conclude your testimony?
- 2 A. Yes, it does.





**QUALIFICATIONS AND EXPERIENCE****MICHELLE BOSWELL**

I graduated from North Carolina State University in 2000 with a Bachelor of Science degree in Accounting. I am a Certified Public Accountant.

As Director of the Accounting Division of the Public Staff, I am responsible for the performance, supervision, and management of the following activities: (1) the examination and analysis of testimony, exhibits, books and records, and other data presented by utilities and other parties under the jurisdiction of the Commission or involved in Commission proceedings; and (2) the preparation and presentation to the Commission of testimony, exhibits, and other documents in those proceedings. I have been employed by the Public Staff since September 2000.

I have performed numerous audits and presented testimony and exhibits before the Commission regarding a wide range of electric, natural gas, and water topics. I have performed audits and/or presented testimony in multiple REPS, fuel, DSM/EE, JAAR, and CPRE cost recovery rider proceedings; 2008 Compliance Reports for North Carolina Municipal Power Agency 1, North Carolina Eastern Municipal Power Agency, GreenCo Solutions, Inc., and EnergyUnited Electric Membership Corporation; four

recent Piedmont Natural Gas (Piedmont) rate cases; the 2016 rate case of Public Service Company of North Carolina; the 2012, 2019, and 2024 rate cases for Dominion Energy North Carolina (formerly Dominion North Carolina Power); the 2013, 2017, 2019, and 2023 DEP rate cases; the 2017, 2019, and 2024 DEC rate cases; multiple fuel annual reviews; several Piedmont, NUI Utilities, Inc. (NUI), and Toccoa annual gas cost reviews; the mergers of Piedmont and NUI, Piedmont and North Carolina Natural Gas, and Carolina Water Service of North Carolina, Inc., and SouthWest Water Company; and many water and sewer rate cases.