PLACE: Dobbs Building, Raleigh, North Carolina

DATE: Monday, June 10, 2024

TIME: 4:12 p.m. - 5:14 p.m.

DOCKET: E-7, Sub 1305

BEFORE: Commissioner Kimberly W. Duffley
Chair Charlotte A. Mitchell
Commissioner Jeffrey A. Hughes
Commissioner Floyd B. McKissick, Jr.
Commissioner Karen M. Kemerait
Commissioner William M. Brawley
Commissioner Tommy Tucker

IN THE MATTER OF:

Application of Duke Energy Carolinas, LLC, for Approval of Demand-Side Management and Energy Efficiency Cost Recovery Rider Pursuant to N.C. Gen. Stat. § 62-133.9 and Commission Rule R8-69

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P R O C E E D I N G S

COMMISSIONER DUFFLEY: Good afternoon. Let's come to order and, please, go on the record. I'm Commissioner Kimberly W. Duffley, and with me are Chair Charlotte A. Mitchell, and Commissioners Jeffrey A. Hughes, Floyd B. McKissick Jr., Karen M. Kemerait, William Brawley, and Tommy Tucker.

I now call for Hearing Docket Number E-7, Sub 1305, which is the Application of Duke Energy Carolinas, LLC, hereinafter DEC, for Approval of Demand-Side Management, hereinafter DSM, and Energy Efficiency, hereinafter EE, Cost Recovery Rider Pursuant to North Carolina General Statute § 62-133.9 and Commission Rule R8-69.

In compliance with the State Government Ethics Act, I remind the members of the Commission of our responsibility to avoid conflicts of interest and I inquire whether any member has a known conflict of interest with respect to the matter before us in this proceeding?

(No response.)

COMMISSIONER DUFFLEY: Please let the record reflect that no conflicts have been identified.

Section 62-133.9 of the North Carolina

General Statute establishes the procedure for cost recovery of DSM and EE expenditures. Section 62-133.9(d) provides for an annual DSM/EE rider for electric public utilities to recover all reasonable and prudent costs incurred and appropriate incentives for adoption and implementation of new DSM and EE measures.

On February 27, 2024, DEC filed its Application for approval of the DSM/EE cost recovery rider, along with the testimony and exhibits of Caroline T. Miller and Casey Q. Fields supporting the Application.

Carolina Utility Customers Association Incorporated and Carolina Industrial Group for Fair Rate Utility Rates III filed petitions for intervention, which were granted by the Commission.

The Public Staff, which represents the Using and Consuming Public, has been made a party to this case pursuant to North Carolina General Statute § 62-15.

On May 15, 2024, the Commission issued an Order Scheduling Hearing, Establishing Procedural and Filing Requirements, and Requiring Public Notice.

On May 8, 2024, DEC filed the supplemental testimony and revised exhibits of Caroline T. Miller and Casey Q. Fields.

On May 20, 2024, the Public Staff filed the direct testimony of David M. Williamson, and the joint direct testimony of Hemanth Meda and Michelle Boswell.

On May 29, 2024, DEC filed the rebuttal testimony and exhibits of Carolyn T. Miller.

On May 31, 2024, DEC filed the required affidavits of public notice.

I now call for the appearances of counsel, beginning with the applicant.

MS. TOON: Good afternoon, again, Commission. Ladawn Toon on behalf of Duke Energy Carolinas.

MR. MIDDLETON: My name is Will Middleton, with the Law Firm Baker Donelson, here on behalf of Duke Energy Carolinas.

COMMISSIONER DUFFLEY: Welcome.

MS. KEYWORTH: Good afternoon, Commissioners. My name is Anne Keyworth. I'm here on behalf of the Using and Consuming Public with the Public Staff, and with me today is Nadia Luhr.

COMMISSIONER DUFFLEY: Thank you.

MR. TYNAN: Good afternoon. Matt Tynan,

with the Brooks Pierce Law Firm for CUCA.

COMMISSIONER DUFFLEY: Good afternoon.

MS. CRESS: Good afternoon. Christina Cress with the Law Firm of Bailey and Dixon, here on behalf of CIGFUR III.

COMMISSIONER DUFFLEY: Good afternoon.

So with respect to the public witness hearing, Ms. Keyworth, have you identified anyone present and wishing to provide public witness testimony in this docket?

MS. KEYWORTH: No, Commissioner Duffley, we have not.

COMMISSIONER DUFFLEY: Out of an abundance of caution, is there anyone in the hearing room that wishes to provide public witness testimony?

(No response.)

COMMISSIONER DUFFLEY: Hearing none, we will move on to the expert witness portion of the hearing.

Are there any preliminary matters we need to address prior to the hearing?

MR. MIDDLETON: None from the Company.

COMMISSIONER DUFFLEY: So let's proceed. DEC, if you'll call your first witness, or panel.

MR. MIDDLETON: Yes, Presiding Commissioner

Duffley. With your permission, the Company would like to call Ms. Miller and Mr. Fields as a panel to address both the direct and rebuttal case of the Company.

COMMISSIONER DUFFLEY: You're doing the direct, supplemental, and rebuttal all at one time?

MR. MIDDLETON: If allowed, that's correct.

COMMISSIONER DUFFLEY: Yes, that is allowed. No objection?

(No response.)

COMMISSIONER DUFFLEY: It's allowed.

MR. MIDDLETON: Thank you, Presiding Commissioner Duffley. The Company will now call Carolyn T. Miller and Casey Q. Fields to the stand.

COMMISSIONER DUFFLEY: Good afternoon. Unless you say you want to be affirmed, I'll swear you. If you can place your left hand on the Bible and raise your right hand.

PANEL OF CAROLYN T. MILLER and CASEY Q. FIELDS;
having been duly sworn,
testified as follows:

MR. MIDDLETON: Thank you very much.

DIRECT EXAMINATION BY MR. MIDDLETON:

Q Start with you, Ms. Miller. Would you please state your name and business address for the record.

A (Ms. Miller) My name is Carolyn T. Miller, and my business address is 425 South Tryon Street, Charlotte, North Carolina.

Q And by whom are you employed, and in what capacity?

A I am a rates and regulatory strategy manager for Duke Energy Carolinas, LLC, supporting both Duke Energy Carolinas and Duke Energy Progress.

Q Okay. And, Ms. Miller, did you cause to be prefiled in this docket on February 27, 2024, 23 pages of direct testimony and seven exhibits?

A Yes.

Q Thank you. Do you have any changes or corrections to that testimony?

A No.

Q And did you also cause to be prefiled in this docket on May 8, 2024, six pages of supplemental direct testimony and four revised exhibits?

A Yes.

Q Thank you. Do you have any changes or corrections to your supplemental direct testimony or exhibits?

A No.
Q And did you also cause to be prefiled in this docket on May 29, 2024, 19 pages of rebuttal testimony and two exhibits?
A Yes.
Q Do you have any changes or corrections to your rebuttal testimony or exhibits?
A No.
Q And, Ms. Miller, if I were to ask you the same questions that appear in your direct, supplemental direct, and rebuttal testimony today, would your answers be the same?
A Yes.
Q Have you also prepared a summary of your testimony for the Commission?
A Yes.

MR. MIDDLETON: Presiding Commissioner Duffley, I'd request that that summary be moved into the record rather than read from the stand, if that's okay.

COMMISSIONER DUFFLEY: That is approved.

MR. MIDDLETON: Thank you. And, Presiding Commissioner Duffley, with that, I also move that Ms. Miller's prefiled direct, supplemental direct, and rebuttal testimony, as well as the seven exhibits submitted to her direct, four revised exhibits submitted with her supplemental direct, and two rebuttal exhibits, be marked for identification as prefiled?

COMMISSIONER DUFFLEY: That the motion is allowed.

(WHEREUPON, Miller Exhibits 1-7 are identified.)

(WHEREUPON, the prefiled direct testimony of CAROLYN T. MILLER is copied into the record as if given orally from the stand.)

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1305

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	
Application of Duke Energy Carolinas, LLC	)	
for Approval of Demand-Side Management	)	**DIRECT TESTIMONY OF**
and Energy Efficiency Cost Recovery Rider	)	**CAROLYN T. MILLER FOR**
Pursuant to N.C. Gen. Stat. § 62-133.9 and	)	**DUKE ENERGY CAROLINAS,**
Commission Rule R8-69	)	**LLC**

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TITLE.

A. My name is Carolyn T. Miller, and my business address is 525 South Tryon Street, Charlotte, North Carolina, 28202. I am a Rates and Regulatory Strategy Manager for Duke Energy Carolinas, LLC ("DEC" or the "Company"). I support both DEC and Duke Energy Progress, LLC ("DEP").

Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL QUALIFICATIONS.

A. I graduated from The College of New Jersey in 1994 with a Bachelor of Science degree in Accounting. I started my career in 1994 at Ernst & Young as a Senior Auditor. Subsequently, from 1997-1999, I worked for Duke Energy Global Asset Development as a Business Analyst. From 1999-2001, I worked for Duke Engineering & Services as a Senior Business Analyst. I then joined Duke Energy in 2001 and served in various roles, including as Senior Business Analyst, Manager of General Accounting, Manager of Emerging Issues, and Manager of Tax Accounting. Since 2016, I have worked for DEC as Manager of Rates and Regulatory Strategy.

Q. WHAT ARE YOUR CURRENT RESPONSIBILITIES FOR DEC?

A. I am responsible for providing regulatory support and guidance on DEC's demand-side management ("DSM") and energy efficiency ("EE") cost recovery process.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NORTH CAROLINA UTILITIES COMMISSION ("COMMISSION")?

A. Yes. I provided testimony in support of the DEC DSM/EE Rider Application in Docket No. E-7, Sub 1285 and the DEP DSM/EE Rider Application in Docket No. E-2, Sub 1322.

Q. **WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. The purpose of my testimony is to explain and support DEC's proposed DSM/EE cost recovery rider ("Rider 16")—including prospective and Experience Modification Factor ("EMF") components—and provide information required by Commission Rule R8-69.

Q. PLEASE DESCRIBE THE EXHIBITS ATTACHED TO YOUR TESTIMONY.

A. Miller Exhibit 1 summarizes the individual rider components for which DEC requests approval in this filing. Miller Exhibit 2 shows the calculation of revenue requirements for each vintage, with separate calculations for non-residential DSM and EE programs within each vintage. Miller Exhibit 3 presents the return calculations for Vintages 2019, 2020, 2021, 2022, and 2023. Miller Exhibit 4 shows the actual and estimated prospective amounts collected from customers in Riders 10 through 15 pertaining to Vintages 2019 through 2024. Miller Exhibit 5 provides the calculation of the allocation factors used to allocate system DSM and EE costs to DEC's North Carolina retail jurisdiction. Miller Exhibit 6 presents the forecasted sales for the rate period (2025) and the actual and estimated sales related to customers that have opted out of various vintages. These amounts are used to determine the forecasted sales to which the Rider 16 amounts will apply. Miller Exhibit 7 is the proposed tariff sheet for Rider 16.

Q. WERE MILLER EXHIBITS 1-7 PREPARED BY YOU OR AT YOUR DIRECTION AND SUPERVISION?

A. Yes.

II. GENERAL STRUCTURE OF RIDERS

Q. PLEASE DESCRIBE THE STRUCTURE OF RIDER 16.

A. Rider 16 was calculated in accordance with the Company's portfolio of programs and cost recovery mechanism first approved in the Commission's *Order Approving DSM/EE Programs and Stipulation of Settlement*, issued on October 29, 2013 ("the Stipulation"), in Docket No. E-7, Sub 1032 and the cost recovery and incentive Mechanism ("2020 Mechanism" and collectively, the "Mechanisms") approved in the Commission's *Order Approving Revisions to Demand-Side Management and Energy Efficiency Cost Recovery Mechanisms,* issued on October 20, 2020, in Docket Nos. E-2, Sub 931 and E-7, Sub 1032 ("2020 Sub 1032 Order").

The approved cost recovery mechanism is designed to allow DEC to collect revenue equal to its incurred program costs[1] for a rate period plus a Portfolio Performance Incentive ("PPI") based on shared savings achieved by DEC's DSM/EE programs and to recover net lost revenues for EE programs only. In addition, per the 2020 Mechanism, as of 2022, the Income-Qualified

[1] Program costs are defined under Rule R8-68(b)(1) as all reasonable and prudent expenses expected to be incurred by the electric public utility, during a rate period, for the purpose of adopting and implementing new DSM and EE measures previously approved pursuant to Rule R8-68.

EE and Weatherization programs are eligible to receive a Program Return Incentive ("PRI") based on shared savings achieved by these programs. Company witness Casey Fields's testimony provides additional information on this matter.

The Company is allowed to recover net lost revenues associated with a particular vintage of an EE measure for the lesser of 36 months or the life of the measure, provided that the recovery of net lost revenues shall cease upon the implementation of new rates in a general rate case to the extent that the new rates are set to recover net lost revenues.

The Company's Mechanisms employ a vintage year concept based on the calendar year.[2] Each vintage year represents an identified 12-month period in which a specific DSM or EE measure is installed for an individual participant or group of participants. In each of its annual rider filings, DEC performs an annual true-up process for the prior calendar year vintages. The true-up will reflect actual participation and verified Evaluation, Measurement and Verification ("EM&V") results for completed vintages, applied in the same manner as agreed upon by DEC, the Southern Alliance for Clean Energy, and the Public Staff - North Carolina Utilities Commission ("Public Staff"), and approved by the Commission in its *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice* issued on November 8, 2011, in Docket No. E-7, Sub 979 ("EM&V Agreement"). In accordance with the 2020

[2] Each vintage is referred to by the calendar year of its respective rate period (*e.g.*, Vintage 2020).

Sub 1032 Order, DEC continues to apply EM&V in accordance with the EM&V Agreement.

The Company has implemented deferral accounting for over- and under-recoveries of costs that are eligible for recovery through the annual DSM/EE rider. The balance in the deferral account(s), net of deferred income taxes, may accrue a return at the net-of-tax rate of return rate approved in DEC's most recent general rate case. The methodology used for the calculation of interest is required to be the same as that typically utilized for DEC's Existing DSM Program Rider. Pursuant to Commission Rule R8-69(c)(3), DEC will not accrue a return on net lost revenues or the PPI/PRI. Miller Exhibit 3, pages 1 through 20, shows the interest calculation performed as part of the true-up of Vintages 2019, 2020, 2021, 2022 and 2023.

The Company expects that most EM&V will be available in the time frame needed to true-up each vintage in the following calendar year. However, if any EM&V results for a vintage are not available in time for inclusion in DEC's annual rider filing, the Company will make an appropriate adjustment in the next annual filing.

DEC calculates one integrated (prospective) DSM/EE rider and one integrated DSM/EE EMF rider for the residential class, to be effective each rate period. The integrated residential DSM/EE EMF rider includes all true-ups for each applicable vintage year. Given that qualifying non-residential customers can opt out of DSM and/or EE programs, DEC calculates separate DSM and EE billing factors for the non-residential class. Additionally, the non-residential DSM and EE EMF billing factors are determined separately for each applicable vintage year, so that the factors can be appropriately charged to non-residential customers based on their opt-in/out status and participation for each vintage year.

Q. WHAT ARE THE COMPONENTS OF RIDER 16?

A. The prospective components of Rider 16 include: (1) a prospective Vintage 2025 component designed to collect estimated program costs and the PPI for DEC's 2025 vintage of DSM programs; (2) a prospective Vintage 2025 component to collect estimated program costs, PPI, PRI, and the first year of estimated net lost revenues for DEC's 2025 vintage of EE programs; (3) a prospective Vintage 2024 component designed to collect the second year of estimated net lost revenues for DEC's 2024 vintage of EE programs; (4) a prospective Vintage 2023 component designed to collect the third year of estimated net lost revenues for DEC's 2023 vintage of EE programs; and (5) a prospective Vintage 2022 component designed to collect the fourth year of estimated net lost revenues for DEC's 2022 vintage of EE programs.

The EMF components of Rider 16 include: (1) a true-up of Vintage 2019 net lost revenues, PPI and participation for DSM/EE programs based on additional EM&V results received; (2) a true-up of Vintage 2020 net lost revenues, PPI and participation for DSM/EE programs based on additional EM&V results received; (3) a true-up of Vintage 2021 net lost revenues, PPI and participation for DSM/EE programs based on additional EM&V results received; (4) a true-up of Vintage 2022 net lost revenues, program costs, PPI and PRI for DSM/EE programs and (5) a true-up of Vintage 2023 net lost revenues, program costs, PPI and PRI for DSM/EE programs.

Q. HOW DOES DEC CALCULATE THE PROPOSED BILLING FACTORS?

A. The billing factor for residential customers is computed by dividing the combined revenue requirements for DSM and EE programs by the forecasted sales for the rate period. For non-residential rates, the billing factors are computed by dividing the revenue requirements for DSM and EE programs separately by forecasted sales for the rate period. The forecasted sales exclude the estimated sales to customers who have elected to opt out of Rider EE. Because non-residential customers are allowed to opt out of DSM and/or EE programs separately in an annual election, non-residential billing factors are computed separately for each vintage.

III. COST ALLOCATION METHODOLOGY

Q. HOW DOES DEC ALLOCATE REVENUE REQUIREMENTS TO THE NORTH CAROLINA RETAIL JURISDICTION AND TO THE RESIDENTIAL AND NON-RESIDENTIAL RATE CLASSES?

A. The Company allocates the revenue requirements related to program costs and incentives for EE programs targeted at retail residential customers across North Carolina and South Carolina to its North Carolina retail jurisdiction based on the ratio of North Carolina retail kWh sales (grossed up for line losses) to total retail kWh sales (grossed up for line losses), and then recovers them only from North Carolina residential customers. The revenue requirements related to EE programs targeted at retail non-residential customers across North Carolina and South Carolina are allocated to the North Carolina retail jurisdiction based on the ratio of North Carolina retail kWh sales (grossed up for line losses) to total retail kWh sales (grossed up for line losses), and then recovered from only North Carolina retail non-residential customers. The portion of revenue requirements related to net lost revenues for EE programs is not allocated to the North Carolina retail jurisdiction, but rather is specifically computed based on the kW and kWh savings of North Carolina retail customers.

Historically, the Company has calculated the NC Revenue Requirement for Demand Response programs using both the state allocation factor and a second Residential/Non-Residential allocation factor, based on the percent of peak demand of each customer class. However, beginning with Vintage 2022, the Company is calculating the NC Revenue Requirement using only the state allocation and not the Residential/Non-Residential Peak Demand factor (as shown in Fields Exhibit 1, page 5 and 6, and reflected in Miller Exhibit 3, pages 14, 16, 18, and 20). This results in a more accurate representation of each customer class bearing the revenue requirement of the demand response programs offered to that class.

The allocation factors used in DSM/EE EMF true-up calculations for each vintage are based on the DEC Cost of Service study most recently filed with the Commission at the time that the Rider EE filing incorporating the initial true-up for each vintage is made. If there are subsequent true-ups for a vintage, DEC will use the same allocation factors as those used in the original DSM/EE EMF true-up calculations.

IV. UTILITY INCENTIVES AND NET LOST REVENUES

Q. HOW DOES DEC CALCULATE THE PPI AND PRI?

A. Pursuant to the Stipulation, DEC calculates the dollar amount of PPI by multiplying the shared savings achieved by the system portfolio of DSM/EE programs by 11.5% prior to 2022. Pursuant to the 2020 Mechanism and related 2020 Sub 1032 Order, starting in 2022, this percentage is lowered to 10.6%. In addition, as discussed above, Income-Qualified EE and Weatherization programs are eligible to receive a PRI.

Company witness Fields further describes the specifics of the PPI and PRI calculations in his testimony. In addition, Fields Exhibit 1, pages 1 through 5, shows the revised PPI Vintage 2019, Vintage 2020, Vintage 2021, Vintage 2022, and Vintage 2023 respectively, based on updated EM&V results, and Fields Exhibit 1, page 6, shows the estimated PPI and PRI by program type and customer class for Vintage 2025. The system amount of PPI and PRI is then allocated to North Carolina retail customer classes to derive customer rates.

Q. HOW DOES DEC CALCULATE THE NET LOST REVENUES FOR THE PROSPECTIVE COMPONENTS OF RIDER EE?

A. For the prospective components of Rider EE, net lost revenues are estimated by multiplying the portion of DEC's tariff rates that represent the recovery of fixed costs by the estimated North Carolina retail kW and kWh reductions applicable to EE programs by rate schedule and reducing this amount by estimated found revenues. The Company calculates the portion of North Carolina retail tariff rates (including certain riders) representing the recovery of fixed costs by deducting the recovery of fuel and variable operation and maintenance costs from its tariff rates. The lost revenues totals for residential and non-residential customers are then reduced by North Carolina retail found revenues computed using the weighted average lost revenue rates for each customer class. The testimony and exhibits of Company witness Fields provide information on the actual and estimated found revenues which offset lost revenues.

Q. WERE NET LOST REVENUES IN RIDER 16 IMPACTED BY THE DECOUPLING RIDER APPROVED BY THE COMMISSION?

A. No. In the most recent DEC rate case in Docket E-7 Sub 1134, the Commission approved DEC's proposal for a residential revenue per customer decoupling mechanism to break the link between the Company's profits and usage per customer in the residential class. As proposed in the DEC rate case, net lost revenues continue to be calculated and collected in the DSM/EE rider.

Q. HOW IS THE COMPANY ENSURING THAT THERE IS NO DOUBLE RECOVERY OF LOST REVENUE?

A. Any net lost revenues attributable to residential customers through the Company's DSM/EE rider are subtracted from the residential decoupling mechanism balance to ensure no double recovery of these revenues from customers. On February 14, 2024, the Company submitted its first Quarterly Residential Decoupling Status Report for the DEP decoupling mechanism as part of Docket No. E-2 Sub 1300. That report outlines the components of the decoupling calculation, including the removal of net lost revenues. A similar report will be provided in May 2024 for the DEC decoupling mechanism approved in Docket No. E-7 Sub 1276.

Q. HOW DOES DEC CALCULATE THE NET LOST REVENUES FOR THE EMF COMPONENTS OF RIDER EE?

A. For the EMF components of Rider EE, DEC calculates the net lost revenues by multiplying the portion of its tariff rates that represent the recovery of fixed costs by the actual and verified North Carolina retail kW and kWh reductions applicable to EE programs by rate schedule. The Company then reduces this amount by actual found revenues.

V. <u>OPT-OUT PROVISIONS</u>

Q. PLEASE EXPLAIN THE OPT-OUT PROCESS FOR NON-RESIDENTIAL CUSTOMERS.

A. Pursuant to the Commission's *Order Granting Waiver, in Part, and Denying Waiver, in Part* ("Waiver Order") issued April 6, 2010, in Docket No. E-7, Sub 938 and the Sub 1032 Orders, the Company is allowed to permit qualifying non-residential customers[3] to opt out of the DSM and/or EE portion of Rider EE during annual election periods. If a customer opts into a DSM program (or never opted out), the customer is required to participate for three years in the approved DSM programs and rider. If a customer chooses to participate in an EE program (or never opted out), that customer is required to pay the EE-related

[3] Individual commercial customer accounts with annual energy usage of not less than 1,000,000 kWh and any industrial customer account.

program costs, shared savings incentive, and the net lost revenues for the corresponding vintage of the programs in which it participated. Customers that opt out of DEC's DSM and/or EE programs remain opted-out unless they choose to opt back in during any of the succeeding annual election periods, which occur from November 1 to December 31 each year, or any of the succeeding annual opt-in periods in March as described below. If a customer participates in any vintage of programs, the customer is subject to all true-up provisions of the approved Rider EE for any vintage in which the customer participates.

DEC provides an additional opportunity for qualifying customers to opt into DEC's DSM and/or EE programs during the first five business days of March. Customers who choose to begin participating in DEC's EE and DSM programs during the special "opt-in period" during March of each year will be retroactively billed the applicable Rider EE amounts back to January 1 of the vintage year, such that they will pay the appropriate Rider EE amounts for the full rate period.

Q. DOES DEC ADJUST THE RATE FOR NON-RESIDENTIAL CUSTOMERS TO ACCOUNT FOR THE IMPACT OF "OPT-OUT" CUSTOMERS?

A. Yes. The impact of opt-out results is considered in the development of the Rider EE billing rates for non-residential customers. Since the revenue requirements will not be recovered from non-residential customers that opt out of DEC's programs, the forecasted sales used to compute the rate per kWh for non-residential rates exclude sales to customers that have opted out of the vintage to which the rate applies. This adjustment is shown on Miller Exhibit 6.

VI. PROSPECTIVE COMPONENTS

Q. WHAT IS THE RATE PERIOD FOR THE PROSPECTIVE COMPONENTS OF RIDER 16?

A. In accordance with the Commission's *Order on Motions for Reconsideration* issued on June 3, 2010, in Docket No. E-7, Sub 938 ("Second Waiver Order") and the 2020 Mechanism, DEC has calculated the prospective components of Rider 16 using the rate period January 1, 2025 through December 31, 2025.

Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE REQUIREMENTS RELATING TO VINTAGE 2022.

A. The Company determines the estimated revenue requirements for Vintage 2022 separately for residential and non-residential customer classes and bases them on the fourth year of net lost revenues for its Vintage 2022 EE programs. The amounts are based on estimated North Carolina retail kW and kWh reductions and DEC's rates approved in its most recent general rate case, which became effective September 1, 2023, adjusted as described above to recover only the fixed cost component.

Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE REQUIREMENTS RELATING TO VINTAGE 2023.

A. The Company determines the estimated revenue requirements for Vintage 2023 separately for residential and non-residential customer classes and bases them on the third year of net lost revenues for its Vintage 2023 EE programs. The amounts are based on estimated North Carolina retail kW and kWh reductions and DEC's rates approved in its most recent general rate case, which became effective September 1, 2023, adjusted as described above to recover only the fixed cost component.

Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE REQUIREMENTS RELATING TO VINTAGE 2024.

A. The Company determines the estimated revenue requirements for Vintage 2024 separately for residential and non-residential customer classes and bases them on the second year of net lost revenues for its Vintage 2024 EE programs. The amounts are based on estimated North Carolina retail kW and kWh reductions and DEC's rates approved in its most recent general rate case, which became effective September 1, 2023, adjusted as described above to only recover the fixed cost component.

Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE REQUIREMENTS RELATING TO VINTAGE 2025.

A. The estimated revenue requirements for Vintage 2025 EE programs include program costs, PPI, PRI, and the first year of net lost revenues determined separately for residential and non-residential customer classes. The estimated revenue requirements for Vintage 2025 DSM programs include program costs, PPI, and PRI. The program costs and shared savings incentive are computed at the system level and allocated to North Carolina based on the allocation methodologies discussed earlier in my testimony. The amounts are based on estimated North Carolina retail kW and kWh reductions and DEC's rates approved in its most recent general rate case, which became effective September 1, 2023, adjusted as described above to only recover the fixed cost component.

VII. EMF

Q. WHAT IS THE TEST PERIOD FOR THE EMF COMPONENT?

A. Pursuant to the Second Waiver Order and the Stipulation, the test period for the EMF component is defined as the most recently completed vintage year at the time of DEC's Rider EE cost recovery application filing date, which in this case is Vintage 2023 (January 1, 2023 through December 31, 2023). In addition, the Second Waiver Order allows the EMF component to cover multiple test periods, so the EMF component for Rider 16 includes Vintage 2019 (January 2019 through December 2019), Vintage 2020 (January 2020 through December 2020), Vintage 2021 (January 2021 through December 2021), and Vintage 2022 (January 2022 through December 2022) as well.

Q. WHAT IS BEING TRUED UP FOR VINTAGE 2023?

A. The chart below demonstrates which components of the Vintage 2023 estimate filed in 2022 are being trued up in the Vintage 2023 EMF component of Rider 16. Miller Exhibit 2, page 5 contains the calculation of the true-up for Vintage 2023. The second year of net lost revenues for Vintage 2023, which are a component of Rider 15 billings during 2024, will be trued up to actual amounts during the next rider filing.

	Vintage 2023 Estimate (2023) (Filed February 2022)	Vintage 2023 True-Up (2023) (Filed February 2024)
	Rider 14 Prospective	**Rider 16 EMF**
Participation	Estimated participation using half-year convention	Update for actual participation for January 2023 – December 2023
EM&V	Initial assumptions of load impacts	Updated according to Commission-approved EM&V Agreement
Lost Revenues	Estimated 2023 participation using half-year convention	Update for actual participation for January 2023 – December 2023and actual 2023 lost revenue rates
Found Revenues	Estimated according to Commission-approved guidelines	Update for actual according to Commission-approved guidelines
New Programs	Only includes programs approved prior to estimated filing	Update for any new programs and pilots approved and implemented since estimated filing

In addition, DEC has implemented deferral accounting for the under/over collection of program costs and calculated a return at the net-of-tax rate of return rate approved in DEC's most recent general rate case. The methodology used for the calculation of return is the same as that typically utilized for DEC's Existing DSM Program rider proceedings. Pursuant to Commission Rule R8-69(c)(3), DEC is not accruing a return on net lost revenues or the PPI. Please see Miller Exhibit 3, pages 1 through 20 for the calculation performed as part of the true-up of Vintage 2019, Vintage 2020, Vintage 2021, Vintage 2022, and Vintage 2023.

Q. HOW WERE THE LOAD IMPACTS UPDATED?

A. For DSM programs, the contracted amounts of kW reduction capability from participants are components of actual participation. As a result, the Vintage 2023 true-up reflects the actual quantity of demand reduction capability for the

Vintage 2023 period. The load impacts for EE programs were updated in accordance with the Commission-approved EM&V Agreement.

Q. HOW WERE ACTUAL NET LOST REVENUES COMPUTED FOR THE VINTAGE 2023 TRUE-UP?

A. Net lost revenues for year one (2023) of Vintage 2023 were calculated using actual kW and kWh savings by North Carolina retail participants by customer class based on actual participation and load impacts reflecting EM&V results applied according to the EM&V Agreement. The actual kW and kWh savings were as experienced during the period January 1, 2023 through December 31, 2023. The rates applied to the kW and kWh savings are the retail rates that were in effect for the period January 1, 2023, through December 31, 2023, reduced by fuel and other variable costs. The lost revenues were then offset by actual found revenues for year one of Vintage 2023 as explained by Company witness Fields. The calculation of net lost revenues was performed by rate schedule within the residential and non-residential customer classes.

Q. WHAT IS BEING TRUED UP FOR VINTAGE 2022?

A. Avoided costs for Vintage 2022 DSM programs are being trued up to update EM&V participation results. Avoided costs for Vintage 2022 EE programs are also being trued up based on updated EM&V results. The actual kW and kWh were savings experienced during the period January 1, 2022 through December 31, 2022. The rates applied to the kW and kWh savings are the retail rates that were in effect during each period the lost revenues were earned, reduced by fuel and other variable costs. In addition, lost revenues previously requested and collected are being adjusted to reflect the impact of the implementation of interim rates as of September 1, 2023.

Q. WHAT IS BEING TRUED UP FOR VINTAGE 2021?

A. Avoided costs for Vintage 2021 DSM programs are being trued up to update EM&V participation results. Avoided costs for Vintage 2021 EE programs are also being trued up based on updated EM&V results. The actual kW and kWh savings were as experienced during the period January 1, 2021, through December 31, 2021. The rates applied to the kW and kWh savings are the retail rates that were in effect during each period the lost revenues were earned, reduced by fuel and other variable costs. In addition, lost revenues previously requested and collected are being adjusted to reflect the impact of the implementation of interim rates as of September 1, 2023.

Q. WHAT IS BEING TRUED UP FOR VINTAGE 2020?

A. Net lost revenues for all years were trued up for updated EM&V results. The actual kW and kWh savings were as experienced during the period January 1, 2020, through December 31, 2020. The rates applied to the kW and kWh savings are the retail rates that were in effect during each period the lost revenues were earned, reduced by fuel and other variable costs. In addition, lost revenues previously requested and collected are being adjusted to reflect the impact of the implementation of interim rates as of September 1, 2023.

Q. WHAT IS BEING TRUED UP FOR VINTAGE 2019?

A. Net lost revenues for all years were trued up for updated EM&V results. The actual kW and kWh savings were as experienced during the period January 1, 2019 through December 31, 2019. The rates applied to the kW and kWh savings are the retail rates that were in effect during each period the lost revenues were earned, reduced by fuel and other variable costs.

Q. ARE THERE ANY OTHER TRUE UPS INCLUDED IN THIS FILING?

A. Yes. As discussed in my Supplemental Direct Testimony filed in Docket E-7 Sub 1285, there were various interest calculation corrections associated with Vintages 2018 through Vintage 2021. The Company discussed those changes with the Public Staff and did not incorporate those changes in Rider 15. Instead, the Company recommended addressing those corrections in Rider 16 as the corrections were varied in nature and resulted in both increases and decreases to rates. Adjustments have been made to Rider 16 for Vintages 2019 through Vintage 2022 in this filing. No adjustment has been made to Vintage 2018 as this vintage is now considered closed. In addition, Miller Exhibit 3 pages 1 through 20 as well as Miller Exhibit 4 have been redesigned for increased transparency in the interest calculations and to reduce the risk of human error.

VIII. PROPOSED RATES

Q. WHAT ARE THE PROPOSED INITIAL BILLING FACTORS APPLICABLE TO NORTH CAROLINA ELECTRIC CUSTOMERS FOR THE PROSPECTIVE COMPONENTS OF RIDER 16?

A. The Company's proposed initial billing factor for the Rider 16 prospective components is 0.5012 cents per kWh for DEC's North Carolina retail residential customers. For non-residential customers, the amounts differ depending upon customer elections of participation. The following chart depicts the options and rider amounts:

Non-Residential Billing Factors for Rider 16 Prospective Components	¢/kWh
Vintage 2022 EE participant	0.0079
Vintage 2023 EE participant	0.0369
Vintage 2024 EE participant	0.0929
Vintage 2025 EE participant	0.3591
Vintage 2025 DSM participant	0.1161

Q. WHAT ARE DEC'S PROPOSED EMF BILLING FACTORS APPLICABLE TO NORTH CAROLINA ELECTRIC CUSTOMERS FOR THE TRUE-UP COMPONENTS OF RIDER 16?

A. The Company's proposed EMF billing factor for the true-up components of Rider 16 is (0.0057) cents per kWh for DEC's North Carolina retail residential customers. For non-residential customers, the amounts differ depending upon customer elections of participation. The following chart depicts the options and rider amounts:

Non-Residential Billing Factors for Rider 16 EMF Components	¢/kWh
Vintage 2019 EE participant	0.0007
Vintage 2019 DSM participant	0.0000
Vintage 2020 EE Participant	(0.0047)
Vintage 2020 DSM Participant	(0.0016)
Vintage 2021 EE Participant	(0.0900)

Vintage 2021 DSM Participant	0.0003
Vintage 2022 EE Participant	(0.0767)
Vintage 2022 DSM Participant	(0.0020)
Vintage 2023 EE Participant	(0.1554)
Vintage 2023 DSM Participant	0.0143

Q. WHAT IS IMPACT OF THE COMPANY'S PROPOSED CHANGES TO THE BILLING FACTORS ON A CUSTOMER'S BILL?

A. If the Company's proposed billing factors are approved, a typical residential customer using 1,000 kWh would see an increase in their total monthly bill of $1.18, or 0.8%. The impact to an average non-residential customer's bill would depend on their opt-in/opt-out status for the various DSM and/or EE vintages.

IX. CONCLUSION

Q. PLEASE SUMMARIZE THE SPECIFIC RATE MAKING APPROVAL REQUESTED BY DEC.

A. DEC seeks approval of the Rider 16 billing factors to be effective throughout 2025. As discussed above, Rider 16 contains (1) a prospective component, which includes the fourth year of net lost revenues for non-residential Vintage 2022, the third year of net lost revenues for Vintage 2023, the second year of net lost revenues for Vintage 2024, and the revenue requirements for Vintage 2025; and (2) an EMF component which represents a true-up of Vintage 2019, Vintage 2020, Vintage 2021, Vintage 2022, and Vintage 2023. Consistent with the Stipulation, for DEC's North Carolina residential customers, the Company calculated one integrated prospective billing factor and one integrated EMF billing factor for Rider 16. Also, in accordance with the Stipulation, the non-residential DSM and EE billing factors have been determined separately for each vintage year and will be charged to non-residential customers based on their opt-in/out status and participation for each vintage year.

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.

(WHEREUPON, Miller Revised Exhibits 1-4 are identified.)

(WHEREUPON, the prefiled supplemental direct testimony of CAROLYN T. MILLER is copied into the record as if given orally from the stand.)

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1305

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of) Application of Duke Energy Carolinas, LLC, Pursuant to N.C.G.S. § 62-133.9 and Commission Rule R8-69 for Approval of Demand-Side Management and Energy Efficiency Cost Recovery Rider)	**SUPPLEMENTAL DIRECT TESTIMONY OF CAROLYN T. MILLER FOR DUKE ENERGY CAROLINAS, LLC**

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TITLE.

A. My name is Carolyn T. Miller, and my business address is 525 South Tryon Street, Charlotte, North Carolina 28202. I am a Rates and Regulatory Strategy Manager for Duke Energy Carolinas, LLC ("DEC" or the "Company"). I support both DEC and Duke Energy Progress, LLC.

Q. ARE YOU THE SAME CAROLYN T. MILLER WHOSE DIRECT TESTIMONY AND EXHIBITS WERE FILED IN THIS DOCKET ON FEBRUARY 27, 2024?

A. Yes.

Q. ARE YOU INCLUDING ANY EXHIBITS WITH YOUR SUPPLEMENTAL DIRECT TESTIMONY?

A. Yes. I am including Revised Miller Exhibits 1, 2, 3, and 4.

Q. WERE THESE EXHIBITS PREPARED BY YOU OR AT YOUR DIRECTION AND SUPERVISION?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT TESTIMONY IN THIS PROCEEDING?

A. The purpose of my supplemental direct testimony is to update Miller Exhibits 1, 2, 3, and 4 that were filed with my direct testimony in this docket. Those updates are explained below and included in Revised Miller Exhibits 1, 2, 3, and 4.

II. UPDATES TO DIRECT TESTIMONY

Q. PLEASE PROVIDE AN OVERVIEW OF THE UPDATES TO YOUR DIRECT TESTIMONY.

A. Following the submission of my direct testimony and exhibits, in the course of a comprehensive review and audit of prior year vintages, two items from my direct testimony requiring an update were identified. The first update relates to the non-residential revenue shown on Miller Exhibit 4, which impacts the proposed non-residential revenue requirement and billing factors. The second update relates to the interest calculation for Vintage 2018 which was not included in my direct testimony. I explain both updates in more detail later in my testimony.

Q. DO THESE UPDATES CHANGE THE COMPANY'S BILLING FACTORS PRESENTED IN THE APPLICATION IN THIS PROCEEDING?

A. Yes. I will go into greater detail below, but overall, these updates decrease certain billing factors for both residential and non-residential customers. Revised Miller Exhibit 1 contains those updated billing factors, which are also outlined below.

Q. PLEASE PROVIDE AN OVERVIEW OF THE FIRST UPDATE TO YOUR DIRECT TESTIMONY.

A. The first update relates the non-residential revenues for Vintages 2019 and 2020 included in Miller Exhibit 4 in the column labelled "Actual 2020 Rider 11". These revenues were not the actual revenues originally filed in Rider 13. The correction is reflected in Revised Miller Exhibit 4 and the updated number includes the associated interest calculations for non-residential customers reflected in Revised Miller Exhibit 3 pages 3, 4, and 7.

Q. PLEASE PROVIDE AN OVERVIEW OF THE SECOND UPDATE TO YOUR DIRECT TESTIMONY.

A. The second update relates to the interest calculation for Vintage 2018 reflected in the new Revised Miller Exhibit 2 page 2018. This update was identified through discussions with the Public Staff – North Carolina Utilities Commission ("Public Staff") regarding the comprehensive review and update of the interest calculation. Specifically, in the Company's previous Demand Side Management ("DSM")/Energy Efficiency ("EE") proceeding in Docket E-7, Sub 1285 ("Rider 15 Proceeding") the Company identified interest calculation corrections associated with Vintages 2018, 2019, 2020, and 2021 that varied in nature and resulted in both increases and decreases to rates in the Rider 15 Proceeding.[1] The Company indicated at that time that it would address the interest calculation corrections as part of the prior year Vintage reconciliation in this year's annual DSM/EE Rider filing. Through discussions, the Company and Public Staff determined that although there is no Evaluation, Measurement, and Verification pertaining to Vintage 2018 and it is technically closed, the interest calculation should go through the same rigorous update as did all the open Vintages. This rigorous update will ensure that the proper calculation is included, and any difference is returned to customers. As a result, the Company recalculated interest for Vintage 2018 from inception and included the true up for both residential and non-residential customers and included those calculations on Revised Miller Exhibit 2 page 2018.

[1] *See* Supplemental Direct Testimony of Carolyn Miller in Docket No. E-7, Sub 1285, pp. 4 – 5 ("[T]he Company will address the interest calculation corrections as part of the prior vintage reconciliation in next year's annual DSM/EE Rider filing.")

Q. HOW DOES THE COMPANY PROPOSE TO ADDRESS THE IMPACT OF THESE PROPOSED CHANGES ON CUSTOMER RATES?

A. The Company proposes that the changes associated be reflected in rates effective January 1, 2025.

Q. WHAT IS THE IMPACT OF THESE UPDATES ON THE PROPOSED DSM/EE RESIDENTIAL REVENUE REQUIREMENT AND BILLING FACTORS?

A. The impact of the proposed updates is an overall reduction to the proposed residential revenue requirement of approximately $493,692 with a corresponding decrease to the billing factor of (0.0022) cents per kilowatt hour ("kWh") as noted in the table below.

Residential Billing Factors	**Direct ¢/kWh**	**Supplemental ¢/kWh**	**Variance ¢/kWh**
Rider 16 Prospective Components	0.5012	0.5012	0.0000
Rider 16 EMF Components	(0.0057)	(0.0079)	(0.0022)

Q. WHAT IS THE IMPACT OF THESE UPDATES ON THE PROPOSED DSM/EE NON-RESIDENTIAL REVENUE REQUIREMENT AND BILLING FACTORS?

A. The impact of the revenue corrections for Vintage 2020 is a reduction to the proposed non-residential EE revenue requirements of approximately $31,576. While there was also a reduction to the proposed non-residential EE and DSM revenue requirements for Vintage 2019, the reduction did not impact the billing factors. The impact of the interest corrections on Vintage 2018 is a reduction to the proposed non-residential EE revenue requirement of approximately $194,009 and a reduction to the proposed non-residential DSM revenue requirement of approximately $31,311. The table below shows the change in the proposed non-residential billing factor for Rider 16 EMF components. The non-residential billing factors for Rider 16 prospective components were not impacted by the updates.

Non-Residential Billing Factors for Rider 16 EMF Components	**Direct ¢/kWh**	**Supplemental ¢/kWh**	**Variance ¢/kWh**
Vintage 2018 EE Participant	0.0000	(0.0011)	(0.0011)
Vintage 2018 DSM Participant	0.0000	(0.0002)	(0.0002)
Vintage 2019 EE Participant	0.0007	0.0007	0.0000
Vintage 2019 DSM Participant	0.0000	0.0000	(0.0000)
Vintage 2020 EE Participant	(0.0047)	(0.0049)	(0.0002)
Vintage 2020 DSM Participant	(0.0016)	(0.0016)	0.0000
Vintage 2021 EE Participant	(0.0900)	(0.0900)	0.0000
Vintage 2021 DSM Participant	0.0003	0.0003	0.0000
Vintage 2022 EE Participant	(0.0767)	(0.0767)	(0.0000)
Vintage 2022 DSM Participant	(0.0020)	(0.0020)	(0.0000)
Vintage 2023 EE Participant	(0.1554)	(0.1554)	(0.0000)
Vintage 2023 DSM Participant	0.0143	0.0143	0.0000

III. CONCLUSION

Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT TESTIMONY?

A. Yes.

(WHEREUPON, Miller Rebuttal Exhibits 1 and 2 are identified.)

(WHEREUPON, the prefiled rebuttal testimony of CAROLYN T. MILLER is copied into the record as if given orally from the stand.)

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1305

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of Duke Energy Carolinas, LLC for Approval of Demand-Side Management and Energy Efficiency Cost Recovery Rider Pursuant to N.C. Gen. Stat. § 62-133.9 and Commission Rule R8-69	))))))	**REBUTTAL TESTIMONY OF CAROLYN T. MILLER FOR DUKE ENERGY CAROLINAS, LLC**

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Carolyn T. Miller, and my business address is 525 South Tryon Street, Charlotte, North Carolina 28202. I work for Duke Energy Carolinas, LLC ("DEC" or "Company") as a Rates and Regulatory Strategy Manager.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS DOCKET?

A. Yes. My direct testimony and exhibits were filed in this docket on February 27, 2024. My supplemental direct testimony and exhibits were filed in this docket on May 8, 2024.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to the concern and recommendations regarding net lost revenues ("NLRs") included in the Joint Testimony of North Carolina Utilities Commission – Public Staff ("Public Staff") witnesses Hemanth Meda and Michelle Boswell. Specifically, I address the Public Staff's concern that the Company's removal of only a portion of NLRs from the period covered by the Company's most recent rate case, rather than completely resetting those NLRs to zero, may have resulted in double counting of NLRs.

Q. DOES YOUR REBUTTAL TESTIMONY INCLUDE ANY EXHIBITS?

A. Yes. I have included two exhibits. Miller Rebuttal Exhibit 1 provides a visual representation of the timing in which NLRs were reset for the most recent DEC North Carolina base rate case. Miller Rebuttal Exhibit 2 provides a detailed example outlining the Company's calculation of recovery of NLRs in accordance with the 2020 energy efficiency ("EE") and demand-side management ("DSM") cost recovery mechanism (the "2020 Mechanism") and its inclusion in the billing determinants of a base rate case.[1]

Q. WERE THESE EXHIBITS PREPARED BY YOU OR AT YOUR DIRECTION?

A. Yes.

Q. PLEASE PROVIDE A SUMMARY OF THE COMPANY'S REBUTTAL POSITION.

A. At the outset, I want to make clear that neither the Company nor Public Staff have identified any instance of double-counting, and the Company has complied with the 2020 Mechanism with respect to the reset of NLRs. Rather, the Public Staff only expressed "concern" based on, what I understand is, a new interpretation of the Company's cost recovery mechanism that certain NLRs may have been double recovered. Although the Public Staff's testimony only briefly addressed this issue, the Public Staff's testimony could call the integrity of the Company's methodology into question. As a result, I think it is important to provide this Commission and other parties with comprehensive details about the Company's methodology in my testimony to ensure that confidence in the process is maintained.

This methodology, as described in detail below, ensures that (i) any NLRs reflected in the actual sales utilized to determine base rates are no longer collected thru the DSM/EE rider and (ii) there is no double counting of NLRs between rates

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[1] After the Company and Public Staff filed testimony in this proceeding, the Commission approved proposed revisions to the Company's DSM/EE Cost Recovery Mechanism in Docket Nos. E-100, Sub 179; E-7, Sub 1032; and E-2, Sub 931. For clarity, my testimony references the Mechanism as it existed when the Company and Public Staff filed testimony—however, the NLRs language that is the focus of my testimony remains unchanged in the recently approved revisions.

approved in the latest base rate case and the DSM/EE rider. The current methodology for resetting NLRs has been consistently applied across multiple rider and base rate case proceedings, audited by Public Staff, confirmed by Public Staff, and approved by this Commission. The Public Staff's current interpretation of this language would require the Company to reset all NLRs to zero after a base rate case, which is not required by the 2020 Mechanism. In fact, the 2020 Mechanism does not require the Company to reset NLRs to any specific amount, rather, it simply requires the Company to ensure that no NLRs are double counted. Although Public Staff is not required to maintain their historical interpretation of the plain language of the 2020 Mechanism in this regard, they have not presented sufficient evidence in this proceeding to support a change in methodology and have not identified any instance of double-counting. In fact, if the Company were required to reset NLRs to zero in the DSM/EE Rider after the next base rate case, rates in the next base rate case would likely increase as a result to account for the NLRs that are not being recovered through the DSM/EE Rider.

II. REBUTTAL TESTIMONY

Q. WHAT ARE NLRS?

A. The 2020 Mechanism defines NLRs as "revenue losses, net of marginal costs avoided ***at the time of the lost kWh sale(s), or in the case of purchased power, in the applicable billing period,*** incurred by [the Company's] public utility operations as the result of a new DSM or EE measure." (Emphasis added). This definition expressly acknowledges the point in time that NLRs are to be recognized in both a base rate case as well as in a DSM/EE rider filing.

a. Recovery of NLRs

Q. DOES THE COMPANY RECOVER NLRS IN THE DSM/EE RIDER?

A. Yes. Paragraph 56 of the 2020 Mechanism permits the Company to recover, "through the DSM/EE and DSM/EE EMF riders, Net Lost Revenues associated with implementation of approved DSM or EE measurement units," subject to certain terms and conditions outlined in the 2020 Mechanism.

Q. HOW DOES THE COMPANY CALCULATE THE AMOUNT OF NLRs FOR ANY GIVEN VINTAGE YEAR IN THE DSM/EE RIDER?

A. At a high level, for the prospective components, NLRs are estimated by (A) multiplying (i) the portion of DEC's tariff rates that represent the recovery of fixed costs and (ii) the estimated NC retail kilowatt ("kW") and kilowatt hour ("kWh") reductions applicable to EE programs by rate schedule, and (B) subtracting estimated found revenues from the number derived in (A). To calculate the portion of NC retail tariff rates (including certain riders) representing the recovery of fixed costs in (A) above, the Company deducts the recovery of fuel and variable operation and maintenance costs from its tariff rates, leaving only fixed costs in the rate.

The Company calculates lost revenues for actual vintages (non-prospective components) by using actual (rather than estimated) kW and kWh savings by NC retail participants by customer class based on actual participation and load impacts reflecting Evaluation, Measurement, and Verification ("EM&V") results applied according to the EM&V Agreement. The lost revenue rates applied to the kW and kWh savings are the retail rates that were in effect for that period reduced by fuel and other variable costs. Finally, the lost revenues are then offset by actual found revenues computed using the weighted average lost revenue rates for each customer class. The resulting number represents NLRs.

Q. DOES THE COMPANY RECOVER NLRS IN BASE RATES?

A. Yes. Rates in a base rate case are set to implicitly recover a certain amount of the NLRs associated with kWh sales reductions.

Q. WHAT DOES IT MEAN TO "IMPLICITLY" RECOVER NLRS?

A. In the context of a base rate case, it means that customer usage is presumed to be reduced at the time a DSM or EE measure is installed by a program participant; therefore resulting in the recovery of NLRs associated with those sales reductions.

Q. HOW DOES THE COMPANY CALCULATE THE NLRS RECOVERED IN BASE RATES?

A. The billing determinants used to set rates in a base rate case are based on actual test year sales. When the test year is extended, the Company adjusts the revenue requirement to weather normalize sales and reflect the impact of customer growth. The customer growth proforma adjusts for the number of customers as of the cut-off date in the base rate case and adjusts usage per customer to the 12 months ending cut-off date. As a result of this process, rates set in a base rate case are based on the usage per customer for each of the 12 months leading up to the cut-off date. This period is also referred to as the "Extended Test Year."

The base rate case does not account for all NLRs during the Extended Test Year. The base rate case only reflects a portion of the savings that make up NLRs or measures implemented during the Extended Test Year. Therefore, it would be inappropriate to recognize all NLRs as if they occurred on day one of the Extended

Test Year. For example if the Extended Test Year for a base rate case was January 1st through December 31st, and a customer started participating in the first month of the year, base rates implicitly reflect one-half of that month's NLRs for the first month and then a full month of NLRs for each of the remaining months in the test year for a total of 11 ½ months of NLRs. If a customer started participating in the tenth month of a test year, a total of 2 ½ months (1/2 month for October and full month for November and December) of NLRs are implicitly recovered in the base rates. In other words, as a customer participates in any given measure, the base rate case will implicitly pick up the energy savings in the billing determinants as a component of actual kWh billed. The Public Staff's interpretation, in this example, suggests that the Company should remove 100% of the NLRs from the DSM/EE rider for a customer that installed a measure in the tenth month of the test year when only 2 ½ months of lost kWh sales would be reflected in base rates.

b. <u>2020 Mechanism Requirements for Recovery of NLRs</u>

Q. PLEASE DESCRIBE HOW THE 2020 MECHANISM ADDRESSES THE COMPANY'S RECOVERY OF NLRS.

A. Paragraph 60 of the 2020 Mechanism recognizes that the Company recovers NLRs through both base rates and the DSM/EE rider and incorporates language to ensure the Company does not double recover any NLRs. Specifically, the 2020 Mechanism states that:

> [k]Wh sales reductions that result from measurement units installed shall cease being eligible for use in calculating Net Lost Revenues as of the effective date of . . . the implementation of new rates approved by the Commission in a general rate case or comparable proceeding ***to the extent the rates set in the general rate case or***

> ***comparable proceeding are set to explicitly or implicitly recover the Net Lost Revenues associated with those kWh sales reductions***.
>
> (Emphasis added).

Practically, in the context of a base rate case, this language simply states that the NLRs recovered pursuant to the DSM/EE rider are reduced by an amount equivalent to the amount of NLRs recovered through base rates. So, although the Company ultimately collects 100% of NLRs, just as it would if there were no base rate case, that recovery is allocated between base rates and the DSM/EE rider. I also explained this process in my direct testimony, noting that recovery of NLRs shall cease "upon the implementation of new rates in a general rate case ***to the extent*** that the new rates are set to recover [NLRs]."[2]

Q. HOW DOES THE COMPANY IMPLEMENT PARAGRAPH 60 OF THE 2020 MECHANISM AFTER GENERAL RATE CASES?

A. The Company "resets" the amount of NLRs in the subsequent DSM/EE rider following the base rate case. This reset reduces the amount of NLRs recovered under the DSM/EE rider by the amount recovered in base rates, in compliance with Paragraph 60 of the 2020 Mechanism.

Q. DOES THE 2020 MECHANISM REQUIRE THE COMPANY TO RESET NLRS TO ZERO AFTER A BASE RATE CASE?

A. No. The 2020 Mechanism does not require the Company to reset NLRs in the DMS/EE rider to any specific level—only to a level that appropriately accounts for NLRs recovered under base rates, whatever that explicit or implicit amount may be. In its simplest terms, the 2020 Mechanism recognizes that the overall

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[2] Direct Testimony of Carolyn T. Miller, p. 5. (Emphasis added).

amount of NLRs that the Company recovers could be recovered through the DSM/EE rider or other rates, such as base rates. Paragraph 60 does not dictate the allocation of NLRs across those rates. Rather, it provides a flexibility to the Company to determine that allocation, so long as the Company does not double count any NLRs in implementing that allocation.

Q. WHEN WOULD IT BE APPROPRIATE TO RESET NLRS TO ZERO IN THE DSM/EE RIDER?

A. The 2020 Mechanism requires the Company to cease recovery of NLRs "to the extent" those NLRs are recovered through base rates. Resetting NLRs to zero in the DSM/EE rider proceeding is appropriate if 100% of NLRs are being explicitly or implicitly recovered elsewhere, such as through base rates. However, as I explain later in my testimony, the Company is not recovering 100% of NLRs during the Extended Test Year and beyond. Therefore, resetting NLRs to zero in the DSM/EE rider proceeding is inappropriate.

c. Reset of NLRs in Most Recent Base Rate Case

Q. HOW WERE NLRS IN THE DSM/EE RIDER RESET AFTER THE MOST RECENT DEC NC BASE RATE CASE?

A. In the Company's most recent rate case, the test year originally was January 1, 2021 through December 31, 2021, and then extended to July 1, 2022 through June 30, 2023.[3] Interim rates were effective on September 1, 2023. Therefore, interim rates incorporated actual usage through June 30, 2023. Consistent with the methodology I outlined earlier, NLRs were calculated up to the effective date of interim rates by

[3] Docket No E-7 Sub 1276 "Application of Duke Energy Carolinas, LLC For Adjustment of Rates and Charges Applicable to Electric Service in North Carolina and Performance-Based Regulation."

using actual kW and kWh savings by NC retail participants by customer class. The actual kW and kWh savings were based on actual participation and load impacts reflecting EM&V results applied according to the EM&V Agreement for the lesser of 36 months or measure life. Rebuttal Miller Exhibit 1 provides a visual depiction of the timeline of the NLRs reset in the most recent DEC NC base rate case. NLRs were reset in three tranches based on specific points in time as follows:

Tranche 1: Reset of NLRs to Recognize Participation in Vintage Months Prior to the Start of the Extended Test Year.

Beginning September 1, 2023, all NLRs associated with participation prior to the Extended Test Year were set to zero. This included all NLRs for participants prior to July 1, 2022. It is appropriate to set Tranche 1 to zero because a full 12 months of NLRs for units installed has been recognized in base rates because all of those NLRs were created prior to the Extended Test Year.

Tranche 2: Reset of NLRs to Recognize Participation in Vintage Months During the Extended Test Year.

The Extended Test Year NLRs (for participation between July 1, 2022 and June 30, 2023) were adjusted by approximately 50% based on specific program enrollment dates. Meaning, approximately 50% of the NLRs were reset to zero. This adjustment appropriately recognizes the fact that not all program participation began at the start of the Extended Test Year; it occurred throughout the Extended Test Year. Approximately 50% of the NLRs will continue to be collected in the DSM/EE rider for the remainder of the lesser of 36 months or measure life.

Tranche 3: Reset of NLRs to Recognize Participation in Vintage Months After the End of the Extended Test Year.

NLRs for participation that occurs after the Extended Test Year (starting July 1, 2023) will be collected in the DSM/EE rider as normal for the lesser of 36 months or measure life. These NLRs were not impacted by the most recent base rate case because the Extended Test Year kWh sales used to set rates did not reflect any reductions associated with units installed after the Extended Test Year. Therefore, it is appropriate to recover 100% of those NLRs in the DSM/EE rider.

Q. IS THE METHODOLOGY USED BY THE COMPANY TO RECOGNIZE NLRS CONSISTENT BETWEEN THE BASE RATE CASE AND THE DSM/EE RIDER?

A. Yes. Assumptions of when kWh savings occur is the same in the base rate case as in the DSM/EE rider. Actual kWh savings are included in the rate case as participation occurs. The DSM/EE rider includes the calculation of NLRs as of the month participation begins. This same methodology is used in the projected Vintage 2025 NLRs filed in this docket. Approximately 50% of the first year of NLRs is included in the first year of a vintage because not all participation begins in the first month of the test year. The Company assumes participation will occur throughout the year, just as it does during the extended test period of base rate cases.

Q. CAN THE COMPANY PERFORM A RECONCILIATION TO ILLUSTRATE THAT THE COMPANY DID NOT DOUBLE-COUNT NLRS?

A. No. It is not possible to perform the dollar-for-dollar reconciliation requested by the Public Staff to illustrate this point given the nature of these proceedings. In a base rate case, NLRs are *implicitly* recovered in rates based on kWh sales that are presumed to be reduced because of customer participation in DSM/EE programs. NLRs are *explicitly* recovered through the DSM/EE rider based on a dollar amount calculated by using kW and kWh savings related to customer participation in DSM/EE programs. As a result, this is not an apples-to-apples comparison for purposes of performing a reconciliation.

However, double-counting was prevented because actual participation and savings that occurred during the Extended Test Year of the base rate case were removed in the DSM/EE rider at the time new base rates went into effect. Rebuttal Miller Exhibit 2 provides an illustration of the methodology applied to reset NLRs reflected in base rates, which includes an illustrative example of the level of savings during the Extended Test Year and how those savings impact the base rate case billing determinants. It demonstrates that there is alignment in the methodology used to remove NLRs in the DSM/EE rider to reflect what is implicitly recovered in the base rates, thus preventing double-counting.

d. Response to Public Staff's Concern and Recommendations

Q. PLEASE EXPLAIN YOUR UNDERSTANDING OF PUBLIC STAFF'S TESTIMONY REGARDING NLRS.

A. My understanding is that Public Staff witnesses Meda and Boswell have a new interpretation of the 2020 Mechanism pertaining to the treatment of NLRs at the time of a base rate case and now believe that it requires the Company to reset all NLRs, for measures installed, to zero up to the point that new base rates are implemented (including the Extended Test Year and beyond). As I explained above, that interpretation is inconsistent with the plain language of the 2020 Mechanism—which does not require the Company to reset NLRs to any specific amount. It is my view that Public Staff's interpretation does not account for the operative language in bold in paragraph 60:

> [k]Wh sales reductions that result from measurement units installed shall cease being eligible for use in calculating Net Lost Revenues as of the effective date of . . . the implementation of new rates approved by the Commission in a general rate case or comparable proceeding **to the extent the rates set in the general rate case or comparable proceeding are set to explicitly or implicitly recover the Net Lost Revenues associated with those kWh sales reductions**.

The language provides the Company the flexibility to recover NLRs "to the extent" they are not recovered in base rates. As previously explained, current base rates account for approximately 50% of NLRs (reflective of actual savings from units installed during the Extended Test Year of July 1, 2022 through June 30, 2023), which is why the Company included the remaining amount of NLRs in the DSM/EE rider. Given that the actual kWh sales used to set base rates do not include any savings for units installed after the Extended Test Year (ending June 30, 2023), the NLRs associated with the kWh sales reduction occurring after June 30, 2023, are not included in base rates. Therefore, the Company continues to calculate and collect 100% of NLRs in the DSM/EE rider for the months after the Extended Test Year. This methodology ensures alignment across proceedings to prevent double-counting. A hard reset to zero is neither required nor contemplated.

Q. DID PUBLIC STAFF POINT TO ANY INSTANCE IN WHICH THE COMPANY DOUBLE-COUNTED NLRS?

A. No. The Public Staff did not point to any instance of double-counting and did not expressly state that the Company double-counted any NLRs. Rather, the Public Staff expressed a "concern" that the Company "may" have double-counted NLRs because it did not reset 100% of NLRs for all measures installed prior to the rates effective date in the most recent base rate case.

Q. HAS THE COMPANY IDENTIFIED ANY INSTANCE IN WHICH THE COMPANY DOUBLE-COUNTED NLRS?

A. No. The Company has not identified any instance in which the Company double counted NLRs resulting from its application of Paragraph 60 of the 2020 Mechanism. NLR recovery is allocated appropriately across base rates and the EE/DSM rider rates pursuant to the 2020 Mechanism.

Q. PLEASE PROVIDE A BRIEF OVERVIEW OF PRIOR PROCEEDINGS IN WHICH THE COMPANY HAS APPLIED THE NLRS METHODOLOGY CONSISTENT WITH ITS APPLICATION IN THIS PROCEEDING.

A. The following table provides a high-level overview of recent proceedings in which the Company has applied the NLR methodology consistent with its application in this proceeding:

Rate Case Docket	**DSM/EE Rider Docket**	**Methodology Challenged**	**Methodology Approved**
E-7 Sub 1146 (Filed in 2017)	E-7 Sub 1192 (Filed in 2019)	No	Yes
E-7 Sub 1214 (Filed in 2019)	E-7 Sub 1230 (Filed in 2020)	No	Yes
	E-7 Sub 1249 (Filed in 2021)	No	Yes

In each of these dockets, the Company specifically addressed the application of the NLRs methodology consistent with its approach in this docket. The following language was included on page 11 of Shannon R. Listebarger's direct testimony in Docket E-7 Sub 1249:

> Residential and non-residential lost revenues associated with participants enrolled during the test period, twelve months ending December 31, 2018, extended to May 31, 2020, of the Company's general rate case proceeding, Docket No. E-7 Sub 1214, have been adjusted based on specific enrollment dates, and a portion of these lost revenues have been removed from the prospective period as of August 24, 2020 and included in interim base rates.

Similar language was used in Docket Nos. E-7 Sub 1192[4] and E-7 Sub 1230.[5] As noted in the table above, the Company's current methodology was previously approved by this Commission. The Company applied its NLR methodology in each of these proceedings in accordance with the language reflected in the 2020 Mechanism.

Q. DID THE PUBLIC STAFF RAISE A SIMILAR CONCERN IN THOSE PROCEEDINGS?

A. No. To my knowledge, the Public Staff did not object to the Company's NLR methodology in any of those past proceedings.

Q. DID THE PUBLIC STAFF RAISE ANY SIMILAR CONCERNS REGARDING THE COMPANY'S NLRS METHODOLOGY IN THE MOST RECENT DSM/EE MECHANISM REVIEW?

A. No. To my knowledge, the Public Staff did not raise any similar concerns in the recent DSM/EE Mechanism review.

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[4] *See* Direct Testimony of Carolyn T. Miller, pp. 10-11, Docket No. E-7 Sub 1192.
[5] *See* Direct Testimony of Carolyn T. Miller, pp. 10-11, Docket No. E-7 Sub 1249.

Q. WHAT DOES THE PUBLIC STAFF RECOMMEND IN THIS PROCEEDING?

A. It is my understanding that the Public Staff is not proposing any change in the DSM/EE rider rates proposed in this proceeding. Instead, the Public Staff makes the following two recommendations:

1. The Commission should order the Company to comply with the plain language in paragraph 60 of the Mechanism; and

2. If double counting did occur for NLRs in the present case, credit the DSM/EE EMF for the amount double counted no later than the next DSM/EE rider proceeding.

Q. IF THIS COMMISSION WERE TO ACCEPT PUBLIC STAFF'S FIRST RECOMMENDATION, HOW WOULD THE COMPANY'S PRACTICE CHANGE?

A. The Company's practice would not change because it already complies with Paragraph 60. As previously noted, the Public Staff omits critical language in Paragraph 60 in the 2020 Mechanism. The Company currently complies with the plain language of Paragraph 60—as has been the case in prior proceedings approved by this Commission—by ensuring that any amounts of NLRs implicitly recovered through base rates are removed from the DSM/EE rider. Importantly, the 2020 Mechanism does not require the Company to reset NLRs to zero, or any specific number, as the Public Staff argues.

Q. IF THIS COMMISSION WERE TO ACCEPT PUBLIC STAFF'S SECOND RECOMMENDATION, HOW WOULD THE COMPANY IMPLEMENT THIS RECOMMENDATION?

A. Neither the Public Staff nor the Company identified any NLRs that were double-counted, so there would be nothing for the Company to credit back to customers. Again, the Public Staff's recommendations rest upon a flawed interpretation of the language within paragraph 60 of the 2020 Mechanism in its entirety. The 2020 Mechanism does not require the Company to reset 100% of NLRs to zero after base rate cases—or to any **specific** amount. Rather, the Company must reset NLRs in an amount that offsets the amount of NLRs recovered through base rates, whatever that amount may be. The Company did not recover 100% of NLRs for through base rates in the most recent DEC NC base rate case and therefore, resetting all NLRs to zero under the DSM/EE rider is inappropriate. Rather, in compliance with the 2020 Mechanism, the Company has removed NLRs from the DSM/EE rider "to the extent" that the rates set in the most recent DEC NC base rate case implicitly recovered NLRs associated with those kWh sales reductions.

e. Impact of Public Staff's Interpretation

Q. PLEASE EXPLAIN HOW CUSTOMER RATES WOULD CHANGE IF THE COMMISSION ORDERED THE COMPANY TO RESET ALL NLRS TO ZERO AFTER A BASE RATE CASE.

A. In short, customer base rates would likely increase. However, to appropriately quantify the impact of changing from the current methodology of calculating NLRs to the Public Staff's new interpretation that would require the Company to reset all

NLRs to zero after a base rate case, several steps would need to be taken. Additionally, the Company must apply that new approach consistently in both DSM/EE rider proceedings and base rate proceedings. At a minimum, the Company would have to take the following steps:

1. Rather than recognizing that participation and corresponding NLRs occur throughout the year, under Public Staff's interpretation, the Company must recognize all NLRs in the first month of the test year (in the context of a base rate case) or vintage period (in the context of a DSM/EE rider). This would decrease the DSM/EE rider rates but would result in a corresponding increase to base rates as explained in step 2.
2. As a result, in the next base rate case, the Company must make an adjustment to annualize kWh savings associated with units installed in the test year billing determinants. This would lower the billing determinants used to set rates and increase base rates.
3. The same assumption would need to be applied to all future prospective periods recovered in the DSM/EE rider. For example, in this proceeding, the Company is requesting estimated recovery for Vintage 2025 based on the assumption that participation will occur throughout the year. The Company would need to revise that methodology and assume that all NLRs are recognized in the first month of the test year. This assumption would increase the DSM/EE rider rates in year one.

III. CONCLUSION

Q. HAS THE COMPANY IDENTIFIED ANY DOUBLE-COUNTED NLRS IN THIS PROCEEDING?

A. No.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

(WHEREUPON, the summary of CAROLYN T. MILLER'S testimony is copied into the record as if given orally from the stand.)

DUKE ENERGY CAROLINAS, LLC
CAROLYN T. MILLER DIRECT, SUPPLEMENTAL, AND REBUTTAL TESTIMONY SUMMARY
DOCKET NO. E-7, SUB 1305

The purpose of my direct testimony is to explain and support Duke Energy Carolinas, LLC's ("DEC" or the "Company") proposed demand-side management/energy efficiency ("DSM/EE") cost recovery rider (the "Rider"), including prospective and Experience Modification Factor ("EMF") components, and to provide information required by Commission Rule R8-69. I describe the structure of the Rider and explain how the Company calculates the proposed billing factors for residential and non-residential customers.

The Company's approved cost recovery mechanisms are designed to allow the Company to collect revenue equal to its incurred program costs for a rate period plus a Portfolio Performance Incentive ("PPI") based on shared savings achieved by the Company's DSM/EE programs and to recover net lost revenues for EE programs only. In addition, under the 2020 Cost Recovery Mechanism, the Income-Qualified EE and Weatherization programs are eligible to receive a Program Return Incentive ("PRI") based on the shared savings achieved by these programs. The Company is also allowed to recover net lost revenues associated with a particular vintage of an EE measure for the lesser of 36 months or the life of the measure, provided that the recovery of net lost revenues shall cease upon implementation of new rates in a general rate case to the extent the new rates are set to recover net lost revenues. I also provide a high-level overview of the Evaluation, Measurement, and Verification or "EM&V" process that "trues up" prior vintage years. The term "vintage year" arises from the Company's cost recovery mechanism and represents an identified 12-month period for which a specific DSM or EE measure is installed for a participant or group of participants. If EM&V results for any vintage year are not available at the time of an annual rider filing, the Company will make the appropriate adjustment in the rider that is filed after those results are received.

I also explain that DEC calculates one integrated (prospective) DSM/EE rider and one integrated DSM/EE EMF rider for the residential class, to be effective each rate period. For non-residential customers, DEC calculates separate DSM and EE billing factors for the non-residential class. Non-residential DSM and EE EMF billing factors are determined separately for each applicable vintage year so that the factors can be appropriately charged to non-residential customers based on their opt-in/out status and participation for each vintage year. I also describe how DEC allocates revenue requirements related to program costs and incentives for EE programs to the North Carolina retail jurisdiction and to the residential and non-residential classes. I also explain how the Company calculates the PPI and PRI, as well as net lost revenues for both the prospective components of the Rider and the EMF components of the Rider.

My direct testimony discusses the opt-out process for non-residential customers. Pursuant to Commission Orders, the Company is allowed to permit qualifying non-residential customers to opt out of the DSM and/or EE portion of the Rider. I explain how the Company adjusts the rate for non-residential customers to reflect this opt out.

Finally, my direct testimony addresses how the Company calculates the prospective and EMF components of the Rider. I provide the proposed initial billing factors applicable to North Carolina retail electric customers for the prospective components and the EMF components for Rider 16. If the Company's proposed billing factors are approved, a typical residential customer using 1,000 kWh would see an increase in their total monthly bill of

$1.18, or 0.8%. The impact to an average non-residential customer's bill would depend on their opt-in/opt-out status for the various DSM and/or EE vintages.

In my supplemental testimony, I outline two updates that the Company identified during a comprehensive review and audit of prior year vintages and related discussions with the Public Staff. The first update relates to the non-residential revenues for Vintages 2019 and 2020 shown on Miller Exhibit 4, which impacts the proposed non-residential revenue requirement and billing factors. The second update relates to the interest calculation for Vintage 2018 which was not included in my direct testimony and is now reflected in new Revised Miller Exhibit 2. Overall, these updates result in a decrease in the revenue requirements and certain billing factors for both residential and non-residential customers.

In my rebuttal testimony, I respond to the concern and recommendations regarding net lost revenues ("NLRs") included in the Joint Testimony of Public Staff witnesses Meda and Boswell. Specifically, I address Public Staff's "concern" that the Company's removal of only a portion of NLRs from the period covered by the Company's most recent rate case, rather than completely resetting those NLRs to zero, may have resulted in double counting of NLRs. My understanding is that the Public Staff's concern arises from a new interpretation of the cost recovery mechanism. For clarity, neither the Company nor Public Staff have identified any instance of double-counting, and the Company has complied with the Mechanism with respect to the reset of NLRs.

My rebuttal testimony provides the Commission and other parties with comprehensive details about the Company's methodology in my testimony to ensure that confidence in the process is maintained. The methodology ensures that (i) any NLRs reflected in the actual sales utilized to determine base rates are no longer collected thru the DSM/EE rider and (ii) there is no double counting of NLRs between rates approved in the latest base rate case and the DSM/EE rider. The current methodology for resetting NLRs has been consistently applied across multiple rider and base rate case proceedings, audited by Public Staff, confirmed by Public Staff, and approved by this Commission. The Public Staff's current interpretation would require the Company to reset all NLRs to zero after a base rate case, which is not required by the Mechanism. In fact, the Mechanism does not require the Company to reset NLRs to any specific amount, but simply requires the Company to ensure that no NLRs are double counted. Public Staff has not presented sufficient evidence in this proceeding to support a change in methodology and has not identified any double-counting. If the Company were required to reset NLRs to zero in the DSM/EE Rider after the next base rate case, rates in the next base rate case would likely increase as a result to account for the NLRs that are not being recovered through the DSM/EE Rider.

This concludes my direct, supplemental, and rebuttal testimony summary.

MR. MIDDLETON: Thank you
Q Mr. Fields, we'll turn to you now. Would you please state your name and business address for the record.
A (Mr. Fields) Yes. My name is Casey Q. Fields, and my business address is 411 Fayetteville Street, Raleigh, North Carolina.
Q Okay. And by whom are you employed, and in what capacity?
A I am employed by Duke Energy Business Services as a lead strategy and collaboration manager for the Carolinas, and our Customer Solutions Regulatory Enablement Group.
Q Okay. And did you cause to be prefiled in this docket on February 27, 2024, 31 pages of direct testimony and 24 exhibits?
A Yes.
Q Okay. And do you have any changes or corrections to your direct testimony or exhibits?
A No.
Q And did you also cause to be prefiled in this docket on May 8, 2024, three pages of supplemental direct testimony and one revised exhibit?

A Yes.
Q And do you have any changes or corrections to your supplemental direct testimony or exhibit?
A No.
Q If I were to ask you the same questions that appear in your direct and your supplemental direct testimony today, would your answers be the same?
A Yes.
Q And, Mr. Fields, have you also prepared a summary of your testimony for the Commission?
A Yes.

MR. MIDDLETON: Presiding Commissioner Duffley, I'd request that, that summary be moved into the record rather than read aloud from the stand.

COMMISSIONER DUFFLEY: That motion's allowed.

MR. MIDDLETON: Thank you, Presiding Commissioner Duffley. And then I'd also move that Mr. Field's prefiled direct, and supplemental direct testimony, as well as the 24 exhibits filed with his direct and one revised exhibit filed with his supplemental direct be marked for identification.

COMMISSIONER DUFFLEY: So with respect to

Mr. Field's direct and supplemental testimony, that is going to be entered into the record as if given orally from the stand, and the exhibits will be marked as they were prefiled.

(WHEREUPON, Fields Exhibits 1-14 and A-J are identified.)

(WHEREUPON, the prefiled direct testimony of CASEY Q. FIELDS is copied into the record as if given orally from the stand.)

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1305

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	**DIRECT TESTIMONY OF**
Application of Duke Energy Carolinas, LLC	)	**CASEY Q. FIELDS**
for Approval of Demand-Side Management	)	**FOR DUKE ENERGY**
and Energy Efficiency Cost Recovery Rider	)	**CAROLINAS, LLC**
Pursuant to N.C. Gen. Stat. § 62-133.9 and	)	
Commission Rule R8-69	)	

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TITLE.

A. My name is Casey Q. Fields, and my business address is 411 Fayetteville Street, Raleigh, North Carolina 27601. I am employed by Duke Energy Business Services, LLC as Lead Strategy and Collaboration Manager for the Carolinas in the Customer Solutions Regulatory Enablement group.

Q. PLEASE BRIEFLY STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I graduated from North Carolina State University in 2008 with a Bachelor of Science Degree in Science, Technology and Society. While obtaining my degree, I interned for Progress Energy at the Harris Nuclear Plant in Corporate Communications in 2006 and later served as a contractor until 2010. Upon graduation, I worked for Disability Determination Services for the North Carolina Department of Health and Human Services performing case work and interacting with applicants. In 2010, I joined Ecova where my primary focus was helping implement Progress Energy's Residential Lighting Program. I joined Duke Energy in 2013 and have held multiple roles, including Program Manager in income-qualified programs and a Senior Solutions Developer. I moved into my current role in March of 2022.

Q. WHAT ARE YOUR CURRENT RESPONSIBILITIES FOR DEC?

A. I am responsible for the regulatory support of demand-side management ("DSM")/energy efficiency ("EE") programs in North Carolina for both Duke

Energy Carolinas, LLC ("DEC" or the "Company") and Duke Energy Progress, LLC ("DEP").

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY TO THIS COMMISSION?

A. Yes. I provided testimony in support of the DEC DSM/EE Rider Application in Docket No. E-7, Sub 1285 and the DEP DSM/EE Rider Application in Docket No. E-2, Sub 1322.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony supports DEC's application for approval of its DSM/EE Cost Recovery Rider, Rider EE, for 2025 ("Rider 16"), which encompasses the Company's portfolio of programs and cost recovery and incentive mechanism approved in the Commission's *Order Approving DSM/EE Programs and Stipulation of Settlement* issued October 29, 2013, in Docket No. E-7, Sub 1032 and the Mechanism approved in the Commission's *Order Approving Revisions to Demand-Side Management and Energy Efficiency Cost Recovery Mechanisms* ("2020 Mechanism" and, collectively with 2013 cost recovery mechanism, the "Mechanisms") issued on October 20, 2020, in Docket Nos. E-2, Sub 931 and E-7, Sub 1032 ("2020 Sub 1032 Order," collectively, "Sub 1032 Orders"). My testimony supports the Company's Application and includes the following sections:

- Section II – Overview and Proceeding and Actions Ordered by the Commission.

- Section III – Rule R8-69 Filing Requirements.
- Section IV – Portfolio Overview.
- Section V – DSM/EE Program Results to Date.
- Section VI – Projected Results.
- Section VII – Evaluation Measurement & Verification ("EM&V") Activities.
- Section VIII – Impacts on Rider.
- Section IX – Portfolio Performance Incentive ("PPI") and Program Return Incentive ("PRI") Calculation.
- Section X – Collaborative.
- Section XI – Inflation Reduction Act – Residential Rates.
- Section XII – Avoided Transmission and Distribution ("T&D") Study.
- Section XIII – Conclusion.

Q. PLEASE DESCRIBE THE EXHIBITS ATTACHED TO YOUR TESTIMONY.

A. Fields Exhibit 1 supplies load impacts and avoided cost revenue requirements by vintage for each DSM/EE program. Fields Exhibit 2 contains a summary of net lost revenues for the period January 1, 2019 through December 31, 2025. Fields Exhibit 3 contains the actual program costs for North Carolina for the period January 1, 2019, through December 31, 2023. Fields Exhibit 4 contains the found revenues used in the net lost revenue calculations. Fields Exhibit 5 supplies evaluations of event-based programs. Fields Exhibit 6 contains information about the results of DEC's programs and a comparison of actual impacts to previous estimates. Fields Exhibit 7 contains the projected program and portfolio cost-effectiveness results for the Company's current portfolio of programs. Fields Exhibit 8 contains a summary of 2023 program performance and an explanation of the variances between the forecasted program results and the actual results. Fields Exhibit 9 is a list of DEC's industrial and large commercial customers that have opted out of participation in its DSM or EE programs and a listing of those customers that have elected to opt in to DEC's DSM or EE programs after having initially notified the Company that they declined to participate, as required by Commission Rule R8-69(d)(2). Fields Exhibit 10 contains the projected PPI and PRI associated with Vintage 2025. Fields Exhibit 11 contains the six-year history of program and avoided costs. Fields Exhibit 12 provides the actual and expected dates when the EM&V for each program or measure will become effective. Fields Exhibit 13 provides a summary of the estimated activities and timeframe for completion of EM&V by program. Fields Exhibit 14 provides information showing the method used to exclude Find It Duke amounts from the EE portfolio.

Fields Exhibits A through J provide the detailed completed EM&V reports for the following: EM&V Report for the PowerShare® Program 2022-2023 (Fields Exhibit A); 2020 – 2021 Smart $aver® Non-Residential Custom Program Evaluation (Fields Exhibit B); DEC/DEP Residential Assessments (Fields Exhibit C); Save Energy and Water Kit Program 2020-

2021 Evaluation (Fields Exhibit D); Smart $aver HVAC 2020-2022 Evaluation Report (Fields Exhibit E); Power Manager Winter BYOT 2022-2023 Evaluation (Fields Exhibit F); DEC 2022 Power Manager Evaluation (Summer) (Fields Exhibit G); Energy Efficiency in Schools Program 2021-2022 Evaluation (Fields Exhibit H); DEC Power Manager BYOT Winter 2021-2022 (Fields Exhibit I); and DEC/DEP Non-Residential Smart $aver® Prescriptive Program (Fields Exhibit J).

Q. WERE THE EXHIBITS INCLUDED WITH YOUR PRE-FILED TESTIMONY PREPARED BY YOU OR AT YOUR DIRECTION AND SUPERVISION?

A. Yes, they were.

II. OVERVIEW OF PROCEEDING AND ACTIONS ORDERED BY THE COMMISSION

Q. PLEASE BRIEFLY DESCRIBE THE PURPOSE OF THIS PROCEEDING.

A. This proceeding is a cost recovery proceeding related to the Company's EE/DSM portfolio of programs. Specifically, the Commission will review and approve an annual rider to the rates of electric customers that will allow the Company to recover all reasonable and prudent costs incurred by DEC for adoption and implementation of new DSM and EE measures. These costs relate to DSM and EE measures that have been reviewed, approved, and, in some cases, modified by the Commission. This proceeding is also where the Commission approves recovery of net lost revenues and appropriate utility incentives as set forth in the Mechanisms. The rider approved in this proceeding will replace the rider approved in last year's proceeding and will be effective until the Commission approves a new rider in next year's proceeding.

The annual DSM/EE/Rider has two components, a projection for the following vintage year and a reconciliation of prior vintage years. The reconciliation component trues up the projection of the vintage year for actual results based on Evaluation, Measurement, and Verification ("EM&V"), which looks at all aspects of the approved programs, including any new programs and measures approved and added, actual program expenditures, actual program participation, and energy savings per participant. Initial EM&V results are considered actual results for a program until the next EM&V results are received at which time the new EM&V results are then considered actual results going forward and applied prospectively for the purposes of truing up vintages. This EM&V continues to apply until it is superseded by new EM&V results. In each annual rider proceeding, DEC must also evaluate the prospective cost-effectiveness for each of its approved DSM/EE programs and for its aggregated portfolio of approved DSM/EE programs.

Q. PLEASE DESCRIBE THE ACTIONS DEC HAS TAKEN IN RESPONSE TO THE COMMISSION'S 2023 ORDER IN DEC'S MOST RECENT DSM/EE RIDER PROCEEDING.

A. In its August 29, 2023, *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice* with a subsequent *Errata Order* issued on September 20, 2023, in Docket No. E-7, Sub 1285 ("Sub 1285 Order"), the Commission ordered that DEC and the DSM/EE Carolinas Collaborative ("Collaborative") participants continue work to better understand and identify potential means of addressing energy savings forecasts. As a result of the regular Collaborative meetings, DEC has facilitated and participated in a number of discussions regarding developing new programs, expanding the reach and increasing the impacts of existing programs, and identifying and overcoming market barriers to achieve increased energy savings for customers. The Company also presented and discussed results on Non-Energy Benefits ("NEBs") study with the Collaborative. This included discussing the elements of NEBs (which could include water savings, equipment performance, participant comfort, and health and safety) and looking at ways NEBs could be utilized in cost effectiveness tests.

Q. PLEASE DESCRIBE THE ACTIONS DEC HAS TAKEN IN RESPONSE TO THE COMMISSION'S 2022 EE/DSM RIDER ORDER RELATED TO THE MYHER PERSISTENCE STUDY.

A. In its December 12, 2022, *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice* in Docket No. E-7, Sub 1265 ("Sub 1265 Order"), the Commission ordered DEC to initiate a persistence study of the MyHER energy savings. The persistence study evaluates the endurance of savings after a customer ceases to participate after having participated in the

MyHER program for a designated period of time. I submitted testimony in that docket explaining that the third-party EM&V vendor recommended to study persistence for a period of two years and that the study schedule would be finalized by Fourth Quarter 2023.

The vendor has now completed a power analysis to determine the appropriate sample size of DEC and DEP customers to include in the study. As a result of the analysis, the vendor recommended to remove multi-family customers from the persistence study because the persistence effects for this segment may not be statistically significant. This is primarily due to two reasons. First, the attrition of customers residing in multi-family homes is higher than that of single-family residences. Multifamily customers are more likely to move residences and not have two years of usage to analyze in the study. Second, the savings effect from HER in the multifamily segment is relatively small compared to single-family residences.

An interim report for first-year persistence would be available in the First Quarter of 2025, with a final report expected to be available in the Second Quarter of 2026. The Company will provide each report to the Commission.

III. RULE R8-69 FILING REQUIREMENTS

Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S APPLICATION AND SUPPORTING TESTIMONY IN THIS PROCEEDING.

A. The information filed in support of Rider 16 is provided in response to the Commission's filing requirements contained in R8-69(f)(1) and can be found in my testimony and exhibits, as well as the testimony and exhibits of Company witness Miller, as follows:

R8-69(f)(1)	Items	Location in Testimony
(i)	Forecasted NC retail sales for the rate period	Miller Exhibit 6
(ii)	For each measure for which cost recovery is requested through Rider 16:	
(ii) a.	Total expenses expected to be incurred during the rate period	Fields Exhibit 1
(ii) b.	Total costs savings directly attributable to measures	Fields Exhibit 1
(ii) c.	EM&V activities for the rate period	Fields Exhibit 12
(ii) d.	Expected peak demand reductions	Fields Exhibit 1
(ii) e.	Expected energy reductions	Fields Exhibit 1
(iii)	Filing requirements for DSM/EE EMF rider, including:	
(iii) a.	Total expenses for the test period in the aggregate and broken down by type of expenditure, unit, and jurisdiction	Fields Exhibit 3
(iii) b.	Total avoided costs for the test period in the aggregate and broken down by type of expenditure, unit, and jurisdiction	Fields Exhibit 1
(iii) c.	Description of results from EM&V activities	Testimony of Casey Fields and Fields Exhibits A-J
(iii) d.	Total peak demand reductions in the aggregate and broken down per program	Fields Exhibit 1
(iii) e.	Total energy reduction in the aggregate and broken down per program	Fields Exhibit 1
(iii) f.	Discussion of findings and results of programs	Testimony of Casey Fields and Fields Exhibit 6
(iii) g.	Evaluations of event-based programs	Fields Exhibit 5
(iii) h.	Comparison of impact estimates from previous year and explanation of significant differences	Testimony of Casey Fields and Fields Exhibits 6 and 8
(iv)	Determination of utility incentives	Testimony of Casey Fields and Fields Exhibit 10
(v)	Actual revenues from DSM/EE and DSM/EE EMF riders	Miller Exhibit 4
(vi)	Proposed Rider 16	Testimony of Shannon Miller Exhibit 1
(vii)	Projected NC sales for customers opting out of measures	Miller Exhibit 6
(viii)	Supporting work papers	Via Data Transfer

IV. PORTFOLIO OVERVIEW

Q. PLEASE PROVIDE AN OVERVIEW OF DEC'S CURRENT DSM/EE PROGRAMS.

A. The following DSM/EE programs have been implemented by DEC in its North Carolina service territory:[1]

RESIDENTIAL CUSTOMER PROGRAMS

- EE Education Program
- Energy Efficient Appliances and Devices Program
- Income-Qualified High-Energy Use Pilot
- Income-Qualified EE and Weatherization Program for Individuals
  - Neighborhood Energy Saver Program
  - Weatherization
- Multi-Family EE Program
- Energy Assessments Program
- New Construction Program
- Smart $aver – Early Replacement and Retrofit
- Smart $aver Program
- My Home Energy Report
- Income-Qualified Power Manager
- Power Manager Load Control Service Program

NONRESIDENTIAL CUSTOMER PROGRAMS

- Nonresidential Smart $aver Energy Efficient Products and Assessment Prescriptive Program includes the following subsets of measures:

[1] The Company has two interruptible programs for nonresidential customers, Interruptible Service ("IS") and Standby Generation ("SG"), which are accounted for outside of the Mechanisms approved by the Commission in the Sub 1032 Orders.

- Energy Efficient Food Service Products
- Energy Efficient HVAC Products
- Energy Efficient Lighting Products
- Energy Efficient Process Equipment Products
- Energy Efficient Pumps and Drives Products

- Smart $aver Custom Incentive and Energy Assessment
- Smart $aver Performance Incentive Program
- Business Energy Saver Program
- EnergyWise for Business Program
- PowerShare Program

Q. HAS THE COMMISSION APPROVED NEW PROGRAMS OR MODIFICATIONS SINCE THE SUB 1032 ORDER WAS ISSUED?

A. Yes. The programs contained in the current portfolio are the same as those approved by the Commission in the initial Sub 1032 Order, with the exception of the Weatherization and the Residential Smart $aver Programs, which have been modified with the Commission's approval. Additionally, the High-Energy Use Pilot, Smart $aver Early Replacement and Retrofit, and Income-Qualified Power Manager Program were all approved by the Commission as new programs since the Sub 1032 Order was issued.

Q. PLEASE EXPLAIN WHY CERTAIN INPUTS FOR DEC'S PORTFOLIO OF PROGRAMS WERE UPDATED.

A. Certain inputs were updated in DEC's 2025 portfolio projection to account for EM&V-related impacts and launching of new approved programs.

Additionally, the underlying assumptions in Smart $aver programs, which offer rebates and incentives to install higher efficiency heating, air conditioning, and ventilation measures, have been updated to reflect the recent federal appliance standards advancements and changes to the efficient lighting standards that were effective mid-2023.

Q. DID THE COMPANY UPDATE ANY INPUTS TO ACCOUNT FOR IRA-RELATED IMPACTS?

A. No, impacts from the IRA have not been assumed in the program projections because the impacts that the IRA will have on the Company's DSM/EE programs are not able to be quantified at this time. The Company is continuing to work and coordinate with the North Carolina State Energy Office ("NC SEO") to fully understand and identify the impacts, if any, IRA funding will have on program forecasts. Guidance from NC SEO and the Department of Energy ("DOE") around implementation will be needed to inform the impacts IRA funding will have to the Company's DSM/EE programs.

Q. PLEASE DESCRIBE HOW EM&V ACTIVITIES IMPACTED DEC'S ESTIMATED 2025 PROGRAM PORTFOLIO.

A. The Company updated the savings impacts of certain programs due to EM&V results that the Company received after it submitted its application for approval of its DSM/EE Rider in its previous annual DSM/EE Rider proceeding in Docket No. E-7, Sub 1285. These routine updates result in changes to the projected avoided cost benefits associated with the projected participation. These EM&V updates will impact the calculation of the specific program and overall portfolio cost-effectiveness, as well as the calculation of DEC's projected shared savings incentive.

Q. AFTER FACTORING THESE UPDATES INTO THE VINTAGE 2025 PORTFOLIO, DO THE RESULTS OF DEC'S PROSPECTIVE UTILITY COST-EFFECTIVENESS TESTS INDICATE THAT IT SHOULD DISCONTINUE OR MODIFY ANY OF ITS PROGRAMS?

A. No. DEC performed a prospective analysis of each of its programs and the aggregate portfolio for the Vintage 2025 period. The cost-effectiveness results for the entire portfolio for Vintage 2025 are contained in Fields Exhibit 7. The aggregate portfolio continues to project cost-effectiveness, with the exception of the Income-Qualified EE Products and Services Program and Income-Qualified High-Energy Use Pilot, which were not cost-effective at the time of Commission approval. Income-qualified programs are typically not cost-effective because they require higher incentives that cover the full cost of the measure and installation to attract income-qualified customers. This higher incentive level typically negatively impacts cost-effectiveness scores. However, income-qualified programs such as these are not required to pass cost-effectiveness thresholds under the EE/DSM Mechanism because these programs provide a broader societal benefit by alleviating energy burdens on income-qualified programs—therefore, they serve the public interest.

Aside from these programs, the only other program in DEC's portfolio that is not cost-effective is the Income-Qualified Power Manager. Although this program is an income-qualified program, it was projected to be cost-effective at the time it was approved by the Commission based upon a forecast covering the first five years of the program. However, the program does not yet have sufficient participation to achieve cost-effectiveness because it was approved by the Commission in late 2023. The Company expects the program to be cost-effective as participation increases. Therefore, there are no reasons to discontinue any of DEC's programs. Notably, the Company continues to examine its programs for potential modifications to increase their effectiveness, regardless of the current cost-effectiveness results.

V. <u>DSM/EE PROGRAM RESULTS TO DATE</u>

Q. HOW MUCH ENERGY, CAPACITY, AND AVOIDED COST SAVINGS DID DEC'S DSM/EE PROGRAMS DELIVER IN 2023?

A. During 2023, DEC's DSM/EE programs delivered over 697 million kilowatt-hours ("kWh") of energy savings, nearly 1,181 megawatts ("MW") of summer peak capacity savings, and nearly 598 MW of winter peak capacity savings, which produced over $422,000,000 in net present value of avoided cost savings. The 2023 performance results for individual programs are provided on page 5 of Fields Exhibit 1.

Q. HOW DID THE COMPANY'S PROGRAMS PERFORM RELATIVE TO THEIR ORIGINAL ESTIMATES FOR 2023?

A. As demonstrated by Fields Exhibit 8, overall performance during 2023 was less than forecasted, although the overall portfolio remained cost-effective. Inflation, high interest rates, challenging workforce environments, and new lighting standards continue to make investments in EE difficult for customers, which resulted in decreased participation in DSM/EE programs. This decreased participation negatively impacted the forecasted performance and was the primary driver in creating less-than-expected performance.

VI. PROJECTED RESULTS

Q. PLEASE PROVIDE A PROJECTION OF THE RESULTS THAT DEC EXPECTS TO SEE FROM IMPLEMENTATION OF ITS PORTFOLIO OF PROGRAMS.

A. The actual results for Vintage 2023 and projection of the results for Vintages 2024 and 2025, as well as the associated projected program expense for DEC's portfolio of programs, are summarized in the following table:

DEC System (NC & SC) DSM/EE Portfolio 2023 Actual Results and 2024-2025 Projected Results			
	2023	2024	2025
Annual System Net MW - Summer	1,181	1,180	1,265
Annual System Net MW - Winter	598	608	715
Annual System Net GWh	698	808	685
Annual Program Costs (Millions)	$137.6	$161.9	$172.8

Consistent with the terms of its Commission-approved cost recovery Mechanisms, DEC will update the actual and projected EE achievement levels in its annual Rider EE filing to account for any program or measure additions based on the performance of programs, market conditions, economics, and consumer demand.

VII. EM&V ACTIVITIES

Q. PLEASE DESCRIBE THE COMPANY'S EM&V ACTIVITIES RELEVANT TO THIS PROCEEDING.

A. The Company's EM&V activities are summarized in greater detail within the exhibits attached to my testimony. Fields Exhibit 12 summarizes the estimated activities and timeframe for completion of EM&V by program. Fields Exhibit 13 provides the actual and expected dates when the EM&V for each program or measure will become effective. Fields Exhibits A through J provide the detailed completed EM&V reports or updates for the following programs:

Fields Exhibit	EM&V Reports	Report Finalization Date	Effective Date	Evaluation Type
A	EM&V Report for the PowerShare® Program 2022-2023	1/4/2024	6/1/2023	Impact
B	2020 – 2021 Smart $aver® Non-Residential Custom Program Evaluation	12/6/2023	1/1/2024	Impact & Process
C	DEC/DEP Residential Assessments	11/27/2023	Varies by measure; most measures are 9/1/21, some 3/1/19, others 3/1/20	Impact & Process
D	Save Energy and Water Kit Program 2020-2021 Evaluation	11/27/2023	7/1/2021	Impact & Process

E	Smart $aver HVAC 2020-2022 Evaluation Report Duke Energy Carolinas and Progress	11/21/2023	4/1/2022	Impact & Process
F	Power Manager Winter BYOT 2022-2023 Evaluation	10/24/2023	4/1/2023	Impact
G	Duke Energy Carolinas 2022 Power Manager Evaluation (Summer)	10/6/2023	10/1/2022	Impact
H	Energy Efficiency in Schools Program 2021-2022 Evaluation	9/1/2023	8/1/2022	Impact & Process
I	DEC Power Manager BYOT Winter 2021/2022	7/5/2023	4/1/2022	Impact & Process
J	Duke Energy Carolinas/Duke Energy Progress Non-Residential Smart $aver® Prescriptive Program Evaluation	3/20/2023	1/1/2021	Impact & Process

Q. HOW WERE EM&V RESULTS UTILIZED IN DEVELOPING THE PROPOSED RIDER 16?

A. The Company applied EM&V results in accordance with the agreement among DEC, the Southern Alliance for Clean Energy, and the Public Staff, approved by the Commission in its *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice* issued on November 8, 2011, in Docket No. E-7, Sub 979 ("EM&V Agreement").

Pursuant to the EM&V Agreement, actual participation and evaluated load impacts are used prospectively to update net lost revenues estimates. In addition, the EM&V Agreement provides that initial EM&V results shall be applied retrospectively to program impacts that were based upon estimated impact assumptions derived from industry standards (rather than EM&V results for the program in the Carolinas), in particular the DSM/EE programs initially approved by the Commission in Docket No. E-7, Sub 831 (collectively, the "Sub 831 Programs"), with the exception of the

Nonresidential Smart $aver Custom Rebate Program. For purposes of the vintage true-ups and forecast, initial EM&V results are considered actual results for a program and continue to apply until superseded by new EM&V results, if any. For all new programs and pilots approved after the Sub 831 Programs, DEC will use initial estimates of impacts until it has EM&V results, which will then be applied retrospectively to the beginning of the offering and will be considered actual results until a second EM&V is performed.

All program impacts from EM&V apply only to the programs for which the analysis was directly performed. Actual impacts and research about EE and conservation behavior directly attributed to existing DEC program offerings may be utilized by DEC when developing new product offerings.

Q. PLEASE PROVIDE AN OVERVIEW OF THE COSTS ASSOCIATED WITH EM&V.

A. The level of EM&V and associated costs varies by program and depends on that program's contribution to total portfolio, how long the program has been in the portfolio without material change, and whether the program and administration have been updated to account for new industry standards related to EM&V. DEC estimates, however, that no costs associated with performing EM&V for all measures in the portfolio will not exceed 5% of total program costs.

Q. WHICH PROGRAMS CONTAIN IMPACT RESULTS BASED ON CAROLINAS-BASED EM&V?

A. All the filed EM&V studies, provided as Fields Exhibits A through J, were Carolinas-based.

Q. DID THE COMPANY UPDATE THE SMART $AVER CUSTOM PROGRAM TO INCLUDE THE UPDATED COMBINED NON-PARTICIPANT SPILLOVER ("NPSO")?

A. Yes. The Company applied the updated combined NPSO to be consistent with the Order received in Docket No. E-2, Sub 1322 ("DEP Order"). The Custom EM&V report was held open until the DEP Order was received to fully understand what changes need to be made for the Custom Program relating to EM&V impacts to ensure consistency with DEP. In the DEP Order, the Commission concluded that "based on the application of the DEP Mechanism and the fact that removing NPSO savings would result in an increase in rates, the Commission finds it appropriate to utilize the combined savings reflected in the Companies' rebuttal testimony for purposes of setting rates in this proceeding." As such, the Company has therefore updated the NPSO application consistent with the DEP Order and the DEC Mechanism.

VIII. IMPACTS ON RIDER

Q. IS THE VINTAGE 2023 EXPERIENCE MODIFICATION FACTOR ("EMF") IMPACTED BY ACTUAL PARTICIPATION?

A. Yes. The EMF in Rider 16 accounts for changes to actual participation relative to the forecasted participation levels utilized in DEC's Vintage 2023 Rider EE. As DEC receives actual participation information, it can then update participation-driven actual avoided cost benefits from its DSM/EE programs and the net lost revenues derived from its EE programs. For example, as previously mentioned, the overall savings along with their related expenditures were less than those that were forecasted. As a result, the EMF will be reduced to reflect the lower costs, net lost revenues, and shared savings incentive (PPI and PRI) associated with its programs.

Q. HOW HAVE EM&V RESULTS BEEN INCORPORATED INTO THE VINTAGE 2023 TRUE-UP COMPONENT OF RIDER 16?

A. In accordance with the EM&V Agreement, all of the final EM&V results that were received by December 31, 2023 have been applied. These results were applied prospectively from the first day of the month immediately following the month in which the study participation sample for the EM&V was completed. This means that if DEC has received EM&V results for a program, the per participant impact applied to that program's projected participation in Vintage 2023 is based upon those actual EM&V results.

Q. PLEASE DESCRIBE HOW DEC CALCULATED FOUND REVENUES.

A. Consistent with the Sub 1032 Orders and with the "Decision Tree" found in Appendix A of the Commission's February 8, 2011 Order in Docket No. E-7, Sub 831, and approved for the new portfolio in the Sub 1032 Orders, possible found revenue activities were identified, categorized, and netted against the net lost revenues created by DEC's EE programs. Found revenues may result from activities that directly or indirectly result in an increase in customer demand or energy consumption within DEC's service territory.

Load-building activities such as these, however, would not be considered found revenues if they (1) would have occurred regardless of DEC's activity, (2) were a result of a Commission-approved economic development activity not determined to produce found revenues, or (3) were part of an unsolicited request for DEC to engage in an activity that supports efforts to grow the economy. On the other hand, found revenues would occur for load growth that did not fall into the previous categories but was directly or indirectly a result of DEC's activities. Based on the results of this work, all potential found revenue-related activities are identified and categorized in Fields Exhibit 4. Additionally, consistent with the methodology employed and approved in Docket No. E-7, Sub 1073, as discussed in detail in the testimony of Company witness Timothy J. Duff in Docket No. E-7, Sub 1050, DEC also proposes to adjust the calculation of found revenues to account for the impacts of activities outside of EE programs that it undertakes that reduce customer consumption – i.e., "negative found revenues."

Q. DOES THE COMPANY'S CALCULATION OF FOUND REVENUES CONTINUE TO ACCOUNT FOR NEGATIVE FOUND REVENUE ACTIVITIES?

A. Yes, Consistent with the methodologies approved in the DEC Mechanism, the Company's calculation of Found Revenues appropriately accounts for Negative Found Revenues.

Q. HAS THE OPT-OUT OF NONRESIDENTIAL CUSTOMERS AFFECTED THE RESULTS FROM THE PORTFOLIO OF APPROVED PROGRAMS?

A. Yes, the opt-out of qualifying nonresidential customers affects DEC's overall nonresidential impacts. For Vintage 2023, DEC had 4,816 eligible customer accounts opt out of participating in DEC's nonresidential portfolio of EE programs, representing a 6% increase from 2022. In addition, DEC had 4,485 eligible customer accounts opt out of participating in DEC's nonresidential DSM programs, representing a 6% decrease from 2022. For 2023, eighty-nine opt-out eligible accounts opted-in to the EE portion of the Rider, and five opt-out eligible accounts opted-in to the DSM portion of the Rider.

IX. <u>PPI & PRI CALCULATION</u>

Q. PLEASE PROVIDE AN OVERVIEW OF THE INCENTIVE-RELATED PROVISIONS IN THE DEC MECHANISM.

A. Pursuant to the related Sub 1032 Orders, the DEC Mechanism allows the Company to (1) recover the reasonable and prudent costs incurred for adopting and implementing DSM and EE measures in accordance with N.C. Gen. Stat. § 62-133.9 and Commission Rules R8-68 and R8-69; (2) recover net lost revenues incurred for up to 36 months of a measure's life for EE programs; and (3) earn a PPI based upon the sharing of a percentage of the net savings achieved through DEC's DSM/EE programs on an annual basis. Prior to 2022 the shared savings percentage is 11.5% and, starting in 2022, this percentage was lowered to 10.6%. The PPI is also subject to certain guidelines that are set forth in the Mechanisms.

Q. PLEASE EXPLAIN HOW THE PPI IS CALCULATED.

A. First, DEC calculates the net savings eligible for an incentive by subtracting the present value of the annual lifetime DSM/EE program costs (excluding approved income-qualified programs as described below) from the net present value of the annual lifetime avoided costs achieved through the Company's programs (again, excluding approved income-qualified programs). Second, the Company multiplies the net savings eligible for incentive by the applicable shared savings percentage to determine its pretax incentive.

Q. DOES DEC EXCLUDE ANY PROGRAMS FROM THE DETERMINATION OF ITS PPI CALCULATION?

A. Yes, consistent with the Sub 1032 Orders, DEC excludes the impacts and costs associated with the Neighborhood Energy Saver Program and the Income-Qualified EE and Weatherization Program for Individuals from its calculation of the PPI. At the time the program was approved, it was not cost-effective, but was approved based on its societal benefit. Beginning in 2022, the Income-Qualified EE and Weatherization programs are eligible to receive a PRI, and in 2023, the Income Qualified High Energy Use Pilot became eligible for PRI.

Q. PLEASE EXPLAIN HOW THE PRI IS CALCULATED.

A. The PRI is calculated by multiplying the net present value of avoided cost by 10.6 percent. As with the PPI, the PRI is also subject to certain limitations that are set forth in the 2020 Mechanism. The percentage used to determine the final PRI for each Vintage Year will be based on the Company's ability to maintain or improve the cost effectiveness of the PRI-eligible programs. The PRI percentage for each PRI-eligible Program will be determined by comparing (1) the projected UCT ratio for the portfolio of PRI-eligible Programs for the Vintage Year at the time of the Company's DSM/EE Rider filing first estimating that projected Vintage Year UCT ratio to (2) the actual UCT ratio achieved for that portfolio of PRI-eligible Programs as that Vintage Year is trued up in future filings. The ratio (UCT actual/UCT estimate) will then be multiplied by 10.60% to determine the PRI percentage that will be applied to the actual avoided costs generated by each approved PRI eligible program.

X. COLLABORATIVE

Q. PLEASE SUMMARIZE THE COLLABORATIVE ACTIVITIES THAT OCCURRED IN 2023.

A. The Collaborative met for formal meetings in January, March, May, July, September, and November. Between meetings, interested stakeholders joined conference calls as needed to zero in on certain agenda items or priorities which could not be fully explored during the formal meetings, such as new program development, study results, and federal funding opportunities. Collaborative members gained a deeper understanding of the issues facing the

Company's DSM/EE programs and provided valuable feedback and perspective. Meetings and calls have begun and will continue in a similar fashion through 2024 as well.

Q. HAS THE COLLABORATIVE LOOKED SPECIFICALLY AT EE PROGRAMS TO ASSIST INCOME-QUALIFIED CUSTOMERS IN SAVING ENERGY?

A. Yes, the Collaborative has been focused on assisting income-qualified households. Program updates specific to the income-qualified programs have been presented at the Collaborative, in addition to a deeper dive in the program operations. The High Energy Use Pilot has also generated questions and the Company provided an update to the Collaborative regarding the Company's efforts to leverage city and county funding in the eligible counties.

The Collaborative has also discussed how NEBs may impact income-qualified programs. Specifically, the recently-completed NEBs study showed that NEBs are generally higher in income-qualified programs and programs that offer weatherization, HVAC and water saving measures have the highest value. Incorporating NEBs in the programs gives members of the Collaborative a more complete picture of the benefits created for these customers through the Company's DSM/EE programs. The inclusion of NEBs, however, does not impact the determination of cost effectiveness which is used to determine whether a program should be offered and in no way impacts the calculation of PPI or PRI that is earned by the Company.

Q. HOW DOES THE COMPANY EVALUATE SUGGESTIONS RECEIVED THROUGH THE COLLABORATIVE?

A. The Company reviews all suggestions offered by Collaborative members. When a suggestion is received, the Company analyzes it for appropriateness in the DSM/EE Rider and determines if it is something that can be included in an existing program or should be presented as a new DSM/EE program to be filed with the Commission. The Company then refers to Technical Resource Manuals around the country and conducts an internal review of our existing measures to see if there are similarities that can be applied to the suggestion. A cost effectiveness analysis is also performed to determine if the suggestion is a viable option in DSM/EE. After careful considerations of the potential program design, the Company shares its findings with the Collaborative to gain feedback on the suggestion.

XI. INFLATION REDUCTION ACT – RESIDENTIAL REBATES

Q. HAS THE COMPANY PURSUED OPPORTUNITIES THAT MAY ARISE UNDER THE IRA THAT COULD BENEFIT ITS CUSTOMERS?

A. Yes. Although the Company itself will not directly receive any IRA funds to apply to its energy efficiency programs, it believes it can provide significant value to customers by helping them to understand, qualify for, and receive IRA funds that, when possible, can be used to complement the Company's energy efficiency programs. Therefore, the Company continues to review the guidance issued by DOE for the IRA and determine what impacts IRA funding will have on the DSM/EE programs. Specifically, the Company is closely reviewing the guidance issued by DOE for HER to determine whether any changes to the design of the programs will be necessary. Additionally, the Company has reviewed the Home Energy Performance-Based, Whole House Rebates and High-Efficiency Electric Home Rebate Program to consider how our customers would benefit from coordinating the Company's energy efficiency incentives and rebates.

In addition to its existing equipment incentive programs, the Home Energy House Call program will continue to provide opportunities to proactively educate and engage residential customers about the opportunities that IRA funds can provide, once funding is available. Furthermore, MyHER's ongoing engagement with customers will provide an opportunity to inform customers of the additional funding opportunities, when available, and connect the benefits of IRA with the existing Company programs by looking at customer's electrical use habits and provide customized tips. Use of the funds in this way can help to ensure that customer efficiency and energy savings are realized at the lowest possible cost to customers. Moreover, to better understand and maximize the opportunities that these funds provide customers to become more energy efficient, the Company continues to work closely with the NC SEO as IRA guidelines and formula funding for HER rebates are established. The Company submitted a response on March 3, 2023 to the United States Department of Energy's Office of State and Community Energy Programs' January 18, 2023, Request for Information on the Inflation

Reduction Act Home Efficiency & Electrification Rebate Programs. The Company also continues to engage with members of the Collaborative who have expressed interest in understanding how the Company will coordinate and optimize the deployment of those rebates. The Company intends to provide on-going status updates to the Collaborative on these matters and will continue to provide an update to the Commission in next year's annual rider filing.

Q. WHAT OTHER INTERACTIONS HAS THE COMPANY HAD WITH THE NC SEO REGARDING IRA FUNDS?

A. As the Company continues to engage with NC SEO on all matters related to IRA, the Contract Training Grant is another funding mechanism that was identified by NC SEO as beneficial for the State. As such, the Company provided a letter of support to the SEO for the SEO's application of the grant that was due on January 31, 2024. The funds will support the important work of training contractors on relevant provisions within the IRA along with overall benefits of EE measures. The Company believes that the Contractor Training Grant is important to ensure that the contractors engaged by the NC SEO have the training necessary to (i) support the installation of energy efficiency equipment and (ii) educate customers on the potential availability of IRA rebates and utility incentives that are available for the customers.

Additionally, based on feedback received from stakeholders, the Company will include the IRA as a standing topic for each Collaborative meeting in 2024 to open the dialogue for any potential program design changes or updates. This will also allow for stakeholders to share lessons learned and information from other jurisdictions that may help inform best practices for DSM/EE programs.

XII. AVOIDED T&D STUDY

Q. HAS THE COMPANY EVALUATED THE RESULTS OF DUKE ENERGY'S 2021 AVOIDED T&D STUDY?

A. Yes. As discussed in the Public Staff's December 19, 2022, update letter to the Commission referencing Dockets E-2, Sub 1294 and E-7, Sub 1265, the review of the 2021 Avoided T&D Study is complete. As a result, the Company evaluated the results of the 2021 Avoided T&D study and found that the results validated the agreed-upon avoided T&D rate applied to Vintage 2023.

Q. WHEN WILL THE NEXT AVOIDED T&D STUDY OCCUR?

A. Yes. Consistent with the schedule set out in the Company's approved EE/DSM Mechanisms, the next Avoided T&D Study will be conducted in the 4^{th} Quarter of 2024 and will utilize the new agreed-upon methodology. The results of that study will be applied to the projection for Vintage Year 2026.

XIII. CONCLUSION

Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?

A. Yes.

(WHEREUPON, Revised Fields Exhibit C is identified.)

(WHEREUPON, the prefiled supplemental direct testimony of CASEY Q. FIELDS is copied into the record as if given orally from the stand.)

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1305

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	
Application of Duke Energy Carolinas,	)	**SUPPLEMENTAL DIRECT**
LLC, Pursuant to N.C. Gen. Stat. § 62-133.9	)	**TESTIMONY OF CASEY Q. FIELDS**
and Commission Rule R8-69 for Approval	)	**FOR**
of Demand-Side Management and Energy	)	**DUKE ENERGY CAROLINAS, LLC**
Efficiency Cost Recovery Rider	)	

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TITLE.

A. My name is Casey Q. Fields, and my business address is 411 Fayetteville Street, Raleigh, North Carolina 27601. I am employed by Duke Energy Business Services, LLC as Lead Strategy and Collaboration Manager for the Carolinas in the Customer Solutions Regulatory Enablement Group.

Q. ARE YOU THE SAME CASEY Q. FIELDS WHOSE DIRECT TESTIMONY AND EXHIBITS WERE FILED IN THIS DOCKET ON FEBRUARY 27, 2024?

A. Yes.

Q. ARE YOU INCLUDING ANY EXHIBITS WITH YOUR SUPPLEMENTAL DIRECT TESTIMONY?

A. Yes. I am including Revised Fields Exhibit C.

Q. WAS THIS EXHIBIT PREPARED BY YOU OR AT YOUR DIRECTION AND SUPERVISION?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL DIRECT TESTIMONY IN THIS PROCEEDING?

A. The purpose of my supplemental direct testimony is to provide the final version of Appendix A to the Residential Energy Assessment Program – Evaluation Report ("Report") filed as Fields Exhibit C on February 27, 2024. Fields Exhibit C contained a draft version of Appendix A and the Revised Fields Exhibit C contains the final version of that Appendix.

II. UPDATE TO FIELDS EXHIBIT C

Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE CHANGES TO APPENDIX A CONTAINED IN REVISED FIELDS EXHIBIT C.

A. The Appendix A within Revised Fields Exhibit C corrects certain values and provides updated tables for certain Duke Energy Progress, LLC ("DEP") results. Specifically, date ranges in the Participant Data Preparation and Comparison Group Selection sections and percentages in the Consumption Data Preparation section were updated. Tables in Appendix A were also updated with final figures for both Duke Energy Carolinas, LLC ("DEC") and DEP. These updates were made as the Report was finalized.

Q. DO ANY OF THE UPDATES CHANGE THE RESULTS OF THE REPORT OR THE DEC DSM/EE RIDER FILING IN THIS DOCKET?

A. No.

III. CONCLUSION

Q. DOES THIS CONCLUDE YOUR PRE-FILED SUPPLEMENTAL DIRECT TESTIMONY?

A. Yes.

(WHEREUPON, the summary of CASEY Q. FIELDS' testimony is copied into the record as if given orally from the stand.)

DUKE ENERGY CAROLINAS, LLC
CASEY Q. FIELDS DIRECT AND SUPPLEMENTAL TESTIMONY SUMMARY
DOCKET NO. E-7, SUB 1305

My testimony supports Duke Energy Carolinas, LLC's (the "Company" or "DEC") application for approval of its demand-side management ("DSM") and energy efficiency ("EE") Cost Recovery Rider for 2025 ("Rider 16").

I first provide the Commission an overview of the Company's annual EE DSM Rider proceeding, which is where the Commission reviews and approves an annual rider to the rates of electric customers that will allow the Company to recover all reasonable and prudent costs incurred by DEC for adoption and implementation of new DSM and EE measures. These rider rates contain two primary components—a projection for the following vintage year and a reconciliation for prior vintage years. The reconciliation component trues up the projection of prior vintage years to account for actual results based on the Evaluation, Measurement, and Verification ("EM&V") process.

I further testify that through the DSM/EE Collaborative, the Company has facilitated and participated in discussions regarding developing new programs, expanding the reach and increasing the impacts of existing programs, and identifying and overcoming market barriers to achieve increased energy savings for customers. The Company also presented the results on the Non-Energy Benefits ("NEBS") study with the Collaborative, discussing the elements of NEBS and looking at ways NEBs could be utilized in cost effectiveness tests.

I also inform the Commission that the Company's third-party EM&V vendor has completed a power analysis to determine the appropriate sample size of DEC and DEP customers to include in the study of the persistence of the MyHER program's energy savings and has recommended the removal of multi-family customers from the study because the persistence effects for the segment may not be statistically significant. An interim report for first-year persistence is expected to be available in the first quarter of 2025 with a final report expected in the second quarter of 2026.

My testimony also outlines how the Company has complied with Commission Rule R8-69's requirements. I note that the aggregate DSM/EE portfolio continues to project cost-effectiveness, except for the Income-Qualified EE Products and Services Program and Income-Qualified High-Energy Use Pilot, which were not cost-effective at the time of approval, and the Income-Qualified Power Manager, which does not yet have sufficient participation to achieve cost-effectiveness because it was approved by the Commission in later 2023. Based on these results of my review, there is no reason to discontinue any of DEC's programs. The Company continues to examine its programs for potential modifications to increase their effectiveness.

I further testify that during Vintage 2023, DEC's DSM/EE programs delivered over 697 million of kilowatt-hours of energy savings, nearly 1,181 megawatts of summer peak capacity savings, and nearly 598 megawatts of winter peak capacity savings, which produced net present value avoided cost savings of over $422 million. However, the Company's overall performance during 2023 was less than forecasted due to inflation, high interest rates, challenging workforce environments, and new lighting standards that adversely impacted customer participation in DSM/EE programs. I also provide a projection of the results that DEC expects to see from implementation of its DSM/EE portfolio Vintages 2024 and 2025 and the associated projected program expense.

With respect to the EM&V results, I explain how the Company has applied EM&V results consistent with the agreement among DEC, the Southern Alliance of Clean Energy and the Public Staff that has been approved by Commission. For any program for which DEC has received EM&V results, the per participant impact applied to the projected program participation in Vintage 2023 is based upon the actual EM&V results that have been received. I also explain how the DEC has calculated found revenues and negative found revenues.

With respect to the opt-outs of nonresidential customers, I testify that for Vintage 2023, DEC had 4,816 eligible customer accounts opt out of participating in DEC's nonresidential portfolio of EE programs and 4,485 eligible customer accounts opt out of DEC's nonresidential DSM programs. I also give an overview of the PPI and PRI calculations pursuant to Commission orders and the Mechanisms.

With respect to the Inflation Reduction Act ("IRA"), I testify that the Company is closely reviewing the guidance issued by the Department of Energy to determine whether any changes to the design of the programs will be necessary. The Company has also reviewed its Home Energy Performance-Based, Whole House Rebates and High-Efficiency Electric Home Rebate Program to consider how our customers would benefit from coordinating the Company's EE incentives and IRA rebates. The Company itself does not directly receive IRA funds to apply to its EE programs, but the Company nonetheless believes that it can provide significant value to its customers by helping them receive IRA funds, when possible, to complement the Company's EE programs. I further testify regarding the Company's continued engagement with the North Carolina State Energy Office on all matters related to the IRA, including providing a letter of support for the

SEO's Contract Training Grant Application. The funds will support the important work of training contractors on relevant provisions within the IRA along with overall benefits of EE measures. The Company intends to provide ongoing status updates on its efforts around the IRA funds to the Collaborative and will provide an update in next year's annual rider filing. Additionally, based on feedback received from stakeholders, the Company will include the IRA as a standing topic for each Collaborative meeting in 2024 to open the dialogue for any potential program design changes or updates.

Finally, I testify that the Company evaluated the results of the 2021 avoided transmission and distribution ("T&D") study and found that the results validated the agree-upon avoided T&D rate applied to Vintage 2023. The next Avoided T&D Study will be conducted in the fourth quarter of 2024 and will utilize the new agreed-upon methodology. The results of that study will be applied to the projection for Vintage Year 2026.

In my supplemental testimony, I provide the final version of Appendix A to the Residential Energy Assessment Program – Evaluation Report that was filed as Fields Exhibit C in my direct testimony. The revised final version of Appendix A included in Revised Fields Exhibit C corrects certain values, tables, and figures. None of the updates changes the results of the report or the DEC DSM/EE rider filing in this docket.

This concludes my direct and supplemental testimony summary.

COMMISSIONER DUFFLEY: And with respect to Carolyn Miller's direct, supplemental, and rebuttal testimony, those testimonies will be entered into the record at this time as if given orally from the stand, and the corresponding exhibits will be marked for identification at this time.

(COURT REPORTER NOTE: Please see prefiled testimony inclusion beginning on page 15.)

MR. MIDDLETON: Thank you, Presiding Commissioner Duffley. And with that, the Company's witnesses are available for cross examination questions from the Commission.

COMMISSIONER DUFFLEY: No questions. No cross examination questions?

MS. KEYWORTH: We do have just a few. Thank you, Presiding Commissioner Duffley.

CROSS EXAMINATION BY MS. KEYWORTH:

Q Ms. Miller, we have just a few questions for you today on the topic of net lost revenues.

A (Ms. Miller) Okay.

Q If you'll -- just to orient you and the Commission, if you recall, the Public Staff asked in its direct that the Company provide verification in its rebuttal testimony demonstrating that the Company's methodology of calculating net lost revenues did not result in double counting; is that correct? Is that your recollection of what we --

A That is my recollection.

Q -- of what the Public Staff alleged in -- or requested in testimony?

A That is correct.

Q Okay. Thank you. So generally speaking, the -- is it correct that the EM&V determines the kilowatt hour reduction per participant per measure over time; is that correct?

A That is correct.

Q Okay. And in order to calculate net lost revenues for a given measure in a month, is it correct that you're taking the number of participants times the kilowatt hour savings from the EM&V and then, again, times the retail rate that's effective for that month; is that accurate?

A The rate that is used is not the retail rate; it is purely the rate recovering your fixed cost.

Q Okay. Thank you for the clarification. So presumably, the Company knows the rates effective for any given month for the calendar year that include the base rate and the rider; is that right?

A We calculate the net lost revenue rate when we do our filing, and we look, on a historical basis, and we take the rates that are in effect for each month and back out fuel and other variable costs. And so we know, on a historical basis, what those are, and we use that same amount on a perspective basis as an estimate, subject to true up.

Q Okay. So on a -- so in any given month, though, the Company's -- the Company knows the rates effective that it's utilizing for its calculation?

A Yes. Yes.

Q Okay. And does the Company have verification of the number of participants of each measure within one or two months, typically?

A I might have to --

A (Mr. Fields) There could be nuances with when --

Q Sure.

A -- we get participation and from a participant that really participated in January versus later on in the year. That -- an example of that is our weatherization program, where we work with community action agencies. They may have someone that participated in Jeremy[sic]-- January, but didn't input an invoice or a request for an incentive until March, and so there would be some distance in there.

Q So it sounds like a couple of months, typically, is going to cover -- you know, the Company is going to have verification of the participation within a couple of months, generally, understanding that there might be exceptions.

A No. Without, you know, going back and doing that for every one of the participants, it's hard for me to say for both the resident and non-resident that would be the case.

Q Okay. So we're -- given that, for the most part, the -- well, let me just back up for a minute. For purposes of net lost revenues; do you identify participation for purposes of determining net lost revenues, right?

A (Ms. Miller) Yes. For net loss revenue purposes there -- the participation by month is assigned to each measure, and that their actual savings per measure is then multiplied by the lost revenue rate to come up with a dollar amount that would be the net lost revenue amount requested in a rider.

Q So -- and I guess my ultimate question is, if we have -- understanding, Mr. Fields, the fact that, you know, occasionally there's going to be participation that is not known for a bit longer than the couple months but, generally, if this information is, you know, known and actual, then why can't the Company provide at least a ballpark verification as to why no double counting has occurred in its calculation of net lost revenues?

A We believe that we have provided the underlying data necessary to verify that information. We have provided, as part of our work papers, the participants by measure, times the rate for the test period and shown how we have excluded that percentage from our rider.

In addition, as part of the rate case, we have provided the billing determinants, and the customer usage calculations for that test period to show the underlying assumptions reflecting the implicit inclusion of net lost revenues in the rate case.

Q But, ultimately, what the Company's are using as a calculation is an estimation for the participation?

A No. I wouldn't agree with that because in our rider filing, we are looking at actual participation and actual measures, and the rates associated with that. And when you look at the savings over the course of the test period, what the Company is excluding is it's saying that over that period of time and that period of participation, this amount of savings has occurred, and in the test period of the rate case, you have that amount of savings implicitly included. And so we are, in effect, working in lockstep with the rate case to make sure that the assumptions in one are the same assumptions in the other.

MS. KEYWORTH: I think that's all the questions we have for now. Thank you.

COMMISSIONER DUFFLEY: Redirect?

MR. MIDDLETON: None from the Company.

COMMISSIONER DUFFLEY: Commissioner questions?

(No response.)

COMMISSIONER DUFFLEY: I have a quick question.

EXAMINATION BY COMMISSIONER DUFFLEY:

Q So DEC's been using this methodology since the 2020 Commission Mechanism Order, correct?

A (Ms. Miller) It has actually gone back further than that. In our initial mechanism, like -- and the rate cases back in, I believe 2014, we've used this methodology back to that point in time as well.

Q Okay. And was this -- any type of change of this methodology discussed in the last DEC rate case?

A It is not necessarily discussed in a rate case proceeding because net lost revenues are implicitly included in the billing determinants and the customer usage. So the benefit to the customers is implicitly included, and if there would be any discussions, it would be around, you know, have you updated the customer usage to reflect the actual experience of the customer.

Q So what docket would be the appropriate docket if there was going to be a change in the methodology? Is this the appropriate docket to discuss a change in methodology?

A I don't believe that it is. I mean, I believe that if we are going to change our procedures, we would need to change it in both the rate case and the EE rider in order to make sure that we stay consistent, and there is no double counting.

Q Okay. So probably in the next -- what I hear you saying is that if there was a change in methodology, it should be brought up in the rate case?

A Right. And, I mean, I believe that the Company's position is that there really isn't a need to change the process. What we have is working, and if we end up changing the process, we will then start adding a layer of complexity and estimation into both proceedings. Because if we change this in the rate case, the rate case is based on actual customer KWH. And so if we want to say that the net lost revenues would be -- all be completely earned the first day of a measure, which is a fundamental difference in the definition of a net lost revenue, but if we were to say that, you would then have to do some kind of annualization of savings in the rate case. And I don't think that that's appropriate, but that would be the docket in which that discussion would need to take place.

Q Okay. Thank you. And then one last question. In your rebuttal testimony, you do not mention witness Williamson's request in his testimony, and, specifically, it was his first recommendation that future EM&V reports on water saving measures include a more robust surveying of large occupancy homes in the data set in order to assess the reasonableness of the data; do you agree with Mr. Williamson's recommendation?

A I am not a program manager expert, so I would need to defer to --

A (Mr. Fields) Yeah. I can take that one on. Absolutely. Reading Mr. Williamson's testimony on a more robust survey for that program is something that we will undertake in the next EM&V evaluation, and put some more substance around the questions that we're asking those customers to make sure we're -- we're diving deeper into that. The methodology that was applied to the

EM&V was standard, but in reviewing, you know, and listening to Public Staff's comments, we'll work on adding additional.

Q Okay. So that's a yes?

A That's a yes.

COMMISSIONER DUFFLEY: Thank you.

Checking, again. No other questions?

(No response.)

COMMISSIONER DUFFLEY: Questions on Commission's questions?

MR. MIDDLETON: No questions.

COMMISSIONER DUFFLEY: Okay. Thank you very much for your testimony today. You are excused.

THE WITNESS: Thank you.

MR. MIDDLETON: Presiding Commissioner Duffley, would now be the appropriate time to move the Application into evidence?

COMMISSIONER DUFFLEY: Yes.

MR. MIDDLETON: We'd move that the Application be moved into -- into the record.

COMMISSIONER DUFFLEY: So approved. I grant that motion.

(WHEREUPON, the Application of Duke Energy Carolinas,

LLC, is received into
evidence.)

MR. MIDDLETON: We would also move that the exhibits, specifically, Miller Exhibits 1 through 7; Revised Miller Exhibits 1 through 4; Miller rebuttal exhibits 1 and 2; Fields Exhibits 1 through 14; Fields Exhibits A through J; and revised Fields Exhibit C also be moved into the record, please.

COMMISSIONER DUFFLEY: Without objection, that motion is approved -- or granted.

(WHEREUPON, Miller Exhibits
1-7, Miller Revised
Exhibits 1-4, and Miller
Rebuttal Exhibits 1-2 are
received into evidence.)

(WHEREUPON, Fields Exhibits
1-4, Fields Exhibits A-J,
and Revised Fields Exhibit
C are received into
evidence.)

MR. MIDDLETON: Thank you.

MS. KEYWORTH: The Public Staff now calls David Williamson, Hemanth Meda, and Michelle Boswell to the stand.

COMMISSIONER DUFFLEY: Do you-all want to be sworn or affirmed?

THE WITNESS: (Ms. Boswell) Sure.

COMMISSIONER DUFFLEY: So if you could place your left hand on the Bible and raise your right.

PANEL OF DAVID WILLIAMSON, HEMANTH MEDA, and MICHELLE BOSWELL;

having been duly sworn,

testified as follows:

DIRECT EXAMINATION BY MS. KEYWORTH:

Q Mr. Williamson, would you please state your name, business address, and current position for the record.

A (Mr. Williamson) Sure. My name is David Williamson, business address is 430 North Salisbury Street, Raleigh, and I'm an engineer with the Public Staff's Energy Division.

Q On May 20, 2024, did you prepare and cause to be prefiled direct testimony in this docket consisting of 14 pages and one appendix?

A That's correct.

Q Do you have any changes or corrections to make to your prefiled testimony?

A I do not.

Q And if you were asked the same questions today, would your answers be the same?
A They would be.
Q Mr. Meda, would you please state your name, business address, and current position for the record.
A (Mr. Meda) My name is Hemanth Meda. My business address is 430 North Salisbury Street, Raleigh, North Carolina. I am a Public Utility Regulatory Analyst with the Accounting Division of the Public Staff.
Q On May 20, 2024, did you prepare and cause to be prefiled direct joint testimony in this docket consisting of 13 pages and two appendices?
A Yes, I did.
Q Do you have any changes or corrections to make to your prefiled direct joint testimony?
A No changes.
Q If you were asked the same questions today, would your answers be the same?
A Yes, they would be the same.
Q And Ms. Boswell, would you please state your name, business address, and current position for the record.

A (Ms. Boswell) Michelle Boswell. My business address is 430 North Salisbury Street, Raleigh, North Carolina. I'm the director of the Accounting Division for the Public Staff.

Q On May 20, 2024, did you prepare and cause to be prefiled direct joint testimony in this docket consisting of 13 pages and two appendices?

A Yes.

Q Do you have any changes or corrections to make to your prefiled direct testimony?

A I do not.

Q If you were asked the same questions today, would your question -- would your answers be the same?

A Yes.

MS. KEYWORTH: Presiding Commissioner Duffley, at this time, I move that the prefiled direct testimony and appendix of Public Staff Witness David Williamson, and the prefiled direct joint testimony and appendices of Public Staff Witnesses Hemanth Meda, and Michelle Boswell be marked as identified and entered into the record as if given orally from the stand?

COMMISSIONER DUFFLEY: I approve that motion.

(WHEREUPON, the prefiled direct testimony and Appendix A of DAVID WILLIAMSON are copied into the record as if given orally from the stand.)

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1305

In the Matter of		
Application of Duke Energy Carolinas,	)	**TESTIMONY OF**
LLC, for Approval of Demand-Side	)	**DAVID M. WILLIAMSON**
Management and Energy Efficiency	)	**PUBLIC STAFF –**
Cost Recovery Rider Pursuant to	)	**NORTH CAROLINA**
N.C.G.S. § 62-133.9 and Commission	)	**UTILITIES COMMISSION**
Rule R8-69	)	

May 20, 2024

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

A. My name is David M. Williamson. My business address is 430 North Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am a Utilities Engineer with the Energy Division of the Public Staff – North Carolina Utilities Commission.

Q. Briefly state your qualifications and duties.

A. My qualifications and duties are included in Appendix A.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present the Public Staff's analysis and recommendations with respect to Duke Energy Carolinas, LLC's (DEC or the Company) application (Application) for approval of its demand-side management (DSM) and energy efficiency (EE) cost recovery rider for Vintage Year 2025 (Rider 16), as well as the testimony and exhibits of DEC witnesses Casey Q. Fields and Carolyn T. Miller filed on February 27, 2024; and the supplemental testimony and exhibits of Casey Q. Fields and Carolyn T. Miller filed on May 8, 2024 (supplemental filing).

My testimony discusses (1) the portfolio of DSM/EE programs included in the proposed Rider 16, including modifications to those programs; (2) the ongoing cost-effectiveness and performance of each DSM/EE program; and (3) the evaluation, measurement, and verification (EM&V) studies filed as Exhibits A through J to the testimony of Company witness Fields.

Q. What documents have you reviewed in your investigation of DEC's proposed Rider 16?

A. I have reviewed the Application, supporting testimony and exhibits, the supplemental filing, and DEC's responses to Public Staff data requests. In addition, I have reviewed the following documents, which are pertinent to Rider 16:

1. The Cost Recovery and Incentive Mechanism for Demand-Side Management and Energy Efficiency Programs approved on August 23, 2017, in the Commission's Order Approving DSM/EE Rider, Revising DSM/EE Mechanism, and Requiring Filing of Proposed Customer Notice, in Docket No. E-7, Sub 1032 (2017 Mechanism);

2. The Cost Recovery and Incentive Mechanism for Demand-Side Management and Energy Efficiency Programs approved on October 20, 2020, in the Commission's Order Approving Revisions to Demand-Side Management and Energy Efficiency Cost Recovery Mechanisms, in Docket Nos. E-2, Sub 931, and E-7, Sub 1032 (2020 Mechanism); and

3. The modification to subsection 20 of the 2020 Mechanism to include language on the Reserve Margin Adjustment Factor,

approved by the Commission in Docket No. E-7, Sub 1265, on December 12, 2022.

Q. Please summarize your recommendations.

A. The Public Staff makes the following recommendations:

1. That future EM&V reports on water saving measures include more robust surveying of large occupancy homes in the data set in order to assess the reasonableness of the data; and

2. That the EM&V reports filed by DEC as Fields Exhibits A through J be accepted.

Q. For which programs is DEC seeking cost recovery through the DSM/EE rider in this proceeding?

A. Pages 12 and 13 of Company witness Fields' direct testimony lists all programs that are eligible for inclusion in the Company's proposed Rider 16. Each of these programs has been approved by the Commission prior to the filing of the Company's Application. New programs and modifications to existing programs approved and initiated during Vintage Year 2025 – the proposed prospective period in this proceeding – will be addressed during the Experience Modification Factor review for Vintage Year 2025.

COST-EFFECTIVENESS

Q. How is the cost-effectiveness of DEC's DSM/EE programs calculated?

A. The cost-effectiveness of a program is determined by calculating a ratio of the benefits versus the costs of the program. The cost-effectiveness of each DSM/EE program is reviewed when it is proposed for approval and then annually in the rider proceedings. Pursuant to the 2020 Mechanism, cost-effectiveness is evaluated at both the program and portfolio levels using the Utility Cost (UC), Total Resource Cost (TRC), Participant, and Ratepayer Impact Measure (RIM) tests. Under each of these four tests, a result above 1.0 indicates that the benefits of the program outweigh the costs[1] such that the program is cost-effective. It is possible for a program's score to exceed 1.0 on one or more tests, while still falling below 1.0 on other tests. While the 2017 Mechanism used the TRC and UC tests to evaluate initial and ongoing cost-effectiveness, the 2020 Mechanism uses the UC test only.

The TRC test represents the combined utility and participant benefits that will result from implementation of the program, with a result greater than 1.0 indicating that the benefits outweigh the costs of a

[1] Each test evaluates costs and benefits from different perspectives in calculating the cost-effectiveness score.

program to both the utility and the program's participants. A UC test result greater than 1.0 means that the program is cost beneficial[2] to the utility (the overall system benefits are greater than the utility's costs incurred to offer the program, including incentives paid to participants). The Participant test is used to evaluate the benefits against the costs specific to those ratepayers who participate in a program. The RIM test is used to understand how the rates of customers who *do not* participate in a program will be impacted by the program (but without consideration of what future rates would have been otherwise).

Q. How is cost-effectiveness evaluated in DSM/EE rider proceedings?

A. In each DSM/EE rider proceeding, DEC files the projected cost-effectiveness of each program and for the portfolio as a whole for the upcoming rate period (Fields Exhibit 7). These projections result from an evaluation of the costs and benefits associated with each test. The evaluations in DSM/EE rider proceedings look at the actual performance of a typical measure, providing an indication of what to

[2] "Cost beneficial" in this sense represents the net benefit achieved by avoiding the need to construct additional generation, transmission, and distribution facilities related to providing electric utility service, or avoiding energy generation from existing or new facilities or purchased power.

expect over the next year. Each year's rider filing is updated with the most current EM&V data and other program performance data.

Q. How does the Public Staff review cost-effectiveness in each rider?

A. The Public Staff compares the cost-effectiveness test projections from previous DSM/EE proceedings to the current filing and develops a trend of cost-effectiveness projections that serves as the basis for the Public Staff's recommendation on whether a program should (1) continue as currently implemented, (2) be monitored for further decreases in cost-effectiveness along with any Company efforts to improve cost-effectiveness, or (3) be terminated. While each DSM/EE rider proceeding provides a snapshot of the cost-effectiveness and performance of the programs and portfolio, the Public Staff does not rely on one specific calculation to evaluate program performance. Trends provide a clearer understanding of how changes in participation, avoided cost inputs, marketing and education about DSM/EE matters, and customer behaviors and preferences impact overall program performance.

Program design and delivery may need to be modified to address changes in cost-effectiveness. For example, incentive levels may need to be increased or decreased to maintain overall cost-effectiveness. Changes in the avoided cost inputs may increase or decrease cost-effectiveness because of the changes to the value of energy savings benefits realized from the portfolio. In either case, the trends in cost-effectiveness over time are more telling of overall performance. So long as programs are reasonably forecasted to produce cost-effective savings, the Public Staff generally supports their approval and inclusion in the DSM/EE rider.

Q. How are the benefits determined in a cost-effectiveness evaluation?

A. The benefits associated with a program's cost-effectiveness are generated by applying the applicable avoided cost rates to the savings generated by the program during a specified vintage year. Additionally, the avoided costs that are used in a proceeding for the upcoming rate period determine how the cost-effectiveness, Portfolio Performance Incentive (PPI), and Program Return Incentive (PRI) will be calculated.

Q. What avoided costs should be used as the basis for determining cost-effectiveness for Vintage Year 2025?

A. While an existing DSM/EE Cost Recovery Mechanism is in place that depicts how avoided costs should be derived in each DSM/EE cost recovery proceeding, as part of the currently pending DSM/EE Cost Recovery Mechanism review, if approved by the Commission, the Company will true-up Vintage Year 2025 and provide an updated underlying avoided cost assumption as well as updated program costs related to changes in customer rebates.

However, as part of this proceeding, for purposes of determining cost-effectiveness for Vintage Year 2025 using the currently approved DSM/EE Cost Recovery Mechanism, the applicable avoided cost rates that comply with paragraph 77 of the 2020 Mechanism are the rates approved in the order issued on November 22, 2022, in the Biennial Determination of Avoided Cost Rates for Electric Utility Purchases from Qualifying Facilities in Docket No. E-100, Sub 175.

PROGRAM PERFORMANCE

Q. Please discuss the performance of DEC's DSM/EE portfolio.

A. The Company's DSM/EE portfolio offers a wide variety of measures to support the needs of its customers. The Public Staff's review of program performance involved (1) reviewing cost-effectiveness trends; (2) reviewing Fields Exhibit 6, which provides specific information on each program's marketing strategy and potential areas of concern; and (3) performing an overall qualitative analysis.

The Public Staff also relies upon knowledge gathered from its involvement in the Company's bi-monthly EE Collaborative meetings to keep abreast of how the portfolio of programs is performing. During these meetings, the Collaborative discusses program performance (participation, customer engagement, and potential barriers to entry and continuation of the program), recently completed EM&V and market potential study activities, and potential new program offerings.

Based on the review discussed above, the Public Staff believes that the historical performance of the Company's programs is reasonable.

EM&V

Q. Have you reviewed the EM&V reports filed by DEC?

A. Yes. The Public Staff contracted the services of GDS Associates, Inc. (GDS), to assist with review of EM&V. With GDS's assistance, I have reviewed the EM&V reports filed in this proceeding as Fields Exhibits A through J.

I have also reviewed previous Commission orders to determine if DEC complied with provisions regarding EM&V contained in those orders. The Company is complying with the various Commission orders regarding EM&V of its DSM/EE portfolio.

Q. With respect to the findings presented in the EM&V reports in this proceeding, do you recommend any adjustments?

A. No, I do not have any recommendations that would impact the rates in this proceeding.

Q. Do you have any observations or recommendations regarding EM&V for nonparticipant spillover in future proceedings?

A. Yes. The Public Staff raised issues with respect to the topic of nonparticipant spillover (NPSO) during Duke Energy Progress, LLC's (DEP) most recent annual DSM/EE rider proceeding in Docket No. E-2, Sub 1322 (DEP Proceeding), where the Public Staff articulated numerous concerns involving the NPSO component of the net-to-gross (NTG) calculation within the Nonresidential Custom Report, which encompassed data collected during the 2018-2019 timeframe. Public Staff witness Warren Hirons outlined those concerns in his testimony filed on August 29, 2023, in the DEP Proceeding. As part of the current proceeding, the Company filed a new program evaluation report using data collected during the 2020-2021 timeframe.

In the current proceeding, the Public Staff is not raising any issues related to the NPSO methodology but will continue to monitor the methodology of the NPSO component of the NTG calculation within the Companies' Nonresidential Custom Reports.

Q. Do you have any observations or recommendations regarding the water-related measures evaluated in the Companies' EM&V reports?

A. Yes. The EE in Schools Program Report, filed as Fields Exhibit H, included large occupancy homes in the data used to complete the report and no further surveying data was collected to ensure that energy savings were still being experienced as a result of the measures' performance. In this instance, a survey respondent reported several thousand kilowatt hours (kWhs) of savings attributable to showerhead measures. More specifically, a participant reported at least seven showers per day at the residence lasting roughly 30 minutes each, which resulted in savings of approximately 8,400 kWhs.[3]

The Public Staff views this data point as an improbable amount of savings from water-related measures and inquired further. The Public Staff learned from the Company that the practice for determining reasonableness of water-related measures is based on a standard deviation determined by the number of showers per person per day and by the number of minutes per shower assessment. For this instance, the data fell within the prescribed

[3] The survey data showed that this household had seven residents living in the home.

band of reasonableness, which is why DEC did not exclude the survey response from the data set used in the EM&V report.

While this data point meets DEC's criteria for purposes of inclusion in this EM&V report, the data does not indicate, through more detailed surveying, if there are instances where some showers occur simultaneously or consecutively within a home that could result in the water heater running out of hot water, thus not producing any additional savings for the program. The Public Staff believes that water heating capability is essential for evaluating high occupancy homes as a reasonableness check for the savings DEC claimed in the report. Therefore, I recommend that future reports that encompass water savings measures include more robust surveying of large occupancy homes in the data set in order to assess the reasonableness of the data.

Q. Should the EM&V reports filed in this proceeding be accepted as complete?

A. Yes, the EM&V reports filed in this proceeding – Fields Exhibits A through J – should be considered complete.

Q. Have you confirmed that the Company's calculations incorporate the verified savings of the various EM&V reports?

A. Yes. As in previous cost recovery proceedings, I was able, through sampling, to verify that the changes to program impacts and participation were appropriately incorporated into the rider calculations for each DSM/EE program, as well as the actual participation and impacts calculated with EM&V data. I reviewed (1) workpapers provided in response to data requests; (2) a sampling of the EE programs; and (3) Fields Exhibit 1, which incorporates data from various EM&V studies. I also met with DEC personnel to review the calculations, EM&V, DSMore modeling inputs, and other data related to the program/measure participation and impacts. Based on my ongoing review of this data, I believe DEC has appropriately incorporated the findings from EM&V studies and annual participation into its rider calculations consistent with Commission orders and the Mechanisms.

Q. Does this conclude your testimony?

A. Yes.

APPENDIX A

QUALIFICATIONS AND EXPERIENCE

DAVID M. WILLIAMSON

I am a 2014 graduate of North Carolina State University with a Bachelor of Science Degree in Electrical Engineering. I began my employment with the Public Staff's Electric Division in March of 2015. In August of 2020, the Electric Division merged with the Natural Gas Division to form the Energy Division, where I am a Utilities Engineer in the Electric Section – Rates and Energy Services. My current responsibilities include reviewing applications and making recommendations for certificates of public convenience and necessity of small power producers, master meters, and resale of electric service. Moreover, my responsibilities include interpreting and applying utility service rules and regulations.

My primary responsibility within the Public Staff is reviewing and making recommendations on DSM/EE filings for initial program approval, program modifications, EM&V evaluations, and on-going program performance related to Electric and Natural Gas Investor-Owned Utilities. I have filed testimony in various Duke Energy Carolinas, Duke Energy Progress, and Dominion Energy North Carolina DSM/EE rider proceedings. I have also filed testimony in recent general rate case proceedings for Piedmont and Public Service Natural Gas companies related to the approval and tracking of their portfolio of EE programs.

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing testimony has been served on all parties of record or their attorneys, or both, in accordance with Commission Rule R1-39, 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 May, 2024.

Electronically submitted
/s/ Anne M. Keyworth
Staff Attorney

(WHEREUPON, the prefiled joint direct testimony and Appendices A and B of HEMANTH MEDA and MICHELLE BOSWELL are copied into the record as if given orally from the stand.)

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1305

In the Matter of		
Application of Duke Energy	)	**JOINT TESTIMONY OF**
Carolinas, LLC, for Approval of	)	**HEMANTH MEDA AND**
Demand-Side Management and	)	**MICHELLE BOSWELL**
Energy Efficiency Cost Recovery	)	**PUBLIC STAFF –**
Rider Pursuant to N.C.G.S. § 62-	)	**NORTH CAROLINA**
133.9 and Commission Rule R8-69	)	**UTILITIES COMMISSION**

May 20, 2024

Q. Mr. Meda, please state your name, business address, and present position.

A. My name is Hemanth Meda, and my business address is 430 North Salisbury Street, Raleigh, North Carolina. I am a Public Utility Regulatory Analyst with the Accounting Division of the Public Staff – North Carolina Utilities Commission (Public Staff).

Q. Briefly state your qualifications and experience.

A. A summary of my qualifications and experience is attached as Appendix A to this testimony.

Q. Ms. Boswell, please state your name, business address, and present position.

A. My name is Michelle Boswell, and my business address is 430 North Salisbury Street, Raleigh, North Carolina. I am the Director of Accounting for the Public Staff.

Q. Briefly state your qualifications and experience.

A. A summary of my qualifications and experience is attached as Appendix B to this testimony.

Q. What is the purpose of your testimony?

A. The purpose of our testimony is to present our review of the application (Application) submitted by Duke Energy Carolinas, LLC (DEC or the Company), regarding the Demand-Side Management (DSM) and Energy Efficiency (EE) cost and incentive recovery rider filed in this docket on February 27, 2024 (DSM/EE Rider),[1] and the supplemental direct testimony and exhibits filed on May 8, 2024. The DSM/EE Rider is authorized by N.C. Gen. Stat. § 62-133.9 and is implemented pursuant to Commission Rule R8-69.

Q. Please describe the basis for the Company's filing.

A. General Statute § 62-133.9(d) allows a utility to petition the Commission for approval of an annual rider to recover (1) the reasonable and prudent costs of new DSM and EE measures, and (2) other incentives to the utility for adopting and implementing new DSM and EE measures. However, N.C.G.S. § 62-133.9(f) allows industrial and certain large commercial customers to opt out of participating in the power supplier's DSM/EE programs and paying the DSM/EE rider upon notification to their electric power supplier that they have implemented or will implement, at their own expense, alternative DSM and EE measures.

Commission Rule R8-69, which was adopted by the Commission pursuant to N.C.G.S. § 62-133.9(h), sets forth the general parameters and procedures governing approval of the annual rider, including, but not limited to (1) provisions for both a DSM/EE rider to recover the estimated costs and utility incentives applicable to the

[1] The DSM/EE Rider is comprised of various class-based DSM, EE, DSM Experience Modification Factor (EMF), and EE EMF billing rates.

"rate period" in which that DSM/EE rider will be in effect, and a DSM/EE EMF rider to recover the difference between the DSM/EE rider in effect for a given test period (plus a possible extension) and the actual recoverable amounts incurred during that test period; and (2) provisions for interest or a return on amounts deferred and on refunds to customers.

In this proceeding, DEC has calculated its proposed DSM/EE rider (incorporating both prospective and EMF DSM and EE billing rates) using, for vintage years prior to 2022, the Cost Recovery and Incentive Mechanism for DSM/EE Programs approved by the Commission in Docket No. E-7, Sub 1032 (Sub 1032), on October 29, 2013, in its *Order Approving Revised Cost Recovery and Incentive Mechanism and Granting Waivers*, as subsequently revised by the Commission in its August 23, 2017 *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice*, issued in the Company's 2017 DSM/EE rider proceeding in Docket No. E-7, Sub 1130 (2017 Mechanism). For vintage years 2022 and after, the Company utilized a revised mechanism, which was approved by the Commission on October 20, 2020, in Sub 1032, in its *Order Approving Revisions to Demand-Side Management and Energy Efficiency Cost Recovery Mechanisms*, and which took effect on January 1, 2022 (2020 Mechanism).

The Public Staff detailed the development and major components of the 2017 and 2020 Mechanisms in the testimony of Michael C. Maness in Docket No. E-7, Sub 1249, filed on May 10, 2021.

Q. Please describe the billing factors, vintage years, rate period, and test period being considered in this proceeding.

A. In its initial Application in this proceeding, DEC requested approval of prospective and EMF DSM and EE billing rates that would result in annual North Carolina retail revenue of approximately $162.8 million. These proposed billing factors are set forth in DEC witness Miller's Exhibit 1. The factors (rates), as applicable to each class, are proposed by the Company to be charged to all participating North Carolina retail customers (i.e., those that have not opted out pursuant to N.C.G.S. § 62-133.9(f)) served during the rate period.

The rate period for this proceeding is the 12-month period from January 1, 2025, through December 31, 2025. This is the period over which the prospective DSM and EE billing rates and the DSM and EE EMF billing rates determined in this proceeding will be charged. It is also the period for which the estimated revenue requirements (program costs, net lost revenues (NLR), and Program Performance Incentive (PPI)) to be recovered through the prospective DSM/EE rates are determined.

The test period applicable to this proceeding is the 12-month period ended December 31, 2023. This is the period for which the under- or overrecovery of DSM/EE revenue requirements, as compared to actual DSM/EE rider revenues, is measured for purposes of determining the DSM and EE EMF billing rates (although Commission Rule R8-69(b) allows the true-up to be extended to cover additional months, subject to review and adjustment in the following year's proceeding). Actual program costs considered for true-up in this proceeding are either costs actually incurred during the test period, or further true-ups or corrections related to previous test periods. For purposes of recovery, actual program costs may be amortized over periods ranging from one to ten years. A return is also calculated on program costs deferred during the test year and on overrecoveries of total revenue requirements after the date the rates change. NLR and PPI reflected in the EMF revenue requirements being set in this proceeding are associated with kilowatt-hours (kWh) and dollar savings achieved during Vintage Year 2023 (which is also the test year), as well as true-ups associated with prior vintage years. The PPI revenue requirement may also be amortized on a levelized basis over several years.

Q. Please explain the purpose of and corrections in the Company's supplemental filing.

A. The purpose of the Company's supplemental filing was to include the interest calculation for Vintage 2018 for the residential revenue requirement and corrections to the 2018, 2019, and 2020 EE and 2018 and 2019 DSM non-residential revenue requirement. The Company's supplemental filing requested approval of prospective and EMF DSM and EE billing rates that would result in annual North Carolina retail revenue of approximately $162.0 million as shown in Revised Miller Exhibit 1.

The increase in the monthly bill of a residential customer using 1,000 kWh of energy resulting from the revenue requirement increase included in the Company's supplemental filing would be $1.16 from Rider 15. The change in a non-residential customer's bill would depend on the particular vintage years of DSM and/or EE rates for which the customer is opted out or opted in.

Q. What are some of the characteristics of DEC's proposed DSM/EE billing factors in this specific proceeding?

A. The prospective DSM and EE billing rates incorporate several cost recovery elements as estimated for the rate period, including operations and maintenance costs, administrative and general (A&G) costs, capital costs, carrying costs (return on deferred costs), NLR, and levelized PPI incentives. The test period true-up DSM and EE EMF billing rates contain test period actual amounts of the same types of costs and incentives as the prospective rates. The DSM and EE EMF billing rates may also include adjustments to any required return on over- or undercollections of DSM/EE revenues.

Q. Will there be future true-ups of the DSM/EE revenue requirements?

A. The finalization of the true-ups of NLR and PPI sometimes lags behind the true-ups of program costs and A&G expenses subject to amortization. This feature of the true-up process is due to the fact that, while cost amounts are typically known and determinable very soon after they are incurred, it can take several months or years to complete the applicable EM&V process and to refine and adjust the cost savings results for a given vintage year so that the final actual incentives payable to the utility can be determined. Therefore, while the cost amounts to be trued-up as part of the test period DSM/EE EMF revenue requirement typically correspond very closely to the actual costs incurred during the test period, the test period revenue requirement often contains incentives related to more than one vintage year. Additionally, certain components of the revenue requirements related to prior years will remain subject to prospective update adjustments and retrospective true-ups in the future, as participation and EM&V analyses are finalized, reviewed, and perhaps refined.

Q. Please describe your investigation of DEC's filing.

A. The Public Staff's investigation of DEC's filing in this proceeding focused on determining whether the proposed DSM/EE rider (1) was calculated in accordance with the 2017 or 2020 Mechanism, as applicable; and (2) otherwise adhered to sound ratemaking concepts and principles. The procedures we utilized included a review of the Company's filing, relevant prior Commission proceedings and orders, and workpapers and source documentation used by the Company to develop the proposed billing rates. Performing the investigation required the review of responses to written data requests, as well as discussions with Company personnel. As part of its investigation, the Accounting Division performed a review of the actual DSM/EE program costs incurred by DEC during the 12-month period ended December 31, 2023. To accomplish this, the Accounting Division selected and reviewed samples of source documentation for test year costs included by the Company for recovery through the DSM/EE Rider. Review of this sample is intended to test whether the actual costs included by the Company in the DSM and EE billing rates are either valid costs of approved DSM and EE programs or administrative costs supporting those programs.

The investigation, including the sampling of source documentation, concentrated primarily on costs and incentives related to the January through December 2023 test period, which will begin to be trued up through the DSM and EE EMF billing rates approved in this proceeding. The Public Staff also performed a more general review of the prospective billing rates proposed to be charged for Vintage Year 2025, which are subject to true-up in future proceedings.

Q. What is your recommendation in this proceeding?

A. Based on the results of the Public Staff's investigation, we recommend that the billing factors proposed by the Company, as set forth in Revised Miller Exhibit 1, be approved by the Commission, subject to resolution of the NLR potential double counting issues discussed below. These factors should be approved subject to any true-ups in future cost recovery proceedings consistent with the 2017 and 2020 Mechanisms and the Commission orders with which they are associated, as well as other relevant orders of the Commission, including the Commission's final order in this proceeding.

Q. Does the Public Staff have any additional comments?

A. Yes. Paragraph 60 of the 2020 Mechanism states that:

> Notwithstanding the allowance of 36 months' Net Lost Revenues associated with eligible kWh sales reductions, the kWh sales reductions that result from measurement units installed shall cease being eligible for use in calculating Net Lost Revenues as of the effective date of (a) a Commission approved alternative recovery mechanism that accounts for

> the eligible Net Lost Revenues associated with eligible kWh sales reductions, or (b) the implementation of new rates approved by the Commission in a general rate case or comparable proceeding to the extent the rates set in the general rate case or comparable proceeding are set to explicitly or implicitly recover the Net Lost Revenues associated with those kWh sales reductions.

In the course of the Public Staff's review of the Application and supporting workpapers in conjunction with the DSM/EE Mechanism review, the Public Staff noted that the Company has not reset the NLRs related to programs and participants included in the period covered by the Company's most recent rate case to zero as required in the 2020 Mechanism. The Public Staff is concerned that the Company's removal of only a portion of the NLRs, rather than a reset to zero, may have resulted in double counting of NLRs.

DEC has confirmed that it did not include NLRs associated with measures installed prior to the test year. However, the Company did include approximately 50% of calculated NLRs for measures installed during the test year as well as 100% of calculated NLRs for measures installed after the test year but before the new base rates became effective. The Public Staff requested – but has not received – data verifying that the NLRs have not been double counted. Accordingly, the Public Staff recommends that in its rebuttal testimony the Company quantify the impact of the use of the Company's methodology versus application of the plain language of

Paragraph 60 of the 2020 Mechanism for the current rider filing to ensure the Company has not double counted NLRs in utilizing its methodology.

Additionally, the Public Staff believes the Mechanism language clearly states that the utility shall cease the inclusion of NLRs associated with installed measures once new rates are implemented. The Public Staff does not believe that DEC stopped the recovery of NLRs for the measures installed upon the new rates becoming effective. Therefore, the Public Staff recommends that the Commission order the Company to (1) follow the plain language of the Mechanism and cease the recovery of NLRs for the measures per the conditions set forth in Paragraph 60 going forward and (2) if double counting did occur for the NLRs in the present case, credit the DSM/EE EMF for the amount double counted no later than the next DSM/EE rider proceeding. If the Commission approves the currently pending Mechanism, this will not be a recurring issue for residential customers as the NLRs for the residential class are proposed to be deemed recovered through the decoupling mechanism. However, it is crucial to make this clear for NLR calculations going forward for non-residential customers and for residential customers should the decoupling mechanism not be in effect.

Q. Does this conclude your testimony?

A. Yes, it does.

APPENDIX A

QUALIFICATIONS AND EXPERIENCE

HEMANTH MEDA

I graduated from University of Wollongong, Australia with a Master of Professional Accounting degree. I also received Master of Commerce and Bachelor of Commerce degrees from Osmania University, Hyderabad, India.

I am a licensed Certified Public Accountant in the State of North Carolina.

I joined the Public Staff Accounting Division as a Financial Analyst in May 2022. Prior to joining the Public Staff, I was employed as Senior Financial Analyst with Swissport USA. I have over twenty years of progressive experience in accounting and finance across various industries.

Since joining the Public Staff, I have been responsible for: (1) the examination and analysis of testimony, exhibits, books and records, and other data presented by utilities and other parties involved in Commission proceedings; and (2) the preparation and presentation to the Commission of testimony, exhibits, and other documents in those proceedings.

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/or 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 DEC's 2010, 2015, 2017, 2019, and 2020 REPS Cost Recovery Rider proceedings; DEP's 2014, 2015, 2017, 2018, and 2019 REPS Cost Recovery Rider proceedings; the 2014 REPS Cost Recovery Rider proceeding for Dominion North Carolina Power; the 2008 REPS 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 and 2019 rate cases for Dominion Energy North Carolina (DENC, formerly Dominion North Carolina Power); the 2013, 2017, 2019, and 2023 DEP rate cases; the 2017, 2019, and 2024 DEC rate cases; fuel and DSM/EE rider proceedings for DEC, DEP, and DENC; CPRE rider proceedings for DEC and DEP, and JAAR rider proceedings for DEP. several Piedmont, NUI Utilities, Inc. (NUI), and Toccoa annual gas cost reviews; the merger of Piedmont and NUI; and the merger of Piedmont and North Carolina Natural Gas.

MS. KEYWORTH: Thank you. The panel is available for cross examination.

COMMISSIONER DUFFLEY: Proceed.

CROSS EXAMINATION BY MR. MIDDLETON:

Q Good to see you-all. I usually see you on video, so it's nice to see you in person today.

Just have brief questions on Ms. Boswell and Mr. Meda's joint testimony. To kind of set the foundation for the line of questioning, I'm going to read a statement in your testimony, and I'll give you a second to get there. But I'm looking at page 10, line 9, Public Staff lays out the recommendation. And if you let me know when you get there, I can -- I can read it from there and I'll read it, and then just correct me if I misstate something, then I'll have a question follow off of that.

"Based on the results of the Public Staff's investigation, we recommended that the billing factors proposed by the Company, as set forth in Revised Miller Exhibit 1, be approved by the Commission, subject to resolution of the NLR potential double counting issues discussed below."

Did I read that correctly?
A (Mr. Meda) Yes.
Q And so based off that statement, just trying to understand the Public Staff's position, really, the only thing that's withholding your full sample of approval is really those net lost revenues issue that we're talking about today; is that right?
A That's correct.
Q And did you-all review Ms. Miller's rebuttal testimony that was submitted after you-all filed your testimony?
A Yes, I did.
Q Okay. And in Ms. Miller's rebuttal testimony, did she identify any double counting in net lost revenues?
A So as part of our investigation, we have asked the Company to provide reconciliation to see if there is any double counting, because we had some concerns and that has not been addressed.
Q And I understand that. And we disagree on some of that. I just -- back to my limited question, did Ms. Miller's rebuttal testimony identify any double count in net lost revenues?

A (Ms. Boswell) Ms. Miller's testimony addressed the fact that they could not do a reconciliation, and I believe stated that the Company found no double counting issues, but still did not provide the information that the Public Staff requested in verifying that information.

Q Okay. I understand that. And last question, in your -- in the Public Staff's testimony, did you-all identify any double count in net lost revenues?

A (Mr. Meda) No. We did not identify anything because we are not able to verify, so there is no way we could see it's double counting or not because we have requested the Company for some data and the Company has not provided that information.

Q And just one follow-up on that, do you have any reason to doubt Ms. Miller's testimony about the information that was provided to Public Staff?

A (Ms. Boswell) While the Public Staff doesn't doubt that that is her belief, we are tasked with not just trusting someone's belief, but actually verifying said data. And that's what we're trying to do is verify that that statement is accurate.

MR. MIDDLETON: Okay. And Thank you very much. That's all I have.

COMMISSIONER DUFFLEY: Redirect?

MS. KEYWORTH: No redirect. Thank you.

COMMISSIONER DUFFLEY: Commissioner questions?

(Indicating.)

Go ahead.

EXAMINATION BY CHAIR MITCHELL:

Q Ms. Boswell, what -- what could they have provided you that they didn't provide you?

A (Ms. Boswell) When we had discussions with the Company before filing our testimony, we had asked them just to provide us a ballpark reconciliation. Show us where you haven't included these within the confines of the rate case and asking for them here within the confines of the DSM/EE in whatever manner that they could do so. We kind of have the perfect storm here in that, to our recollection and the history of this, we've never had the rate case, a mechanism review, and a rider all in such close proximity to each other. And so in our review of all of those items, this question that popped up was, can we verify that you have zeroed out essentially, or held the ratepayers harmless from the inclusion of those net lost revenues that, whether explicitly or implicitly -- or however implicitly you want to describe it -- in the rate case versus the mechanism. And we found in the course of all of our discussions, which were numerous with the Company, in trying to tie this down that it really wasn't there; and to the Company's testimony, evidently, can't be done. And so from that, we're not really sure where to go.

Q So as I understand the Company's rebuttal testimony, which came in subsequent, obviously, to your testimony, the Company provided a written explanation of -- or a written response to your -- to the question of whether double counting occurred, and so is it your position that, sort of, the explanation provided in the testimony aside, they haven't provided you the work papers showing you the actual determinants or whatever it is that you need to see?

A Correct. And Mr. Williamson can help me explain part of this, but they calculate net lost revenues on a monthly basis, and they have the program participants and the kilowatt hours on a monthly basis. And so, while appreciating that there are some things that you have to calculate using some kind -- I don't want to say estimate, but some kind of.

A (Mr. Williamson) Proxy.

A (Ms. Boswell) Proxy -- thank you -- if you will. Whether it's assuming everything occurs first of the year or assuming everything's a mid-year convention, or what have you. It was just -- it is our belief that you have that information on a monthly basis, and whether or not it takes a month or two -- or according to Mr. Fields, maybe a couple of extra months depending on the specificity of the program. You have that information in your systems and can show us on a monthly basis since you have that information how it flowed through versus utilizing this proxy, if you will, that they've chosen to utilize of the mid-year convention.

Q And just to make sure I understand exactly what you're saying. Show us how it flowed through; so you want the Company to show the Public Staff how a credit for a net lost revenue was passed on to the customers, either through the DSM/EE rider or through the rate -- well, let me -- let me -- you answer my question. What is it -- let me, for the court reporter's sake, let me ask that question clearly: What is it that you want Duke to show the Public Staff?

A It is verification that we haven't picked up those kilowatt-hour savings -- or reductions, not savings in this case -- sorry -- within the confines of the rate case and still accounting for them within the confines of the DSM/EE mechanism.

Q Got it. The -- y'all's testimony -- I just had the page then I flipped -- on page 12, you discuss, you know, whether the Commission approves the pending mechanism, and if it does, then this, and if it doesn't, then that; so the Commission has since issued an order on the mechanism. So is your concern -- so help me understand the Public Staff's concern now, in light of the order issued on the mechanism.

Is the Public Staff's concern limited to this one particular case in time where we are between -- where we were between mechanisms and sort of in the middle of rate case -- a rate case year, or do you-all have what you need going forward?

A Yes and no. And I know that's clear as mud, so let me try to clarify. For residential customers, because of the mechanism that you-all have approved, as long as there is a PBR rate case in effect, those net lost revenues will be deemed to be recovered within the decoupling mechanism. So, therefore, we wouldn't have the net lost revenue recovery for residential within the confines of the DSM/EE mechanism.

Q Got it. Okay.

A So it resolves it as long as we have a PBR and an active decoupling mechanism. It doesn't resolve it for non-residential customers since we do not have a decoupling mechanism for non-residential customers. And it wouldn't resolve it for any year that we don't have a PBR in effect because we, by default, would revert back to the current methodology.

COMMISSIONER DUFFLEY: Thank you. That's

all I have. Thank you.

EXAMINATION BY COMMISSIONER DUFFLEY:

Q You heard the questions that I asked the DEC witnesses; so, if there was going to be some type of change of this, I'll call it a mechanism, what case is the appropriate case to hammer out that type of change in the mechanism?

A (Mr. Williamson) Well, I mean, having just recently concluded a mechanism review, I think we made a lot of strides on how to deal with net lost revenues going forward. I think the issue that we have today is how do we deal -- because the new mechanism hasn't gone into effect yet --

Q Correct.

A -- so how do we deal with a rate case occurrence, which isn't every year. So it's -- it's every couple years it feels like this rate case reset has occurred, and so it's just trying to ensure that the reset has been applied appropriately. And so in this case, you know, I think I kind of go back to witness Miller's rebuttal exhibit Number 1, where she's kind of spelled it out as far as how the Company has applied this reset, and really the main issue is this test period

July 1, 2022, through June 30, 2023 --
Q Are you in the middle bucket?
A Yes. Yes, ma'am. In the middle bucket.
Q Okay.
A Because it's -- the left bucket is basically saying that it's been zeroed out. There's no more net lost revenue recovery. And then the far right bucket for everything beyond July 1, after the true-up period, it's as if -- it's continuing to build the net lost revenue bucket for the rider proceeding, or soon to be through the decoupling, but we're trying to ensure that this time period of July 1, 2022, through June 30, 2023, has been handled appropriately. And it appears that there's just been a -- just a percentage allocation applied to that time period, whereas there is enough data -- should be enough data to discern which month net lost revenues has been accrued for each month during that period and which month should be reset to zero or continued on at full value.
Q And so to follow up that, I'm just trying to understand Public Staff's request, which I know is, have the Company provide the information to

Public Staff, but if -- we've all read their rebuttal, but what is it that you're requesting that the Commission do? Because, again, for that middle bucket, it's that kind of 50 percent. So if you were the Company, how would you account and figure out that middle bucket?

A So I think --

Q Any one of you can answer this, by the way.

A So I think the main -- the main question is, what month does that reset period begin? And that's really the big question is -- what they've applied right here a 12-month kind of a reduced value, almost for the net lost revenues with this 50 percent. And so it's just trying to figure out, in my mind, it's either zero or it's the full value of the net lost revenue that it equates to. But what's been applied in this middle bucket is a kind of reduced percentage.

And so it's just whether or not -- I don't believe to my knowledge the mechanism addresses a kind of mixed value. To me, it just kind of reads as you either reset to zero or you just continue on accruing the net lost revenues in the net lost revenue bucket.

Q So what I heard you say -- testified to is, instead of having that 50 percent, you just go to one side or the other; have it be zero or it be 100 percent?

A Depending on when the reset month occurs. And so that's what we're trying to figure out is: what month is that reset month?

COMMISSIONER DUFFLEY: So Commissioner, you wanted to ask a question -- follow up question. I'm not done, but I'll let you pop in.

COMMISSIONER HUGHES: No. It's okay.

Q So could you also explain, obviously, the 2020 mechanism order that was issued? The testimony of the Company is that this has not been brought about. Can you explain why -- why this is the first time that this issue is coming up?

A (Ms. Boswell) Sure. And I think it's just a matter of the reading of that paragraph. The Public Staff believes that it's really clear that, when you have a rate case, you would reset its -- the 36-month period ends and you move forward. The Company reads it differently. And so it hasn't come up before because, like I said, when we go through an audit -- and as much as I would like to say that we look at everything and every case, there's simply not enough time. And so when we're in any of the cases, we're looking at what is the biggest piece of the pie so to speak. What is most likely to be incorrect or contain errors and have the most impact to ratepayers.

And so in the DSM/EE, we haven't had the perfect storm, in our recollection, of having a rate case, a mechanism review, and a rider all in such close proximity. And so, when our Staff began looking at all of it and making for sure that we had paired all the pieces together, this issue came up of: how do we tie this in? How do we verify this? And that is what we broached with the Company on many occasions is: help us to tie this in. Help us to see that -- it may not come down to every kilowatt hour or every dollar, and that's okay, because there are estimates involved within the DSM/EE.

Q Correct.

A And we all know this, but get us into the relative ballpark of the game that we should all be playing the same game of. Just show us that we're within the same ballpark, and we move on. And to date, we don't have that to be able to say that we're ready to do that.

Q Thank you. And tell me your view on this language. You know, at the end of paragraph 60 of the order, it says -- they state that, "The Public Staff ignores this to the extent the rate set in the general rate case, or comparable proceeding are set to explicitly or implicitly recover net lost revenues associated with those kilowatt-hours sales reductions." Can you respond to that argument that Company's making?

A (Ms. Boswell) Absolutely. We're not ignoring that sentence. And, actually, that's what gave rise to our concern is that, okay, we've got the language as it sets forth here, so we still have to be able to show that it does those things. And right now, we can't show that it does those things.

COMMISSIONER DUFFLEY: Thank you.

And, Commissioner Hughes?

EXAMINATION BY COMMISSIONER HUGHES:

Q I'd be a lot more comfortable if I had a spreadsheet with formulas in front of me.

A (Ms. Boswell) Wouldn't we all.

Q But I'm just with -- I think I understand where you're going. And just to follow-up on some of my colleagues questions; first off, the 50 percent number, from what I understand, all along that the MyHER programs lost revenues dominates the rider calculations in every single way. And through past riders and testimony and questions, it's my understanding that those never reset. So that, that part of net lost revenues, which dominates an amount -- especially on the residential side, it's 70 percent of the net lost revenues total, they are not going to get reset.

A Correct.

Q Okay. So I was just -- I was a little confused about the 50 percent. I know I should have asked that to the Duke panel instead of you, but is that your understanding, too, that, what you're looking for are these other programs, which in a total of what the rider is collecting is going to be relatively modest compared to the net lost revenues that in, you know, in the MyHER program?

A Right. As the mechanism currently stands today, absolutely, you're correct. In the mechanism that you-all have approved, we're hoping to see more of a change associated with it not being as reliant on MyHER. And, so in the future, we think that if there's a non-PBR rate case and we have -- we're reverting back to the standard that we would have a larger issue at that point in time.

A (Mr. Williamson) And so, I guess to add a little bit of clarity to that, I kind of go back to Fields Exhibit 2 with regards to this, and that's the net lost revenue accumulation --

Q I do have that one in front of me?

A -- spreadsheet. And I guess to put a little bit more emphasis about what we're talking about here and the dollar impact is, there are -- so as you can see, there's tons of years involved in the net lost revenues because they're allowed -- per the mechanism -- to accumulate up to 36 months of net lost revenues to be recovered, but in every proceeding rider, you have to request the next 12 months of that 36 months. And so that's why you see in some of these Vintage Years, some of them have three, some of them have four, but it's trailing ends. So the -- I guess some of the concern that's here is there are additional requests from that Vintage 2022 and Vintage 2023 installs that are in here that trail out into the -- this current Vintage year 2025, and so there's a perspective component for residential and the non-residential that are being added to the rate being asked for in this proceeding that fall in that 2022 and 2023 time period of the rate case where the net lost revenues would be reset.

And so the question is more of: in that time period, what is the appropriate net lost revenues that should be allowed for inclusion in 2025 Vintage Year for residential and non-residential net lost revenues? And so that's kind of the whole point of the reset is, at a -- when a rate case concludes -- or the, however it's interpreted with the reset, whichever month that falls on, 36 months are going to continue, but that doesn't mean that you're entitled to the full 36 months. You might be cut short because the Company has since been made whole through the general rate case, and so the lost revenues for those past measures have been handled. Doesn't mean that the installs after the general rate case test-year they are still getting the full value and they're included in the rider as if the rate case had never occurred. But that's what we're trying to deal with is to make sure that the 2025 ask in this case is -- for net lost revenues is handled as it should be. So I hope that answers -- or at --

Q Yeah. No. It does. Exactly. So if they had provided a column where, as if the rate case did not occur and they had provided that next to the column that's in the rider so that you would see 2025 with no rate case, 2025 with a rate case having occurred; would that have given you comfort to see that there was a significant drop in that column? Does that make sense?

A That does make sense. I'd have to leave that to the accounting folks to respond to, but it's my understanding that, through the numerous discovery that we did send on trying to drill into this that -- because all of -- this is Field's Exhibit 2, and this feeds into Miller's exhibits, I believe it's just Miller Exhibit 1, where it's just kind of giving a summary of all the different rate components, but, it's just -- it's applied already. There is no highlight of the reduction as a result of the rate case change. And so that's what we're trying to dig into is, what is -- what is the impacts of the rate case per the mechanism in order to show us and verify to us that this has occurred.

COMMISSIONER HUGHES: Got it. Thanks.

COMMISSIONER DUFFLEY: Any other Commissioner questions?

(No response.)

COMMISSIONER DUFFLEY: Questions on Commission's questions?

MR. MIDDLETON: Limited, if that's okay, Presiding Commissioner.

COMMISSIONER DUFFLEY: Proceed.

CHAIR MITCHELL: Before he goes, may I ask one question?

COMMISSIONER DUFFLEY: Yes.

EXAMINATION BY CHAIR MITCHELL:

Q Guys, before we lose the opportunity, just -- I'm not clear on the Public Staff's position. And I may never get there, because I'm just limited in my capabilities. So is it the 50 -- the fact that Duke uses this estimate at 50 percent that's troubling to you, and you want to see actuals?

A (Ms. Boswell) It's not --

Q For that 2022, 2023 period? So first, answer that question.

A (Mr. Williamson) I think. What the Public Staff's trying to get to is, what month per the mechanism should be the cut-off month between the reset of net lost revenues and the continuation, the full value of the net lost revenues?

Q Say that again. What month.

A Which month. Which month should be the cut-off period for the reset of the net lost revenues.

Q Should be the cut-off period for the reset. Does that mean, at what period of time should the reset begin?

A At what period of time has the net lost revenues been recovered implicitly through the rate case that's been recently concluded?

Q Through the base rates. So --

A Yes, ma'am.

Q So really, the question is -- make sure I'm understanding -- you've got the base rates that have been set in the rate case, and then what is the first month that NLR should be recovered in the rider again?

A Correct.

Q Should begin again to be reflected in the rider; is that the question?

A That's correct.

Q And you-all were never able to come to an agreement on that exact point in time with Duke?

A No, ma'am.

Q And then help me understand your understanding of the 50 percent. Where does the -- how does the 50 percent work here?

A (Ms. Boswell) So the Company has used a mid-year convention and assumed that half has occurred before July 1, and the other half has occurred after July 1. And so they get to an approximate 50 percent. I actually think it's like 50.46 -- subject to check -- but they've assumed that half of it is occurring at the beginning of the test year -- or at the beginning of the calendar year, and half is occurring at the end of the calendar year, regardless of when it actually occurred.

Q And so does that -- is that not a different way of kind of getting at the same issue? Y'all want a date, and they've said we're just going to assume half of the -- we're going to assume a 50 percent of the NRLs for this period of time, this post-July 1, period of time.

A And it may very well be. We were just looking for that verification that that methodology actually came to that. That actually held -- because they -- what they have indicated is they use this methodology regardless of when that cut-off -- regardless of when the update period ends in a rate case.

And so for us, it's verifying that this is actually representative, and actually does what it needs to do.

Q I think I -- maybe I get it. But, so Ms. Miller's testimony refers to an extended test-year, and you're using the term "update." Do you-all mean the same --

A Yes.

Q Do you-all mean the same thing there? I just want to make sure.

A I believe so, yes.

CHAIR MITCHELL: Well, Duke's counsel can clear that up if there are questions on Commissioner's questions. But just so we're -- I want to make sure we're all on the same page here.

EXAMINATION BY COMMISSIONER DUFFLEY:

Q And I have a followup, because that's what I understood is, you're trying to figure out this middle bucket.

A Right.

Q I mean -- and you want the verification. They're saying that they cannot give the verification, but, so that's where I was trying to get with my earlier questioning is, how do you get to a potential methodology like the 50 percent that everyone's comfortable with? Because if they could provide you the verification it depend on the year. Some years it's going to be one side, and other years it might fall on the opposite side. So could it be just a reduction of -- instead of using 50 percent, using some other formula. That -- that's where I was getting to is: how the two of you can come to a resolution, and then, about the methodology -- the formula in that middle space, and what is the appropriate case to do that in? Is it in a rider? Is it in the rate case or is it in the methodology case?

A I would say that you would have to start the process within the confines of a rate case. I don't know that there's a lot -- I think you could -- once you have that in place, then you could put that within the confines of the mechanism. I think the mechanism, as it stands now, just says, you'll reset them. And it's silent to the methodology, so I don't think we would be going against the mechanism to work that out within the confines of that rate case or, hopefully, before we get to a rate case so that when the rate case comes, everyone is in agreement on something, theoretically.

A (Mr. Williamson) And so, I guess just to add to that, it's my understanding that -- I don't know if a methodology for an allocation is necessarily needed whenever, on a monthly basis, we're determining the net lost revenues that are going to be claimed for that particular month in a given Vintage Year. And so you're either claiming it or you're not claiming it. And so, that Vintage Year would be a reflection of what you can claim. And it's just highlighting what is claimable.

COMMISSIONER DUFFLEY: Thank you.

Any other questions?

CHAIR MITCHELL: Yes.

COMMISSIONER DUFFLEY: Chair Mitchell.

EXAMINATION BY CHAIR MITCHELL:

Q Mr. Williamson, so it as simple for you and -- for you-all that they are tracking the data month-to-month for DSM/EE rider purposes, and you want them to pick a point in time and so any -- anytime -- and so the point in time before that point in time any of those NLRs would be reflected in the base rates that have been set in the rate case, and after that period of time, those NLRs are collected through the DSM/EE rider?

A (Mr. Williamson) That's correct.

Q And so you-all believe that they've got that data. They have that data on a month-to-month -- on a monthly basis and just didn't provide it to you?

A I do believe they have it on a month-to-month basis. I don't know the discovery responses that accounting reviewed on this matter.

Q Okay.

A (Ms. Boswell) And then keep in mind, this is only if we don't have a PBR, except for non-residential, which it would occur regardless.

Q But it's the case in this proceeding?

A In this case, yes.

Q And I understand the implications for the future, but we have to resolve it in this case.

A Absolutely.

CHAIR MITCHELL: Thank you for letting me ask my question.

COMMISSIONER DUFFLEY: Sure.

Questions on Commission questions?

MR. MIDDLETON: Yes. Limited questions.

EXAMINATION BY MR. MIDDLETON:

Q Appreciate your testimony. I want to -- just give me a couple seconds to kind of walk back through so I can orient you-all as to where my questions are coming from, from the Commission.

So this is for the panel, probably best for Ms. Boswell and Mr. Meda. I think Chair Mitchell asked a question about whether you received work papers. I think she specifically cited billing determinants. And I just want to make sure that the answer is clear so that we have it on the record. Did you-all receive work papers containing billing determinants from the rate case?

A (Mr. Meda) Yes, we did.

Q And did you-all also receive customer growth performance that were updated for usage by residential and non-residential customers?

A (Mr. Williamson) Are you talking about within the rate case?

Q No. Well, have you ever received that from the Company in the context of net lost revenue discussion?

A No. No. And for the context of net lost revenues, it's essentially determined on customer participation, savings assumptions for EM&V, and then the -- the -- I've always called it the retail rate, but Ms. Miller called it the lost revenue rate earlier when she was on the stand. But it's number of customers the amount of savings. Customers are measures. Number of savings per customer per measure, multiplied by that dollar value to come up with the monthly lost revenue for that month.

Q And so you've not received customer growth performance from the Company in the context of this discussion net lost revenues?

A In this rider, no.

A (Mr. Meda) No.

Q Have you received back-up support evidencing any kilowatt hours removed from the test-period in the EE rider?

A (Mr. Williamson) Removing? Can you clarify?

Q Have you received any information from the Company, which the Company believes demonstrates removing kilowatt hours from the test period in a EE rider?

A (Ms. Boswell) We received, from the Company, what their illustration of the 50 percent was as far as on a tiered basis -- stair-stepped, for lack of a better term, basis.

Q Thank you, Ms. Boswell.

A I don't know if that was what you were looking for.

Q I didn't mean to cut you off. But, yes, that's helpful. Thank you. Just quickly, a couple of other questions.

I believe you received questions from Presiding Commissioner Duffley about the methodology we're all discussing, and so I want to follow-up on that. Isn't it true that the mechanism sets parameters or guideposts for that methodology that the Company has to operate within to calculate this number?

A (Mr. Meda) Yes.

Q And did Public Staff raise this issue in the recently completed mechanism review, where we were reviewing the mechanisms and proposing changes and revisions?

A (Ms. Boswell) We did not, as we are reading it differently than the Company is. So upon our reading of it when we were doing the mechanism review, we thought it covered what it needed to cover.

Q Okay.

A (Mr. Williamson) And in the mechanism review was a going forward approach at the time of -- I don't know if you remember, but the mechanism review was a very long, lengthy process. And so those conversations were being had over a number of months, whereas this has been filed since, I think, late February of this year. And so the presumption while we were going through the mechanism review was that the language was fine as it was. It wasn't until we got into this proceeding that we were coming to a disagreement on the language and how to apply it.

Q Okay. So just so I'm clear, you characterize a long and lengthy process, nowhere in that long --

A The mechanism review was a long, lengthy process that took lots of -- many months, many hours of everyone's time in order to come to the agreement that we came to that was approved by the Commission.

Q I agree with you wholeheartedly. Just limited question. Nowhere in those long, lengthy discussions does the Public Staff raise this concern?

A (Mr. Meda) I have to say one thing. Like, as we have done -- as you mentioned earlier, like, in the last 12 months, when we have looked at the rate case, the mechanism review, and looking at the rider, when we're putting all these puzzles together, that's when we realized: is there something happening? Is there double counting happening? So that's when we had some concern, and that's when we raised the issue. It is not during the mechanism process we have raised the issue.

A (Ms. Boswell) Right. And to answer your question, no, we did not bring it up. And in large part because, as all of the parties were working their way through the mechanism, it is trying to peel apart, what are the biggest issues at play? And, like I said before, it was our understanding that this language covered what it needed to cover. Just like it's the Company's understanding that this language covers what it needs to cover. We just have different interpretations of what that coverage is.

MR. MIDDLETON: Thank you, Ms. Boswell. Thank you, Mr. Meda. Thank you, Mr. Williamson. That's all the questions from the Company.

COMMISSIONER DUFFLEY: Thank you.

Questions? Ms. Keyworth?

MS. KEYWORTH: Just one.

EXAMINATION BY MS. KEYWORTH:

Q Was this issue on your radar when we filed our initial comments for the mechanism review?

A (Ms. Boswell) It was not.

MS. KEYWORTH: That's all the questions I have.

COMMISSIONER DUFFLEY: Thank you-all for your testimony this afternoon. You may be excused.

Ms. Keyworth, I'll accept motions.

MS. KEYWORTH: Thank you, Presiding Commissioner Duffley. The Public Staff moves that the prefiled direct testimony of Public Staff Witness David Williamson, and the prefiled direct joint testimony of Public Staff Witnesses Hemanth Meda and Michelle Boswell be entered into the record.

COMMISSIONER DUFFLEY: And the testimony has been entered into the record, and that's with the -- no exhibits, right?

(COURT REPORTER NOTE: Please see prefiled testimony inclusion beginning on page 128.)

MS. KEYWORTH: No exhibits.

COMMISSIONER DUFFLEY: Thank you.

Any further matters that we need to address?

MS. TOON: None from the Company.

COMMISSIONER DUFFLEY: So proposed orders and briefs will be due 30 days from the notice of publication of the transcript. And I thank you-all, and we're adjourned.

(The proceedings were adjourned.)

C E R T I F I C A T E

I, KAYLENE CLAYTON, do hereby certify that the Proceedings in the above-captioned matter were taken before me, that I did report in stenographic shorthand the Proceedings set forth herein, and the foregoing pages are a true and correct transcription to the best of my ability.

Kaylene Clayton
Kaylene Clayton