STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-2, SUB 1322

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application of Duke Energy Progress, LLC,	)	
for Approval of Demand-Side Management	)	ORDER APPROVING DSM/EE
and Energy Efficiency Cost Recovery Rider	)	RIDER AND REQUIRING FILING
Pursuant to N.C. Gen. Stat. § 62-133.9 and	)	OF PROPOSED CUSTOMER
Commission Rule R8-69	)	NOTICE

HEARD: On Tuesday, September 19, 2023, at 9:18 a.m. in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE: Commissioner ToNola D. Brown-Bland, Presiding; Chair Charlotte A. Mitchell and Commissioners Daniel G. Clodfelter, Kimberly W. Duffley, Jeffrey A. Hughes, Floyd B. McKissick, Jr., and Karen M. Kemerait[1]

APPEARANCES:

For Duke Energy Progress, LLC:

Ladawn Toon, Associate General Counsel, Duke Energy Corporation, NCRH 20/Post Office Box 1551, Raleigh, North Carolina 27602-1551

Marion "Will" Middleton, III, Baker, Donelson, Bearman, Caldwell & Berkowitz, PC, 2235 Gateway Access Point, Suite 2020, Raleigh, North Carolina 27607

For the Carolina Utility Customers Association, Inc.:

Amanda Hawkins, Brooks, Pierce, McLendon, Humphrey & Leonard, LLP, Suite 1700, Wells Fargo Capitol Center Raleigh, North Carolina 27601

For the Carolina Industrial Group for Fair Utility Rates II:

Douglas D.C. Conant, Bailey & Dixon, LLP, 434 Fayetteville Street, Suite 2500, North Carolina 27601

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[1] The terms of Commissioners ToNola D. Brown-Bland and Daniel G. Clodfelter ended prior to the decision in this docket and, therefore, they did not participate.

For the Using and Consuming Public:

Anne M. Keyworth and Nadia L. Luhr, Staff Attorneys, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699-4300

BY THE COMMISSION: N.C. Gen. Stat. § 62-133.9(d) authorizes the North Carolina Utilities Commission (Commission) to approve an annual rider to the rates of electric public utilities, outside of a general rate case, for recovery of all reasonable and prudent costs incurred for adoption and implementation of new demand-side management (DSM) and energy efficiency (EE) measures. The Commission is also authorized to award incentives to electric companies for adopting and implementing new DSM/EE measures, including, but not limited to, appropriate rewards based on (1) the sharing of savings achieved by the DSM and EE measures and/or (2) the capitalization of a percentage of avoided costs achieved by the measures. Commission Rule R8-69(b) provides that every year the Commission will conduct a proceeding for each electric public utility to establish an annual DSM/EE rider to recover the reasonable and prudent costs incurred by the electric utility in adopting and implementing new DSM/EE measures previously approved by the Commission pursuant to Commission Rule R8-68. Further, Commission Rule R8-69(b) provides for the establishment of a DSM/EE experience modification factor (EMF) rider to allow the electric public utility to collect the difference between reasonable and prudently incurred costs and the revenues that were realized during the test period under the DSM/EE rider then in effect. Commission Rule R8-69(c) permits the utility to request the inclusion of utility incentives (the rewards authorized by the statute), including net lost revenues (NLR), in the DSM/EE rider and the DSM/EE EMF rider.

On June 13, 2023, Duke Energy Progress , LLC (DEP or Company), filed an application for approval of its DSM/EE rider for 2023 (Application) and the direct testimony and exhibits of Casey Q. Fields, Senior Strategy and Collaboration Manager for Duke Energy Business Services, LLC, a service company affiliate of DEP and a subsidiary of Duke Energy Corporation (Duke Energy), and Carolyn T. Miller, Manager of Rates and Regulatory Strategy for Duke Energy Carolinas, LLC (DEC), but supporting DEP as well.

On June 23, 2023, the Carolina Industrial Group for Fair Utility Rates II (CIGFUR) filed its petition to intervene. The Commission granted the petition on June 27, 2023. On July 3, 2023, Carolina Utility Customers Association, Inc. (CUCA) filed its petition to intervene. The Commission granted the petition on July 11, 2023. The intervention of the Public Staff is recognized pursuant to N.C.G.S. § 62-15(d) and Commission Rule R1-19(e).

On June 30, 2023, the Commission issued an Order Scheduling Hearing, Requiring Filing of Testimony, Establishing Discovery Guidelines, and Requiring Public Notice (Scheduling Order).

On August 24, 2023, DEP filed the Supplemental Testimony and Revised Exhibits of witnesses Casey Q. Fields and Carolyn T. Miller. On August 28, 2023, DEP filed a correction to the Supplemental Testimony and Revised Exhibits filed on August 24, 2023, clarifying a procedural matter.

On August 29, 2023, the Public Staff filed the Testimony and Exhibits of Hemanth Meda, Public Utilities Regulatory Analyst; Tommy Williamson, Jr., Utilities Engineer; and Warren Hirons, Project Manager at GDS Associates.[2]

On September 7, 2023, DEP filed the Rebuttal Testimony and Revised Exhibits of Casey Q. Fields, Carolyn T. Miller, and Lark L. Lee, Senior Director at Tetra Tech.

On September 15, 2023, the Public Staff filed a motion for substitution of witness and adoption of testimony, requesting to substitute Michelle Boswell, Director of the Accounting Division, as the sponsor of testimony pre-filed by Hemanth Meda on August 29, 2023. On September 18, 2023, the Commission issued its Order Allowing Adoption of Testimony and Accepting Substitution of Witness. On September 18, 2023, the Public Staff filed the testimony of Michelle Boswell.

On September 18, 2023, DEP filed its affidavits of publication, as required by the Scheduling Order.

On September 19, 2023, the public witness hearing was called to order as scheduled. No public witnesses appeared. Also on September 19, 2023, the expert witness hearing took place as scheduled.

On November 15, 2023, DEP and the Public Staff filed a partial Joint Proposed Order reflecting the issues upon which these parties agree. On the same date, DEP and the Public Staff each submitted separate filings as a supplement to the partial Joint Proposed Order that reflect each party's position on the contested issues in this docket.

Cost Recovery Mechanism

On June 15, 2009, in Docket No. E-2, Sub 931, the Commission issued an Order Approving Agreement and Stipulation of Partial Settlement, Subject to Certain Commission-Required Modifications in DEP's first DSM/EE rider proceeding (Sub 931 Order). In the Sub 931 Order, the Commission approved, with certain modifications, an Agreement and Stipulation of Partial Settlement (Stipulation) between DEP, the Public Staff, and Wal-Mart Stores East, LP, and Sam's East, Inc., setting forth the terms and conditions for approval of DSM/EE measures and the annual DSM/EE rider proceedings pursuant to N.C.G.S. § 62-133.9 and Commission Rules R8-68 and R8-69. The Stipulation included a Cost Recovery and Incentive Mechanism for DSM and EE Programs (Original Mechanism), which was modified by the Commission in its Sub 931 Order and subsequently in its Order Granting Motions for Reconsideration in Part issued on November 25, 2009, in the same docket. The Original Mechanism as approved after reconsideration allowed DEP to recover

[2] Witness Hirons' Exhibit 2 contains confidential information. As a result, the Public Staff filed both public and confidential versions of that exhibit.

all reasonable and prudent costs incurred and utility incentives earned for adopting and implementing new DSM and EE measures in accordance with N.C.G.S. § 62-133.9, Commission Rules R8-68 and R8-69, and the additional principles set forth in the Original Mechanism.

On January 20, 2015, in Docket No. E-2, Sub 931, the Commission issued an Order Approving Revised Cost Recovery and Incentive Mechanism and Granting Waivers. In that Order, the Commission approved an agreement between DEP, the Public Staff, Natural Resources Defense Council, and Southern Alliance for Clean Energy proposing revisions to the Original Mechanism, generally to be effective January 1, 2016 (Revised Mechanism). The Revised Mechanism allows DEP to recover all reasonable and prudent costs incurred and utility incentives earned for adopting and implementing new DSM and EE measures in accordance with N.C.G.S. § 62-133.9, Commission Rules R8-68 and R8-69, and the additional principles set forth in the Revised Mechanism.

On November 27, 2017, in Docket No. E-2, Sub 1145 (Sub 1145), the Commission issued its Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice (Sub 1145 Order), in which it approved the agreement to revise certain provisions of the Revised Mechanism reached by DEP and the Public Staff. The Revised Mechanism, as modified by the Sub 1145 Order, is set forth in Maness Exhibit I filed in Sub 1145 and is referred to herein as the “2017 Mechanism.”

On October 20, 2020, in Docket Nos. E-2, Sub 931, and E-7, Sub 1032, the Commission issued its Order Approving Revisions to Demand-Side Management and Energy Efficiency Cost Recovery Mechanisms (2020 Sub 931 Order), in which it approved a revised prospective Mechanism (2020 Mechanism). The 2020 Mechanism includes the following substantive changes to the 2017 Mechanism that are applicable to DEP: (1) addition of a Program Return Incentive (PRI), an incentive to encourage DEP to pursue savings from existing and new low-income DSM/EE programs, and to maintain and increase the cost-effectiveness of these programs; (2) reduction of the Portfolio Performance Incentive (PPI) to 10.60%; (3) addition of a cap and floor on the PPI with a maximum margin of 19.50% for Vintage Year 2022 and afterward, and a minimum margin over aggregate pre-tax program costs for PPI eligible programs of 10% for Vintage Year 2022, 6% for Vintage Year 2023, and 2.50% for Vintage Year 2024 and afterward; (4) an assessment of whether it is appropriate to use non-energy benefits in the determination of cost-effectiveness under the Total Resource Cost Test (TRC); (5) clarification that bundled measures must be consistent with and related to the measure technologies or delivery channels of a program, unless otherwise ordered by the Commission; (6) use of the Utility Cost Test (UCT) to determine the cost-effectiveness of new and ongoing programs; (7) a review of Avoided Transmission and Distribution (T&D) Costs no later than December 31, 2021; and (8) an additional incentive of $500,000 if DEP achieves annual energy savings of 1.0% of the prior year's system retail electricity sales in any year during 2022 through 2025, and a penalty of a $500,000 reduction in its EE revenue requirement if DEP fails to achieve annual energy savings of 0.5% of retail sales, net of sales associated with customers opting out of DEP’s EE programs. The 2020 Mechanism is effective for vintage years beginning with Vintage Year 2022. Thus, the 2017 Mechanism applies to costs recovered through the EMF in this proceeding, while the 2020 Mechanism applies prospectively to costs projected and eventually trued up for Vintage Year 2022. Therefore, this cost recovery proceeding falls under the Commission's Sub 931 Orders approving both the 2017 Mechanism and the 2020 Mechanism.

Docket No. E-2, Sub 1322

Based upon consideration of DEP's Application, the pleadings, the testimony and exhibits received into evidence, and the record in its entirety, the Commission now makes the following:

FINDINGS OF FACT

1. DEP is a duly organized limited liability company existing under the laws of the State of North Carolina, is engaged in the business of developing, generating, transmitting, distributing, and selling electric power to the public in North and South Carolina, and is subject to the jurisdiction of the Commission as a public utility. DEP is lawfully before this Commission based upon its application filed pursuant to N.C.G.S. § 62-133.9 and Commission Rule R8-69.

2. The test period for purposes of this proceeding extends from January 1, 2022, through December 31, 2022.

3. The rate period for purposes of this proceeding extends from January 1, 2024, through December 31, 2024.

4. DEP has requested approval for the recovery of costs, and utility incentives where applicable, related to the following DSM/EE programs:

Residential

- EE Education Program for Schools
- Multi-Family EE Program
- My Home Energy Report (MyHER)
- Neighborhood Energy Saver (Low-Income)
- Smart $aver EE Program
- New Construction Program
- Load Control Program (EnergyWise)
- Save Energy and Water Kit (now part of the EE Appliances Program)
- Energy Assessment Program
- Low-Income Weatherization Pay for Performance
- Energy Efficient Appliances and Devices Program

Non-Residential

- Smart $aver Energy Efficient Products and Assessments
- Smart $aver Performance Incentive Program
- Small Business Energy Saver
- Commercial, Industrial, and Governmental ("CIG") Demand Response Automation
- EnergyWise for Business

Combined Residential and Non-Residential

- EE Lighting
- Distribution System Demand Response ("DSDR")[3]

These programs are eligible for cost and utility incentive recovery, where applicable.

5. Pursuant to Paragraph 19 of the 2017 Mechanism and Paragraph 20 of the 2020 Mechanism, programs benefiting low-income customers are not required to be cost-effective for inclusion in the rider.

6. For purposes of inclusion in this DSM/EE rider, DEP's overall portfolio of residential and non-residential DSM and EE programs is cost-effective.

7. The evaluation, measurement, and verification (EM&V) reports filed as Fields Exhibits A, B, C, D, F, G, H, and I are acceptable for purposes of this proceeding and should be considered complete for purposes of calculating program impacts. DEP has appropriately incorporated the results of these EM&V reports into the DSM/EE rider calculations. With respect to Fields Exhibit E (EM&V for Smart $aver Non-Residential Program Years 2018-2019), DEP and the Public Staff were unable to reach an agreement in the application of the EM&V report for calculating program impacts. The Commission addresses Fields Exhibit E below—however, the record reveals that the Public Staff's recommendation with respect to Fields Exhibit E is limited and would not impact the actual rates in the rider.

8. The Public Staff raised legitimate concerns about the methodology used by DEP, as described in Fields Exhibit E, to document and calculate non-participant spillover (NPSO). Solely for the purpose of this proceeding, and primarily because it has no impact on the rates approved herein, the Commission accepts the inclusion of NPSO as requested by DEP.

[3] As explained in witness Miller's Direct Testimony, DEP proposed including the DSDR program as part of base rates in Docket No. E-2, Sub 1300. As a result, DEP is not including prospective DSDR costs as part of the rider filing but will continue to collect DSDR costs and amortizations through Vintage 2023 as part of the DSM/EE rider. (Miller Direct at 11-12.)

9. In its direct testimony and exhibits, DEP requested the recovery of NLR in the amount of $35,134,042 and PPI/PRI in the amount of $15,865,808 through the EMF component of the total DSM/EE rider, and NLR of $41,479,043 and PPI/PRI of $15,482,020 for recovery in the forward-looking, or prospective component of the total rider.

10. In its supplemental direct testimony and exhibits, DEP requested the recovery of NLR in the amount of $35,133,404 and PPI/PRI in the amount of $15,865,823 through the EMF component of the total DSM/EE rider, and NLR of $41,478,824 and PPI/PRI of $14,393,799 for recovery in the forward-looking, or prospective component of the total rider. These updates result from (1) minor corrections identified by DEP that impact the non-residential billing factor and (2) a change in the regulatory fee applied to noncompetitive jurisdictional revenues pursuant to the Commission's June 30, 2023 Order Increasing Regulatory Fee Effective July 1, 2023 issued in Docket No. M-100, Sub 142.

11. In its rebuttal testimony and exhibits, DEP requested the recovery of NLR in the amount of $35,124,511 and PPI/PRI in the amount of $15,880,505 through the EMF component of the total DSM/EE rider, and NLR of $41,478,824 and PPI/PRI of $14,393,799 for recovery in the forward-looking, or prospective component of the total rider. These numbers were adjusted from DEP's supplemental testimony in response to certain recommendations by the Public Staff. However, these adjustments were not significant enough to change the billing factors proposed in DEP's supplemental direct testimony. DEP's proposed recovery of NLR and PPI/PRI is consistent with the 2020 Mechanism and is appropriate.

12. For purposes of the DSM/EE rider to be set in this proceeding and subject to review in DEP's future DSM/EE rider proceedings, the reasonable and appropriate estimate of DEP's North Carolina retail DSM/EE program rate period amounts, consisting of its amortized operations and maintenance (O&M) costs, depreciation, capital costs, taxes, amortized incremental administrative and general (A&G) costs, carrying charges, NLR, and PPI/PRI, is $166,075,379 (excluding the North Carolina Regulatory Fee, or NCRF), and this is the appropriate amount to use to develop the forward-looking or prospective DSM/EE revenue requirement.

13. For purposes of the EMF component of its DSM/EE rider, DEP's reasonable and prudent North Carolina retail test period costs and incentives, consisting of its amortized O&M costs, capital costs, taxes, amortized incremental A&G costs, carrying charges, NLR, and PPI/PRI, are $152,581,088. Therefore, the test period revenue requirement, as reduced by the test period revenues collected and miscellaneous adjustments, is $(24,884,526), which is the test period over-collection that is appropriate to use as the DSM/EE EMF revenue requirement in this proceeding.

14. After assignment or allocation to customer classes in accordance with N.C.G.S. § 62-133.9, Commission Rule R8-69, and the Commission Orders in Docket No. E-2, Sub 931, the revenue requirements for each rate class, excluding the NCRF, are shown in the table below.

DSM/EE PROSPECTIVE COMPONENT:	
Residential	$ 115,633,430
General Service EE	$ 45,976,477
General Service DSM	$ 4,386,053
Lighting	$ 79,419
Total	**$ 166,075,379**

DSM/EE EMF COMPONENT:	
Residential	$ (8,130,707)
General Service EE	$ (15,909,290)
General Service DSM	$ (766,552)
Lighting	$ (77,976)
Total	**$ (24,884,526)**

15. The appropriate and reasonable North Carolina retail class level kilowatt hour (kWh) sales for use in determining the DSM/EE and DSM/EE EMF billing factors in this proceeding are:

Rate Class	kWh Sales
Residential	17,128,995,467
General Service EE	8,734,624,909
General Service DSM	8,660,219,034
Lighting EE	371,886,089
Lighting DSM	371,703,126

16. The appropriate DSM/EE EMF billing factors, excluding NCRF, are: (0.047) cents per kWh for the Residential class; (0.182) cents per kWh for the EE component of the General Service classes; (0.009) cents per kWh for the DSM component of the General Service classes; and (0.021) cents per kWh for the Lighting class. The factors do not change with the NCRF included.

17. The appropriate forward-looking, or prospective DSM/EE rates to be charged by DEP during the rate period, excluding NCRF, are: 0.675 cents per kWh for the Residential class; 0.526 cents per kWh for the EE component of the General Service classes; 0.051 cents per kWh for the DSM component of the General Service classes; and 0.021 cents per kWh for the Lighting class.

18. The appropriate forward-looking, or prospective DSM/EE rates to be charged by DEP during the rate period, including NCRF, are: 0.676 cents per kWh for the Residential class; 0.527 cents per kWh for the EE component of the General Service classes; 0.051 cents per kWh for the DSM component of the General Service classes; and 0.021 cents per kWh for the Lighting class.

19. The appropriate total DSM/EE annual riders including the forward looking and the EMF rate (including NCRF) for the Residential, General Service, and Lighting rate classes are increments of 0.629 cents per kWh for the Residential class; 0.345 cents per kWh for the EE portion of the General Service class; 0.042 cents per kWh for the DSM portion of the General Service class; and 0.000 cents per kWh for the Lighting class.

20. DEP should continue to leverage its collaborative stakeholder meetings (Collaborative) to work with stakeholders to garner meaningful input regarding potential program portfolio enhancement and program design, as well as to address forecasted savings.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 1

This finding of fact, which is supported by DEP's Application, is essentially informational, procedural, and jurisdictional in nature, and is uncontroverted.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 2-3

No party opposed DEP's proposed rate period and test period. The rate period and test period proposed by DEP are reasonable and consistent with the 2017 and 2020 Mechanisms approved by the Commission.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 4

The evidence for this finding of fact can be found in DEP's Application, the testimony and exhibits of DEP witnesses Miller and Fields, the testimony of Public Staff witness Williamson, and various Commission orders in program approval dockets.

DEP witness Miller's supplemental direct testimony shows the portfolio of DSM/EE programs that is associated with DEP's request for approval of this rider. Tr. at 39-40. The direct testimony of DEP witness Fields lists the DSM/EE programs for which DEP is requesting cost recovery, and incentives where applicable, in this proceeding. Tr. at 63-64.

In his testimony, Public Staff witness Williamson stated that he has reviewed the DSM/EE programs for which DEP seeks cost recovery and noted that both DEP's residential and non-residential portfolio have been cost-effective during the 2018 through 2022 timeframe. Tr. at 174 The Public Staff did not object to the programs included in DEP's Application for cost recovery and witness Williamson verified that changes to program impacts and participation were appropriately incorporated into the rider calculations for each DSM/EE program. *Id.* at 177.

Thus, the Commission finds and concludes that each of the programs listed by witnesses Fields and Williamson have received Commission approval as a new DSM or EE program and are, therefore, eligible for cost recovery in this proceeding under N.C.G.S. § 62-133.9.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 5-6

The evidence for these findings of fact can be found in the testimony and exhibits of DEP witness Fields and the testimony and exhibits of Public Staff witnesses Williamson and Boswell.

Summary of the Evidence

DEP witness Fields testified that DEP reviewed the portfolio of DSM/EE programs and performed prospective analyses of each of its programs and the aggregate portfolio for the Vintage 2024 period, the results of which are incorporated in Fields Exhibit No. 7. Tr. at 63. DEP witness Fields provided cost-effectiveness scores indicating that all programs pass the UCT threshold of 1.0, with the exception of the low-income programs and EnergyWise for Business.[4] (Fields Supplemental Ex. 7.) However, taken as a whole, DEP's residential and non-residential portfolios of DSM/EE programs are cost-effective. (Fields Supplemental Ex. 7.)

DEP witness Fields also testified that DEP has begun working with its third-party EM&V vendor to finalize the schedule of the MyHER program by the fourth quarter of 2023, and that the recommendation from the vendor is to study persistence of energy savings for a period of two years, with an interim report for first-year persistence expected to be available in the first quarter of 2025 and the final report expected to be available in the third quarter of 2026. Tr. at 61.

Public Staff witness Williamson stated in his testimony that he reviewed DEP's calculations of cost-effectiveness under each of the four standard cost-effectiveness tests – UCT, TRC, Participant, and Ratepayer Impact Measure. *Id.* at 169-73. The Public Staff also compared the cost-effectiveness test results in previous DSM/EE proceedings to the current filing and developed a trend of cost-effectiveness that serves as the basis for the Public Staff's recommendation of whether a program should be terminated. *Id.* at 171-72. Witness Williamson explained that the Public Staff's evaluation does not rely on one specific calculation to evaluate program performance and that the DSM/EE rider proceeding simply provides a snapshot of the cost-effectiveness and performance of the programs and portfolio. *Id.* at 172. That said, witness Williamson noted that both DEP's residential and non-residential portfolios have been cost-effective during the 2018 through 2022 timeframe. *Id.* at 174; Williamson Exhibit 2.

Discussion and Conclusions

No party challenged inclusion of the above-listed programs in DEP's DSM/EE rider for cost recovery. Based upon the foregoing, the Commission concludes that for purposes of inclusion in Rider 15, DEP's aggregate DSM/EE portfolio appropriately projects cost-

[4] DEP witness Fields stated that EnergyWise for Business is in its first year of the newly modified program, which was designed to increase cost effectiveness and is in the process of ramping up program performance. (Fields Direct at 14.)

effectiveness and is approved as described. DEP shall continue to update the Commission on the progress of the MyHER persistence study in the annual rider proceedings until the report is final and filed with the Commission.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7

The evidence for this finding of fact can be found in the direct and rebuttal testimony and exhibits of DEP witness Fields and the testimony of Public Staff witness Williamson.

Summary of the Evidence

DEP witness Fields testified regarding the EM&V process, activities, and results presented in this proceeding. Tr. at 68-69. He explained that the EMF component of DEP's DSM/EE rider incorporates actual customer participation and evaluates load impacts determined through EM&V and applied pursuant to the Revised Mechanism. *Id.* at 70-71. In this proceeding, DEP submitted, as exhibits to witness Fields's testimony, detailed completed EM&V reports or updates for the following programs:

- EnergyWise Home Demand Response Program; Summer 2021 (Fields Exhibit A)
- Neighborhood Energy Saver Program 2021 Evaluation Report (Fields Exhibit B)
- Small Business Energy Saver Program 2019-2020 Evaluation Report (Fields Exhibit C)
- EnergyWise Business 2020/2021 (Fields Exhibit D)
- Non-Profit Low Income Weatherization Pay for Performance Pilot Program Evaluation Report 2022 (Fields Exhibit F)
- Retail Lighting Program 2022 Evaluation Report (Fields Exhibit G)
- EnergyWise Home Demand Response Program; Winter 2021/2022 (Fields Exhibit H)
- Non-Residential Smart $aver® Prescriptive Program Evaluation (Fields Exhibit I)[5]

In his testimony, Public Staff witness Williamson testified that DEP has appropriately incorporated the findings of the EM&V studies and annual participation into its rider calculations consistent with Commission orders and the 2017 and 2020 Mechanisms. Tr. at 177. Witness Williamson also noted that, with the exception of Fields Exhibit E, all EM&V reports that were filed as Fields exhibits should be considered complete as filed. *Id.*

Discussion and Conclusions

No party contested the EM&V information submitted by DEP except with regard to Exhibit E. The Commission therefore finds that the EM&V reports filed as Fields Exhibits A, B, C, D, F, G, H, and I are acceptable for purposes of this proceeding and should be considered complete for purposes of calculating program impacts. Further, the

[5] As explained below, witness Fields also submitted an Exhibit E. The Public Staff and DEP maintain certain limited disagreements regarding that Exhibit, which are addressed below.

Commission concludes that DEP is appropriately incorporating the results of Fields Exhibits A, B, C, D, F, G, H, and I into its DSM/EE rider calculations. Based upon the testimony and evidence cited above, the Commission finds the net energy and capacity savings derived from the EM&V to be reasonable and appropriate. Further, the Commission concludes that DEP is appropriately incorporating the results of EM&V into the DSM/EE rider calculations.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 8

Summary of the Evidence

The evidence supporting this finding of fact is found in DEP's Application; the direct and supplemental testimony and exhibits of DEP witnesses Casey Fields and Carolyn Miller and Public Staff witnesses Warren Hirons and Michelle Boswell; the rebuttal testimony of DEP witnesses Fields, Miller, and Lark Lee; and the entire record in this proceeding.

DEP Direct and Supplemental Testimony

As part of its Application, DEP filed a 2018-2019 Evaluation Report (Report) concerning DEP's Non-Residential Smart $aver Custom Program (Program), filed in this proceeding as Exhibit E to witness Fields' direct testimony. The Report was created by Nexant (now known as Resource Innovations) in partnership with Tetra Tech (together with Nexant, the Evaluator) for DEP and Duke Energy Carolinas, LLC (DEC and, together with DEP, Duke Energy). The Report includes, among other things, a Net-to-Gross (NTG) analysis of the energy savings attributable to the Program and an explanation of the method utilized by the Evaluator in determining the NTG savings.

According to the Report, calculations are performed for free-ridership (an estimate of the proportion of the Program's savings that would have happened in the absence of the Program) and spillover (an estimate of savings resulting from the installation of energy-efficient projects completed without a program incentive but that still was influenced by the Program) and the results, when combined, produce the Program-level NTG ratio. Notably, the Report differentiates between participant spillover (PSO), which the Report described as the attribution of savings to the Program for equipment that participants installed without the incentive that was influenced by the Program; and nonparticipant spillover (NPSO), which the Report describes as the attribution of savings to the Program for equipment contractors install for customers without a Duke Energy incentive that was influenced by the Program. The NTG ratio is then multiplied by the gross verified energy savings resulting from the impact evaluation activities to determine the Program's net verified energy savings. Fields Exhibit E, 50-68.

The Report describes the sampling for the Program, which included 1,187 records (780 for DEC and 407 for DEP). According to the Report, the tracking data was aggregated to the sector, or measure-category level, summing incentive amounts and kilowatt-hour (kWh) savings, using the Unique Project ID variable. The detailed measure descriptions were retained for reference in the participant survey, and after aggregation, the Carolina territories sample frame included 834 measure-level records (544 for DEC and 390 for DEP), all of which were included in the study's sample. The Report indicates that a total of 283 unique customer contacts were associated with the 834 projects included in the sample. The Evaluator conducted surveys with 92 customer respondents (65 DEC customers and 27 DEP customers, with two respondents being customers of both utilities) who completed 236 different projects in the DEC and DEP territories. *Id*.

The body of the Report shows, among other things, NTG NPSO evaluation results of 12.54% for DEC and 24.03% for DEP, with a combined Duke Energy result of 12.95%. *Id*.

Public Staff Direct Testimony

In direct testimony, Public Staff witness Hirons emphasized the importance of correctly capturing net program savings given that they are used in rider calculations to determine net lost revenues (NLRs) and performance incentives. Nonetheless, according to witness Hirons, the Report provided incomplete, misleading, and at times contradictory information concerning the magnitude of net program savings. More specifically, witness Hirons explained that, while Tables 1-1 and 1-4 of the Report provide the respective DEC- and DEP-reported and verified gross savings, the main body of the report does not provide a corresponding table or other explanation of the study results showing the *net* savings for each utility or how the gross verified savings for each utility are multiplied by the NTG ratios to determine program-level net savings. In addition, witness Hirons testified that he found the Report to be misleading or contradictory regarding whether Program-level net savings are estimated using an overall NTG ratio or a utility-specific NTG ratio. Although Appendices A and B to the Report indicate that utility-specific NTG ratios were used to determine Program-level net savings for each utility, the NTG ratio in Figure 5-3 of the body of the Report implies that a combined NTG ratio was used as listed in Table 1-7 of the Report. Thus, witness Hirons explained that the main body of the Report did not provide pertinent information concerning utility-specific Program-level net savings. Tr., 187-99.

Witness Hirons listed numerous additional concerns regarding the adequacy of the Evaluator's net Program savings analysis contained in the Report. First, witness Hirons testified that the analysis contains double counting of projects included in response to one of the Evaluator's survey questions. More specifically, witness Hirons explained that five vendors had customer bases that included both DEC and DEP territories. The Evaluator applied the results of these five survey responses (DEC and DEP combined) in their entirety for each individual utility-specific NPSO calculation and, as such, did not attempt to apportion these projects between the two utilities. According to witness Hirons, the Evaluator's double-counting of projects is a flaw in the calculation of utility specific NPSO and creates an extraordinary level of uncertainty. Witness Hirons further explained that two of the five vendor responses with customer bases in both DEC and DEP were responsible for 23.9% and 82.0% of the total number of projects incentivized by the program respectively for DEC and DEP, and were responsible for 48.4% and 86.7% of the total number of unincentivized projects influenced by the program respectively for DEC and DEP. Witness Hirons testified that, ultimately, the Evaluator incorrectly assigned full value of the responses to the relevant survey question to both DEC and DEP. Tr. at 199-202.

Next, witness Hirons explained that the Evaluator failed to appropriately weight the savings by measure and project type. According to witness Hirons, the evaluation plan provided by Duke Energy to the Public Staff in November 2020 (2020 Plan) indicated that NPSO savings would be weighted using stratum-level and record-level weights and noted that Duke Energy would use the Pennsylvania Evaluation Framework (Pennsylvania Framework), which provides sampling requirements if using NPSO, to evaluate NTG. However, witness Hirons testified that the Report did not follow the method discussed in the 2020 Plan and did not follow the guidance provided by the Pennsylvania Framework, which calls for appropriately weighting data based on the type of equipment sold (e.g., lighting or non-lighting) and total program savings (e.g., project size). Instead of following the 2020 Plan, the Evaluator weighted each project equally, implying that each project is an average project characterized as having the mean of the gross savings across all projects. However, the projects had vastly different savings based upon whether the measure was lighting or non-lighting and whether the strata was small or large. As such, witness Hirons testified that the disparity in project size by measure and in project numbers, in conjunction with the failure to identify which measures and project sizes were associated with each vendor response in the NPSO survey, created highly uncertain results and rendered them inappropriate for use in the analysis. Tr. at 202-06.

In addition, witness Hirons testified that the results of the analysis are highly sensitive to only a few data points. According to witness Hirons, the Report shows that 67 of 199 participating contractors completed surveys, and that only ten of those 67 responses had an NPSO of greater than zero. Of those ten responses, two account for over 90% of DEC’s NPSO (with one of these two being a contractor that served both DEC and DEP and had its responses double counted) and one accounts for 86.7% of DEP’s NPSO. Although the 2020 Plan called for weighting by measure type and project size to limit the impact of any single vendor response, witness Hirons explained that the Evaluator only considered the number of projects, leading to a result inappropriately influenced by only two vendor responses. Tr. at 206-08.

Moreover, witness Hirons explained that the analysis contained in the Report credits NPSO to projects which were likely to have been ineligible for the Program, as well as to projects that were likely to have been installed by opt-out customers that were ineligible for the Program. According to witness Hirons, five DEC survey responses and one DEP survey response indicated that the main reason for not pursuing an incentive was either that the projects were not eligible, or the customers were opted out of payment for the DSM/EE rider and participation in the DSM/EE rider programs. Witness Hirons testified that an opted-out customer should be marked as an ineligible project and not have the ability to influence the NPSO. Otherwise, according to witness Hirons, customers paying the DSM/EE rider are reimbursing Duke Energy for lost revenues attributable to opted-out customers who are not paying for the rider and whose sales are not included in calculations of savings or NLR, thereby creating a cross-subsidy from opted-in customers to opted-out customers. Tr. at 208-12.

Finally, witness Hirons testified that the NPSO estimates contained in the Report were substantially greater than results from similar evaluations in other states, with the highest non-Duke Energy estimate in the benchmarking analysis at 3.9%. According to witness Hirons, the NPSO results for Duke Energy are significantly out of line with other recent NPSO estimates, thereby calling the Report's NPSO estimate into question. Tr. at 212-14.

As a result of these concerns, witness Hirons testified that the Report's evaluation of NPSO was speculative at best and should not be accepted. Instead, witness Hirons recommended that Duke Energy be required to remove the NPSO savings from the analysis entirely and submit a revised evaluation report reflecting the removal of NPSO savings. In addition, witness Hirons made a number of recommendations to strengthen the results of future evaluations of the Program's NPSO, including that future NPSO evaluation reports should (1) state how net program savings are calculated for each service territory and clearly disclose the magnitude of the estimated net program savings in the main body of the report; (2) include a method to ensure that projects are not double counted and are, instead, apportioned to the respective DEC and DEP service-territories in a manner which reflects the best available information if they leverage vendor survey responses to estimate NPSO; (3) include a method to ensure that projects appropriately weight the savings by measure and project type if they leverage vendor survey responses to estimate NPSO; (4) include a reasonableness check to assess whether the results are overly sensitive to a small number of data points, and this reasonableness check should be discussed in the report to help provide the Commission with confidence that the results are not overly influenced by outlier data points; (5) include a method to ensure that projects that were ineligible for the program and projects completed by customers who were ineligible to participate are removed from the calculation of NPSO if they leverage vendor survey responses to estimate NPSO; and (6) include a benchmarking analysis of the results of the NPSO in comparison to other programs of similar type (e.g., non-residential custom or non-residential prescriptive), and the results of this benchmarking analysis should be discussed in the report with an explanation provided if an evaluation estimates NPSO to be substantially greater than the benchmarking analysis. Tr. at 214-16.

DEP Rebuttal Testimony

In rebuttal testimony, DEP witness Lee stated her disagreement with Public Staff witness Hirons' contention that the NPSO contained double counting, stating that the methodology utilized to calculate NPSO was based on each contractor's activity and reported number of projects, with only one instance of a contractor that reported unincentivized projects influenced by the programs who had overlapping program activity in both DEC and DEP territories. Witness Lee testified that the Evaluator did not intend for the territory-specific NTG values in Appendix A of the Report to be utilized. Witness Lee further testified that the Evaluator recommended to DEP that the Program's net savings be revised using the combined NTG value of 12.95%, instead of DEP's 24.03%. Tr. at 102-03.

Concerning witness Hiron's assertion that NPSO should be excluded from the Program's net savings in this proceeding, witness Lee disagreed on the basis that generating additional energy savings by influencing contractor practices is foundational to Duke Energy's EE programs' theories and activities. In her view, the Evaluator reliably measured the Program's influence on contractor practices outside the programs utilizing an industry-standard, transparent NPSO methodology known as the Pennsylvania Framework, which provides free ridership and spillover estimation. Witness Lee testified that the Evaluator implemented the methodology with robust sampling, data collection, and analysis to reliably calculate NPSO. Tr. at 104.

With regard to witness Hiron's contention that NPSO results were not weighted correctly, witness Lee testified that the NPSO results were based on a census sample of the contractor population and were then weighted by contractor size, which she describes as the most appropriate method for custom projects. Witness Lee explained that the Evaluator both sampled the complete participating contractor population and achieved survey completely representative of the target population and determined that stratum weighting was not needed based on the representation across stratum proportional to representation in the total population. Witness Lee further explained that the Evaluator weighted by project size for participant free ridership and participant-like spillover estimates, which aligns with the portion of the Evaluator's 2020 Evaluation Plan. Witness Lee agreed with witness Hirons that weighting NPSO by project size may be appropriate for deemed or partially deemed prescriptive project savings but cautioned that weighting NPSO by contractor size is the most appropriate method for custom projects where project size tends to be atypical. According to witness Lee, the Evaluator used expert judgment to weight by trade ally size using the number of projects reported by each contractor given that the measures in the Program are custom projects. Tr. at 104-06.

Witness Lee further testified that customer eligibility is not a criterion to estimate NPSO pursuant to the Pennsylvania Framework, and that the survey questions employed by the Evaluator properly asked about projects similar to what was done through the program to solicit responses about projects that save energy in accordance with the Pennsylvania Framework. Therefore, witness Lee testified that the NPSO estimate in the Report did not incorrectly include ineligible customers, as witness Hirons stated. Tr. at 106-08.

Concerning the utilization of benchmarking from other jurisdictions, witness Lee testified that the Evaluator regularly includes benchmarking results in its evaluation studies to provide context of how specific program results compare to other programs. However, witness Lee explained that the Evaluator does not adjust primary data results based upon benchmarking results on the basis that primary data is the most accurate tool to understand unique marketplaces and specific program impacts in those markets, not to mention the vastly different policy and regulatory contexts at play in different states affecting program design and delivery and resulting market effects such as NPSO. Tr. at 108-09.

Witness Lee noted that opportunities for continuous improvement should always be explored, not only in program design and delivery, but also in EM&V. Witness Lee agreed with witness Hirons that future evaluation reports should clearly state how net program savings are calculated for each service territory and clearly disclose the magnitude of the estimated program net savings in the main body of the report to ensure that the methodology is transparent and to make external review easier. To address contractors with overlapping projects across Duke Energy's territories, witness Lee recommended that, in the future, the contractor-specific NPSO estimate be apportioned to DEP and DEC based on the percentage of projects incentivized through the programs within each territory. From research conducted to date, witness Lee noted that it is often difficult for contractors to accurately indicate which territory the sales were in given the proximity between the DEC and DEP territories and the fact that some contractors work across both. Tr. at 109-10.

Witness Lee emphasized that the Evaluator's analysis resulted in a reliable NPSO estimate, consistent with industry standard NPSO methodologies that the Evaluator implemented with robust sampling and survey techniques. Witness Lee testified that the Evaluator carefully employed the Pennsylvania Framework NPSO methodology to both collect and analyze survey response data, utilized a census sample including all 199 participating contractors. Survey techniques resulted in 67 contractor surveys, a 33.7% response rate, which is higher than what is typically achieved in other evaluation trade ally research. Furthermore, witness Lee testified that the contractors who completed the survey were representative of the population. According to witness Lee, the Evaluator achieved a confidence interval with greater precision than industry standard (8.1% precision level in this instance, as compared to the industry-accepted 10% precision level). With respect to witness Hirons' concern that two contractors' responses account for much of the data, witness Lee testified that contractor variations reflect levels of engagement with the programs and overall sales volume and that, based on the Evaluator's extensive experience with trade ally research, it expects results to reflect varying trade ally sizes and activity in the marketplace. According to witness Lee, such diversity was reflected in the data and resulting analysis, and high contractor-specific NPSO does not mean an invalid response. Tr. at 108-10.

DEP Witness Fields testified that witness Hirons' application of his findings for the gross verified kWh retrospectively is a departure from the method outlined in the most recently approved cost recovery mechanism in Docket No. E-2, Sub 931, which, according to witness Fields, prohibits such retroactive application. In addition, witness Fields testified that NPSO savings from non-participants are not a cross subsidy and are, instead, an indication of the additional system benefits recognized by all customers regardless of opt-out status arising from operating effective programs. Because the standardized EM&V process evaluates how EE programs influence the energy consumption of both participants and nonparticipants and is consistent with the method that DEP has used historically, witness Fields testified that the impacts resulting from the influence of DEP's programs have on opted-out customers should not be ignored. Tr., 94-95.

Witness Fields testified that the net effect of witness Lee's recommended updated NPSO savings is an increase of approximately $6,662 to the total revenue requirement. Witness Miller testified that this adjustment does not impact the rates requested in DEP's supplemental filing. Tr., 48, 93.

Testimony Presented at the Expert Witness Hearing

At the expert witness hearing, DEP witness Lee testified that she agreed with Public Staff witness Hirons' recommendations 1, 2, and 4, as listed in his direct testimony. When asked about the Pennsylvania Framework and whether industrial customers have the option to opt-out in Pennsylvania, witness Lee testified that this policy difference between North Carolina and Pennsylvania was not relevant to the Evaluator's analysis and that the Evaluator applied the survey questions and analysis contained in the Pennsylvania Framework. Tr. at 116-17.

Witness Miller testified that there was no impact to Rider C or Rider CE based on DEP's position in rebuttal, and that the impact of the Public Staff's recommendation to remove the NPSO in this proceeding would be a $20,000 increase in the revenue requirement, resulting in an increase in Rider C and Rider CE to nonresidential DSM rates by $0.0001 per kWh. Tr. at 131.

DEP witness Fields admitted that, with regard to NPSO, opted-in industrial customers pay for savings attributable to opted-out industrial customers. When asked for clarity concerning his statement in rebuttal testimony that the EM&V process utilized by DEP in this proceeding was "consistent with the method that DEP has used historically," and whether his statement was intended to indicate that previous custom reports have similarly included NPSO in the analysis, witness Fields testified that he did not recall whether previous custom EM&V reports have in fact included NPSO and agreed, subject to check, that prior custom EM&V reports did not include NPSO. Tr., 119-20.

Public Staff witness Boswell testified that, due to the fact that application of the Public Staff's recommendation as set forth in its direct testimony would result in an increase in rates when applying the PPI floor created by Paragraph 78 of the Mechanism and the PRI floor created by Paragraph 89(d) of the Mechanism, the Public Staff was withdrawing its recommendation to remove NPSO savings entirely, although the Public Staff still did not agree with DEP's calculation of net savings provided in rebuttal testimony due to its concerns with the methodology applied. Witness Boswell noted that the reduced savings contained in DEP's rebuttal ensured that rates would not increase. Tr. at 217-18.

Public Staff witness Hirons testified that, with regard to witness Lee's contention that customer eligibility is not a criteria of the Pennsylvania Framework for determining NPSO, a review of the survey questionnaire demonstrates that project eligibility is the foundation of the NPSO calculations. In addition, although witness Lee testified that policy differences between North Carolina and Pennsylvania concerning the ability of industrial customers to opt-out are not relevant, witness Hirons explained that this difference is important given that industrial customers in Pennsylvania are not permitted to opt out, as they are in North Carolina. In addition, witness Hirons testified that the method utilized in this Report was not consistent with all of the other nonresidential program evaluation reports that have been filed and that other reports have a qualification question that screens out opted-out industrial customers. Witness Hirons also explained his view that the failure to screen out industrial customers which have opted out constitutes cross subsidization is based on the fact that if a program's revenue is lost because of participation by an opted-out customer, that customer's rates do not change, and the customers who are paying for the rider have to foot that bill for NLRs. Witness Boswell testified the Public Staff intends to address this issue in the 2023 Mechanism Review occurring in Docket No. E-2, Sub 931. Tr. at 219-25.

Witness Hirons emphasized the importance of aligning DEP's EM&V methods with best practices, cautioning that there could be consequences in future rider proceedings if the methods allow substantial NPSO that either is being calculated incorrectly or inconsistently. Although it is a moot point from a dollar perspective in this proceeding, witness Hirons testified that it is important to correct the methods going forward and testified that this is a conversation the Public Staff is willing and ready to engage in going forward. Tr. at 226-27.

Witness Hirons further testified that, for the 2020 and 2023 evaluation reports for the prescriptive program, ineligible projects were explicitly removed from the analysis by the Evaluator. Tr. at 228-29.

Discussion and Conclusions

With respect to the amount of NPSO savings to include in this rider proceeding, the Commission approves the use of the savings calculations reflected in DEP's rebuttal testimony and agreed to by the Public Staff. Despite the concerns raised by the Public Staff with regard to the method utilized by the Evaluator in calculating these savings, it is undisputed that removing the NPSO savings from this rider entirely would result in an increase in rates. This increase, however, would be solely based on the application of the PPI floor in the DEP Mechanism, and the Commission notes that, but for this provision of the DEP Mechanism, removing savings would typically result in a decrease in rates. 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.

The Commission has initiated a full review of DEP's and DEC's DSM/EE cost and incentive recovery Mechanisms in Docket Nos. E-2, Sub 931, E-7, Sub 1032 and E-100, Sub 179. The Commission intends to include within that review a full evaluation of the practice and methodology of including participant and non-participant spillover in the calculation of energy savings.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 9-19

The evidence for these findings of fact can be found in the testimony and exhibits of DEP witness Miller and the testimony and exhibits of Public Staff witness Boswell.

Summary of the Evidence

In direct testimony, DEP witness Miller calculated a proposed North Carolina retail revenue requirement for NLR in the amount of $35,134,042 and a PPI/PRI in the amount of $15,865,808 for the EMF component of the total DSM/EE rider, as reflected in Miller Direct Exhibit 2 page 6. In addition, DEP witness Miller calculated a proposed North Carolina retail revenue requirement for NLR in the amount of $41,479,043 and a PPI/PRI in the amount of $15,482,020 for the forward-looking, or prospective component of the total DSM/EE rider, as reflected on Miller Direct Exhibit 2 page 3. DEP witness Miller testified that, for purposes of the EMF component of its DSM/EE rider, DEP's reasonable and prudent North Carolina retail test period costs and incentives, consisting of its amortized O&M costs, capital costs, taxes, amortized incremental A&G costs, carrying charges, NLR, and PPI/PRI, were $152,575,922. DEP witness Miller's testimony and exhibits also indicated that the amount of test period DSM/EE rider revenues and miscellaneous adjustments to take into consideration in determining the test period DSM/EE under- or over-recovery is $177,465,710. Therefore, the test period revenue requirement, as reduced by the test period revenues collected and miscellaneous adjustments, is $(24,889,788), which is the test period over-collection that is appropriate to use as the DSM/EE EMF revenue requirement in this proceeding. Tr. at 23-24.

DEP witness Miller also calculated DEP's estimate of its North Carolina retail DSM/EE program rate period amounts, consisting of its amortized O&M costs, depreciation, capital costs, taxes, amortized incremental A&G costs, carrying charges, NLR, and PPI/PRI, as $167,163,820. *Id.* at 25. The $167,163,820 revenue requirement includes: (1) $28,393,238 for anticipated rate period program expenses; (2) amortizations and carrying costs associated with deferred prior period costs totaling $81,809,519; (3) NLR for the rate period totaling $41,479,043 for vintage years 2019 through 2024; and (4) PPI/PRI totaling $15,482,020 associated with vintage years 2015 through 2024. *Id.*

On August 28, 2023, DEP witness Miller filed corrected supplemental direct testimony and exhibits updating the EM&V results for the non-residential prescriptive program and rebuttal testimony and exhibits updating the EM&V results for the non-residential custom program. Witness Miller calculated a proposed North Carolina retail revenue requirement for NLR in the amount of $35,133,404 and a PPI/PRI in the amount of $15,865,823 for the EMF component of the total DSM/EE rider, as reflected in Supplemental Direct Miller Exhibit 2 page 6. Witness Miller calculated a proposed North Carolina retail revenue requirement for NLR of $41,478,824 and a PPI/PRI of $14,393,799 for the forward-looking, or prospective component of the total DSM/EE rider, as reflected on Supplemental Direct Miller Exhibit 2 page 3. Witness Miller testified as part of Supplemental Direct Exhibit 2 page 6, that, for purposes of the EMF component of its DSM/EE rider, DEP's reasonable and prudent North Carolina retail test period costs and incentives, consisting of its amortized O&M costs, capital costs, taxes, amortized incremental A&G costs, carrying charges, NLR, and PPI/PRI, were $152,575,299. Witness Miller's exhibits also indicated that the amount of test period DSM/EE rider revenues and miscellaneous adjustments to take into consideration in determining the test period DSM/EE under- or over-recovery is $177,466,487. Miller Supplemental Direct Exhibit 2 page 7. Therefore, the test period revenue requirement, as reduced by the test period revenues collected and miscellaneous adjustments, is $(24,891,188), which is the test period over-collection that is appropriate to use as the DSM/EE EMF revenue requirement in this proceeding. Miller Supplemental Direct Exhibit 2 pages 4-5.

Witness Miller also calculated DEP's estimate of its North Carolina retail DSM/EE program rate period amounts, consisting of its amortized O&M costs, depreciation, capital costs, taxes, amortized incremental A&G costs, carrying charges, NLR, and PPI/PRI, as $166,075,379. Miller Supplemental Direct Exhibit 2 page 3. The $166,075,379 revenue requirement includes: (1) $28,393,238 for anticipated rate period program expenses; (2) amortizations and carrying costs associated with deferred prior period costs totaling $81,809,519; (3) NLR for the rate period totaling $41,478,824 for vintage years 2019 through 2024; and (4) PPI/PRI totaling $14,393,799 associated with vintage years 2015 through 2024. Miller Supplemental Direct Exhibit 2 page 3.

Witness Miller revised the regulatory fee applied to noncompetitive jurisdictional revenues from 0.14% to 0.1475%, as approved in the Commission's June 30, 2023 Order Increasing Regulatory Fee Effective July 1, 2023 issued in Docket No. M-100, Sub 142. Tr. at 38.

On September 7, 2023, DEP witness Miller filed rebuttal testimony proposing a North Carolina retail revenue requirement for NLR in the amount of $35,124,511 and a PPI/PRI in the amount of $15,880,505 for the EMF component of the total DSM/EE rider, as reflected in Miller Rebuttal Exhibit 2 page 6. Witness Miller calculated a North Carolina retail revenue requirement for NLR of $41,478,824 and a PPI/PRI of $14,393,799 for the forward-looking, or prospective component of the total DSM/EE rider, as reflected on Miller Rebuttal Exhibit 2 page 3. Witness Miller testified that, for purposes of the EMF component of its DSM/EE rider, DEP's reasonable and prudent North Carolina retail test period costs and incentives, consisting of its amortized O&M costs, capital costs, taxes, amortized incremental A&G costs, carrying charges, NLR, and PPI/PRI, were $152,581,088, as reflected on Miller Rebuttal Exhibit 2 page 6. Witness Miller's exhibits also indicated that the amount of test period DSM/EE rider revenues and miscellaneous adjustments to take into consideration in determining the test period DSM/EE under- or over-recovery is $177,465,614, as reflected on Miller Rebuttal Exhibit 2 page 7. Therefore, the test period revenue requirement, as reduced by the test period revenues collected and miscellaneous adjustments, is $(24,884,526), which is the test period over-collection that is appropriate to use as the DSM/EE EMF revenue requirement in this proceeding. Miller Rebuttal Exhibit 2 pages 4-5.

Witness Miller also calculated DEP's estimate of its North Carolina retail DSM/EE program rate period amounts, consisting of its amortized O&M costs, depreciation, capital costs, taxes, amortized incremental A&G costs, carrying charges, NLR, and PPI/PRI, as $166,075,379, as reflected on Miller Rebuttal Exhibit 2 page 3. The $166,075,379 revenue requirement includes: (1) $28,393,238 for anticipated rate period program expenses; (2) amortizations and carrying costs associated with deferred prior period costs totaling $81,809,519; (3) NLR for the rate period totaling $41,478,824 for vintage years 2019 through 2024; and (4) PPI/PRI totaling $14,393,799 associated with vintage years 2015 through 2024. (Miller Rebuttal Exhibit 2 page 3.)

According to the exhibits of DEP witness Miller, after assignment or allocation to customer classes in accordance with N.C.G.S. § 62-133.9, Commission Rule R8-69, and the Commission Orders in Docket No. E-2, Sub 931, the revenue requirements for each class, excluding NCRF, are as follows:

DSM/EE PROSPECTIVE COMPONENT:	
Residential	$115,633,430
General Service EE	45,976,477
General Service DSM	4,386,053
Lighting	79,419
Total	**$166,075,379**

DSM/EE EMF COMPONENT:	
Residential	$(8,130,707)
General Service EE	(15,909,290)
General Service DSM	(766,552)
Lighting	(77,976)
Total	**$(24,884,526)**

(Miller Rebuttal Exhibit 2 pages 1, 2, 4 and 5.)

Witness Miller's exhibits also set forth the North Carolina retail class level kWh sales that DEP believes are appropriate and reasonable for use in determining the DSM/EE and DSM/EE EMF billing factors in this proceeding. Witness Miller adjusted the kWh sales to exclude estimated sales to customers who have opted out of participation in DEP's DSM/EE programs. (Miller Direct at 14.) Based on her exhibits, the appropriate and reasonable North Carolina retail class level kWh sales for use in determining the DSM/EE and DSM/EE EMF billing factors in this proceeding are:

Rate Class	kWh Sales
Residential	17,128,995,467
General Service EE	8,734,624,909
General Service DSM	8,660,219,034
Lighting EE	371,886,089
Lighting DSM	371,703,126

(Miller Rebuttal Exhibit 2 pages 1 and 2.)

Witness Miller testified that the proposed DSM/EE rates recover costs to be incurred from January 1, 2024, through December 31, 2024. The DSM/EE EMF is a true-up mechanism recognizing costs and recoveries for the test period of January 1, 2022, through December 31, 2022. Witness Miller further showed in Miller Rebuttal Exhibit 1 that DEP proposed the following total DSM/EE billing factors, excluding the NCRF: 0.628 cents per kWh for the Residential class; 0.344 cents per kWh for the EE component of the General Service classes; 0.042 cents per kWh for the DSM component of the General Service classes; and 0.000 cents per kWh for the Lighting class. Witness Miller next testified that, including the NCRF, the appropriate DSM/EE billing factors are 0.629 cents per kWh for the Residential class; 0.345 cents per kWh for the EE component of the General Service classes; 0.042 cents per kWh for the DSM component of the General Service classes; and 0.000 cents per kWh for the Lighting class. Tr. at 48.

Public Staff witness Boswell recommended approval of DEP's proposed billing factors, as set forth in Revised Miller Exhibit 1. *Id.* at 157. She noted, however, that the finalization of the true-ups of NLR and PPI/PRI sometimes lag behind the true-up of program costs and A&G expenses subject to amortization. Thus, certain components of the revenue requirements related to prior years remain subject to prospective update adjustments and retrospective true-ups in the future. *Id.* at 155. In addition, witness Boswell stated that in accordance with the DEP NC 2022 DSM/EE rider proceeding (Docket No. E-2, Sub 1294), the Public Staff undertook a review of the DSM/EE advertising and promotion costs, including their relationship to incentives directly or indirectly provided to DSM/EE program participants, and believes them to be reasonable in the current proceeding. *Id.* at 158.

Discussion and Conclusions

Based on the foregoing, the Commission finds and concludes that DEP has complied with N.C.G.S. § 62-133.9, Commission Rule R8-69, and previous Commission orders regarding calculating costs and utility incentives for the test and rate periods at issue in this proceeding. Therefore, the Commission concludes that for purposes of the DSM/EE EMF billing rates to be set in this proceeding, DEP's reasonable and prudent North Carolina retail test period costs and incentives, consisting of its amortized DSM/EE O&M costs, capital costs, taxes, amortized incremental A&G costs, carrying charges, NLR, and PPI/PRI, are $152,581,088 (excluding the NCRF). The reasonable and appropriate amount of test period DSM/EE rider revenues and adjustments to take into consideration in determining the test year and prospective period DSM/EE under- or over-recovery is $177,465,614 (excluding the NCRF). Therefore, the aggregate DSM/EE over-recovery for purposes of this proceeding is ($24,884,526).

For purposes of the DSM/EE rider to be set in this proceeding, and subject to review in DEP's future DSM/EE rider proceedings, the Commission concludes that DEP's reasonable and appropriate estimate of its North Carolina retail DSM/EE program rate period amounts, consisting of its amortized O&M costs, capital costs, taxes, amortized incremental A&G costs, carrying charges, NLR, and PPI/PRI is $166,075,379 (excluding the NCRF), which is the appropriate amount to use to develop the DSM/EE revenue requirement.

For the revenue requirements per class, the Commission concludes that after assignment or allocation to customer classes in accordance with N.C.G.S. § 62-133.9, Commission Rule R8-69, and the relevant orders in Docket No. E-2, Sub 931, the revenue requirements for each class, excluding NCRF, are as follows:

DSM/EE PROSPECTIVE COMPONENT:	
Residential	$115,633,430
General Service EE	45,976,477
General Service DSM	4,386,053
Lighting	79,419
Total	**$166,075,379**

DSM/EE EMF COMPONENT:	
Residential	$(8,130,707)
General Service EE	(15,909,290)
General Service DSM	(766,552)
Lighting	(77,976)
Total	**$(24,884,526)**

Furthermore, the Commission finds that the appropriate and reasonable North Carolina retail class level kWh sales for use in determining the DSM/EE and DSM/EE EMF billing factors in this proceeding are as follows: Residential class – 17,128,995,467; General Service class EE – 8,734,624,909; General Service class DSM – 8,660,219,034; Lighting class DSM – 371,703,126; and Lighting class EE - 371,886,089.

Based on the testimony and exhibits of witnesses Miller and Fields, the testimony and exhibits of witness Boswell, and the entire record in this proceeding, the Commission finds and concludes that the DSM/EE billing factors as proposed by DEP are appropriate to be charged during the rate period for the Residential, General Service, and Lighting rate schedules as follows:

DSM/EE PROPOSED BILLING FACTORS (₵/kWh):		
	Excluding NCRF	Including NCRF
Residential	0.628	0.629
General Service EE	0.344	0.345
General Service DSM	0.042	0.042
Lighting	0.000	0.000

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 20

The evidence for this finding of fact can be found in the testimony of DEP witness Fields and Public Staff witness Williamson.

DEP witness Fields described the Collaborative's activities. He reported that the Collaborative met for formal meetings in January, March, May, July, September, and November in 2022. Tr. at 60. Between meetings, interested stakeholders joined conference calls as needed to focus on certain agenda items or priorities that could not be fully explored during the formal meetings such as new program development, study results, and federal funding opportunities. Witness Fields stated that such meetings and calls will continue similarly through 2023. *Id.*

Witness Williamson explained that the Public Staff uses its involvement in the Collaborative to stay "informed regarding how the portfolio of programs is performing." Witness Williamson noted that the Collaborative discusses program performance, recently completed EM&V and market potential study activities, and potential new program offerings. Tr. at 174.

With respect to opt-outs, witness Fields described how opt-outs by qualifying non-residential customers have impacted DEP's overall non-residential participation and the associated impacts. *Id.* at 71. For Vintage 2022, DEP had 4,760 eligible customer accounts opt out of participating in DEP's non-residential portfolio of EE programs and 4,694 eligible customer accounts opt out of participating in DEP's non-residential portfolio of DSM programs. *Id.* Additionally, witness Fields testified that during 2022, 60 opt-out eligible accounts opted in to the EE portion of the rider, and one opt-out eligible account opted in to the DSM portion of the rider. *Id.* Witness Fields explained that DEP continues to evaluate and revise its non-residential programs to accommodate new technologies, eliminate product gaps, remove barriers to participation, and leverage their Large Account Management Team, to make its programs more attractive and to make sure customers are informed about product offerings. *Id.* at 71-72. Witness Fields further testified that the forecasted decline in energy savings was a primary focus of the Collaborative's discussions in 2022. *Id.* at 59. He attributed the decline primarily to the changing lighting standards and widespread adoption of LEDs. *Id.* DEP has discussed a number of new programs with the Collaborative, several of which have been filed for Commission approval. *Id.* Additionally, the Collaborative is involved in ongoing discussions about expanding program footprints and leveraging state and federal legislation to capture more opportunities. *Id.*

Discussion and Conclusions

The Commission is encouraged by DEP's cost-effective DSM/EE portfolios and is encouraged that DEP continues to seek out DSM/EE savings for a broad range of customers—which is particularly important given the forecasted decline in DEP's DSM/EE savings. Therefore, the Commission directs the Collaborative to continue its ongoing work to examine the reasons for the forecasted decline. Likewise, the Collaborative shall continue to expeditiously explore options for preventing or correcting a decline in future DSM/EE savings.

IT IS, THEREFORE, ORDERED as follows:

1. That the appropriate DSM/EE EMF billing factors, excluding NCRF, are: (0.047) cents per kWh for the Residential class; (0.182) cents per kWh for the EE component of the General Service classes; (0.009) cents per kWh for the DSM component of the General Service classes; and (0.021) cents per kWh for the Lighting class. The factors do not change with the NCRF included;

2. That the appropriate forward-looking DSM/EE rates to be charged by DEP during the rate period, excluding NCRF, are: 0.675 cents per kWh for the Residential class; 0.526 cents per kWh for the EE component of the General Service classes; 0.051 cents per kWh for the DSM component of the General Service classes; and 0.021 cents per kWh for the Lighting class;

3. The appropriate forward-looking DSM/EE rates to be charged by DEP during the rate period, including NCRF, are: 0.676 cents per kWh for the Residential class; 0.527 cents per kWh for the EE component of the General Service classes; 0.051 cents per kWh for the DSM component of the General Service classes; and 0.021 cents per kWh for the Lighting class;

4. That the appropriate total DSM/EE annual riders including the forward looking and the EMF rate (including NCRF) for the Residential, General Service, and Lighting rate classes are increments of 0.629 cents per kWh for the Residential class, 0.345 cents per kWh for the EE portion of the General Service class, 0.042 cents per kWh for the DSM portion of the General Service class, and 0.000 cents per kWh for the Lighting class;

5. That DEP shall file appropriate rate schedules and riders with the Commission to implement these adjustments as soon as practicable. Such rates are to be effective for service rendered on or after January 1, 2024;

6. That DEP shall work with the Public Staff to prepare a joint proposed Notice to Customers giving notice of rate changes ordered by the Commission herein, and DEP shall file such proposed notice for Commission approval as soon as practicable;

7. That DEP and Collaborative participants shall continue to work to better understand and identify potential means of addressing energy savings forecasts; and

8. That the combined DEC/DEP Collaborative shall continue to meet every other month.

ISSUED BY ORDER OF THE COMMISSION.

This the 19th day of December, 2023.

NORTH CAROLINA UTILITIES COMMISSION

Tamika D. Conyers

Tamika D. Conyers, Deputy Clerk

Commissioners William M. Brawley and Tommy Tucker did not participate in the decision in this docket.