

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-2, SUB 1294

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

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

HEARD: On Wednesday, September 14, 2022, at 10:00 a.m. in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina (Public Witness Hearing, Hearing Examiner Heather Fennell, Presiding)

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

APPEARANCES:

For Duke Energy Progress, LLC:

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For the Carolina Utility Customers Association:

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For the Carolina Industrial Group for Fair Utility Rates II:

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For the North Carolina Justice Center, North Carolina Housing Coalition, and Southern Alliance for Clean Energy:

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For the Using and Consuming Public:

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BY THE COMMISSION: North Carolina General Statute § 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 May 20, 2022, the Commission issued an Order Requiring Filing of Additional Testimony (Additional Testimony Order), requiring that Duke Energy Progress, LLC (DEP or the Company) include in its testimony and exhibits, when filing its 2022 DSM/EE rider application and testimony, responses to specific questions attached to that Order as Appendix A. The Commission also required that the Public Staff include in its testimony and exhibits responses to the Commission's questions and/or information responsive to DEP's responses to those Commission questions.

On June 14, 2022, DEP filed an application for approval of its DSM/EE rider for 2022 (Application) and the direct testimony and exhibits of Shannon R. Listebarger, Manager – Rates and Regulatory Strategy for Duke Energy Carolinas, LLC (DEC), but supporting DEP as well, and Karen K. Holbrook, Director – Integrated Grid Strategy & Solutions Group for Duke Energy Business Services, LLC, a service company affiliate of DEP and a subsidiary of Duke Energy Corporation (Duke Energy).

On July 8, 2022, the Commission issued an order scheduling a hearing for September 14, 2022, establishing discovery guidelines, providing for intervention and testimony by other parties, and requiring public notice (Scheduling Order). DEP subsequently filed the affidavits of publication for the public notice as required by the Commission's Scheduling Order.

The intervention of the Public Staff – North Carolina Utilities Commission (Public Staff) is recognized pursuant to N.C.G.S. § 62-15(d) and Commission Rule R1-19(e). The Carolina Industrial Group for Fair Utility Rates II (CIGFUR), and the Carolina Utility Customers Association, Inc. (CUCA) each filed a petition to intervene on June 16, 2022, which petitions were granted by Order issued on June 21, 2022. On July 8, 2022, the North Carolina Justice Center (NC Justice Center), North Carolina Housing Coalition (NC Housing Coalition), and Southern Alliance for Clean Energy (SACE) (collectively, NC Justice Center, *et al.*) filed a joint petition to intervene, which was granted by Order issued on July 12, 2022.

On August 23, 2022, DEP filed the supplemental testimony and revised Exhibit 1 of witness Listebarger.

On August 24, 2022, the NC Justice Center, *et al.* filed the testimony and exhibits of Forest Bradley-Wright, the Energy Efficiency Director for SACE; and the Public Staff filed the testimony and exhibits of Michelle M. Boswell, Director of the Accounting Division, and David M. Williamson, Utility Engineer in the Energy Division.

On September 1, 2022, DEP filed the rebuttal testimony of witnesses Holbrook and Lynda Powers, Senior Strategy and Collaboration Manager for the Carolinas in the Portfolio Strategy and Support Group.

On September 7, 2022, DEP and the Public Staff filed a Joint Motion for Witnesses to be Excused from Appearance at Evidentiary Hearing. On September 12, 2022, the Commission issued an Order that excused the expert witnesses from attending the

hearing, accepted their testimony and exhibits into evidence, notified the parties that the Commission would take notice of specific testimony provided in the Duke Energy Carolinas, LLC (DEC) DSM/EE proceeding in Docket No. E-7, Sub 1265 (Sub 1265), canceled the expert witness hearing, and directed that proposed orders and briefs be filed by October 14, 2022 (Witness and Testimony Order).

The public witness hearing was called to order as scheduled on September 14, 2022. No public witnesses appeared at the hearing to testify.

On October 12, 2022, the Commission granted a request to extend the date for filing briefs and proposed orders to October 28, 2022. On that date, DEP and the Public Staff filed their Joint Proposed Order, CIGFUR filed a brief, and NC Justice Center, *et al.* filed a brief.

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 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 SACE 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 the Company and the Public Staff. The Revised Mechanism, as revised 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 the Company 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 the Company fails to achieve annual energy savings of 0.5% of retail sales, net of sales associated with customers opting out of the Company’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.

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Based upon consideration of DEP’s Application, the pleadings, the testimony and exhibits received into evidence, the parties’ briefs, and the record, 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, 2021, through December 31, 2021.

3. The rate period for purposes of this proceeding extends from January 1, 2023, through December 31, 2023.

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

Residential

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

Residential and Non-Residential

- Distribution System Demand Response (DSDR)
- EE Lighting

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 benefitting 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, the Company's portfolio of DSM and EE programs is otherwise cost-effective, and the Commission does not direct that any action be taken on any of these programs at this time.

7. DEP's costs and revenues derived from referrals under the Find It Duke referral channel to persons who are not DEP ratepayers, and for referrals related to non-EE work, are not included in DEP's costs and revenues under its Rider.

8. The evaluation, measurement, and verification (EM&V) reports filed in this proceeding are acceptable for purposes of this proceeding and should be considered complete for purposes of calculating program impacts, with the exception of the EM&V report on the Small Business Energy Saver Program, which contained an error. The Commission will hold open that EM&V report until the next proceeding.

9. DEP has appropriately incorporated the results of these EM&V reports into the DSM/EE rider calculations.

10. In DEP's application for approval of the MyHER program in Docket No. E-2, Sub 989 (Sub 989), DEP stated that the program would have a one-year measure life and that the EM&V for MyHER would determine the net energy savings attributable to the program, as well as the persistence of the energy savings over time.

11. The Commission approved DEP's MyHER program application in Sub 989 by Order issued on December 18, 2014.

12. DEP is requesting to recover during the 2023 rate year net lost revenues (NLR) of \$10,141,666, a Portfolio Performance Incentive (PPI) of \$605,774, and program costs of \$3,825,490 attributed to MyHER.

13. The Company has complied with the Commission's requirement that DEP monitor the changes in annual ratios of allocations between non-DSDR and DSDR equipment and report the degree of change in its annual DSM/EE rider filing. Based on its review, the Company determined that the capacitor allocation ratio should be reduced from 20.35% to 19.64% and the regulator allocation ratio should be reduced from 77.64% to 75.77%.

14. The Company's and the Public Staff's proposed language codifying the reserve margin adjustment factor (RMAF) methodology into the Mechanism is approved.

15. It is premature for the Commission to make any determination on the appropriateness of including dynamic pricing tariffs in the DSM/EE portfolio at this time.

16. The Company should investigate ways to benefit customers and potentially reduce energy bills by leveraging AMI customer data to increase the beneficial impact that the combination of innovative rate designs and DSM/EE programs can have on customers.

17. In its direct testimony and exhibits, DEP requested the recovery of NLR in the amount of \$27,146,277 and PPI in the amount of \$17,453,062 through the EMF component of the total DSM/EE rider, and NLR of \$40,803,858 and PPI of \$15,486,316 for recovery in the forward-looking, or prospective component of the total rider. DEP's proposed recovery of NLR and PPI is consistent with the Mechanism and is appropriate.

18. 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 the Company'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, is \$182,213,260 (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.

19. 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, are \$146,813,531. Therefore, the test period revenue requirement, as reduced by the test period revenues collected and miscellaneous adjustments, is \$(27,293,649), which is the test period over-collection that is appropriate to use as the DSM/EE EMF revenue requirement in this proceeding.

20. 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 as follows:

DSM/EE PROSPECTIVE COMPONENT:	
Residential	\$ 117,176,252
General Service EE	\$ 59,228,146
General Service DSM	\$ 5,464,773
Lighting	\$ 344,089
Total	\$ 182,213,260

DSM/EE EMF:	
Residential	\$ (10,695,962)
General Service EE	\$ (15,437,704)
General Service DSM	\$ (1,178,342)
Lighting	\$ 18,360
Total	\$ (27,293,648)

21. 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:

<u>Rate Class</u>	<u>kWh Sales</u>
Residential	16,671,099,362
General Service EE	10,361,570,874
General Service DSM	10,365,136,121
Lighting EE	366,051,281
Lighting DSM	365,714,174

22. The appropriate DSM/EE EMF billing factors, excluding NCRF, are: (0.064) cents per kWh for the Residential class; (0.149) cents per kWh for the EE component of the General Service classes; (0.011) cents per kWh for the DSM component of the General Service classes; and 0.005 cents per kWh for the Lighting class. The factors do not change with the NCRF included.

23. The appropriate forward-looking DSM/EE rates to be charged by DEP during the rate period, excluding NCRF, are: 0.703 cents per kWh for the Residential class; 0.572 cents per kWh for the EE component of the General Service classes; 0.053 cents per kWh for the DSM component of the General Service classes; and 0.094 cents per kWh for the Lighting class. The appropriate forward-looking DSM/EE rates to be charged by DEP during the rate period, including NCRF, are: 0.704 cents per kWh for the Residential class; 0.573 cents per kWh for the EE component of the General Service classes; 0.053 cents per kWh for the DSM component of the General Service classes; and 0.094 cents per kWh for the Lighting class.

24. 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 0.640 cents per kWh for the Residential class, 0.424 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 0.099 cents per kWh for the Lighting class.

25. DEP should continue to leverage its collaborative stakeholder meetings (Collaborative) to expand on the existing discussions related to the decline in current and forecasted energy savings and the expansion and improvements of low-income EE programs and other program design issues raised in the testimony of NC Justice

Center, *et al.* witness Bradley-Wright and provide a summary of those discussions in the Company's next DSM/EE rider filing.

26. It is not necessary for the Company to track savings resulting from the Collaborative's suggested programs.

27. A requirement for the Company to quantify and report carbon savings associated with its DSM/EE portfolio is beyond the scope of DEP's annual DSM/EE cost recovery proceedings at this time.

28. It is appropriate for the Collaborative to continue to emphasize developing and expanding EE programs to assist low-income customers in saving energy and reducing their energy burdens.

29. The Company should continue Collaborative meetings so that the combined DEP/ DEC Collaborative meets every two months.

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 Mechanism 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 Listebarger and Holbrook, the testimony of Public Staff witness Williamson, and various Commission orders in program approval dockets.

DEP witness Listebarger's testimony shows the portfolio of DSM/EE programs that is associated with the Company's request for approval of this rider. Listebarger Direct at 5. The direct testimony of DEP witness Holbrook lists the DSM/EE programs for which the Company is requesting cost recovery, and incentives where applicable, in this proceeding. Those programs are:

Residential

- EE Education Program
- Multi-Family EE
- MyHER

- Neighborhood Energy Saver (Low-Income)
- Smart \$aver EE Program (formerly, Home Energy Improvement Program)
- New Construction
- Load Control (EnergyWise)
- Save Energy and Water Kit
- Energy Assessment
- Low-Income Weatherization Pay for Performance
- Energy Efficient Appliances and Devices Program

Non-Residential

- Smart \$aver Energy Efficient Products and Assessments (formerly, EE for Business)
- Smart \$aver Performance Incentive Program
- Small Business Energy Saver
- CIG Demand Response Automation
- EnergyWise for Business

Residential and Non-Residential

- DSDR
- EE Lighting

Holbrook Direct at 13-14.

In his testimony, Public Staff witness Williamson also listed the DSM/EE programs for which the Company seeks cost recovery and noted that each of these programs has received approval as a new DSM or EE program and is eligible for cost recovery in this proceeding under N.C.G.S. § 62-133.9. Williamson Direct at 5-6.

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

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 5-7

The evidence for these findings of fact can be found in the testimony and exhibits of Company witness Holbrook, pages 156-159 of the transcript of testimony by Company witness Holbrook from the evidentiary hearing in Docket No. E-7, Sub 1265, the testimony and exhibits of Public Staff witnesses Williamson and Boswell, page 166 and 167 of the transcript of testimony by Public Staff witness Williamson from the evidentiary hearing in

Docket No. E-7, Sub 1265,¹ the testimony of NC Justice Center, *et al.*, witness Bradley-Wright, and previous Commission orders.

Summary of the Evidence

DEP witness Holbrook testified that the Company reviewed the portfolio of DSM/EE programs and performed prospective analyses of each of its programs and the aggregate portfolio for the Vintage 2023 period, the results of which are incorporated in Holbrook Exhibit No. 7. Holbrook Direct at 15. DEP's calculations showed that all programs pass the UCT threshold of 1.0, including programs that did not previously pass, like Neighborhood Energy Saver and EnergyWise for Business. Holbrook Direct at 15, Holbrook Ex. 7.

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. Williamson Direct at 8-9. 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. Williamson Direct at 10. Witness Williamson testified that although many programs continue to be cost-effective, the TRC and UCT scores as filed by the Company for all programs have a natural ebb and flow over time, mainly due to changes in avoided costs and updated EM&V and program participation. Williamson Direct at 11, Williamson Exhibits 1 & 2. Witness Williamson noted that as avoided cost rates have decreased in recent years, cost-effectiveness has decreased. The Public Staff does not expect this trend to continue, however, as fuel costs increase, more renewable capacity is added, coal plants are retired, the need for additional capacity grows, and the emphasis on grid improvement increases. These factors, he explained, should produce higher valuations for the benefits and increase the cost-effectiveness of DSM and EE programs. Williamson Direct at 11.

Witness Bradley-Wright also agreed that the Company's DSM/EE programs continued to be cost-effective and delivered financial value to its customers. He noted that the net present value of avoided costs was substantially lower than in previous years, but still amounted to approximately \$112 million of financial benefit for the customers. Bradley-Wright Direct at 5.

Find it Duke Referral Channel

Witness Holbrook testified that DEP had filed its calculations and workpapers showing the exclusion of non-DSM/EE costs and revenues related to the Find it Duke (FID) referral channel. Based on FID activity during calendar year 2021, 26.1% of the

¹ Ordering Paragraph No. 2 of the Commission's Order Excusing Witnesses, Canceling Hearing, Requiring Late-Filed Exhibit, and Taking Notice of Prior Testimony, issued September 12, 2022, incorporated "into the record as evidence in this docket the testimony . . . of DEC's witnesses in Docket No. E-7, Sub 1265 pertaining to the MyHER program."

revenue was classified as non-DSM/EE. Using this allocation, the Company removed total expenses of \$86,900 from the DSM/EE revenue requirement along with \$61,470 in non-DSM/EE revenue. Additionally, the Company accounted for a related change in PPI, totaling \$2,924. Thus, the DSM/EE revenue requirement decreased by \$22,506. Holbrook Direct at 29.

Witness Holbrook also provided additional information about the Company's efforts in the 2021-2022 time period to recruit historically disadvantaged businesses to participate in the FID referral channel. She reported that Duke Energy intends to continue with recruitment efforts with the following organizations: National Minority Supplier Development Council, Woman's Business Enterprise National Council, African American Chamber of Commerce, National Veteran Business Development Council, and the National LGBT Chamber of Commerce. Additionally, a level of effort was signed on November 22, 2021 with the FID program vendor to build an automatic process that will capture supplier diversity classification upon each new Trade Ally registration and allow FID to track success. At the end of 2021, 78 active Trade Allies participated in the FID channel. Witness Holbrook also explained that one historically disadvantaged business currently participates in FID – an African-American Trade Ally. The average dollar amount for the work performed by this business was approximately \$10,900. This Trade Ally supports HVAC installations, which are higher in project cost compared to other services such as insulation services. Witness Holbrook further testified that in 2021, the average reported dollar value of work performed by contractors that were not historically disadvantaged businesses is reported to be approximately \$4,400. Non-disadvantaged Trade Allies participate mainly in a wider variety of services beyond HVAC installation, which results in a lower average value of work performed. Holbrook Direct at 27- 29.

Discussion and Conclusions

No party challenged inclusion of the above-listed programs in the Company's DSM/EE rider for cost recovery. No party challenged the removal of costs and revenues associated with non-DSM/EE referrals through the FID referral channel.

Specifically, with respect to MyHER and AMI, and based on the foregoing, the Commission agrees with the Public Staff that future EM&V should be utilized to the extent feasible to assess how having the AMI usage data available to customers influences their behaviors toward implementing DSM and EE, and any associated impact on the MyHER program, which continues to be refined and enhanced by insights from interval usage data. As noted by the Public Staff, this analysis should be conducted at a future date when the EM&V sampling period gets closer to the date when these new AMI tools became available to customers. The Commission further finds that the ability of customers to access their energy consumption data online through AMI and Customer Connect is still relatively nascent. Thus, the Commission concludes that EM&V is appropriate to apply but directs the Company to ensure that its future EM&V processes appropriately assess the impact of AMI on the MyHER program.

The Commission also recognizes that MyHER is cost-effective. No party disputed its cost-effectiveness. Specifically, MyHER is cost-effective under the UCT. As defined in Paragraph 16 of the Mechanism, the UCT is a cost-effectiveness test that measures the net costs of a DSM or EE Program or portfolio as a resource option based on the incremental costs incurred by the utility (including incentive costs paid by the utility to or on behalf of participants) and excluding any net costs incurred by the participants. The benefits for the UCT are the avoided supply costs (i.e., the reduction in generation capacity costs, transmission and distribution capacity costs, and energy costs caused by a load reduction), valued at marginal cost for the periods when there is a load reduction. This reduction in avoided supply costs benefits all customers, even if they are one of the relatively few customers that do not participate in, or have opted out of, MyHER.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 8-9

The evidence for these findings of fact can be found in the direct and rebuttal testimony and exhibits of DEP witness Holbrook, the rebuttal testimony of DEP witness Powers, and the testimony of Public Staff witness Williamson.

Summary of the Evidence

DEP witness Holbrook testified regarding the EM&V process, activities, and results presented in this proceeding. Holbrook Direct at 17-20. She explained that the EMF component of the Company's DSM/EE rider is calculated using actual customer participation in DSM/EE programs, as compared to the customer participation numbers projected in the prior year's proceeding. She further stated that the EMF incorporates evaluated load impacts determined through EM&V, with the evaluated load impacts used to apply the calculations under the Revised Mechanism. Holbrook Direct at 18-20. In this proceeding, the Company submitted, as exhibits to witness Holbrook's testimony, detailed completed EM&V reports or updates for the following programs:

- EnergyWise Home Demand Response Program Winter 2020/2021 (Holbrook Exhibit A)
- Small Business Energy Saver Program 2019-2020 (Holbrook Exhibit B)
- Online Savings Store Program 2021 (Holbrook Exhibit C)
- K12 Education Program 2019-2020 (Holbrook Exhibit D)
- My Home Energy Report Program Evaluation (Holbrook Exhibit E)
- Commercial, Industrial, and Governmental Demand Response Automation Program 2020-2021 (Holbrook Exhibit F)
- Multifamily Energy Efficiency Program (Holbrook Exhibit G)

Witness Holbrook further testified that the Company had determined that it needed to file a revised Small Energy Business Saver (SBES) report due to inaccurately calculated savings from indoor lighting measures. The Company discussed this with the Public Staff and agreed to have the evaluator revise the SBES report and use the virtual verification survey data captured through the DEC/DEP SBES report. Holbrook Direct at 10-11.

In his testimony, Public Staff witness Williamson testified that the Company has appropriately incorporated the findings of the EM&V studies and annual participation into its rider calculations consistent with Commission orders and the 2020 Mechanism. Williamson Direct at 38. Witness Williamson agreed, however, that review of the EM&V reports revealed an error in the model inputs associated with the interactive effects that are used to determine the net-to-gross ratio in Holbrook Exhibit B (EM&V report for SBES). Upon review and discussions with the Public Staff, DEP agreed to update the report to correct the identified error and incorporate the financial impacts associated with the update in the next rider proceeding; thus, witness Williamson recommended that the Commission hold open the report in Holbrook Exhibit B until the next rider proceeding. Williamson Direct at 34.

Witness Williamson also made four recommendations with respect to future EM&V reports. First, he recommended a more expansive survey evaluation with respect to the MyHER program. Witness Williams did not dispute that, with respect to a customer's interaction with the MyHER report, survey responses "Always" and "Never" were strong indicators to influence a "Net-to-Gross" ratio. He isolated the response "Sometimes," however, stating that "Sometimes" is too vague a response to provide meaningful data. He added that the MyHER Report's determination of the meaning of "Sometimes" and how influential that response is to the conclusions drawn by the MyHER Report is unclear. Williamson Direct at 35. Although he did not contest the terminology used in the surveys, he recommended that the Commission require the Company to expand on the methodology and include more detailed questions to determine how often customers read their MyHER reports in the Company's next MyHER EM&V report. *Id.* Next, witness Williamson testified that the Public Staff wanted to know whether the MyHER evaluation accounts for potentially unopened or unreceived MyHER reports in its calculations of savings determinations. Thus, he recommended that the Commission require the Company to include more detailed questions related to the number of MyHER reports that participants do not read. Williamson Direct at 36. Third, witness Williamson stated that while the Company's EM&V report discusses the ability, through Advanced Metering Infrastructure (AMI), to disaggregate participants who have electric vehicles, it does not discuss whether it can also disaggregate participants with solar panels or who are on a Time of Use (TOU) rate. According to witness Williamson, these activities, along with electric vehicle use, would generate a different load shape for a participating customer's home and would be distinct enough to warrant being grouped with other participants with similar homes. Witness Williamson questioned whether the rigor of the home grouping with the MyHER reports is this granular. Thus, he recommended that the Commission require the Company in its next MyHER EM&V report to assess the criteria used to group similar homes in the EM&V report and to clarify whether homes with EVs, solar panels, or a TOU rate are grouped together. Williamson Direct at 36-37. Finally, witness Williamson also stated that there was value in understanding whether and to what extent the MyHER report motivates customers to participate in DEP's other DSM/EE programs and, relatedly, what other non-utility initiatives have motivated customers to install EE measures in their homes. Therefore, he recommended that the Commission require the Company, in its next EM&V report for MyHER, to include more detailed questions on how MyHER reports motivate participants to adopt measures within DEP's DSM/EE portfolio

and how non-utility initiatives have influenced participants' decisions to install EE measures in their homes.

Discussion and Conclusions

No party contested the EM&V information submitted by the Company. The Commission therefore finds that the EM&V reports filed as Holbrook Exhibits A, C, D, E, F, and G are acceptable for purposes of this proceeding. With the exception of Holbrook Exhibit B, these EM&V reports should be considered complete for purposes of calculating program impacts. The Commission will hold Holbrook Exhibit B open until the next DEP DSM/EE rider proceeding. The Company shall update the Holbrook Exhibit B report to address the identified error and incorporate the financial impacts associated with the update in DEP's next annual DSM/EE rider proceeding. Further, the Commission concludes that DEP is appropriately incorporating the results of Holbrook Exhibits A, C, D, E, F, and G 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.

With respect to witness Williamson's recommendations, the Commission agrees that the next MyHER EM&V report should include the information he recommended, with the exception of his fourth recommendation. Witness Williamson testified that there would be value in understanding if, and to what extent, the MyHER reports motivated customers to participate in other DSM/EE programs in DEP's portfolio, and what other non-utility initiatives have motivated customers to install EE measures in their homes. Rather than requiring the Company to add detailed questions to its MyHER EM&V reports as recommended by witness Williamson, the Commission determines that the Company and the Public Staff should discuss what non-utility initiatives would motivate customers to install EE measures in their homes and how to measure their impact, if any, and report on the status of these discussions in the Company's next DSM/EE rider proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NO. 10-12

The evidence in support of these findings and conclusions can be found in the MyHER Application (hereinafter defined), the MyHER Order (hereinafter defined), the 2017 and 2020 Mechanisms, the MyHER EM&V Reports (hereinafter defined), the Company's DSM/EE rider Application, the direct and supplemental testimony and exhibits of Company witnesses Listebarger, Powers, and Holbrook, and the testimony and exhibits of Public Staff witnesses Boswell and Williamson.

Evidence Supporting Findings of Fact Nos. 10-12

DEP's MyHER program was approved by the Commission in Docket No. E-2, Sub 989 on December 18, 2014. *Application by Duke Energy Progress, LLC for Approval of My Home Energy Report Program (MyHER Application)*; *Order Approving Program (MyHER Order)*. In summary, DEP described the MyHER program as an EE measure to

assist residential customers in becoming more energy efficient. DEP stated that the program would provide each participant with a monthly report that included energy usage information about a peer group of homes similar in size, age, type of heating fuel, and geography to that of the participant's home. Further, the monthly MyHER reports would include targeted EE tips. In addition, the MyHER Application stated that the program was comparable to the existing DEC MyHER Program that was approved by the Commission on September 11, 2012 in Docket No. E-7, Sub 1015.

DEP's MyHER Application stated that the program would have a one-year measure life. Attachment A, line 1. Finally, in Section (c)(3)(ii)(a) of the Application, under the heading "Measurement and Verification Reporting Plan for New Demand-Side Management and Energy Efficiency Measures," DEP stated that "the goal of the impact evaluation is to assess the net energy savings attributable to the program, as well as the persistence of the energy savings over time."

In its 2014 MyHER Order the Commission approved DEP's MyHER program as a new energy efficiency program, and ordered that the ratemaking treatment for the program, including costs, NLR and PPI would be determined in DEP's annual DSM/EE cost recovery rider docket. In addition, the Commission approved the Public Staff's recommendations for implementation of the program, including the recommendation that DEP and DEC coordinate the EM&V for their respective programs and find ways to reduce EM&V costs. MyHER Order, at 3.

As previously discussed, the present cost recovery proceeding is governed by the Commission's Sub 931 Orders approving the 2017 Mechanism and the 2020 Mechanism, with the 2017 Mechanism applicable to costs recovered through the EMF and the 2020 Mechanism applicable to costs projected for the 2023 rate period. Under Paragraph No. 69 of the 2020 Mechanism, in pertinent part:

Recoverable NLR shall ultimately be based on kWh sales reductions and kW savings verified by the EM&V process and approved by the Commission.

Since DEP's MyHER Program was approved, the Commission has accepted both the 2017 MyHER EM&V Report,² and the 2019 MyHER EM&V Report³ as complete for the purposes of calculating the impacts of the MyHER Program. The 2020 MyHER EM&V Report was filed in this docket and is accepted herein as complete also for the purposes of calculating the impacts of the MyHER Program. As previously noted, under Paragraph No. 69 of the 2020 Mechanism recoverable NLR is based on kWh sales reductions and kW savings verified by the EM&V process and approved by the Commission.

While none of the three MyHER EM&V Reports filed to date by DEP assesses the persistence of energy savings after customers no longer participate in the MyHER

² Docket No. E-2, Sub 1206.

³ Docket No. E-2, Sub 1252.

program by receiving monthly energy usage reports with targeted energy savings tips, it should be noted that accounting for persistence of savings has continued to be discussed as a topic relevant to the MyHER EM&V Reports. SACE, *et al.* witness Chris Neme raised the issue in his direct testimony in DEP's 2018 DSM/EE rider proceeding, questioning whether MyHER savings could be overstated if persistence savings were not accounted for and considered. In response to witness Neme's testimony, which raised other concerns in addition to MyHER persistence savings, the Commission ordered the Company to use the Collaborative to discuss the issues raised by witness Neme and to report to the Commission on the discussions in its next annual DSM/EE rider proceeding. Thereafter, in compliance, DEP discussed persistence savings in the context of MyHER with the Collaborative and testified in its 2019 DSM/EE rider proceeding as follows:

The MyHER program and its EM&V are designed to account for customers' automatic enrollment in MyHER, which lasts until they opt out of the program. Issues of persistence are consequently not part of EM&V testing. Additional concerns about whether savings from MyHER are being attributed to the years in which the EE treatment occurred are not immediately relevant given the absence of regulatory requirements to achieve savings targets in specific years. Rather, the focus of EM&V has been on accurately capturing savings within the continuous treatment model.

The Company acknowledges that alternative program designs may shed light on potential cost savings or energy saving projections in future filings. Accordingly, the Company agrees to investigate the feasibility of incorporating persistence testing in upcoming EM&V studies. Because any testing will require several years to complete, the Collaborative decided not to pursue this issue any further until more information is available. Additionally, new data made available through the deployment of AMI meters may represent an opportunity for enhanced personal messaging. The Collaborative will be active in contributing to all program design updates to ensure that customers receive the greatest benefit from this opportunity.

Direct Testimony of Robert P. Evans for Duke Energy Progress, LLC, Docket No. E-2, Sub 1206, at 13-14 (June 11, 2019) (Sub 1206).

In its Order in the 2019 Sub 1206 proceeding the Commission again directed that the Company continue having discussions with the Collaborative on the issues previously raised by witness Neme. *Id.* at 29.

In response to the Additional Testimony Order in the present docket, DEP filed Holbrook Exhibit 19, which included the following information specific to North Carolina participants in the DEP MyHER program.

MyHER NC Customer Account Participation – Total and New Participants

Year (Rider Rate Year)	Total NC Participants (actual or provisional)	Estimated NC Participants participating in program for first time
2017	680,419	172,058
2018	708,222	94,244
2019	658,942	40,820
2020	659,794	84,994
2021	680,928	108,492
2022	675,433	135,142
2023	674,831	109,824
2024	676,317	110,066

Holbrook Exhibit 19 (NC Participants Table).

In the Witness and Testimony Order, the Commission gave the parties notice that it would incorporate into the evidence in this docket several pages of the testimony from DEC’s 2022 proceeding in Docket No. E-7, Sub 1265 (Sub 1265).⁴ During the Sub 1265 hearing, in response to questions by the Commission, the DEC panel of witnesses testified that the total number of annual MyHER participants was derived by including all of the previous year’s participants (existing participants), except the relatively few participants that opt out, plus new DEC customers who received the MyHER report for the first time during the year (new participants). Specifically, in response to questions from the Commission about the derivation of the MyHER participant numbers from 2017 through 2021, the DEC panel testified as follows:

Q. Okay. So then if we go to 2021 and it shows 1,376,708 participants, would that number include all or any of the 1,394,693 participants that were in rate year 2017?

Q. Yes. That’s very likely, and there’ll be some – again, the changes that happen through their opt-outs or new participants, but largely the same.

Q. Okay. So just given that number of years, given the three-year restriction in paragraph 57 of the mechanism, what is the basis for including 2017 MyHER participants in the 2021 calculation of total participants?

A. So I don’t know if it says it in paragraph 57, but the restrictions on lost revenue are three years or until the rate case becomes effective or the measure life. Whatever is the lowest. And the MyHER Program has a one-year measure life. So if we were to stop MyHER, essentially, the tips and

⁴ The Witness and Testimony Order also informed parties that at the public witness hearing the parties would have the opportunity to state their objection, if any, to the Sub 1265 testimony being incorporated into evidence in this proceeding. No party stated an objection at the public witness hearing.

the engagement goes away and we would expect that the usage would revert back to pre MyHER, before we ever got a report. And so because we have to engage them and incur the cost to engage them, every year it's a one-year measure life. And so, because of that, while it's included in the rate case, as a baseline, in order to keep that going, we have to continue to engage those customers. And so we continue that participation and that lost revenue because of the one-year measure life that it has.

Q. Okay. So from a legacy standpoint, do I understand that every year, all the participants, whether they've been participating for one, two, three, four, five years, are considered to be in that legacy year? So 2021, it's a new program for all the participants?

A. That's correct, yes.

Sub 1265 Tr., pp. 157-59.

Further, in response to questions from counsel for NC Justice Center, *et al.*, the DEC panel testified as follows:

Q. I have a question about MyHER, now shifting gears. Commissioner Hughes was asking about the number of participants and the control group. Has Duke or has its EM&V contractor considered, kind of, a third category of customers who've been on the MyHER Program for maybe a year or two, and then have them roll off and, sort of, to test out this hypothesis? Would there be a persistence of savings, even without that treatment, even without getting the reports? Has that been part of the EM&V from MyHER?

A. (Ms. Williams) We have not had a formal persistence study, but that is something that we can certainly look into with the evaluator.

Q. And are you familiar that in other parts of the country with these kinds of behavioral programs, that they have found some persistence of savings after customers have rolled off of participation?

A. I am aware that there is some persistence of savings. Some slight degradations, but overall, persistence of savings, yes.

Q. So it sounds like Duke then would be willing to investigate that further as another way of maybe trimming costs and while not dramatically reducing savings from MyHER going forward?

A. That is something that we can certainly explore.

Id. at 166-67.

For the 2023 rate year, the total energy savings attributed to each DEP MyHER participant is 229.67 kWh. Holbrook Exhibit 17. (Savings Table). On a North Carolina basis, the NLR attributed to MyHER for the 2023 rate year is \$10,141,666, the PPI is \$605,774 and the program cost is \$3,825,490. Holbrook Exhibit 18.

Discussion and Conclusions

DEP presented substantial evidence that the costs, PPI and NLR it seeks to recover for the MyHER program in the 2023 rate year are justified, and no party challenged that evidence. The Commission concludes that DEP should recover its full MyHER costs, PPI and NLR, as requested by the Company. Moreover, the Commission is persuaded that MyHER continues to be a successful EE program that serves the public interest.

MyHER was approved by the Commission as a program with a one-year measure life on the basis that residential customers would benefit from the monthly reminders about energy saving behaviors, and also would benefit from new energy saving tips from DEP. Given that MyHER was approved as a one-year measure, it is appropriate, at this time, for DEP to continue to include as participants in MyHER those customers who have received the report in the previous year, as well as any new customers receiving the report during the test year, as shown in DEP's NC Participants Table.

However, the Commission wants assurance that any change in the benefits compared to costs of the MyHER program to DEP's customers is understood and becomes transparent as soon as is reasonably possible. The Commission understands that the monthly participation counts shown in Tables 3-3 and 3-4 of the 2022 MyHER EM&V Report were used by Nexant to estimate the aggregate energy saving impacts of the MyHER program. The 2022 MyHER EM&V Report explains that "Per-home kWh savings estimates for each bill month are multiplied by the number of participating homes to arrive at the aggregate MWh impact achieved by the program." MyHER EM&V Report, at 13. In turn, the kWh savings are used to calculate PPI and NLR, which are costs passed on to customers. As a result, as highlighted by witness Neme in 2018, it remains important to know whether kWh savings by a MyHER participant continue to be attributable to monthly receipt of a MyHER report (the underlying assumption supportive of the Commission's approval of the program) or will or have become persistent (and at what level) even if that customer no longer receives a MyHER report as a program participant.

Thus, given that DEP recognized in its MyHER Application that persistence of savings should be examined when studying the impact of the program, that in compliance with the Commission's orders in DEP's annual DSM/EE rider proceedings the Collaborative continues to discuss the issue of persistence of savings as related to customer monthly reports, that, to date, a "formal persistence study" with respect to MyHER has not been performed, that DEP and DEC coordinate the EM&V for their respective programs as recommended by the Public Staff and ordered by the Commission, that the DEP and DEC MyHER programs are very similar and their EM&Vs of the programs are conducted jointly, that in DEC's 2022 DSM/EE rider proceeding the Commission ordered DEC to evaluate the persistence of MyHER savings after a multiple year participating customer no longer

participates in the program, and that the Commission wants to fully and better understand the benefits of the MyHER program, the Commission finds that DEP should coordinate with DEC in conducting an analysis of the persistence of DEP's MyHER energy savings in accordance with the guidelines established for such analysis in the DEC DSM/EE Order issued on December 12, 2022, in Docket No. E-7, Sub 1265. Once the analysis is complete, DEP should include an analysis of persistence of MyHER savings in its future MyHER EM&V reports.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 13

The evidence for this finding of fact can be found in the testimony of DEP witness Holbrook.

The Commission's Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice issued November 16, 2015, in Docket No. E-2, Sub 1070, directed DEP to file all changes in annual ratios of allocations between non-DSDR and DSDR equipment, report the degree of change in its annual DSM/EE rider filing, and provide such changes to the Public Staff as they become available. Witness Holbrook testified that the Company conducted a review of 2,020 units during the summer of 2021 and determined that the capacitor allocation ratio should be reduced from 20.35% to 19.64%, and the regulator allocation ratio should be reduced from 77.64% to 75.77%. Witness Holbrook indicated that the same units would be reviewed during the summer of 2022, and any further changes would be communicated to the Public Staff and implemented on January 1, 2023. Holbrook Direct at 10. No party contested this information. Therefore, the Commission concludes that DEP should continue to file reports of changes to its allocations between non-DSDR and DSDR equipment in future proceedings and provide the Public Staff with information on any changes to the allocation factor as they become available.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 14

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

Company witness Holbrook testified that the Company and the Public Staff worked together to develop mechanism language concerning the RMAF for the Commission's consideration and approval. Holbrook Exhibit 13 illustrated the proposed RMAF-related modifications to subsection 20 of the Mechanism. Holbrook Direct at 30. Public Staff witness Williamson agreed with Company witness Holbrook's testimony and requested that the Commission approve the Company's language in Holbrook Exhibit 13. Williamson Direct at 18.

The language on the RMAF for inclusion in subsection 20 of the 2020 Mechanism is as follows:

20A. However, for the calculation of the underlying avoided energy credits to be used to derive the program-specific avoided energy benefits, the calculation will be based on the projected EE portfolio hourly shape, rather than the assumed 24x7 100 MW reduction typically used to represent a qualifying facility. For purposes of determining cost-effectiveness, estimated incremental EM&V costs attributable to each Program shall be included in the Program costs. DEP will comply, however, with Commission Rule R8-60(i)(6)(iii), which requires DEP to include in its biennial Integrated Resource Plan, revised as applicable in its annual report, certain information regarding the Measures and Programs that it evaluated but rejected.

20B. Moreover, for the Calculation of the underlying avoided capacity benefits, when authorized pursuant to Commission Rule R8-69I and unless the Commission determines otherwise in a G.S. 62-133.9 DSM/EE Rider proceeding, the Company shall be permitted to recognize the impact of the Reserve Margin Adjustment Factor used in the determination of the PPI and PRI values for its energy efficiency programs.

The Reserve Margin Adjustment Factor is equivalent to $(1 + \text{Reserve Margin}) / (\text{Performance Adjustment Factor})$ and will be applied to the avoided capacity costs of all energy efficiency programs.

The Reserve Margin employed shall be based upon the value reflected in the most recent Commission accepted Integrated Resource Plan proceeding as of December 31 of the year immediately preceding the date of the annual DSM/EE rider filing. The Performance adjustment Factor employed shall be based upon value reflected in the most recent Commission approved Biennial Avoided Cost proceeding as of December 31 of the year immediately preceding the date of the annual DSM/EE rider filing.

Holbrook Exhibit No. 13.

The Commission finds that, as directed in the Commission's December 17, 2021 Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice, in Docket No. E-2, Sub 1273, the Company has proposed language for inclusion in the 2020 Mechanism regarding the methodology to be used for the RMAF. Neither the Public Staff nor any other party opposed the proposed inclusion of the RMAF language reflected in Holbrook Exhibit No. 13 in the 2020 Mechanism. Based on the foregoing, the Commission approves the proposed language on Holbrook Exhibit No. 13 for inclusion in the 2020 Mechanism.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 15-16

The evidence supporting these findings of fact can be found in the direct and rebuttal testimony and exhibits of DEP witness Holbrook and the direct testimony and exhibits of Public Staff witness Williamson.

Summary of Responses

In response to the Commission's Additional Testimony Order, DEP witness Holbrook testified that the deployment of AMI and Customer Connect had not directly impacted the implementation and marketing of EE and DSM programs, nor did DEP expect ultimate full deployment to do so. She explained, however, that although the use of AMI did not directly impact implementation of the Company's DSM/EE programs, it directly and positively impacted the EM&V of the EE and DSM programs that were used in rider calculations. In terms of the MyHER program, the AMI and Customer Connect capabilities are not redundant. AMI provides data without normative comparisons and energy saving advice. In contrast, MyHER adds normative comparisons that engage and empower customers by advising on how they may save more energy and directing them to other programs that they may leverage for further savings. She testified that all customers have access to their AMI data, but customers participating in MyHER also receive their MyHER reports as well. Therefore, because the control group and treatment group both have access to AMI data, the incremental savings of the treatment group are the MyHER savings, and the AMI data is effectively canceled out. The only difference between the two groups is a result of the report itself. Witness Holbrook also elaborated on the use of customer AMI data in DEP's program evaluations, and she listed a number of programs where AMI was being incorporated into the evaluations. Holbrook Direct at 30-32.

As directed by the Commission, witness Holbrook also responded to Public Staff witness Williamson's testimony in Docket No. E-2, Sub 1273 related to the provisions of Commission Rule R8-69(B)(5), as applied to the overlap of AMI informed services and the specialized tips supported by the MyHER EE program. She testified that all Duke Energy customers, at their option, may go online to see their hourly usage AMI data, regardless of whether they receive their MyHER report. Residential customers who receive a MyHER report, however, receive data educating them about their energy usage, engaging them with a normative comparison and then empowering them with specialized energy tips. Thus, reductions in energy use are directly attributable to the MyHER report. Holbrook Direct at 32-33. Witness Holbrook also described how the Company was exploring additional MyHER capabilities now that Customer Connect paired with the AMI data has created expanded communications opportunities. These opportunities include: (i) providing alerts to MyHER participants that AMI data has detected unexpected energy spikes in home appliances; (ii) improving modeling to identify discrepancies between MyHER participants' self-reported heating systems and what AMI detects as the most likely heating system, resulting in more accurately tailored tips to customers; and (iii) identifying likely MyHER participants with pools, spas, and hot tubs as well as those MyHER participants who charge EVs. Additionally, the Company is also exploring potentially providing tips to MyHER participants enrolled in TOU or other dynamic pricing tariffs. Holbrook Direct at 34-35.

Witness Holbrook further detailed the metrics showing the number of MyHER participants that have utilized the new AMI or Customer Connect capabilities, such as the percentage of MyHER customers that have visited the AMI Usage Web Site compared with the number of MyHER participants that have visited the MyHER online portal. The metrics showed that in November – December 2021, just under 0.04% of DEP MyHER participants accessed their My Account AMI data charts showing usage at a level less than standard one-month billing. The Company only had the ability to distinguish between customers accessing their My Account AMI Charts and comparing that with customers accessing their MyHER data after November 2021. Holbrook Direct at 35-36.

With respect to how DEP will integrate its new dynamic pricing rates into EE and DSM programs, witness Holbrook testified that as with other DEP rate schedules, customers using the new, dynamic pricing rates will be eligible to participate in EE and DSM programs through the availability section of the relevant tariff. Holbrook Direct at 36.

Witness Holbrook also testified that attributing savings from each recommendation of the Collaborative is problematic due to the overlapping nature of the proposals. She listed, however, the following programs as key DSM and/or EE program modifications or additions introduced as a result of the DSM/EE Collaborative during 2020-2021:

- Low-Income Housing Tax Credit (LIHTC). Collaborative members brought this idea to the Company in March 2019 to reach multifamily housing developments that were applying for tax credits. The Company investigated and found that all of the measures and substantial design assistance were already offered to customers through the Smart \$aver Custom New Construction Energy Efficiency Design Assistance program. DEP recognized, however, that it presented a new opportunity to utilize a concept within this initiative to pair these incentives with federal tax credits. Developers are seeing the benefits of this pairing.
- Energy Star Retail Products Platform (ESRPP). The Collaborative submitted the ESRPP for consideration in January 2020. It offers incentives to retailers of Energy Star appliances; the retailers then offer discounts on those appliances to consumers. The ESRPP replicated many of the features that were part of a DEP program already in operation. The Company has revisited using the ESRPP as a reference point when the Company searches for new measures. The suggested measure, however, would not have provided any additional savings; consequently, the Company did not implement it.
- Program Savings from Codes and Standards – Members of the Collaborative suggested that the Company could claim savings from advancing building energy codes and appliance standards and suggested a program to capture those savings. As the Company has previously reported to the Collaborative, North Carolina does not have a statutory or regulatory framework that defines how a utility may claim attributed savings.

Thus, there is no avenue by which the Company could implement such a program.

- Residential Low-Income Single-Family Heat Pump Water Heater Rental Program – Collaborative members recommended in June 2020 that DEP offer a program where low-income customers could rent a heat pump water heater for their home directly from DEP, adding the payment to their electric bills. Attributes of the program, such as the appropriate placement of the appliance and an on-bill collection mechanism, added unresolved complexities to implementing this program. Although the effort will take time, the Company continues to research and investigate this recommendation.
- Non-Residential Multifamily Heat Pump Water Heater Rebate – Collaborative members suggested that the Company approach multifamily property owners to offer a rebate for installing heat pump water heaters, which would serve multiple units within a building. The Company has determined that it can include the heat pump water heater rebate in the New Construction Energy Efficiency Design Assistance program, but no developer has expressed an interest in participating.
- Manufactured Homes Retrofit Program – Collaborative members suggested a program that retrofits manufactured homes with more efficient heating and air conditioning, replaces or repairs duct work, and insulates and seals the structure. The Company has not developed this into a new program because all the recommended measures are already part of the Residential Smart \$aver program and available to manufactured homes.
- Manufactured Home New and Replacement Programs – Collaborative members suggested that the Company offer incentives for replacing inefficient manufactured homes with Energy Star manufactured homes. The Company continues to investigate program design research.

Holbrook Direct at 37-42.

Witness Holbrook also addressed the Commission's question regarding any implications that the new components of S.L. 2021-165 (N.C.G.S. § 62-110.9) will have or are expected to have on DEP's EE and DSM Programs and the rider applications. Witness Holbrook explained that the savings from MyHER and other programs are provided primarily to the group responsible for preparing the Integrated Resource Plan (IRP). The estimates from the first five years are provided, and those results are then extrapolated to the most recent Market Potential Study to derive the long term projected savings. She further stated that the proposed Carbon Plan, filed in Docket No. E-100, Sub 179 on May 16, 2022, did not use specific program forecasts, but rather assumed a reduction from DSM/EE initiatives of 1% of eligible load (load net of opt outs).

Public Staff witness Williamson also testified in response to the Commission's Additional Testimony Order. He stated that DEP had completed the deployment of AMI and updated Customer Connect billing system; thus, the Company is able to take a more refined look at how the system is operating and how customers are using energy at the point of delivery. He testified that AMI allows customers to make more informed decisions about their consumption behavior and to react when high demand and system conditions warrant load reductions. Witness Williamson further testified that AMI and Customer Connect advance customers' understanding of various rate designs and encourage customers to take advantage of TOU rates. He also offered that the potential for increased participation in DSM and EE programs through the implementation of AMI and Customer Connect should result in system and operational efficiencies that, in turn, lead to greater savings for DEP and participating customers. Williamson Direct at 19. Witness Williamson agreed that the utilities may use sub-hourly data resulting from AMI to provide more personalized DSM/EE opportunities, and that customers who review their usage data better understand how participating in a DSM program may impact their daily life and finances. Williamson Direct at 20. Witness Williamson also noted that the use of AMI data has not yet been incorporated into comparisons between DEP's DSM/EE Portfolio costs and savings during the 2020 DSM/EE rider test year and the 2021 DSM/EE rider test year. According to witness Williamson, the ability to use AMI data for EM&V is still evolving. Williamson Direct at 21.

Witness Williamson also responded to witness Holbrook's testimony on MyHER. First, he noted that customers only became able to use their My Account AMI charts as of November 2021. Witness Williamson stated that he expects that as more customers become familiar with this tool, they will use the interval AMI data tool to maximize their energy savings. Next, he testified that the current MyHER EM&V does not account for customers who utilize the customer web portal where they can view their AMI data and, as a result, change their usage pattern going forward. In witness Williamson's opinion, as the EM&V sampling period gets closer to the date when these new AMI tools became available to customers, it should increase its rigor by including an analysis, survey, and other relevant studies that show how having AMI usage data available to customers influences their behaviors toward DSM and EE. Williamson Direct at 23-24.

Witness Williamson reported that the Public Staff was satisfied with the Company's efforts to explore modifying or expanding the capabilities of the MyHER program now that Customer Connect paired with AMI data has created expanded opportunities for communicating with customers. He did note that the Public Staff was concerned with the Company's approach to using AMI data to alert customers when their usage spikes to the extent this communication was only available to my MyHER participants. He instead believed that this was an important capability for all customers to be able to access. Williamson Direct at 24.

Witness Williamson did not contest the Company's metrics showing the number of MyHER participants who have utilized new AMI/Customer Connect capabilities. He explained that the AMI data had only been accessible for customers since November 2021. Awareness and usage of the My Account AMI data will take time to grow; efforts to

improve customer awareness and marketing should allow customers to understand what this portal has to offer. Williamson Direct at 25.

Witness Williamson also addressed witness Holbrook's testimony on dynamic pricing rates. To his knowledge, the Commission has not considered dynamic rate tariffs such as the Company's TOU rates and real-time pricing schedules to be DSM or EE. Witness Williamson noted that dynamic pricing tariffs encourage customers to shift energy usage from peak to off-peak, like a DSM program. Unlike a DSM program, however, dynamic pricing tariffs solely rely on the customer to act to shift usage, while DSM programs are actively managed by the Company. Witness Williamson also argued that dynamic pricing tariffs should be excluded from the DSM/EE portfolio because the net impacts of dynamic pricing are recovered on a cost-of-service basis from all customers, while the cost of the DSM/EE portfolio is recovered from the targeted customer class. Witness Williamson further contended that system planning was another reason to exclude dynamic pricing tariffs from the DSM/EE portfolio. Witness Williamson concluded that dynamic pricing tariffs should have little to no impact on DSM/EE program marketing, implementation, or cost-effectiveness. Williamson Direct at 27-28.

With respect to the implications of N.C.G.S. § 62-110.9 on DEP's DSM/EE programs and rider application, witness Williamson noted that the Company's DSM/EE goal in the proposed Carbon Plan exceeds the achievable savings projected in the Company's current Market Potential Study. The Public Staff opposed the use of "as found" baselines for energy savings, but it did generally agree that the Mechanism may require reassessment to ensure utility incentives are reasonable after the Carbon Plan determinations are made. In addition, witness Williamson testified that the Public Staff currently views two potential scenarios where N.C.G.S. § 62-110.9 could influence the DSM/EE programs and rider applications. In the first potential scenario, if a cost of carbon were to be introduced and approved in an avoided cost proceeding, then that input would be incorporated in the final avoided cost calculations and rates approved by the Commission, which would then flow into the avoided costs used in the DSM/EE rider. If a cost of carbon were to be introduced and approved in the avoided cost proceeding, then an assessment of potential changes to the Mechanism would need to take place to ensure that savings incentives are handled appropriately. The second potential scenario involved accounting for carbon reductions similarly to how energy efficiency credits are counted for compliance with the Renewable Energy and Energy Efficiency Portfolio Standard. Williamson Direct at 30-31. Witness Williamson also confirmed that the Public Staff accepted as reasonable, accurate, or complete DEP witness Holbrook's exhibits in response to the Commission's questions in Appendix A. Williamson Direct at 29, 32-33.

In her rebuttal testimony, witness Holbrook opposed Public Staff witness Williamson's testimony on the use of AMI data to alert customers and his recommendation to exclude dynamic pricing tariffs from the DSM/EE tariffs. First, she responded to witness Williamson's assertion that all customers should have access to the benefits of AMI implementation by noting that virtually all of the Company's customers have AMI meters. This means that they can access their AMI data and view their usage data – they do not have to register for MyHER to do so. She explained that AMI customers

can elect to receive automated usage alerts as well. These alerts are not part of the DSM/EE portfolio. Eligible customers will automatically receive a Mid-Cycle Alert halfway through their billing cycle, showing usage to date, projected usage, and associated estimated bill amount for the rest of the month/bill cycle. These alerts provide customers with detailed information regarding their energy usage and estimated bill so that they can take meaningful action to manage their electric bills. Thus, witness Holbrook concluded, the Company is leveraging AMI data to alert customers and all customers have access to their interval data and data usage alerts as a result. Holbrook Rebuttal at 4.

Witness Holbrook contrasted MyHER and the Usage Alerts, however. Although they both use AMI data to provide customers with the tools to manage their energy usage, they serve different purposes. The Usage Alert is intended to prevent bill surprises in any given month. Witness Holbrook testified that MyHER assembles data and customizes it to the specific customer to encourage participation in other EE measures and behavioral changes over the long term to increase energy efficiency. *Id.* She noted that MyHER provides an added benefit of alerting the customer if spikes in energy usage may have occurred as well. This is not solely the function of AMI data, however. Instead, witness Holbrook explained, it is a function of MyHER's ability to synthesize AMI data and return corresponding spike alerts to customers. Holbrook Rebuttal at 5.

Witness Holbrook disputed Public Staff witness Williamson's statement that only MyHER customers would have access to the MyHER spike alerts. All eligible customers are included in MyHER, unless they have opted out or are part of the control group. Regardless of whether a customer has MyHER, the customer can access their usage data to determine if an energy spike has occurred. *Id.*

Witness Holbrook also disagreed with witness Williamson's statement that dynamic pricing tariffs should have little to no impact on DSM/EE program marketing, implementation, or cost-effectiveness. She relayed that EM&V will verify the extent to which there are differences in energy consumption and usage patterns as a result of the dynamic pricing tariffs. She testified that these programs and tariffs could be adjusted in response to those specific recommendations and be tailored in a way that encourages customers on the dynamic tariffs to achieve energy savings. Holbrook Rebuttal at 6.

Discussion and Conclusions

First, the Commission notes that impacts of N.C.G.S. § 62-110.9 on DEP's EE and DSM Programs and the rider applications are currently being reviewed in Docket No. E-100, Sub 179. As these questions arose in that docket as well, the Commission declines to make any related findings and conclusions in this proceeding at this time.

The Commission also concludes that it is premature to determine whether and to what extent dynamic pricing tariffs have an impact on DSM/EE program marketing, implementation, or cost-effectiveness. To date, the Company has not submitted a dynamic pricing tariff as an EE or DSM program nor identified one that it has designed to have an impact on marketing, implementation, or cost-effectiveness. Because no such

program is before the Commission at this time, the Commission does not in this proceeding advance approval or disapproval of any such tariff or tariff design. Instead, the Commission continues to urge the Company to investigate ways to benefit customers and potentially reduce energy bills by leveraging AMI customer data to increase the beneficial impact that the combination of innovative rate designs and EE/DSM programs can have on customers.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 17-24

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

Summary of the Evidence

DEP witness Listebarger calculated proposed North Carolina retail NLR in the amount of \$27,146,277 and a PPI in the amount of \$17,453,062 for the EMF component of the total DSM/EE rider, as reflected in Listebarger Exhibit 2, page 6, and North Carolina retail NLR of \$40,803,858 and a PPI of \$15,486,316 for the forward-looking, or prospective component of the total rider, as reflected on Listebarger Exhibit 2, page 3. Witness Listebarger 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, were \$146,813,531. Witness Listebarger'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 un-er- or over-recovery is \$174,107,180. Therefore, the test period revenue requirement, as reduced by the test period revenues collected and miscellaneous adjustments, is (\$27,293,649), which is the test period over-collection that is appropriate to use as the DSM/EE EMF revenue requirement in this proceeding. Listebarger Direct at 8.

Witness Listebarger 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, as \$182,213,260. The \$182,213,260 revenue requirement includes: (1) \$32,437,143 for anticipated rate period program expenses; (2) amortizations and carrying costs associated with deferred prior period costs totaling \$75,892,112; (3) recovery of DSDR depreciation and capital costs totaling \$17,593,831; (4) NLR for the rate period totaling \$40,803,858 for vintage years 2016 through 2023; and (5) PPI totaling \$15,486,316 associated with vintage years 2016 through 2023.

According to the exhibits of DEP witness Listebarger, 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	117,176,252
General Service EE	59,228,146
General Service DSM	5,464,773
Lighting	344,089
Total	182,213,260

DSM/EE EMF:	
Residential	\$(10,695,962)
General Service EE	(15,437,704)
General Service DSM	(1,178,342)
Lighting	18,360
Total	\$(27,293,648)

Listebarger Exhibit 2, p. 1 of 7, p. 2 of 7, p. 4 of 7, and p. 5 of 7.

Witness Listebarger'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. She adjusted the kWh sales to exclude estimated sales to customers who have opted out of participation in DEP's DSM/EE programs. Listebarger Direct at 14-16. Based on her exhibits, 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:

<u>Rate Class</u>	<u>kWh Sales</u>
Residential	16,671,099,362
General Service EE	10,361,570,874
General Service DSM	10,365,136,121
Lighting EE	366,051,281
Lighting DSM	365,714,174

(Listebarger Exhibit 2, pp. 1 and 2 of 7.)

Witness Listebarger testified that the proposed DSM/EE rates recover costs to be incurred from January 1, 2023, through December 31, 2023, and that the DSM/EE EMF is a true-up mechanism recognizing costs and recoveries for the test period of January 1, 2021, through December 31, 2021. She further testified that DEP proposed the following total DSM/EE billing factors, excluding NCRF: 0.639 cents per kWh for the Residential class; 0.423 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 0.099 cents per kWh for the Lighting class. Witness Listebarger next testified that, including the NCRF, the appropriate DSM/EE billing factors are 0.640 cents per kWh for the Residential class and 0.424 cents per kWh for the EE component of the General Service classes. The DSM/EE billing factors for the DSM component of the General Service classes and the Lighting classes do not change when the NCRF is included. Listebarger Direct at 17-18; Listebarger Exhibit No.1.

Witness Listebarger filed Supplemental Direct testimony on August 23, 2022, in which she filed Revised Listebarger Exhibit No. 1 to reflect the change in the regulatory fee applied to noncompetitive jurisdictional revenues from 0.13% to 0.14%, as approved by the Commission's June 30, 2022 Order Increasing Regulatory Fee Effective July 1, 2022, issued in Docket No. M-100, Sub 142. The incorporation of the increased regulatory fee, however, had no impact on the rates supplied in the original application, as shown in the Revised Listebarger Exhibit 1. Listebarger Supplemental at 2.

Witness Boswell testified that the Public Staff found no errors or other issues in its investigation of the Company's filings necessitating an adjustment to DEP's proposed billing factors. Boswell Direct at 10. Witness Boswell recommended approval of the Company's proposed billing factors as set forth in Listebarger Exhibit 1 Revised. Boswell Direct at 11. She noted, however, that the finalization of the true-ups of NLR and PPI sometimes lags behind the true-up of program costs and administrative and general 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. Boswell Direct at 8-9. Public Staff witness Boswell also stated that the Public Staff intends to undertake a review of DSM/EE advertising and promotion costs to determine the steps the Company regularly takes to right-size its DSM/EE advertising costs and whether additional steps can be taken.

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, are \$146,813,531 (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 \$174,107,180 (excluding the NCRF). Therefore, the aggregate DSM/EE over-recovery for purposes of this proceeding is (\$27,293,649).

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 is \$182,213,260 (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 orders in Docket No. E-2, Sub 931, the revenue requirements for each class, excluding NCRF, are as follows:

DSM/EE PROSPECTIVE COMPONENT:	
Residential	\$117,176,252
General Service EE	59,228,146
General Service DSM	5,464,773
Lighting	344,089
Total	<u>182,213,260</u>

DSM/EE EMF:	
Residential	\$(10,695,962)
General Service EE	(15,437,704)
General Service DSM	(1,178,342)
Lighting	<u>18,360</u>
Total	<u>\$(27,293,648)</u>

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 – 16,671,099,362; General Service class EE – 10,361,570,874; General Service class DSM - 10,365,136,121; Lighting class DSM – 365,714,174; and Lighting class –E - 366,051,281.

Based on the testimony and exhibits of witnesses Listebarger and Holbrook, the testimony and exhibits of witness Boswell, and the entire record in this proceeding, the Commission 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	0.639	0.640
General Service EE	0.423	0.424
General Service DSM	0.042	0.042
Lighting	0.099	0.099

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 25-29

The evidence for these findings of fact can be found in the testimony of NC Justice Center, *et al.* witness Bradley-Wright, Public Staff witness Williamson, and DEP witnesses Holbrook and Lynda Powers.

Summary of the Evidence

Company witness Holbrook reported that during Vintage 2021, DEP's DSM/EE programs delivered almost 379 million kWh of energy savings and more than 355 MW of

capacity savings, which produced a net present value of avoided cost savings of over \$112 million. Holbrook Direct at 15. She noted that two residential programs significantly out-performed compared to their original savings estimates: the Energy Efficient Lighting Program and the Residential Smart Saver program. When compared to the estimates originally filed for Vintage 2021, the programs exceeded projections by 92% and 48%, respectively. The non-residential program with the largest percentage increase in expected energy savings from those forecasted for 2021 is the Energy Efficient Lighting program. This program produced energy savings that exceeded DEP's projections by 93%. The difference was primarily associated with increased participation. Holbrook Direct at 16.

Witness Holbrook also described the actions that DEP had taken with the Collaborative in response to the Commission's Sub 1252 Order. She reported that the Collaborative met for formal meetings in January, March, May, July, September, and November. Between meetings, interested stakeholders joined conference calls in February, April, May, August, October, and December to focus on certain agenda items or priorities that could not be explored during regular meetings. Witness Holbrook indicated that the Collaborative discussed opportunities for new programs to gain energy savings and enhancements for low-income EE programs. Holbrook Direct at 6-7.

Witness Holbrook further testified that the forecasted decline in savings underpinned all of the Collaborative's discussions in 2021. As the decline is due primarily to the changing lighting standards and widespread adoption of LEDs, members have suggested a number of new program ideas, several of which continue to be investigated. The Company is monitoring potential changes in federal appliance and energy standards that may influence program design. Moreover, witness Holbrook reported that the Company was working with many Collaborative members on developing multiple pilot programs, such as a Tariffed-on-Bill program that is aimed at removing upfront capital barriers to installing energy efficient appliances. The Collaborative has also focused on low-income program opportunities and design. Collaborative members were engaged in developing the High Energy Use Low-Income Pilot for more than a year, with progress being made. Collaborative members have contributed to the expansion of existing low-income programs, such as expanding DEC's weatherization program into DEP. Witness Holbrook also testified that the Collaborative was aware of the work of the Low Income Affordability Collaborative and looked forward to exploring the final report. Holbrook Direct at 8-9.

Witness Holbrook described how opt-outs by qualifying non-residential customers have impacted DEP's overall non-residential participation and the associated impacts. For Vintage 2021, DEP had 4,136 eligible customer accounts opt out of participating in DEP's non-residential portfolio of EE programs and 4,226 eligible customer accounts opt out of participating in DEP's non-residential portfolio of DSM programs. This represented a decrease in opt-outs from the 5,233 EE accounts and 5,441 DSM accounts that opted out in 2020. Additionally, witness Holbrook testified that during 2021, 11 opt-out eligible accounts opted in to the EE portion of the rider, and 3 opt-out eligible accounts opted in to the DSM portion of the rider. The Company is continuing its efforts to attract program participants from opt-out customers. Witness Holbrook explained that the Company 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. Holbrook Direct at 20.

Witness Bradley-Wright testified that the Commission should direct DEP to:

- Work with the Collaborative to develop a concrete, multiyear implementation plan to achieve the efficiency savings levels developed in the Carbon Plan, as directed in the Commission's final order on the Carbon Plan;
- Annually report the carbon reduction impacts of its DSM/EE portfolio in future rider proceedings, following a stakeholder process to inform how the carbon reduction impacts of the Company's DSM/EE portfolio will be tracked and quantified;
- Annually report on the steps it is taking to (1) increase participation and achieve higher total savings for low-income customers and (2) help bridge the gap between existing efficiency offerings and the scale of need identified by the LIAC;
- Include a calculation of prior-year reported and future-year projected efficiency savings as a percentage of total annual retail sales in future DEP DSM/EE Rider filings and indicate whether the Company anticipates achieving the 1% savings to receive the \$500,000 performance bonus;
- Report to the Commission on an annual basis the progress the Company has made working with the Collaborative to advance stakeholder proposed recommendations to modify existing efficiency programs or create new programs;
- Track prior-year reported and future-year projected efficiency savings associated with Collaborative-sponsored program recommendations and report them to the Collaborative and in future DEP DSM/EE Rider filings;
- File a proposed plan with the Commission by January 31, 2023 for enhanced verification or reporting of self-certified DSM and EE opt outs to ensure the savings are valid.

Bradley-Wright Direct at 4.

Witness Bradley-Wright noted that in 2021, DEP's reported energy efficiency savings were 326.3 gigawatt hours (GWh) at the meter, which is equal to 0.75% of the previous year's retail sales and an increase of 6.9% in total savings from the previous year. He further reported that DEP fell short of the 378.7 GWh of savings that it had

projected in 2021 and has not achieved the 1% target annual savings threshold that was agreed to in the Duke Energy-Progress Energy Merger. Bradley-Wright Direct at 4-5.

Witness Bradley-Wright agreed that the Company's programs were cost-effective and delivered "considerable financial value to customers." Bradley-Wright at 5. He also testified that residential programs have made up an increasing majority of DEP's DSM/EE portfolio for the past several years. He singled out MyHER as representing more than half of DEP's reported system energy reductions. He urged the Company to implement additional measures that achieve deeper and longer-lived savings to maintain a more balanced and robust program portfolio going forward. He also recommended adding to or modifying programs that target water heating, space heating and cooling, and other comprehensive measures. *Id.*

Witness Bradley-Wright testified that DEP's non-residential programs continued to decline to only 26% of total energy efficiency savings in 2021, which was 36% below the Company's savings forecast in Docket No. E-2, Sub 1252. Non-residential savings have decreased 39% from 2018-2021. He identified industrial and large commercial customers opting out as negatively impacting DEP's ability to reach higher savings from benchmarks due to this group's large share of energy consumption. Witness Bradley-Wright also argued that opt-out customers should be included in the percentage of retail sales calculations. He opined that a reasonable person would suspect that many customers who opt out may not have satisfied the requirements of making efficiency improvements at their facilities because there is no enforcement in practice. He recommended that DEP file a proposed plan with the Commission by January 31, 2023 for enhanced verification or reporting of self-certified DSM and EE opt outs to ensure the savings are valid. Bradley-Wright Direct at 6-7.

Witness Bradley-Wright compared the low-income energy efficiency impacts to previous years. He reported that DEP's Neighborhood Energy Saver program continued to underperform during the persistence of the COVID-19 pandemic. Witness Bradley-Wright also noted that the Multi-Family Energy Efficiency program, which benefits significant numbers of low-income customers, was similarly impacted with an 88% reduction in 2021 savings relative to its pre-pandemic performance. Citing his testimony from the past two annual DEP DSM/EE rider proceedings, witness Bradley-Wright stated that DEP's low-income programs lag behind DEC's results. He applauded DEP's efforts to assist low-income customers by filing the Neighborhood Energy Saver 2.0 program with expanded measure offerings and the request for approval of an Income Qualified Weatherization program comparable to DEC's. Bradley-Wright Direct at 10.

Witness Bradley-Wright also discussed DEP's forecast of energy savings. He noted that DEP is projecting 353.5 GWh of energy savings from both residential and non-residential programs in 2023, which is an increase from the 326.3 GWh of at-the-meter savings DEP reported for COVID-impacted 2021 but is a decrease from the forecast for 2022 energy savings in last year's filing. He noted that DEP's forecasting a higher UCT cost-effectiveness score for 2023 should result in more financial savings for customers. Bradley-Wright Direct at 11. He further noted that DEP had not reached the 1% of total

annual retail sales performance incentive target, and he estimated DEP's forecasted 2023 efficiency savings will equal about .79% of annual retail sales. This is higher than DEP's savings from 2021, but lower than DEP's performance in previous, pre-pandemic years. He recommended that the Commission direct DEP to calculate its forecasted savings as a percentage of total annual retail sales in future rider proceedings and indicate whether the Company anticipates achieving its 1% savings to receive the \$500,000 performance bonus. Bradley-Wright Direct at 13-14.

Witness Bradley-Wright also commented that DEP's Neighborhood Energy Saver accounts for 4.6 GWh of system energy reductions in 2023, which is higher than the Company's pre-pandemic savings levels. He noted that DEP's low-income program performance has trailed DEC's even when accounting for DEC's larger number of residential customer accounts. He noted that DEP had submitted for approval a new low-income energy efficiency program – Income-Qualified Energy Efficiency and Weatherization Program – that should help close that gap. He also highlighted the Public Staff's and the Company's support for low-income energy efficiency and DSM programs in the LIAC report. Bradley-Wright Direct at 16-20.

Witness Bradley-Wright listed several programs that the DSM/EE Collaborative could advance: (i) Residential Electric Resistance Tank Water Heater and Hybrid Heat Pump Hybrid Water Heater Rental Program; (ii) Manufactured Homes Energy Efficiency Retrofit and Replacement Program; (iii) Arrearage Management Pilot EE Program; (iv) Low Income Carve-out from Market Energy Efficiency Programs; and (v) Comprehensive Affordable Multifamily Energy Efficiency Program. Acknowledging the progress that has been made to advance EE for low-income customers, witness Bradley-Wright recommended the Commission direct DEP to file an annual, detailed report on the initiatives it is working on to increase participation and achieve higher savings for low-income customers and to seek new ways to increase participation and higher savings for low-income customers. Bradley-Wright Direct at 21-23.

Witness Bradley-Wright also praised the Company and other stakeholders on the process for developing a residential income-qualified high energy use pilot. He also mentioned stakeholder work on the Tariffed-on-Bill Programs. He indicated that these processes should be adopted for the Collaborative in general. He also recommended that the Commission direct the Company to report in its annual DEP Rider filings the progress it has made working with the Collaborative, including information on how many Duke personnel met with the Collaborative, details on status of measure selection, input assumptions, cost-effectiveness evaluations, anticipated participation and kWh savings, program development milestones, and whether and approximately when the Company anticipates implementing program modification recommendations or submitting an application to the Commission for approval. Bradley-Wright Direct at 28-29.

Witness Bradley-Wright also recommended that the Commission direct DEP to track carbon reduction effects of the DSM/EE programs. He indicated that this tracking could inform new approaches to delivering DSM/EE programs that save money and accelerate decarbonization. Bradley-Wright Direct at 30-31.

In her rebuttal testimony, DEP witness Powers responded to witness Bradley-Wright's testimony. Witness Powers is Duke's primary point of contact with the Collaborative. She explained that the role of the Collaborative is to provide insight and input concerning topics related to EE and DSM, including program design and development, measurement and evaluation, regulatory and market conditions, specific issues requested by the Commission, and emerging technologies to achieve cost-effective energy savings. The Collaborative differs from the LIAC, which is intended to address affordability issues for low-income residential customers. Witness Powers testified that the Company would ensure that the work of the Collaborative is aligned with the recommendations of the LIAC final report. Powers Rebuttal at 6-7.

Witness Powers also distinguished between the purposes of the Carbon Plan and the Collaborative. She noted that the Carbon Plan presented a comprehensive and detailed integrated resource plan for the energy transition to achieve carbon emissions reductions. In contrast, the Collaborative focuses on EE/DSM programs, which encourage customers to consume less energy from the Company's grid. She disagreed with witness Bradley-Wright's recommendation that the Collaborative should be required to track and report carbon reduction under the Carbon Plan. She noted that the Carbon Plan has not yet been approved but confirmed that the Company would comply with any reporting requirements and, through the Mechanism, would update the inputs underlying the determination of utility system benefits and review the resulting impacts on the determination of cost-effectiveness for the Company's portfolio of programs, PPI, and PRI. Powers Rebuttal at 8-9.

With respect to low-income programs, witness Powers also opposed witness Bradley-Wright's recommendation that DEP should annually report on multiple steps it is taking to increase participation and align with the LIAC. She noted that this recommendation disregarded the Company's already existing efforts and reporting obligations. The Company is already taking steps to maximize savings for its low-income customers and the Company submits annual reports to the Commission that contain information regarding the same. These efforts and corresponding reports were underway well before the LIAC. She concluded that witness Bradley-Wright's additional reporting requirements result in an added level of bureaucracy that would divert time and attention away from developing low-income solutions. Powers Rebuttal at 9-10.

Witness Powers noted that witness Bradley-Wright agreed that DEP's portfolio was cost-effective overall. She testified that the information he recommended that the Company file on the prior year reported and future year projected efficiency savings as a percentage of total annual retail sales to determine whether it will achieve the 1% savings target is already provided in the annual rider filings. In fact, he performed this calculation in his testimony from the available data. She affirmed that if the Company achieves the 1% target, it will provide all necessary information to substantiate it. Powers Rebuttal at 11.

Witness Powers acknowledged the difference between DEC and DEP energy savings. She explained that the Companies maintain the same focus, effort, and dedication to drive increased savings to customers. She indicated that any difference in savings achieved by the Companies reflects the utility-specific nature of implementing cost-

effective EE/DSM programs and not the level of commitment from either utility. Powers Rebuttal at 12.

Witness Powers also disagreed with witness Bradley-Wright's recommendation to track and report the progress of recommendations within the Collaborative. She noted that as she has stated in previous dockets, taking an idea and developing it into a cost-effective, legally-compliant program is a time-consuming process impacted by factors that neither the Collaborative nor the Company can control. She concluded that witness Bradley-Wright's tracking and reporting requirements would not bring more programs to implementation or achieve more energy savings for customers. Instead, they would impose unnecessary requirements on the Commission and its staff. Moreover, she explained that recommendations do not need to be tracked to ensure they are considered. Powers Rebuttal at 13-14.

Witness Powers also opposed witness Bradley-Wright's recommendation that savings associated with Collaborative-sponsored program recommendations be tracked and reported. She testified that tracking savings arising from each recommendation made in the Collaborative adds an unnecessary layer of complexity and uncertainty. Nor does this tracking and reporting create any benefit for customers; instead, it only results in "keeping score." Witness Powers recommended instead that the Collaborative continue to be guided by its mission to create additional savings for customers regardless of where the idea originates.

With respect to opt outs, witness Powers described how certain customers have the ability to opt out of the EE and/or DSM rider through statute, not by Company policy. She disagreed with witness Bradley-Wright's recommendation that the Company verify and report that customers are opting out appropriately under the statute. She testified that instead, the statute provides a framework for challenging such certifications and enumerates the parties that may initiate such challenges. She concluded that witness Bradley-Wright's recommendation would improperly expand or modify that framework. She added that large commercial and industrial customers have vast, complex operations on-site, and they have a natural incentive to reduce their energy costs. Moreover, many of the operations that the Company would have to review to conduct these audits and verifications are likely competitively sensitive and proprietary. In sum, she concluded that the additional responsibilities and costs of auditing and verifying these opt-out customers' self-certifications did not outweigh any incremental benefit of conducting these complex audits and verifications. Powers Rebuttal at 15-16.

Discussion and Conclusions

The Commission has fully reviewed the issues raised and the recommendations made by NC Justice Center, *et al.*, witness Bradley-Wright and concludes the following:

(1) The Commission declines to require DEP to match DEC's budget for low-income EE programs, because program budgets are not used to set ceilings on DEP's spending but are rather designed to accurately reflect the costs associated with projected participation in the program for cost recovery purposes. The Commission appreciates the work that the Collaborative and the Company did in bringing forward two new EE for low-income programs for Commission review. The Company and the Collaborative, however, should continue to emphasize developing and expanding EE programs to assist low-income customers in saving energy and reducing their energy burdens and should continue to work with the LIAC, as appropriate, to accomplish this.

(2) The Commission declines to adopt witness Bradley-Wright's recommendation that the Company track and report EE savings resulting from programs suggested by the Collaborative. The Commission agrees with witness Powers that program development can be a complex and lengthy process. Therefore, in lieu of tracking and reporting EE savings resulting from the Collaborative's suggested programs, the Company should continue reporting on Collaborative activities in its testimony filed in these proceedings.

(3) The Commission declines to adopt witness Bradley-Wright's recommendation to require DEP to quantify and report carbon savings associated with its DSM/EE portfolio in its DSM/EE rider proceedings. The Carbon Plan has been filed and evidence heard, but the Commission has not yet issued an order. Therefore, it is premature in this proceeding for the Commission to direct DEP to take any action or take on any reporting or tracking obligations related to the Carbon Plan.

(4) The Commission declines to impose any additional tracking or reporting requirements on DEP at this time. The Commission recognizes that DEP is a regulated company that has the responsibility of proposing, developing, implementing, and administering cost-effective EE/DSM programs that comply with: (i) applicable law; (ii) the Commission's Rules; (iii) and the Mechanism. These obligations already impose numerous reporting requirements on the Company, and already encompass some of witness Bradley-Wright's requested information. The additional reporting requirements – although well-intended – would add time and complexity to program development. The additional complexities would ultimately erode the net benefit provided to customers and impose additional costs on customers, shift the focus from driving additional savings, and provide little benefit to customers, the Collaborative, or the Commission.

IT IS, THEREFORE, ORDERED as follows:

1. That the appropriate DSM/EE EMF billing factors, excluding NCRF, are: (0.064) cents per kWh for the Residential class; (0.149) cents per kWh for the EE component of the General Service classes; (0.011) cents per kWh for the DSM component of the General Service classes; and 0.005 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: 0.703 cents per kWh for the Residential class; 0.572 cents per kWh for the EE component of the General Service classes; 0.053 cents per kWh for the DSM component of the General Service classes; and 0.094 cents per kWh for the Lighting class. The appropriate forward-looking DSM/EE rates to be charged by DEP during the rate period, including NCRF, are: 0.704 cents per kWh for the Residential class; 0.573 cents per kWh for the EE component of the General Service classes; 0.053 cents per kWh for the DSM component of the General Service classes; and 0.094 cents per kWh for the Lighting class;

3. 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 0.640 cents per kWh for the Residential class, 0.424 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 0.099 cents per kWh for the Lighting class;

4. 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, 2023;

5. 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;

6. That DEP should continue to leverage its collaborative stakeholder meetings (Collaborative) to expand on the existing discussions related to the decline in current and forecasted energy savings and the expansion and improvements of low-income EE programs and other program design issues raised in the testimony of NC Justice Center, *et al.* witness Bradley-Wright and provide a summary of those discussions in the Company's next DSM/EE rider filing;

7. That DEP shall continue to leverage its Collaborative to discuss the on-going challenges to customers adopting energy efficiency in the market that has led to current and forecasted decline in energy savings and the development and expansion of EE for low-income customers and report the results of these discussions in the Company's 2023 DSM/EE rider filing;

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

9. That DEP shall coordinate with DEC to conduct a study of the persistence of MyHER energy savings over time, in compliance with the discussion of same in the body of this Order and in the DEC DSM/EE Order issued on December 12, 2022, in Docket No. E-7, Sub 1265.

ISSUED BY ORDER OF THE COMMISSION.

This the 22nd day of December, 2022.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in black ink that reads "Erica N. Green". The signature is written in a cursive style with a large initial "E".

Erica N. Green, Deputy Clerk

Commissioners Jeffrey A. Hughes and Daniel G. Clodfelter dissent in part.

Commissioner Floyd B. McKissick, Jr., did not participate in this decision.

DOCKET NO. E-2, SUB 1294

Commissioner Jeffrey A. Hughes, joined by Commissioner Daniel G. Clodfelter, dissenting in part:

I agree with most of this order and approve the proposed 2023 rider amounts for the EE and DSM programs in DEP's portfolio with one notable exception – the MyHER behavioral program. I feel obligated to partially dissent to this order because I do not have enough evidence to determine if the \$14,572,930 DEP proposes collecting from its customers for carrying out the MyHER program in 2023 is fair and appropriate. While I understand that unsubstantiated assumptions have historically been made resulting in the current EE cost recovery mechanism producing very high utility incentive estimates, my review of the evidence put forth in this docket suggests that there are potential problems and contradictions behind certain measure assumptions that were made in calculating the requested amount of utility incentives. My dissent is driven by the requirement that I find that any utility incentives to be collected from customers must be appropriate. N.C. Gen. Stat. § 62-133.9(d)(2). My dissent should not be interpreted as a general concern over how DEP implements its EE and DSM programs. DEP and the many stakeholders it works with on EE matters have demonstrated a commitment to these programs that I am in no way calling into question. More than ever, I believe it is essential to support and expand EE and DSM programs – I just want to make sure that the cost to customers is not higher than what it needs to be to implement sustainable and effective measures that are fair to the utility and to customers.

DEP's application requests \$3,825,490 to cover the estimated direct participant costs of implementing the MyHER program in 2023. DEP requests an additional \$10,747,440 in utility incentive payments composed of \$10,141,666 in net lost revenue (NLR) incentives and \$605,774 as a shared savings incentive (PPI). I am satisfied with the evidence put forth to justify recovery of the \$3,825,490 DEP proposes to spend on the program in 2023 but have concerns about the appropriateness of the amount of requested incentives.

The essence of my concerns about DEP's requested MyHER incentives are the same as stated in my dissenting opinion in the final Order issued on December 12, 2022, in the Duke Energy Carolinas, LLC docket, E-7, Sub 1265, and I therefore adopt and incorporate that dissenting opinion herein.

/s/ Jeffrey A. Hughes
Commissioner Jeffrey A. Hughes

/s/ Daniel G. Clodfelter
Commissioner Daniel G. Clodfelter