



**NORTH CAROLINA
PUBLIC STAFF
UTILITIES COMMISSION**

August 13, 2020

Ms. Kimberley A. Campbell, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4300

Re: Docket No. E-7, Sub 1230 - Application Pursuant to N.C.G.S. 62-133.9 and Commission Rule R8-69 for Approval of Demand-Side Management and Energy Efficiency Cost Recovery Rider

Dear Ms. Campbell:

Attached for filing is the Public Staff's Proposed Order Approving DSM/EE Rider and Requiring Filing of Customer Notice in the above-referenced docket.

By copy of this letter, I am forwarding a copy to all parties of record by electronic delivery.

Sincerely,

Electronically submitted
s/ Lucy E. Edmondson
Staff Attorney
lucy.edmondson@psncuc.nc.gov

Attachment

Executive Director
(919) 733-2435

Communications
(919) 733-5610

Economic Research
(919) 733-2267

Legal
(919) 733-6110

Transportation
(919) 733-7766

Accounting
(919) 733-4279

Consumer Services
(919) 733-9277

Electric
(919) 733-2267

Natural Gas
(919) 733-4326

Water
(919) 733-5610

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. E-7, SUB 1230

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

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

HEARD: On Tuesday, June 9, 2020, in Commission Hearing Room 2115,
Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina
and via WebEx Video Conference

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

APPEARANCES:

For Duke Energy Carolinas, LLC:

Kendrick C. Fentress, Associate General Counsel, Duke Energy
Corporation, P.O. Box 1551, Raleigh, North Carolina 27602

Robert W. Kaylor, Law Office of Robert W. Kaylor, P.A., 353 East Six
Forks Road, Suite 260, Raleigh, North Carolina 27609

For the Carolina Industrial Group for Fair Utility Rates III:

Warren K. Hicks, Bailey & Dixon, LLP, 434 Fayetteville Street,
Suite 2500, P.O. Box 1351, Raleigh, North Carolina 27602

For the North Carolina Sustainable Energy Association:

Benjamin Smith, Regulatory Counsel, 4800 Six Forks Road,
Suite 300, Raleigh, North Carolina 27609

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

David Neal, Southern Environmental Law Center, 601 West
Rosemary Street, Suite 220, Chapel Hill, North Carolina 27516

For the Using and Consuming Public:

Lucy E. Edmondson and Nadia L. Luhr, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699

BY THE COMMISSION: North Carolina General Statute Section 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.

In the present proceeding, Docket No. E-7, Sub 1230, on February 25, 2020, Duke Energy Carolinas, LLC (DEC or the Company) filed an application for approval of its DSM/EE rider (Rider EE¹ or Rider 12) for 2020² (Application) and the direct testimony and exhibits of Carolyn T. Miller, Rates Manager for DEC, and Robert P. Evans, Senior Manager – Strategy and Collaboration for the Carolinas in the Company’s Market Solutions Regulatory Strategy and Evaluation group.

The intervention of the Public Staff – North Carolina Utilities Commission (Public Staff) is recognized pursuant to N.C. Gen. Stat. § 62-15(d) and Commission Rule R1-19(e). The Carolina Industrial Group for Fair Utility Rates III filed a petition to intervene on March 19, 2020, which was granted on March 23, 2020. On March 23, 2020, the North Carolina Sustainable Energy Association (NCSEA) filed a petition to intervene, which was granted on March 24, 2020. On April 17, 2020, the North Carolina Justice Center (NC Justice Center), North the Carolina Housing Coalition, and the Southern Alliance for Clean Energy (SACE) (collectively, "NC Justice Center et al.") filed a joint petition to intervene, which was

¹ DEC refers to its DSM/EE Rider as “Rider EE”; however, this rider includes charges intended to recover both DSM and EE revenue requirements.

² The Rider EE proposed in this proceeding is the Company’s eleventh Rider EE and includes components that relate to Vintages 2016, 2017, 2018, 2019, 2020, and 2021 of the cost and incentive recovery mechanism approved in Docket No. E-7, Sub 1032, as modified in Docket No. E-7, Sub 1130. For purposes of clarity, the aggregate rider is referred to in this Order as “Rider 12” or the proposed “Rider EE.” Rider 12 is proposed to be effective for the rate period January 1, 2021, through December 31, 2021.

granted on April 21, 2020. The Carolina Utility Customers Association, Inc. filed a petition to intervene on May 8, 2020, which was granted on May 12, 2020.

On May 11, DEC filed the supplemental testimony and exhibits of witnesses Evans and Miller.

On May 22, 2020, 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 Michael C. Maness, Director of the Accounting Division, J. Robert Hinton, Director of the Economic Research Division, and David M. Williamson, Utilities Engineer in the Electric Division.

On June 1, 2020, DEC filed the rebuttal testimony of witness Evans and Timothy J. Duff, General Manager – Customer Regulatory Strategy and Evaluation.

On June 3, 2020, DEC and the Public Staff filed a joint motion to excuse DEC witness Miller and Public Staff witness Maness from appearing at the June 9, 2020 expert witness hearing. On June 5, 2020, the Commission issued an order granting the motion.

On June 8, 2020, the Public Staff filed the supplemental testimony of witnesses Maness and Williamson.

The case came on for hearing as scheduled on June 9, 2020. No public witnesses appeared at the hearing.

Other Pertinent Proceedings:

Docket No. E-7, Subs 831, 938, 979, 1032, 1130, and 1164

On February 9, 2010, the Commission issued an *Order Approving Agreement and Joint Stipulation of Settlement Subject to Certain Commission-Required Modifications and Decisions on Contested Issues* in DEC's first DSM/EE rider proceeding, Docket No. E-7, Sub 831 (Sub 831 Order). In the Sub 831 Order, the Commission approved, with certain modifications, the Agreement and Joint Stipulation of Settlement between DEC, the Public Staff, SACE, Environmental Defense Fund (EDF), Natural Resources Defense Council, and the Southern Environmental Law Center (Sub 831 Settlement), which described the modified save-a-watt mechanism (Sub 831 Mechanism), pursuant to which DEC calculated, for the period from June 1, 2009 until December 31, 2013, the revenue requirements underlying its DSM/EE riders based on percentages of avoided costs, plus compensation for NLR resulting from EE programs only. The Sub 831 Mechanism was approved as a pilot with a term of four years, ending on December 31, 2013.

On February 15, 2010, the Company filed an Application for Waiver of Commission Rule R8-69(a)(4) and R8-69(a)(5) in Docket No. E-7, Sub 938 (Sub 938 Waiver Application), requesting waiver of the definitions of "rate period" and "test period." Under the Sub 831 Mechanism, customer participation in the Company's DSM and EE programs and corresponding responsibility to pay Rider EE are determined on a vintage year basis. A vintage year is generally the 12-

month period in which a specific DSM or EE measure is installed for an individual participant or group of participants.³ The Company applied the vintage year concept on a calendar-year basis to the modified save-a-watt portfolio of programs for ease of administration for the Company and customers. Pursuant to the Sub 938 Waiver Application, “test period” is defined as the most recently completed vintage year at the time of the Company’s DSM/EE rider application filing date.

On April 6, 2010, the Commission entered an *Order Granting Waiver, in Part, and Denying Waiver, in Part* (Sub 938 Waiver Order), which Order approved the requested waiver of R8-69(d)(3) in part, but denied the Company’s requested waiver of the definitions of “rate period” and “test period.”

On May 6, 2010, DEC filed a Motion for Clarification or, in the Alternative, for Reconsideration, asking that the Commission reconsider its denial of the waiver of the definitions of “test period” and “rate period,” and that the Commission clarify that the EMF may incorporate adjustments for multiple test periods. In response, the Commission issued an *Order on Motions for Reconsideration* on June 3, 2010 (Sub 938 Second Waiver Order), granting DEC’s Motion. The Sub 938 Second Waiver Order established that the rate period for Rider EE would align with the 12-month calendar year vintage concept utilized in the Commission-approved save-a-watt approach (in effect, the calendar year following the Commission’s order in each annual DSM/EE cost recovery proceeding), and that the test period for Rider

³ Vintage 1 is an exception in terms of length. Vintage 1 is a 19-month period beginning June 1, 2009 and ending December 31, 2010, because of the approval of DSM/EE programs prior to the approval of the cost recovery mechanism.

EE would be the most recently completed vintage year at the time of the Company's Rider EE cost recovery application filing date.⁴

On February 8, 2011, in Docket No. E-7, Sub 831, the Commission issued its *Order Adopting "Decision Tree" to Determine "Found Revenues" and Requiring Reporting in DSM/EE Cost Recovery Filings* in Docket No. E-7, Sub 831 (Sub 831 Found Revenues Order), which included, in Appendix A, a "Decision Tree" to identify, categorize, and net possible found revenues against the NLR created by the Company's EE programs. Found revenues may result from activities that directly or indirectly result in an increase in customer demand or energy consumption within the Company's service territory.

On November 8, 2011, in Docket No. E-7, Sub 979, the Commission issued its *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice* (Sub 979 Order), in which it approved the Evaluation, Measurement, and Verification (EM&V) agreement (EM&V Agreement) reached by the Company, SACE, and the Public Staff. Pursuant to the EM&V Agreement, for all EE programs, except for the Non-Residential Smart \$aver Custom Rebate Program and the Low-Income EE and Weatherization Assistance Program, actual EM&V results are applied to replace all initial impact estimates back to the beginning of the program offering. For the purposes of the vintage true-ups, these initial EM&V

⁴ Further, in the Sub 938 Second Waiver Order issued June 3, 2010, the Commission concluded that DEC should true up all costs during the save-a-watt pilot through the EMF rider provided in Commission Rule R8-69(b)(1). The modified save-a-watt approach approved in the Sub 831 Order required a final calculation after the completion of the four-year program, comparing the cumulative revenues collected related to all four vintage years to amounts due the Company, taking into consideration the applicable earnings cap.

results will be considered actual results for a program until the next EM&V results are received. The new EM&V results will then be considered actual results going forward and will be applied prospectively for the purposes of truing up vintages from the first day of the month immediately following the month in which the study participation sample for the EM&V was completed. These EM&V results will then continue to apply and be considered actual results until superseded by new EM&V results, if any. For all new programs and pilots, the Company will follow a consistent methodology, meaning that initial estimates of impacts will be used until DEC has valid EM&V results, which will then be applied back to the beginning of the offering and will be considered actual results until a second EM&V is performed.

On February 6, 2012, in the Sub 831 docket, the Company, SACE, and the Public Staff filed a proposal regarding revisions to the program flexibility requirements (Flexibility Guidelines). The proposal divided potential program changes into three categories based on the magnitude of the change, with the most significant changes requiring regulatory approval by the Commission prior to implementation, less extensive changes requiring advance notice prior to making such program changes, and minor changes being reported on a quarterly basis to the Commission. The Commission approved the joint proposal in its July 16, 2012 *Order Adopting Program Flexibility Guidelines*.

On October 29, 2013, the Commission issued its *Order Approving DSM/EE Programs and Stipulation of Settlement* in Docket No. E-7, Sub 1032 (Sub 1032 Order), which approved a new cost recovery and incentive mechanism for DSM/EE

programs (Sub 1032 Mechanism) and a portfolio of DSM and EE programs to be effective January 1, 2014, to replace the cost recovery mechanism and portfolio of DSM and EE programs approved in Docket No. E-7, Sub 831. In the Sub 1032 Order, the Commission approved an Agreement and Stipulation of Settlement, filed on August 19, 2013, and amended on September 23, 2013, by and between DEC, NCSEA, EDF, SACE, the South Carolina Coastal Conservation League (CCL), NRDC, the Sierra Club, and the Public Staff (Stipulating Parties), which incorporates the Sub 1032 Mechanism (Sub 1032 Stipulation).

Under the Sub 1032 Stipulation, as approved by the Commission, the portfolio of DSM and EE programs filed by the Company was approved with no specific duration (unlike the programs approved in Sub 831, which explicitly expired on December 31, 2013). Additionally, the Sub 1032 Stipulation also provided that the Company's annual DSM/EE rider would be determined according to the Sub 1032 Stipulation and the terms and conditions set forth in the Sub 1032 Mechanism, until otherwise ordered by the Commission. Under the Sub 1032 Stipulation, the Sub 1032 Mechanism was to be reviewed in four years. Pursuant to the Sub 1032 Stipulation, any proposals for revisions to the Sub 1032 Mechanism were to be filed by parties along with their testimony in the annual DSM/EE rider proceeding.

The overall purpose of the Sub 1032 Mechanism is to (1) allow DEC to recover all reasonable and prudent costs incurred for adopting and implementing new DSM and EE measures; (2) establish certain requirements, in addition to those of Commission Rule R8-68, for requests by DEC for approval, monitoring,

and management of DSM and EE programs; (3) establish the terms and conditions for the recovery of NLR (net of found revenues) and a Portfolio Performance Incentive (PPI) to reward DEC for adopting and implementing new DSM and EE measures and programs; and (4) provide for an additional incentive to further encourage kilowatt-hour (kWh) savings achievements. The Sub 1032 Mechanism also includes the following provisions, among several others: (a) it shall continue until terminated pursuant to Commission order; (b) modifications to Commission-approved DSM/EE programs will be made using the Flexibility Guidelines; (c) treatment of opted-out and opted-in customers will continue to be guided by the Commission's Orders in Docket No. E-7, Sub 938, with the addition of an additional opt-in period during the first week in March of each year; (d) the EM&V Agreement shall continue to govern the application of EM&V results; and (e) the determination of found revenues will be made using the Decision Tree approved in the Sub 831 Found Revenues Order. Like the Sub 831 Mechanism, the Sub 1032 Mechanism also employs a vintage year concept based on the calendar year.⁵

On August 23, 2017, in Docket No. E-7, Sub 1130 (Sub 1130), the Commission issued its *Order Approving DSM/EE Rider, Revising DSM/EE Mechanism, and Requiring Filing of Proposed Customer Notice* (Sub 1130 Order), in which it approved the agreement to revise certain provisions of the Sub 1032 Mechanism reached by the Company and the Public Staff.

⁵ Each vintage under the Sub 1032 Mechanism is referred to by the calendar year of its respective rate period (e.g., Vintage 2020).

To prevent the use of "stale" avoided cost rates, Paragraph 69 of the Sub 1032 Mechanism, which describes how avoided costs are determined for purposes of calculating the PPI, was revised such that for Vintage 2019 and beyond, the program-specific avoided capacity benefits and avoided energy benefits will be derived from the underlying resource plan, production cost model, and cost inputs that generated the avoided capacity and avoided energy credits reflected in the most recent Commission-approved Biennial Determination of Avoided Cost Rates as of December 31 of the year immediately preceding the annual DSM/EE rider filing date. This change served to align the underlying assumptions used to calculate the avoided costs used in avoided cost proceedings and DSM/EE proceedings. 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-megawatt (MW) reduction typically used to represent a qualifying facility (QF).

Paragraph 19 of the Sub 1032 Mechanism was revised to specify that the avoided costs used for purposes of program approval filings would also be determined using the method outlined in revised Paragraph 69. The specific Biennial Determination of Avoided Cost Rates used for each program approval filing would be derived from the rates most recently approved by the Commission as of the date of the program approval filing.

Paragraph 23 of the Sub 1032 Mechanism was revised, and Paragraphs 23A-D were added, to specify which avoided costs should be used for determining the continuing cost-effectiveness of programs and actions to be taken based on

the results of those tests. Pursuant to Paragraph 23, each year the Company files an analysis of the current cost-effectiveness of each of its DSM/EE programs as part of the DSM/EE rider filing. New Paragraph 23A requires the use of the same method for calculating the avoided costs outlined in the revisions to Paragraph 69 to determine the continued cost-effectiveness for each program. Like revised Paragraph 69, Paragraph 23A specifies that the avoided capacity and energy costs used to calculate cost-effectiveness will be derived from the avoided costs underlying the most recent Commission-approved Biennial Determination of Avoided Cost Rates as of December 31 of the year immediately preceding the annual DSM/EE rider filing date. New Paragraphs 23B through 23D address the steps that will be taken if specific DSM/EE programs continue to produce Total Resource Cost (TRC) test results less than 1.00 for an extended period. For any program that initially demonstrates a TRC of less than 1.00, the Company shall include in its annual DSM/EE rider filing a discussion of the actions being taken to maintain or improve cost-effectiveness, or alternatively, its plans to terminate the program. If a program demonstrates a prospective TRC of less than 1.00 in a second DSM/EE rider proceeding, the Company shall include a discussion of what actions it has taken to improve cost-effectiveness. If a program demonstrates a prospective TRC of less than 1.00 in a third DSM/EE rider proceeding, the Company shall terminate the program effective at the end of the year following the DSM/EE rider order, unless otherwise ordered by the Commission. This change allows the Company the necessary time to manage its programs and maintain cost-effectiveness.

On October 18, 2019, The Commission issued an *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice* in Docket No. E-7, Sub 1192 (Sub 1192 Order). In the Sub 1192 Order, consistent with the requirements of N.C.G.S. § 62-133.9 and Commission Rule R8-68, the Commission approved the following DSM or EE programs or pilot programs to be offered to customers in 2020: Energy Assessments Program; EE Education Program; Energy Efficient Appliances and Devices; Residential Smart \$aver EE Program; Multi-Family EE Program; My Home Energy Report; Income-Qualified EE and Weatherization Program; Power Manager Load Control Service Program; Non-Residential Smart \$aver Energy Efficient Food Service Products Program; Non-Residential Smart \$aver Energy Efficient HVAC Products Program; Non-Residential Smart \$aver Energy Efficient IT Products Program; Non-Residential Smart \$aver Energy Efficient Lighting Products Program; Non-Residential Smart \$aver Energy Efficient Process Equipment Products Program; Non-Residential Smart \$aver Energy Efficient Pumps and Drives Products Program; Non-Residential Smart \$aver Custom Incentive and Energy Assessment Program; PowerShare; PowerShare Call Option; Small Business Energy Saver; Smart Energy in Offices; EnergyWise for Business; and Non-Residential Smart \$aver Performance Incentive.. The Commission concluded that the Company's portfolio of DSM and EE programs was overall cost-effective and eligible for inclusion in Rider 11. Pursuant to Paragraph 19 of the Sub 831 Mechanism, the Income-Qualified EE and Weatherization Program – Low-Income, the Commission determined that this program does not have to meet the TRC or Utility Cost Test (UCT) to be eligible

for inclusion in the Company's portfolio because of the exception for low-income and other non-cost-effective programs with similar societal benefits. Modifications to the Residential Smart \$aver EE Program have resulted in improved cost-effectiveness scores and the Commission concluded that no action by the Company was required with respect to this program. The Food Service and Information Technology measures of the Nonresidential Smart \$aver Program were not currently cost effective under the TRC test; however, as these are only two measures of a larger program, the Commission concluded that no further action by the Company was required with respect to those measures.

The Commission accepted the EM&V reports filed as Evans Exhibits A, D, E, F, G, H, I, J, K, and L and considered them complete for purposes of calculating program impacts.

The Commission held that DEC should continue to leverage its collaborative stakeholder meetings (Collaborative) to work with stakeholders to garner meaningful input regarding potential portfolio enhancement and program design. It further found that the Company should continue the frequency of the Collaborative meetings so that the combined DEC/Duke Energy Progress, LLC (DEP) Collaborative meets every two months.

Docket No. E-7, Sub 1230

Based upon consideration of DEC's Application, the pleadings, the testimony and exhibits received into evidence at the hearing, the parties' briefs, and the record as a whole, the Commission now makes the following:

FINDINGS OF FACT

1. DEC is a public utility with a public service obligation to provide electric utility service to customers in its service area in North Carolina and is subject to the jurisdiction of the Commission.

2. The Commission has jurisdiction over this Application pursuant to the Public Utilities Act. Based on the specific recovery of costs and incentives proposed by DEC in this proceeding, the Commission finds that it has the authority to consider and approve the relief the Company is seeking in this docket.

3. For purposes of this proceeding, DEC has requested approval of costs and incentives related to the following DSM/EE programs to be included in Rider 12: Energy Assessment Program, EE Education Program, Energy Efficient Appliances and Devices Program, Smart \$aver EE Program, Multi-Family EE Program, My Home Energy Report (MyHER) Program, Neighborhood Energy Saver Program (formerly Income-Qualified EE and Weatherization Program), Power Manager Load Control Service Program, Nonresidential Smart \$aver Energy Efficient Products and Assessment Program, PowerShare Nonresidential Load Curtailment Program, Small Business Energy Saver Program, EnergyWise for Business Program, and Nonresidential Smart \$aver Performance Incentive Program.

4. Pursuant to Paragraph 19 of the Mechanism, the Neighborhood Energy Saver Program (formerly Income-Qualified EE and Weatherization Program) is not required to have a TRC or UCT result greater than 1.0 to be eligible

for inclusion in the Company's portfolio. Accordingly, the Commission finds and concludes that no further action by the Company is required with respect to this program.

5. The Residential Smart Saver EE Program has failed to demonstrate a prospective TRC result greater than 1.0 in the current proceeding and in the previous five rider proceedings.⁶ The Commission finds and concludes that if the program continues to demonstrate a prospective TRC result of less than 1.0 for Vintage 2022, the Company should include in its next rider filing a discussion of the actions being taken to maintain or improve cost-effectiveness, or alternatively, its plans to terminate the program.

6. The Company's proposed Grid Improvement Plan (GIP) has the potential to impact the cost-effectiveness of the Company's DSM/EE programs, and a detailed analysis of potential impacts, as well as status reporting of GIP implementation, is necessary in the DSM/EE rider proceedings in order to allow the Commission and the parties to fully evaluate the Company's DSM/EE portfolio during each year's rider proceeding. The Commission concludes that the Company shall: (1) perform an analysis explaining how GIP will affect the performance of individual DSM/EE programs and their ability to produce peak demand and energy savings, and file the report with the Commission in the current docket by January 1, 2021; (2) in the next rider proceeding, explain how the Company will distinguish peak demand and energy savings between GIP and DSM and EE programs; and

⁶ The last time the Company forecasted a TRC score above 1.0 for this program was in Docket No. E-7, Sub 1050, filed in March of 2014.

(3) provide in its next rider filing a list of GIP projects that have been implemented and explain how those projects have affected the performance of the Company's DSM/EE portfolio, if at all.

7. For purposes of inclusion in Rider 12, the Company's portfolio of DSM and EE programs is cost-effective.

8. The EM&V reports filed as Evans Exhibits A, B, C, D, and E are acceptable for purposes of this proceeding and should be considered complete for purposes of calculating program impacts.

9. It is inappropriate to include a reserve margin adder to the avoided capacity savings in the calculations of cost-effectiveness and utility incentives for the Company's Vintage 2021 DSM and EE programs.

10. It is appropriate to apply the seasonal allocation of 90% winter and 10% summer, as modeled in the most recently approved avoided cost proceeding, toward the capacity benefits in the calculations of cost-effectiveness and utility incentives for the Company's Vintage 2021 measures associated with its DSM and EE programs.

11. The components of Rider 12, as reflected in Maness Revised Exhibit I, have been calculated in a manner that appropriately reflects the Commission's findings and conclusions in this Order, as well as the Commission's findings and conclusions as set forth in the Sub 831 Order, the Sub 831 Found Revenues Order,

the Sub 938 Waiver Order, the Sub 938 Second Waiver Order, the Sub 979 Order, the Sub 1032 Order, and the Sub 1130 Order.

12. The reasonable and prudent Rider 12 billing factor for residential customers⁷ is 0.5110 cents per kWh, which, as is the case for all the billing factors stated in these findings of fact, includes the regulatory fee.

13. The reasonable and prudent Rider 12 Vintage 2021 EE prospective billing factor for non-residential customers who do not opt out of Vintage 2021 of the Company's EE programs is 0.3495 cents per kWh.

14. The reasonable and prudent Rider 12 Vintage 2021 DSM prospective billing factor for non-residential customers who do not opt out of Vintage 2021 of the Company's DSM programs is 0.1084 cents per kWh.

15. The reasonable and prudent Rider 12 Vintage 2020 prospective EE billing factor for non-residential customers who participated in Vintage 2020 of the Company's EE programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2020 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is 0.0612 cents per kWh.

16. The reasonable and prudent Rider 12 Vintage 2019 prospective EE billing factor for non-residential customers who participated in Vintage 2019 of the Company's EE programs (or who did not so participate, but neither (a) explicitly

⁷ The residential billing factor applicable to all residential customers is the sum of the residential prospective and residential true-up factors for the applicable vintage years.

opted out of Vintage 2019 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is 0.0687 cents per kWh.

17. The reasonable and prudent Rider 12 Vintage 2018 prospective EE billing factor for non-residential customers who participated in Vintage 2018 of the Company's EE programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2018 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is 0.0137 cents per kWh.

18. The reasonable and prudent Rider 12 Vintage 2019 EE EMF billing factor for non-residential customers who participated in Vintage 2019 of the Company's EE programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2019 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is (0.0225) cents per kWh.

19. The reasonable and prudent Rider 12 Vintage 2019 DSM EMF billing factor for non-residential customers who participated in Vintage 2019 of the Company's DSM programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2019 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is 0.0019 cents per kWh.

20. The reasonable and prudent Rider 12 Vintage 2018 EE EMF billing factor for non-residential customers who participated in Vintage 2018 of the Company's EE programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2018 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is (0.0049) cents per kWh.

21. The reasonable and prudent Rider 12 Vintage 2018 DSM EMF billing factor for non-residential customers who participated in Vintage 2018 of the Company's DSM programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2018 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is (0.0014) cents per kWh.

22. The reasonable and prudent Rider 12 Vintage 2017 EE EMF billing factor for non-residential customers who participated in Vintage 2017 of the Company's EE programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2017 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is 0.0342 cents per kWh.

23. The reasonable and prudent Rider 12 Vintage 2017 DSM EMF billing factor for non-residential customers who participated in Vintage 2017 of the Company's DSM programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2017 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is 0.0000 cents per kWh.

24. The reasonable and prudent Rider 12 Vintage 2016 EE EMF billing factor for non-residential customers who participated in Vintage 2016 of the Company's EE programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2016 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is 0.0193 cents per kWh.

25. The reasonable and prudent Rider 12 Vintage 2016 DSM EMF billing factor for non-residential customers who participated in Vintage 2016 of the

Company's DSM programs (or who did not so participate, but neither (a) explicitly opted out of Vintage 2016 during the annual enrollment period for that vintage, nor (b) opted out of Vintage 2021) is (0.0001) cents per kWh.

26. DEC should continue to leverage its collaborative stakeholder meetings (Collaborative) to work with stakeholders to garner meaningful input regarding potential portfolio enhancement and program design.

27. The Company should continue the current frequency of the Collaborative meetings such that the combined DEC/Duke Energy Progress, LLC (DEP) Collaborative meets every two months.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-2

The evidence and legal bases in support of these findings and conclusions can be found in the Application, the pleadings, the testimony, and the exhibits in this docket, as well as in the statutes, case law, and rules governing the authority and jurisdiction of this Commission. These findings are informational, procedural, and jurisdictional in nature.

North Carolina General Statute Section 62-133.9 grants the Commission the authority to approve an annual rider, outside of a general rate case, for recovery of reasonable and prudent costs incurred in the adoption and implementation of new DSM and EE measures, as well as appropriate rewards for adopting and implementing those measures. Similarly, Commission Rule R8-68 provides, among other things, that reasonable and prudent costs of new DSM or

EE programs approved by the Commission shall be recovered through the annual rider described in N.C. Gen. Stat. § 62-133.9 and Commission Rule R8-69. The Commission may also consider in the annual rider proceeding whether to approve any utility incentive (reward) pursuant to N.C. Gen. Stat. § 62-133.9(d) (2) a through c.

Commission Rule R8-69 outlines the procedure whereby a utility applies for and the Commission establishes an annual DSM/EE rider. Commission Rule R8-69(a)(2) defines DSM/EE rider as “a charge or rate established by the Commission annually pursuant to N.C. Gen. Stat. § 62-133.9(d) to allow the electric public utility to recover all reasonable and prudent costs incurred in adopting and implementing new demand-side management and energy efficiency measures after August 20, 2007, as well as, if appropriate, utility incentives, including net lost revenues.” Commission Rule R8-69(c) allows a utility to apply for recovery of incentives for which the Commission will determine the appropriate ratemaking treatment.

North Carolina General Statute Section 62-133.9, along with Commission Rules R8-68 and R8-69, provides that the Commission shall approve an annual rider allowing an electric public utility, upon application, to recover the reasonable and prudent incurred costs of approved DSM and EE programs. The Commission-approved rider may also allow an electric public utility to recover appropriate utility incentives, potentially including “[a]ppropriate rewards based on capitalization of a percentage of avoided costs achieved by demand-side management and energy efficiency measures.” Consistent with this provision, as well as the Commission-approved Mechanism, the Company filed an application for approval of such

annual rider (Rider 12). The cost recovery and utility incentives the Company seeks through Rider 12 are based on the Company recovering DSM/EE program costs, NLR (net of found revenues), and a PPI incentive related to the DSM and EE programs approved in the Sub 1032 Order and those programs approved following the Sub 1032 Order. Recovery of these costs and utility incentives is also consistent with N.C. Gen. Stat. § 62-133.9, Rule R8-68, and Rule R8-69. Therefore, the Commission concludes that it has the authority to consider and approve the relief the Company is seeking in this docket.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 3

The evidence for this finding and conclusion can be found in DEC's Application, the testimony and exhibits of Company witnesses Evans and Miller, the testimony of Public Staff witness Williamson, and various Commission orders.

DEC witnesses Miller and Evans' testimony and exhibits show that the Company's request for approval of Rider 12 is associated with the Sub 1032 portfolio of programs, as well as the programs approved by the Commission after the Sub 1032 Order. The direct testimony and exhibits of DEC witness Evans listed the applicable DSM/EE programs as follows: Energy Assessment Program; EE Education Program; Energy Efficient Appliances and Devices Program; Residential Smart \$aver EE Program; Multi-Family EE Program; My Home Energy Report Program; Income-Qualified EE and Weatherization Program; Power Manager Load Control Service Program; Non-Residential Smart \$aver Energy Efficient Food Service Products Program; Non-Residential Smart \$aver Energy

Efficient HVAC Products Program; Non-Residential Smart \$aver Energy Efficient IT Products Program; Non-Residential Smart \$aver Energy Efficient Lighting Products Program; Non-Residential Smart \$aver Energy Efficient Process Equipment Products Program; Non-Residential Smart \$aver Energy Efficient Pumps and Drives Products Program; Non-Residential Smart \$aver Custom Incentive Program; Non-Residential Smart \$aver Custom Energy Assessment Program; PowerShare Non-Residential Load Curtailment Program; Small Business Energy Saver Program; EnergyWise for Business Program; and Non-Residential Smart \$aver Performance Incentive Program. (Tr. at 59-60.)

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. Gen. Stat. § 62-133.9. (Id. at 236-37.)

Thus, the Commission finds and concludes that each of the programs listed by witnesses Evans 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. Gen. Stat. § 62-133.9.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 4-7

The evidence for these findings and conclusions can be found in the testimony and exhibits of Company witness Evans, the testimony and exhibits of Public Staff witness Williamson, and the testimony of SACE witness Bradley-Wright.

DEC witness Evans 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 2021 period, the results of which are incorporated in Evans Exhibit No. 7. (Tr. at 61.) DEC's calculations indicate that, notwithstanding the Income-Qualified EE and Weatherization Program (which was not cost-effective at the time it was approved by the Commission), the Residential Smart \$aver EE Program, and elements of the Non-Residential Smart \$aver Program, the aggregate portfolio continues to be cost-effective. (Id. at 61.)

Public Staff witness Williamson stated in his testimony that the Public Staff reviewed cost-effectiveness under each of the four standard cost-effectiveness tests: Utility Cost (UC), Total Resource Cost (TRC), Participant, and Ratepayer Impact Measure. (Id. at 240.) The Public Staff also compared the cost-effectiveness test predictions in previous DSM/EE proceedings to the current filing and developed a trend of potential cost-effectiveness that serves as the basis for the Public Staff's recommendation on whether a program should continue as currently implemented, be monitored, or be terminated. (Id. at 241-42.)

Witness Williamson testified that while many programs continue to be cost-effective, the TRC and UC scores as filed by the Company for all programs have a natural ebb and flow over the years of DSM/EE rider proceedings, mainly due to the changes in avoided costs. (Id. at 242.) He stated that decreasing cost-effectiveness is also partially attributable to unit savings being lower than originally expected as determined through EM&V of the programs. (Id.) Also, as programs mature, baseline standards increase, or avoided cost rates decrease, it becomes

more difficult for a program to produce cost-effective savings. (Id.) Witness Williamson also stated that, on the other hand, some programs have experienced greater than expected participation, which typically results in greater savings per unit cost and increases cost-effectiveness. (Id.)

Witness Williamson further testified about the performance of DEC's overall portfolio of programs, stating that the historical performance of the Company's programs is reasonable, while noting a number of concerns with the portfolio. (Id. at 244-45.)

First, witness Williamson expressed concern with the Company's lighting-related measures. He recalled that in past proceedings, the Public Staff has highlighted that the EE lighting market for North Carolina is transforming and that non-specialty LED lighting will likely become the baseline standard for general service bulb technologies by January 2020, thereby decreasing savings from any EE program that continues to include general service bulb technologies. He noted that although federal standards for lighting measures did not change in 2020 as expected, the Public Staff continues to believe that the EE lighting market in North Carolina has transformed at a faster rate than was initially recognized, and that non-specialty LED lighting should be considered the baseline standard for general service bulb technologies. He noted that the Company's portfolio is focusing on specialty LED bulb technologies going forward, and that the Public Staff agrees with this approach. Based on the Public Staff's review of lighting-related EM&V reports over the last three years, and the Company's acknowledgment of upcoming lighting standard changes, witness Williamson recommended that the

Commission require that, beginning in 2021, only specialty LED lighting be considered for recognition as energy efficiency. (Id. at 246-49.)

In his rebuttal testimony, witness Evans testified that while the Company agrees in part with witness Williamson that significant market transformation with respect to LED non-specialty lighting has taken place, this transformation has not been universal, particularly with respect to low-income and multifamily residences. He added that the Company still sees an ongoing need for non-specialty energy efficient A-line bulbs in both low-income and multifamily residences, and that the Company intends to continue providing A-line bulbs to low-income customers through its Neighborhood Energy Saver Program and through outlets such as Good Will, Dollar General, Dollar Tree, and Habitat stores. He also testified that the Company intends to continue replacing inefficient lighting with non-specialty LED bulbs through its Multi-Family direct install program. (Id. at 82.) In light of the circumstances presented by witness Evans with respect to the current need for non-specialty energy efficient A-line bulbs for low-income and multifamily residences, the Commission finds and concludes that witness Williamson's recommendation regarding specialty LED lighting is an appropriate topic for discussion in the Collaborative.

Witness Williamson also expressed concern with the impact of the Company's Grid Improvement Plan (GIP) on its DSM/EE programs. He testified that the GIP, as proposed, would drive enhancements to capacity, data analytics/collection, and power flow capabilities on almost all of the circuits within its service territory. As more data analytics and technology enhancements are

made to the Company's day-to-day operations, the base-level impacts and offerings of DSM/EE programs will be impacted. He stated that he believes the MyHER and DSM programs will be most impacted by the GIP proposal, as they rely heavily on data analytics and base level system capacity on the Transmission and Distribution (T&D) grid, and that as the Company deploys GIP, these programs will need to be re-evaluated to ensure that they remain cost-effective and to determine whether or not they have become standard operating procedures. (Id. at 250-51.)

With respect to MyHER, witness Williamson explained that the program relies on the collection of individual customers' data, and then analyzes that data in relation to similar nearby customers. As part of the GIP, the Company has been deploying Advanced Metering Infrastructure (AMI) throughout its service territory, which is expected to, among other things, provide customers with direct access to their interval usage data through the use of a Smart Meter Usage App. Witness Williamson stated that the services and access to data provided by the meters will be duplicative of the data provided under the MyHER program, with the exception of the energy efficiency tips offered through the MyHER report. He recommended that the Commission require DEC to assess the costs and benefits of continuing to offer the MyHER program, versus providing the same comparison and tips through another channel. (Id. at 251-53.)

During cross-examination, witness Evans testified that in addition to providing usage data and energy efficiency tips, the MyHER program also provides homeowners with a comparison of their energy-usage data to that of similar

customers, which is a function not provided in the Smart Meter Usage App. With respect to the energy efficiency tips provided by the MyHER program, witness Evans acknowledged that they could potentially be provided outside the MyHER program, such as in an individual customer bill. He further testified that energy-savings tips are occasionally provided on customer bills. He emphasized that the Smart Meter Usage App is informational, while the information being provided through the MyHER report includes motivational aspects and actionable tips. (Id. at 132-134.)

With respect to the Company's DSM programs, witness Williamson explained that such programs rely on the level of system demand that is on the grid at the time that the particular DSM program is called upon by system operations. He added that if the base level of demand on the T&D grid changes, then the level of demand response from DSM programs could potentially be impacted as well. Witness Williamson testified that the Company's plan to enable Integrated Volt/Var Controls (IVVC), which is part of the Company's GIP proposal, will allow the distribution system to optimize voltage and reactive power needs, likely resulting in reduced demand savings from the Company's DSM programs. (Id. at 254-55.)

During cross-examination, witness Evans acknowledged that one would expect that if IVVC is implemented and the Company sees a reduction in system demand, the Company's DSM programs would be called upon less frequently, resulting in less of a demand savings. (Id. at 129.) He also testified that while the cost-effectiveness of the Company's DSM programs would not necessarily

decrease because of a reduction in demand savings, decreases in cost-effectiveness are possible for residential DSM and for the small business demand response program. (Id. at 130.)

Based on his concerns with the impacts of the Company's GIP proposal on the DSM/EE rider, witness Williamson recommended that the Commission require the Company to: (1) perform an analysis to explain how GIP will affect the performance of DSM/EE programs and their ability to produce peak demand and energy savings; (2) in the next rider proceeding, explain how the Company will distinguish peak demand and energy savings between GIP and DSM and EE programs; and (3) provide in its next rider filing a list of GIP projects that have been implemented and how those projects have affected the performance of the Company's DSM/EE portfolio, if at all. (Id. at 255-56.)

In his rebuttal testimony, witness Evans disagreed with witness Williamson's recommendation that an analysis be performed by the Company to explain how GIP will impact the performance of its DSM/EE programs. He testified that the Company has provided voluminous amounts of data, analyses, and general information regarding the Company's proposed GIP, including its IVVC program, as part of the pending rate cases for DEC and DEP in Docket Nos. E-7, Sub 1214 and E-2, Sub 1219. He added that while the Company is not opposed to reporting information about IVVC, that the additional analysis recommended by witness Williamson is not necessary, and that any influence or interaction between GIP and DSM/EE programs will be evaluated and captured in the existing reporting protocols. (Id. at 83.) During cross-examination, witness Evans testified that it

would be an extensive and lengthy process to analyze and quantify the impacts of IVVC on the Company's measures, and that the Company would evaluate any such impacts through an EM&V analysis. (Id. at 130-31.)

Witness Evans also disagreed with witness Williamson's recommendation that the Company provide in its next rider filing a list of GIP projects that have been implemented and how those projects have impacted the Company's DSM/EE portfolio. He testified that recommendations on reporting on the status of GIP are addressed extensively in the pending rate cases, and that including additional GIP reporting in the DSM/EE proceedings is unnecessary and will likely lead to confusion. He added that because neither the Company nor any other party has recommended having the programs in the GIP be filed or considered as part of the DSM/EE rider proceeding, that the DSM/EE rider proceeding is not the appropriate forum for the information witness Williamson is recommending for reporting. He also noted that any influence or interaction between GIP and DSM/EE programs will be evaluated and captured in the existing reporting protocols. (Id. at 84.) In response to a question from the Commission, witness Williamson testified that he stands by his recommendation that the Company provide additional status reporting on the interaction between the GIP and the Company's DSM programs in the DSM/EE dockets, and that such reporting is necessary to ensure that such impacts are evaluated on a yearly basis. (Id. at 296-97.)

With respect to witness Williamson's recommendations concerning the GIP, the Commission finds and concludes that the potential impacts of the Company's proposed GIP on the cost-effectiveness of the Company's DSM/EE programs

warrants further examination. Furthermore, while the Commission acknowledges that the Company has provided information concerning the GIP in the pending rate cases, it is the opinion of the Commission that information concerning the potential impact of the Company's proposed GIP on its DSM/EE programs is also relevant to, and should be presented in, the Company's DSM/EE rider proceedings. With respect to the question of whether the additional analyses recommended by witness Williamson will be adequately covered by EM&V analyses, the Commission is persuaded that a yearly analysis of any impacts on cost-effectiveness will be essential to evaluating the Company's DSM/EE portfolio during each year's rider proceeding, and that the existing EM&V reporting protocol is therefore not sufficient. The Commission concludes that the Company shall: (1) perform an analysis explaining how GIP will affect the performance of DSM/EE programs and their ability to produce peak demand and energy savings, and file the report with the Commission in the current docket by January 1, 2021; (2) in the next rider proceeding, explain how the Company will distinguish peak demand and energy savings between GIP and DSM and EE programs; and (3) provide in its next rider filing a list of GIP projects that have been implemented and explain how those projects have affected the performance of the Company's DSM/EE portfolio, if at all.

SACE witness Bradley-Wright testified that DEC's DSM/EE portfolio is cost-effective and delivers strong financial value to customers. In 2019, DEC's DSM/EE portfolio had a UCT result of 2.91 and a TRC test result of 2.69. (Id. at 356.)

Overall, the Commission concludes that DEC's portfolio of DSM and EE programs is cost-effective and eligible for inclusion in Rider 12.

The Commission makes specific findings and conclusions as to the individual programs that DEC and/or the Public Staff have identified as not being cost-effective below.

Neighborhood Energy Saver Program (formerly
Income-Qualified EE and Weatherization Program)

Witness Evans testified that the Income-Qualified EE and Weatherization Program, which was not cost-effective at the time of Commission approval, is not projected to be cost-effective for the Vintage 2021 period. (Tr. at 61.)

Pursuant to Paragraph 19 of the Mechanism (which provides an exception for low-income programs and other non-cost-effective programs with similar societal benefits), the NES program is not required to pass the TRC or UCT tests to be eligible for inclusion in the Company's portfolio. Accordingly, the Commission finds and concludes that no further action by the Company is required with respect to this program.

Residential Smart \$aver

In his direct testimony, DEC witness Evans indicated that the Residential Smart \$aver EE program is not projected to be cost-effective for the Vintage 2021 period. (Tr. at 61.) He added that during 2019, the Company implemented several changes to the program, including the continued transformation to an all referral

channel. (Id. at 62.) He further testified that there are no reasons to discontinue any of DEC's programs, and that the Company continues to examine its programs for potential modifications to increase their effectiveness, regardless of the current cost-effectiveness test results. (Id. at 61.)

Public Staff witness Williamson testified that the Company has recently expanded the scope of the Smart \$aver referral channel to include a variety of items and services beyond its original focus on HVAC equipment-related contractor referrals. The referral channel now also provides customers with contractor referrals related to rooftop solar systems, plumbing, and tree removal services. Witness Williamson explained that all funds that DEC receives from contractors participating in the referral channel, including those associated with non-EE-related services, are used to offset the program costs for the Smart \$aver program. He also noted that, at this time, the funds associated with rooftop solar and tree service contractors represent only a "very small portion" of the overall revenues received. (Id. at 261-63.)

Witness Williamson stated that while the Public Staff does not believe the Company has violated any Commission rules or the Flexibility Guidelines that address how program modifications are to be handled, that the expansion of the referral channel into areas not specifically related to DSM and EE programs does seem to be the type of program change that should be brought to the Commission's attention for approval in advance of the change, particularly for a change that would give the appearance of impacting the performance or cost recovery of a particular DSM or EE program. He testified that the Public Staff will continue to

discuss this matter with the Company, and that such discussions could include the potential for revisions to the Flexibility Guidelines to address this type of program modification. (Id. at 263.)

The Commission, however, notes that the Residential Smart \$aver EE program has failed to demonstrate a prospective TRC result greater than 1.0 in the current proceeding and in the last five rider proceedings: Subs 1073, 1105, 1130, 1164, and 1192. Paragraph 23 of the Mechanism requires the Company, in each annual DSM/EE cost recovery filing, to perform prospective cost-effective test evaluations for each of its approved DSM and EE programs. Pursuant to Paragraph 23B of the Mechanism, when a program initially demonstrates a prospective TRC of less than 1.0, the Company must include a discussion in its annual DSM/EE rider proceeding concerning actions being taken to maintain or improve cost-effectiveness, or, alternatively, plans to terminate the program. Pursuant to Paragraph 23C, if a program demonstrates a prospective TRC of less than 1.0 in a second DSM/EE rider proceeding, the Company must include a discussion in its annual filing concerning what actions it has taken to improve cost-effectiveness. Pursuant to Paragraph 23D, if a program demonstrates a prospective TRC of less than 1.0 in a third DSM/EE rider proceeding, the Company must terminate the program, unless otherwise ordered by the Commission. Because the Residential Smart \$aver EE program has now demonstrated a prospective TRC of less than 1.0 in a sixth consecutive DSM/EE rider proceeding, the Commission is of the opinion that it is necessary to determine whether there

are steps that can be taken to improve the cost-effectiveness of the program, or whether the program should be terminated.

Based on the foregoing, the Commission determines that no changes are required to the Company's Residential Smart \$aver EE program. The Commission also finds and concludes that if the program continues to demonstrate a prospective TRC result of less than 1.0 for the Vintage 2022 forecast in the next rider proceeding, the Company should include in its next rider filing a discussion of the actions being taken to maintain or improve cost-effectiveness, or alternatively, its plans to terminate the program.

Non-Residential Smart \$aver

In his direct testimony, DEC witness Evans indicated that two elements of the Non-Residential Smart \$aver program—Food Service and Information Technology—are not cost-effective. Witness Evans testified, however, that it would not be appropriate to discontinue these elements of the Non-Residential Smart \$aver Program. He stated that these elements are “integral” for insuring that a robust portfolio of prescriptive offerings is available for the Company's non-residential customers, and that these elements are merely measure categories within a much larger program. He explained that the TRC score for the prescriptive portion of the Non-Residential Smart \$aver Program is 2.05, and the TRC score for the Non-Residential Smart \$aver Program as a whole is 1.71. (Tr. at 61-62.)

Based on the foregoing, the Commission finds and concludes that the Company is not required to take any action with respect to these two measures of the Non-Residential Smart \$aver Program at this time.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 8

The evidence in support of this finding and conclusion can be found in the testimony and exhibits of DEC witness Evans and the testimony of Public Staff witness Williamson.

DEC witness Evans testified regarding the EM&V process, activities, and results presented in this proceeding. He explained that the EMF component of Rider 12 incorporates actual customer participation and evaluated load impacts determined through EM&V and applied pursuant to the EM&V Agreement. In addition, actual participation and evaluated load impacts are used prospectively to update estimated net lost revenues. (Tr. at 68.) In this proceeding, the Company submitted as exhibits to witness Evans' testimony detailed, completed EM&V reports or updates for the following programs: Income-Qualified EE and Weatherization Program (Neighborhood Energy Saver) - 2017 (Evans Exhibit A); My Home Energy Report Program Evaluation 2017-2018 (Evans Exhibit B); PowerShare Program – 2018 (Evans Exhibit C); Energy Efficiency Education in Schools 2017-2018 (Evans Exhibit D); and Residential Smart \$aver EE 2016-2017 (Revised) (Evans Exhibit E). (Id. at 55-56.)

In his testimony, Public Staff witness Williamson recommended that the EM&V reports filed in this proceeding, labeled as Evans Exhibits A through E, be

considered complete. (Id. at 268.) Witness Williamson reviewed prior Commission orders to determine if DEC complied with their provisions regarding EM&V. (Id. at 264.) Witness Williamson also confirmed that the Company's calculations incorporated the verified savings of the various EM&V reports. (Id. at 269.)

Witness Williamson noted several concerns with the EM&V report for the Neighborhood Energy Saver (NES) Program. First, he testified that the EM&V report determined program savings using an engineering analysis, which relied on information from other sources (namely, technical reference manuals from other states), rather than using a DEC-specific billing analysis. He explained that while the use of an engineering analysis is an acceptable analytical approach for the NES program, a billing analysis is preferable because it provides a more accurate representation of actual program performance. (Id. at 265-66.) Witness Williamson also raised a concern related to the evaluation of the net-to-gross ratio (NTGR). He testified that the engineering analysis assumes a NTGR of 1.0, which is standard practice for income-qualified programs. He also testified, however, that lighting accounts for 38% of the program's gross savings, and that there have been significant changes in the lighting market in recent years. The EM&V report indicated that many bulbs could not be installed because efficient bulbs were already present, which suggested a NTGR of less than 1.0 for lighting measures. In addition, he testified that the engineering analysis assumes the baseline wattage is equal to the federal standard (equivalent to a halogen bulb), when at the time of the evaluation, halogen bulbs likely only represented a small fraction of shelf space at stores selling bulbs to prospective lighting purchasers. According to witness

Williamson, the NTGR assumption and the presumed baseline wattage in the engineering analysis may overestimate the LED bulb savings component of the program. Witness Williamson stated that while Evans Exhibit A is acceptable for purposes of verifying the NES program savings, it would be appropriate to perform the next evaluation of the NES program as soon as possible, and to incorporate a billing analysis in that evaluation. He added that the Company has represented to the Public Staff that it will initiate the next evaluation “very soon.” (Id. at 266-67.)

Witness Williamson also raised a concern regarding cases in which similar or identical measures are offered across multiple programs. He testified that in such cases, the Company should ensure that the measures are evaluated consistently and using the same assumptions, including where the Company uses different contractors in the evaluations of those programs. He further recommended that where similar or identical measures are not evaluated consistently across programs, the Company should explain the differences justifying each case. (Id. at 268.)

No party contested the EM&V information submitted by the Company. The Commission therefore finds that the EM&V reports filed as Evans Exhibits A, B, C, D, and E are acceptable for purposes of this proceeding and should be considered complete for purposes of calculating program impacts.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 9-26

The evidence in support of these findings and conclusions can be found in the Sub 831 Order, Sub 831 Found Revenues Order, Sub 938 Waiver Order, Sub

938 Second Waiver Order, Sub 979 Order, Sub 1032 Order, and Sub 1130 Order; as well as in the Company's Application; the direct and supplemental testimony and exhibits of Company witness Miller, the direct and rebuttal testimony and exhibits of witness Evans; the rebuttal testimony of Company witness Duff; and the direct and supplemental testimony and exhibits of Public Staff witnesses Maness and Williamson and the direct testimony of Public Staff witness Hinton.

On February 26, 2020, DEC filed its Application seeking approval of Rider 12, which includes the formula for calculation of Rider EE, as well as the proposed billing factors to be effective for the 2021 rate period. Company witness Miller testified that the methods by which DEC has calculated its proposed Rider EE are the Sub 1032 Stipulation and the Mechanism approved in the Sub 1032 Order, as revised by the Sub 1130 Order. (Tr. at 19.)

Witness Miller provided an overview of the Mechanism, which is designed to allow the Company to collect revenue equal to its incurred program costs⁸ for a rate period, plus a PPI based on shared savings achieved by the Company's DSM and EE programs, and to recover NLR for EE programs only. (Id. at 19-23.) Witness Miller explained that the PPI is calculated by multiplying the net dollar savings achieved by the system portfolio of DSM and EE programs by a factor of 11.5%. (Id. at 24.) The system amount of PPI is then allocated to North Carolina retail customer classes to derive customer rates. (Id. at 25.) Company witness

⁸ Rule R8-68(b)(1) defines "program costs" as all reasonable and prudent expenses expected to be incurred by the electric public utility, during a rate period, for adopting and implementing new DSM and EE measures previously approved pursuant to Rule R8-68.

Evans explained that the calculation of the PPI is based on avoided cost savings, net of program costs, achieved through the implementation of the Company's DSM and EE programs. (Id. at 75.)

The Company may recover NLR associated with a particular vintage for a maximum of 36 months or the life of the measure, or until the implementation of new rates in a general rate case to the extent that the new rates are set to recover NLR. Witness Miller testified that for the prospective components of Rider EE, NLR are estimated by multiplying the portion of the Company's tariff rates that represents the recovery of fixed costs by the estimated North Carolina retail kilowatt (kW) and kWh reductions applicable to EE programs by rate schedule, and reducing this amount by estimated found revenues. (Id. at 26.) The fixed cost portion of the tariff rates is calculated by deducting the recovery of fuel and variable operation and maintenance costs from the tariff rates. (Id. at 25.) The NLR totals for residential and non-residential customers are then reduced by North Carolina retail found revenues computed using the weighted average lost revenue rates for each customer class. (Id. at 25.) For the EMF components of Rider EE, NLR are calculated by multiplying the fixed cost portion of the tariff rates by the actual and verified North Carolina retail kW and kWh reductions applicable to EE programs by rate schedule, and reducing this amount by actual found revenues. (Id. at 73.)

Witness Miller also testified about the impact of the Commission's *Order Accepting Stipulation, Deciding Contested Issues, and Requiring Revenue Reduction*, issued on June 22, 2018, in Docket No. E-7, Sub 1146, the Company's last base rate case. (Sub 1146 Order). In that Order, the Commission directed the

Company to maintain all of its federal excess deferred income taxes (EDIT) resulting from passage of the federal Tax Cuts and Jobs Act in a regulatory liability account pending flow back of that liability to DEC's ratepayers with interest. The Company was ordered to file its proposal to flow back the EDIT by June 22, 2021, or in its next general rate case, whichever is sooner. Witness Miller confirmed that on February 25, 2020, the Company filed a general rate case in Docket No. E-7, Sub 1214, in which it proposed that all EDIT be returned to customers through a separate rider. Thus, the Company did not include a placeholder to mitigate potential overcollections of lost revenues as it did in its Rider 11 filing. Witness Miller also noted that if the mechanism for returning EDIT to customers changes as part of the final outcome in the pending general rate case, the Company will file supplemental exhibits incorporating the appropriate adjustments. (Tr. at 26-28.)

Witness Evans described how, in accordance with the Sub 831 Settlement, the Commission's Sub 831 Found Revenues Order, and the Sub 1032 Stipulation, DEC reduces NLR by net found revenues. (Id. at 71-72.) Additionally, he stated that the Company has continued the practice the Commission approved in its *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice* issued on August 21, 2015, in Docket No. E-7, Sub 1073, for purposes of that proceeding, of reducing net found revenues by the monetary impact (negative found revenues) caused by reductions in consumption resulting from the Company's current initiative to replace Mercury Vapor lights with LED fixtures. (Id. at 72-73.)

According to witness Miller, in each of its annual rider filings, DEC performs an annual true-up process for the prior calendar year vintages. The true-up reflects actual participation and verified EM&V results for the most recently completed vintage, applied in accordance with the EM&V Agreement. (Id. at 20.) The Company expects that most EM&V will be available in the time frame needed to true-up each vintage in the following calendar year. (Id. at 21.) If any EM&V results for a vintage are not available in time for inclusion in DEC's annual rider filing, however, then the Company will make an appropriate adjustment in the next annual filing. (Id.)

Under the Sub 1032 Stipulation, as witness Miller explained, deferral accounting may be used for over- and under-recoveries of costs eligible for recovery through the annual DSM/EE rider. (Id. at 20.) The balance in the deferral accounts, net of deferred income taxes, may accrue a return at the net-of-tax rate of return approved in the Company's then most recent general rate case. (Id.) She testified that the methodology used for the calculation of interest shall be the same as that typically utilized for the Company's Existing DSM Program Rider proceedings. Pursuant to Commission Rule R8-69(c)(3), the Company will not accrue a return on NLR or the PPI. (Id.)

Under the Sub 1032 Stipulation, and the Sub 938 First Waiver Order, qualifying non-residential customers may opt out of the DSM and/or EE portion of Rider EE during annual election periods. (Id. at 28.) Rider EE will be charged to all customers who have not elected to opt out during an enrollment period and who participate in any vintage year of programs, and these customers will be subject to

all true-up provisions of the approved Rider EE for any vintage in which the customers participate. (Id.) Witness Miller explained that the Mechanism affords an additional opportunity for participation whereby qualifying customers may opt in to the Company's EE and/or DSM programs during the first five business days of March. (Id. at 29.) Customers who elect to begin participating in the Company's DSM and/or EE programs during the special "opt-in period" during March of each year will be retroactively billed the applicable Rider EE amounts back to January 1 of the vintage year, such that they will pay the appropriate Rider EE amounts for the full rate period. (Id.)

Witness Miller explained that the billing factors are computed separately for DSM and EE measures by dividing the revenue requirements for each customer class, residential and non-residential, by the forecasted sales for the rate period for the customer class. (Id. at 22.) For non-residential rates, the forecasted sales exclude the estimated sales to customers who have elected to opt out of paying Rider EE. The non-residential billing factors are separately computed for each vintage. (Id. at 22-23.)

Witness Miller testified that program costs and incentives for EE programs targeted at retail residential customers across North Carolina and South Carolina are allocated to the North Carolina retail jurisdiction based on the ratio of North Carolina retail kWh sales (grossed up for line losses) to total retail kWh sales (grossed up for line losses), and then recovered only from North Carolina retail residential customers. (Id. at 23) Revenue requirements related to EE programs targeted at retail non-residential customers across North Carolina and South

Carolina are allocated to the North Carolina retail jurisdiction based on the ratio of North Carolina retail kWh sales (grossed up for line losses) to total retail kWh sales (grossed up for line losses), and then recovered from only North Carolina retail non-residential customers. (Id.) The portion of revenue requirements related to NLR is computed based on the kW and kWh savings of North Carolina retail customers. (Id.)

For DSM programs, witness Miller noted, the aggregated revenue requirement for all retail DSM programs targeted at both residential and non-residential customers across North Carolina and South Carolina is allocated to the North Carolina retail jurisdiction based on the North Carolina retail contribution to total retail peak demand. Both residential and non-residential customer classes are allocated a share of total system DSM revenue requirements based on each group's contribution to total retail peak demand. (Id. at 24) The allocation factors used in DSM/EE EMF true-up calculations for each vintage are based on the Company's most recently filed Cost of Service studies at the time that the Rider EE filing incorporating the true-up is made. (Id.) If there are subsequent true-ups for a vintage, the allocation factors used will be the same as those used in the original DSM/EE EMF true-up calculations. (Id.)

Witness Miller explained that DEC calculates one integrated (prospective) DSM/EE rider and one integrated DSM/EE EMF rider for the residential class, to be effective each rate period. (Id. at 21.) The integrated residential DSM/EE EMF rider includes all true-ups for each applicable vintage year. (Id.) Given that qualifying non-residential customers can opt out of DSM and/or EE programs,

DEC calculates separate DSM and EE billing factors for the non-residential class. Additionally, the non-residential DSM and EE EMF billing factors are determined separately for each applicable vintage year, so that the factors can be appropriately charged to non-residential customers based on their opt-in/out status and participation for each vintage year. (Id.)

Prospective Components of Rider 12

Rider 12 consists of five prospective components: (1) a prospective Vintage 2021 component designed to collect program costs and the PPI for DEC's 2021 vintage of DSM programs; (2) a prospective Vintage 2021 component to collect program costs, PPI, and the first year of net lost revenues for DEC's 2021 vintage of EE programs; (3) a prospective Vintage 2020 component designed to collect the second year of estimated net lost revenues for DEC's 2020 vintage of EE programs; (4) a prospective Vintage 2019 component designed to collect the third year of estimated net lost revenues for DEC's 2019 vintage of EE programs; and (5) a prospective Vintage 2018 component designed to collect the fourth year of estimated lost revenues for DEC's 2018 vintage of non-residential EE programs. (Id. at 22.)

Pursuant to the Sub 938 Second Waiver Order and the Sub 1032 Order, the rate period for the prospective components of Rider 11 is January 1, 2021 through December 31, 2021. (Id. at 30.)

The prospective revenue requirements for Vintage 2018 are determined separately for residential and non-residential customer classes and are based on

the fourth year of estimated NLR for the Company's Vintage 2018 EE programs. (Id. at 30.) The amounts are based on estimated North Carolina retail kW and kWh reductions and the Company's rates approved in DEC's most recent general rate case, Docket No. E-7, Sub 1146, which became effective August 1, 2018, adjusted as described above to recover only the fixed cost component. (Id.) Certain non-residential lost revenues associated with vintages through the test period January 1, 2018, through December 31, 2018, have been removed from the prospective period as of August 1, 2020, assuming new base rates to become effective in the pending general rate case, Docket No. E-7, Sub 1214, recover the net lost revenues associated with those specific kWh sales reductions. All amounts will be "trued up" during the next EMF period. (Id.)

The prospective revenue requirements for Vintage 2019 are determined separately for residential and non-residential customer classes and are based on the third year of estimated NLR for the Company's Vintage 2019 EE programs. (Id. at 30.) The amounts are based on estimated North Carolina retail kW and kWh reductions and DEC's rates approved in Sub 1146, which became effective August 1, 2018, adjusted as described to only recover the fixed cost component. (Id. at 31.) Certain non-residential lost revenues associated with vintages through the updated test period February 1, 2019, through January 31, 2020, have been removed from the prospective period as of August 1, 2020, assuming new base rates to become effective in the pending general rate case, Docket No. E-7, Sub 1214, recover the net lost revenues associated with those specific kWh sales reductions. All amounts will be "trued up" during the next EMF period. (Id.)

The prospective revenue requirements for Vintage 2020 are determined separately for residential and non-residential customer classes and are based on the second year of estimated NLR for its Vintage 2020 EE programs. The amounts are based on estimated North Carolina retail kW and kWh reductions and DEC's rates approved in Sub 1146, which became effective August 1, 2018, adjusted as described to only recover the fixed cost component. (Id.) Certain non-residential lost revenues associated with vintages through the updated test period February 1, 2019, through January 31, 2020, have been removed from the prospective period as of August 1, 2020, assuming new base rates to become effective in the pending general rate case, Docket No. E-7, Sub 1214, recover the net lost revenues associated with those specific kWh sales reductions. All amounts will be "trued up" during the next EMF period. (Id. at 32.)

The prospective revenue requirements for Vintage 2021 EE programs include estimates of program costs, the PPI, and the first year of NLR determined separately for residential and non-residential customer classes. (Id.) The program costs and shared savings incentive are computed at the system level and allocated to North Carolina retail operations. The NLR for EE programs are based on estimated North Carolina retail kW and kWh reductions and the rates approved in Sub 1146, which became effective August 1, 2018. (Id.)

On May 11, 2020, DEC witness Miller filed supplemental testimony and exhibits reflecting prospective billing factors for Rider 12 of 0.4184 cents per kWh for all North Carolina retail residential customers, 0.3522 cents per kWh for non-residential Vintage 2021 EE participants, 0.1200 cents per kWh for non-residential

Vintage 2021 DSM participants, 0.0612 cents per kWh for non-residential Vintage 2020 EE participants, 0.0687 cents per kWh for non-residential Vintage 2019 EE participants, and 0.0137 cents per kWh for non-residential Vintage 2018 EE participants. (Id. at 44.)

EMF Components of Rider 12

Rider 12 includes the following EMF components: (1) a true up of Vintage 2016 lost revenues; (2) a true up of Vintage 2017 lost revenues; (3) a true-up of Vintage 2018 PPI, participation, and lost revenues for DSM/EE programs based on additional EM&V results received; and (4) a true-up of Vintage 2019 program costs, PPI, and lost revenues for DSM/EE programs. (Id. at 22.)

Witness Miller testified that pursuant to the Sub 938 Second Waiver Order and the Sub 1032 Order, the “test period” for the Vintage 2019 EMF component is January 1, 2019, through December 31, 2019. (Id. at 32-33.) As the Sub 938 Second Waiver Order allows the EMF to cover multiple test periods, the test period for the Vintage 2018 EMF component is January 1, 2018, through December 31, 2018, the test period for the Vintage 2017 EMF component is January 1, 2017, through December 31, 2017, and the test period for the Vintage 2016 EMF component is January 1, 2016, through December 31, 2016. (Id. at 33.)

Witness Miller explained the updates to the Vintage 2019 estimate filed in 2018 that comprise the Vintage 2019 EMF component of Rider 12. Estimated participation for Vintage 2019 was updated for actual participation for the period January 2019, through December 2019. Regarding NLR, estimated participation

for Year 1 of Vintage 2019 used a half-year convention, while the NLR for Year 1 of Vintage 2019 true-up was updated for actual participation for the period January through December 2019 and actual 2019 lost revenue rates. (Id.) Found revenues for Year 1 of Vintage 2019 were trued up according to Commission-approved guidelines. (Id.) To reflect the results of EM&V, Vintage 2019 estimated avoided cost savings were updated pursuant to the EM&V Agreement. Finally, while the Vintage 2019 estimate included only the programs approved prior to the filing of the estimated Vintage 2019 revenue requirement, the Year 1 Vintage 2019 true-up was updated for new programs and pilots approved and implemented during Vintage 2019. (Id. at 33-34.) For DSM programs, the Vintage 2019 true-up reflects the actual quantity of demand reduction capability for the Vintage 2019 period. (Id. at 34.)

Actual year one (2019) NLR for Vintage 2019 were calculated using actual kW and kWh savings by North Carolina retail participants by customer class in 2019, based on actual participation and load impacts applied according to the EM&V Agreement. (Id. at 34-35.) The rates applied to the kW and kWh savings are those in effect for 2019, reduced by fuel and variable operation costs. (Id. at 35.) NLR were then offset by actual found revenues for Year 1 NLR of Vintage 201. (Id.) NLR were calculated by rate schedule within the residential and non-residential customer classes. (Id.)

Witness Miller also described the basis for the Vintage 2018 EMF component of Rider 12. She explained that avoided costs and NLR for Vintage 2018 EE programs were trued-up based on updated EM&V participation results

and the impacts of DEC's recent rate case, Sub 1146. (Id.) Avoided costs for Vintage 2018 DSM programs were trued- up to update participation results. (Id.) She explained that the actual kW and kWh savings were as experienced during the period January 1, 2018, through December 31, 2018. The rates applied to the kW and kWh savings are the retail rates that were in effect during each period the lost revenues were earned, reduced by fuel and other variable costs. (Id.)

Witness Miller explained the basis for the Vintage 2017 EMF component of Rider 12. (Id.) She explained that all years were trued-up based on updated EM&V results. (Id.) She explained that the actual kW and kWh savings were as experienced during the period January 1, 2017, through December 31, 2017. The rates applied to the kW and kWh savings are the retail rates that were in effect during each period the lost revenues were earned, reduced by fuel and other variable costs. (Id. at 35-36.)

In her May 11, 2020 supplemental testimony and exhibits, Company witness Miller updated lost revenues based on EM&V, adjusted Vintages 2018, 2019 and 2021, Vintage 2019 program costs resulting from the Public Staff's program cost audit, and included Vintage 2016 lost revenues that had been omitted from the original filing. (Id. at 40-42.) These updates were reflected on Supplemental Miller Exhibits 1-4; Supplemental Miller Exhibit 6-7; and Supplemental Evans Exhibits 1-3. (Id. at 42-44.) She requested approval of the following annual billing adjustments, on a cents per kWh basis, with regulatory fee included:

EMF Residential	0.1011
Prospective Residential	0.4184
2016 EMF Non-Residential EE	0.0193
2016 EMF Non-Residential DSM	(0.0001)
2017 EMF Non-Residential EE	0.0342
2017 EMF Non-Residential DSM	0.0000
2018 EMF Non-Residential EE	(0.0049)
2018 EMF Non-Residential DSM	(0.0014)
2019 EMF Non-Residential EE	(0.0225)
2019 EMF Non-Residential DSM	0.0019
2018 Prospective Non-Residential EE	0.0137
2019 Prospective Non-Residential EE	0.0687
2020 Prospective Non-Residential EE	0.0612
2021 Prospective Non-Residential EE	0.3522
2021 Prospective Non-Residential DSM	0.1200

(Id. at 44-45.)

Avoided Costs Used in Calculating the PPI

In his testimony, Public Staff witness Hinton proposed two adjustments to the avoided capacity costs benefits used by DEC in the calculation of its PPI.⁹ First,

⁹ As discussed by Public Staff witness Williamson, the adjustments to avoided capacity costs (benefits) proposed by Mr. Hinton also impact the projections of ongoing cost-effectiveness for DEC's DSM programs. However, even with Mr. Hinton's proposed adjustments, the DSM programs continue to be cost-effective.

Mr. Hinton recommended that the Commission require DEC to remove the 17% adder it had applied to all of the megawatt (MW) reductions (demand reduction benefits) associated with the Company's EE programs beginning with vintage year 2021. Second, he recommended that the Company apply a seasonal capacity allocation factor of 90% for the winter season and 10% seasonal allocation factor for the summer season to its entire portfolio of programs consistent with the seasonal allocation factor approved in Docket No. E-100, Sub 158. (Id. at 204-06.)

Parties Discussion of the Issues

Mr. Hinton explained that in Docket No. E-100, Sub 158 (Sub 158), the Commission issued its Notice of Decision on October 7, 2019, on its determination of avoided energy and avoided capacity rates, DEC filed its compliance rates on November 1, 2019, and the Commission issued its Final Order on April 15, 2020, establishing these rates. (Id. at 204.) He noted that in this proceeding, the Company updated its underlying avoided cost inputs for both capacity and energy to be derived from the Sub 158 rates. (Id.)

Mr. Hinton indicated that for the first time, the Company is proposing in this proceeding to increase the value of the demand reduction benefits from EE programs by 17%. (Id. at 206-07.) He explained that in DEC's Integrated Resource Plan (IRP), DEC reduces its peak load by the amount of the demand reduction from EE programs, which DEC considers to be a demand-side resource, as shown in the Load, Capacity, and Reserve (LCR) Tables included in DEC's IRP. (Id. at 206.) Mr. Hinton acknowledged the Company's argument that since it increases

the amount of supply-side resources required to meet the projected peak load by a 17% reserve margin, a similar reserve margin adjustment is appropriate for demand-side resources. (Id.) Mr. Hinton pointed out that under DEC's premise, a 100 MW load reduction from EE should reduce DEC's existing generating capacity by 119 MW to maintain its reserve margin, thereby equating the value to customers of 100 MW of demand-side EE programs to 119 MW of supply-side resources, which is logical from an IRP planning perspective. (Id. at 206-08.) However, he noted, the key question is the appropriate value of a MW of load reduction to customers. (Id. at 208.) Mr. Hinton argued that it would be unfair to customers to force them to pay 17% more for the same amount of demand reduction from a demand-side resource. (Id.)

Mr. Hinton also noted that the avoided capacity rate includes a 5% Performance Adjustment (PAF) factor. (Id. at 209-10.) He explained that the PAF was designed to allow a QF to experience a reasonable number of outages and still receive its full capacity payment. (Id. at 210.) Otherwise, a QF would have to operate 100% of its on-peak hours throughout the year in order to receive its full capacity payment. (Id.) He further noted that in Docket No. E-100, Sub 148, the Commission approved a lower PAF of 1.05 that was based on an equivalent forced outage rate for all of its generation resources. (Id.) This PAF was also approved in Sub 158. (Id. at 209.)

Mr. Hinton opined that the proposed reserve margin adder was inconsistent with the Sub 1130 revisions to the Sub 1032 Mechanism as it did not properly apply the Sub 158 avoided capacity rates. (Id. at 211-12.) Further, he noted that including

a reserve margin adder was a major change to the Mechanism, and thus should be considered in a total review of the Mechanism, where the impact of this change would be balanced against other elements such as the PPI percentage. (Id. at 212-13.) He noted that per Public Staff witness Maness, the NC retail impact of the removal of the reserve margin adder on the PPI is \$618,791. (Id. at 213.)

In regard to the seasonal allocation adjustment, Mr. Hinton explained that the Company had accorded avoided capacity benefits to “legacy” DSM programs using a 100% summer seasonal allocation weighting, while applying to “incremental” measures avoided capacity benefits using the Sub 158 seasonal allocation of 90% winter and 10% summer.¹⁰ (Id. at 213-14.) He stated that the Company justified this approach on the basis that these “legacy” measures and participation are included in its IRP. (Id. at 214.)

Mr. Hinton pointed out that the Company has maintained that it had switched to being a winter planning system as documented in its 2016 Resource Adequacy Study, 2016 and 2018 Biennial Avoided Cost proceedings, and 2016 and 2018 biennial IRPs. (Id. at 214.) In regard to its ongoing 2020 Reserve Margin Study, witness Hinton noted that DEC's 2018 IRP projects summer peaks 300-400 MW above winter peaks during most of the planning period; however, DEC has indicated that it is a winter planning system. (Id.) He noted that the Commission approved seasonal allocation factors in Docket No. E-100, Sub 148 of 80% winter

¹⁰ DEC makes a distinction between “legacy” and “incremental” DSM programs in its evaluation of the portfolio and program cost effectiveness. “Legacy” DSM is the level of DSM activation capability that was originally projected for the year 2021 in DEC's 2018 IRP, while “incremental” is all activation capability that is above the projected levels of the 2018 IRP for year 2021.

and 20% summer, while shifting to even more of a winter allocation in the Sub 158 proceeding. (Id. at 215.) Mr. Hinton said that in Sub 158, the Company indicated that these allocation factors recognized the loss of load risk that was greater in the winter and would send appropriate price signals to QFs. (Id. at 215-16.)

Mr. Hinton expressed skepticism about the merit of the proposal to treat legacy and incremental DSM differently when there had been increasing emphasis on winter planning in the Sub 158 proceeding. (Id. at 216-17.) He stated that summer DSM now has less value as both a capacity resource at the expected time of peak and in dollars per kW associated with the demand reductions. (Id.) Mr. Hinton pointed out that if the Sub 158 seasonal allocation was applied to DEC's legacy DSM programs, all would continue to be cost effective. (Id. at 217.) Moreover, he noted that the Commission had expressed concerns regarding the Company's need to develop programs that reduce the winter peak. (Id. at 217-18.) Mr. Hinton pointed out that application of the Sub 158 allocation of seasonal capacity value to these legacy DSM programs would encourage the Company to emphasize programs that reduce load during the winter season. (Id. at 218.) He also provided evidence using system lambdas and dates of activation of DEC's air conditioning cycling program that tended to show that the capacity value of this summer DSM program has gone down over time as DEC becomes more and more of a winter planning utility. (Id. at 218-21.) Therefore, Mr. Hinton recommended that the Commission require DEC to apply the current biennial avoided cost proceeding seasonal allocation of capacity benefits to all of its DSM programs. (Id. at 221-22.)

DEC witness Duff testified that since EE is treated as a load reduction resource in the IRP, it is appropriate to apply a 17% reserve margin to it as to an increase in system load. (Id. at 119.) He pointed out that for every kW of load reduction from EE, the Company does not have to plan for 1.17 kW of load serving capacity. (Id.) Mr. Duff noted that the IRP treats EE and DSM programs differently - EE programs reduce the load forecast and reduce the need to build a reserve, while DSM programs are treated as a supply-side dispatchable resource; they neither reduce the load forecast, nor reduce the reserve margin requirement. (Id. at 123.) In regard to Mr. Hinton's argument that the PAF included in avoided capacity rates was equivalent to a reserve margin adjustment, Mr. Duff argued that if the Commission were to agree with this argument, it should only reduce the reserve margin adder by the amount of the PAF. (Id. at 124.)

DEC witness Duff testified that the Company made one change to its application of avoided capacity costs in this proceeding from previous proceedings by voluntarily applying the 90% Winter/10% Summer allocation approved in Sub 158 for all new incremental participation in both EE and DSM programs. (Id. at 108.) He explained that the Company voluntarily adopted this seasonal allocation to encourage the development of programs that provide winter capacity and because it better aligns with how QFs receive capacity value. (Id. at 109.) Mr. Duff defended the application of these seasonal allocation factors to only incremental programs by pointing out that in Sub 158, the 90/10% seasonal allocation factors were applied only to future QF capacity and not to existing power purchase agreements. (Id. at 110) He also noted that this treatment of legacy DSM was

consistent with the Commission's Order in the Sub 1164 proceeding. (Id. at 112.) Mr. Duff contended that the Public Staff's proposal would devalue existing DSM resources as opposed to encouraging new winter capacity. (Id. at 116.)

During questioning by Chair Mitchell about the effect of the Public Staff's recommendations on the cost effectiveness of DSM programs, witness Duff acknowledged that the programs would remain cost-effective. (Id. at 170.) He noted that future changes in the avoided T&D rates could make these programs no longer cost effective and, in his opinion, it would be too early to know the full impact of the recommendation in light of the upcoming avoided T&D study. (Id. at 170-71.) Upon further questioning, witness Duff acknowledged that application of the Public Staff's recommendation to the Company's DSM programs would not change the value of participation in a DSM program to an individual DEC customer, but rather it would change the value proposition of the Company's DSM programs to *all* (emphasis added) customers. (Id. at 172.)

Referencing testimony that made comparisons between treatment of DSM/EE programs and QFs, Commissioner Hughes questioned witness Hinton regarding the revenue flows and cost recovery for a QF versus a DSM/EE program. (Id. at 297-98.) Witness Hinton stated that the revenue stream of a QF contract is set over a fixed term contract, whereas DSM/EE programs are only a one-sided arrangement for the utility with the ratepayers paying the costs through a rider. (Id. at 298.) He noted that in Docket No. E-7, Sub 1130, it was agreed by parties that avoided costs for the programs would be calculated using the PURPA method, which meant that these rates would change every two

years, unlike the long-term fixed QF contract where rates remain unchanged. (Id. at 299-301.) Witness Hinton testified that the Company's proposal to use the PURPA¹¹ method encompassed the risk that the capacity value of DSM over the summer season could decrease and consequently the revenue flows from summer DSM programs, like air conditioning cycling, could decrease. (Id. at 301-02.) Witness Hinton went on to state that avoided cost rates are not static and the issue of declining avoided costs has been discussed with the Company for years. (Id.) Lastly, witness Hinton noted that the rider provides that the Company recoups its prudently incurred program costs; the risk would apply to the amount of the incentive which is earned by the Company and is based on the amount of shared savings produced by the programs calculated using the avoided capacity savings. (Id. at 302.)

Commission Discussion

Based on the foregoing, the Commission concludes that the appropriate avoided capacity benefits and per kWh avoided energy benefits to be used for the initial estimate of the Vintage 2021 PPI and any Vintage 2021 PPI true-up should be derived from the approved Docket No. E-100, Sub 158 PURPA production cost model as outlined in Docket No. E-7, Sub 1130, which includes capacity weighting by season. Thus, it was appropriate for DEC to allocate avoided capacity benefits by season to its Vintage 2021 DSM programs, but it should have applied the seasonal allocation to all of those measures. The Commission notes that its

¹¹ Public Utility Regulatory Policies Act, Pub. L. 95-617, 92 Stat. 3117, enacted November 9, 1978.

decision in the Sub 1164 case did not rule on the Company's legacy/incremental distinction, but rather whether the use of a "zero capacity" value when the IRP did not show a capacity need was consistent with the Mechanism as revised or when it would undervalue DSM programs or send the correct price signals. This case is different. As the Public Staff points out, the Commission has for a number of years emphasized the need for the Company to develop winter DSM programs based on DEC's contention that it is winter planning. Use of a seasonal allocation does not undervalue programs; instead, it appropriately values the load reductions associated with its DSM programs, thereby sending the correct price signal.

The Commission is persuaded that the avoided capacity benefits should be calculated using the approved production model from the most recent Biennial Avoided Cost proceeding; moreover, legacy programs should not be exempt from the approved season weighting of capacity value. It is inequitable to ratepayers to weight the value of capacity offered by QFs during the summer season at 10%, while according summer load reductions generated by the Company's DSM programs beginning in 2021 a capacity value of 100%. As such, the Commission finds that the avoided capacity benefits for Vintage 2021 measures of both legacy and new incremental programs should be based on the approved cost inputs in the production model with the approved seasonal weighting as provided in Docket No. E-100, Sub 158. The Commission notes that the Public Staff's recommendation and the Commission's conclusion in this regard does not apply to DSM measures that are implemented prior to year 2021; therefore, application of its conclusion will not change the avoided cost benefits found to have resulted

from measures implemented in prior years, even when those measures are associated with the same DSM programs for which the Sub 158 change in seasonal allocation will apply to the 2021-vintage measures.

Furthermore, the Commission finds that the use of seasonal capacity weighting is consistent with the Company's past IRPs, Reserve Adequacy Studies, and Biennial Avoided Cost proceedings. As such, it is reasonable to recognize the increased value of winter-related DSM programs. This recognition does not penalize summer DSM programs; rather, it provides the Company an appropriate incentive to aggressively pursue programs that reduce load in the appropriate (at this time, winter) season. This incentive appears to be necessary given the slow progress the Company has made in making winter season DSM programs available to its customers.

With regard to the use of the reserve margin adder, the Commission agrees with the Public Staff that it is inappropriate for the Company to increase the capacity savings value of EE programs by 17%. First, use of this adder is inconsistent with the current Mechanism, and as Public Staff witness Hinton points out, should be considered along with any other changes to the Mechanism during an overall Mechanism review. Second, the avoided capacity cost rates already include an allowance for a 1.05 PAF, which prior to the Sub 148 proceeding, had some equivalence to the reserve margin. DEC's application of a different reserve margin when the capacity rates already include an amount that accounts for the reserve margin is not appropriate. Finally, the Commission agrees with Mr. Hinton that allowing the application of a reserve margin adder inappropriately gives EE a

higher value than DSM. As discussed above, the Commission has for several years been encouraging DEC to develop winter DSM programs, and allowing EE to receive a higher capacity value than DSM would undermine that effort. The playing field should be level for both types of demand-side resources. DEC's choice as to how it models DSM and EE in its IRP should not result in disparate treatment of these two resources.

Additionally, the Commission notes that DEC applied its proposed seasonal allocation and the reserve margin adder to its rider calculations, but did not include a request to change the Mechanism or any testimony noting this change in methodology. This is not appropriate. In future cases, any changes to the methodology used for calculating the rider should be identified in testimony, including the reasons for the change and the impact of the change, as well as whether a change to the Mechanism is requested.

Public Staff Review of Company Rider 12 Calculations

Public Staff witness Maness testified that his investigation of DEC's filing in this proceeding focused on whether the Company's proposed DSM/EE billing factors (a) were calculated in accordance with the Sub 1032 Settlement, the Sub 1130 Order, and the Revised Mechanism, and (b) otherwise adhered to sound ratemaking concepts and principles. (Tr. At 323.)

Public Staff witness Maness testified that as part of its investigation in this proceeding, the Public Staff performed a review of the DSM/EE program costs incurred by DEC during the 12-month period ended December 31, 2019. (Id.) To

accomplish this, the Public Staff selected and reviewed a sample of source documentation for test year costs included by the Company for recovery through the DSM/EE riders. Review of this sample was intended to test whether the costs included by the Company in the DSM/EE riders are valid costs of approved DSM and EE programs. (Id.) In his June 8, 2020, Supplemental Testimony, Mr. Maness stated that other than the item described below and adjusted by the Company in its supplemental testimony, the Public Staff found no material differences between the program costs as filed by the Company and the costs as reflected in the supporting documentation examined. (Id. at 340)

Witness Maness further noted the following with respect to the Public Staff's investigation:

- Review of Vintage Year 2019 Program Costs – the Public Staff's review of the selected sample items from the 2019 DSM/EE program costs resulted in one exception related to certain adjustments that the Company made to its DSM/EE program costs in last year's DSM/EE rider proceeding, Docket No. E-7, Sub 1192. In that proceeding, both the Company and the Public Staff made adjustments to the program costs included in the calculation of Rider 11 to incorporate certain credits to Vintage Year 2018 North Carolina retail program costs that were not actually recorded in the Company's general ledger until 2019. Thus, when the time came to calculate Vintage Year 2019 North Carolina retail program costs for purposes of Rider 12 to be set in this proceeding, the Company reversed the credits recorded in the general ledger in 2019 that had already been reflected in the Rider 11

calculation, but inadvertently calculated a greater reversal than it should have, thus overstating North Carolina retail Vintage Year 2019 program costs by approximately \$725,000. The Company subsequently incorporated this adjustment into witnesses Evans and Miller's Supplemental Testimony and Exhibits. These reductions in Vintage Year 2019 program costs will result in an approximate \$83,000 increase in the Vintage Year 2019 PPI. (Id. at 324-26.)

- Return on Deferred Program Costs and Interest on Over-recoveries – Witness Maness stated that, as in past proceedings, the Public Staff reserves the right to raise the issue of the appropriate interest rate on overrecoveries on utility incentives. (Id. at 326.)

In his supplemental testimony, Mr. Maness filed corrected calculations that took into account revisions made to the adjustments recommended by Public Staff witnesses Hinton and Williamson to adjust seasonal weightings of avoided capacity benefits associated with DSM programs and to remove inappropriately added reserve margins to the avoided cost savings of EE programs. (Id. at 337-39.) Other than these issues, the Public Staff found no errors or other issues necessitating an adjustment to Rider 12 billing factors. (Id. at 339.) Based on the Public Staff's adjustments, Mr. Maness recommended the following Vintage 2021 prospective factors:

(In cents per kWh)

Res. DSM/EE factor	0.4099
Non-Res. EE factor	0.3495
Non-Res. DSM factor	0.1084

(Id.)

Conclusions on Calculations of Rider EE

Based on the foregoing, the Commission finds and concludes that the components of Rider 12 as adjusted by the Public Staff are in compliance with the Commission's findings and conclusions herein, as well as the Commission's findings and conclusions as set forth in the Sub 1032 Stipulation and the Mechanism approved in the Sub 1032 Order, as revised by the Sub 1130 Order.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 27-28

The evidence in support of these findings and conclusions can be found in the testimony of DEC witness Evans and SACE witness Bradley-Wright.

Company witness Evans testified that since the June 11, 2019 hearing in Sub 1192, the Collaborative has met four times, in July 2019, September 2019, November 2019, and January 2020. He also testified that in between meetings, interested stakeholders joined conference calls and informal meetings to zero in on certain agenda items or priorities that could not be fully explored during the formal meetings. (Tr. at 76.) Witness Bradley-Wright also testified that the

Collaborative has met regularly, consistent with the Commission's Order in Sub 1192. (Id. at 371.)

Witness Evans stated that the Company has improved the flow of information and refined its methods of engagement in response to feedback from stakeholders. He further stated that the Company has on occasion asked the Collaborative to review program modifications on a compressed timeline, and that, in order to ensure that members can contribute meaningfully to proposals for new programs or modifications to existing programs in the future, the Company has begun to bring program ideas to the Collaborative during the research phase. In addition, he testified that the Company has used input from the Collaborative to expand the reach of its programs, citing the Smart \$aver Custom Design Assistance program as an example. (Id. at 77-78.) Witness Evans testified that the Collaborative has identified several programs for low- and middle-income families, manufactured homes, renters, and small and medium commercial and industrial customers in which they have insight or experience that they can share with the Company. (Id. at 78.)

Witness Evans also testified that some have expressed the desire for the Company to have a standard reporting protocol that is convenient for review and analysis and that allows for topline trends and takeaways to be easily identified. He testified that the format of its regulatory filing is to present information relevant to cost recovery, and that the Company does not wish to alter the format of its rider filings unless directed to do so by the Commission or Public Staff. In response to the desire for a standard reporting protocol, however, the Company is developing

a new structure for reporting both DEC's and DEP's program performance metrics to the Collaborative. He explained that the new structure will show historical participation, impacts, and costs by program, and that it will compare actual results to plans, break down budgets by category, identify cost/benefit test results, and situate the savings in the context of the broader utility. Witness Evans stated that the Company would present the analysis in the March 2020 Collaborative meeting and make ongoing improvements based on member feedback. (Id. at 79.) Witness Bradley-Wright testified that the Company had presented a prototype visual dashboard to the Collaborative that compared projections to reported values for expenditures, savings, and participation at the program and portfolio level. (Id. at 379.) He noted that the dashboard shows program performance at a glance, and shows trends in budgets, actual costs, and savings. He added that prior to the development of the dashboard, year-over-year comparisons would have required manually gathering and assembling data, and that the prototype dashboard is a "vast improvement." He explained that the dashboard is continuing to be refined. Witness Bradley-Wright also testified that if the Company were to provide electronic workbooks containing the information provided in the dashboard, both to the Collaborative and in future rider filings, that it could prove highly beneficial for review and analysis and could streamline the discovery process for all parties. He recommended that the Company continue to work with the Collaborative to refine its data reporting and share associated workpapers as appropriate, such that Collaborative members can better understand program and portfolio

performance and identify opportunities and solutions that lead to expanded efficiency savings. (Id. at 380.)

Witness Bradley-Wright testified that the Collaborative meetings have included regular updates on program performance and EM&V reports by the Company, and that the Collaborative has focused on the following areas: increasing savings impact for low-income customers; examination of portfolio-level opportunities and challenges for increasing overall efficiency savings; market potential study; understanding the Company's marketing strategy and execution; cost-effectiveness testing protocols and assumptions; new delivery channels; and new program ideas. (Id. at 372-73.)

Witness Bradley-Wright also testified that the Collaborative has gained a much deeper understanding of the issues surrounding low-income savings impact, and that the Collaborative has discussed in-depth the Company's ability to increase its low-income program savings through partnership with weatherization providers. According to witness Bradley-Wright, some near-term benefits have already resulted from these discussions. He noted that he hopes the Collaborative will develop clear recommendations for the Company for increasing its low-income savings, and that the Company will come to the Commission for approval to implement the recommendations. (Id. at 373-74.)

Witness Bradley-Wright explained that the Collaborative prioritized examination of portfolio-level opportunities and challenges in 2019 as a precursor to developing recommendations to help increase the Company's overall energy

savings levels. He added that the Collaborative recognized that increasing portfolio savings would require responding to the challenges created by diminishing cost-effectiveness caused by decreasing avoided costs and more efficient baselines. He explained that Exhibit 7 to his testimony is a year-end summary report by the Collaborative covering topics ranging from member perspectives on the 1% savings goal, market dynamics, state policy and regulatory matters, and potential new programs and delivery channels that could lead to increased efficiency savings. (Id. at 374-75.) Witness Bradley-Wright also provided a list of several new program ideas raised by Collaborative members, and indicated that those ideas will be discussed further in upcoming Collaborative meetings. (Id. at 376-77.) He added that the Collaborative had had several discussions concerning “energy efficiency as a service,” which he explained refers to programs with incentives that are tied to actual, metered energy savings rather than to deemed or engineered savings values. The program concept also considers financing options to assist customers with the upfront cost of deeper efficiency improvements. (Id. at 377.)

With respect to cost-effectiveness, witness Bradley-Wright testified that the application of the TRC test as used by the Company does not fully reflect the monetary value of the benefits that energy efficiency provides to program participants, and stated that some of the Collaborative participants support a recommended change to the Mechanism in which the UCT would determine cost-effectiveness, rather than the TRC test. He also testified that the Collaborative continues to seek new program opportunities and delivery channels that reduce costs and increase benefits to maintain value and make up for lower avoided costs

and rising baselines. (Id. at 378.) He further stated that the Collaborative has discussed the inclusion of additional energy benefits (such as natural gas savings) and non-energy benefits (NEBs) in cost-effectiveness testing, and that the Collaborative is considering how such benefits could be quantified. (Id. at 378.)

Witness Bradley-Wright recommended that the Company work with Collaborative members to establish and utilize project deadlines and create work products for select activities. He testified that project timelines and concrete work product on certain tasks could help to maintain momentum and enable attribution of certain outcomes to the work of the Collaborative. He added that it would also provide a more tangible opportunity for the Commission to track the work of the Collaborative. (Id. at 382.)

Witness Bradley-Wright testified that the Company continues to be a regional leader for EE in the Southeast, though the Company reported a decline in savings for 2019, falling below 1% annual savings in comparison with the prior year's retail sales. He stated that in the previous two years, the Company exceeded the 1% savings target agreed to in a settlement with SACE and other parties in the Duke-Progress Merger. In 2019, DEC delivered 794.9 gigawatt-hours (GWh) of efficiency savings at the meter, equal to 0.98% of the previous year's retail sales. This reflects a 2% decline in incremental savings from the previous year, for which DEC reported annual savings of 1.05% of the previous year's retail sales. He noted that in 2019, DEC's portfolio of programs exceeded its savings projections by approximately 8%. He also commended the performance of the Income-Qualified Energy Efficiency and Weatherization Program, which

significantly exceeded projections and program performance from previous years. (Id. at 355-56.)

With respect to the Company's residential programs, witness Bradley-Wright testified that the largest savings came from the My Home Energy Report (MyHER) Program and large amounts of lighting measures in the Energy Efficient Appliances and Devices program. Referencing the testimony of witness Neme on behalf of the NC Justice Center, SACE, and the Natural Resources Defense Council in Sub 1164, he noted a concern with heavy reliance on these types of measures, especially in light of changing federal lighting standards. He also noted that information presented to the Collaborative by DEC's Market Potential Study consultant suggested that behavioral efficiency programs like MyHER are seen as comprising the overwhelming majority of 5-year cumulative achievable efficiency potential. He recommended that the Company place more focus on adding or modifying programs targeting the largest energy end uses, such as heating and cooling and water heating. (Id. at 356-57.)

With respect to the Company's non-residential programs, witness Bradley-Wright testified that they achieved significantly less savings than projected, with each program except for the Non-Residential Smart \$aver Energy Efficiency Lighting Program delivering savings below project levels. He noted that opt-outs continue to reflect a lost opportunity for capturing additional energy savings from the Company's programs. (Id. at 357-58.)

With respect to low-income efficiency impacts, witness Bradley-Wright testified that they increased by 30% over the previous year, continuing a trend of steady annual growth. He discussed a newly piloted approach, the Direct Weatherization Pilot, which contributed to strong efficiency savings for the Income-Qualified Weatherization Program. He recommended that, because the pilot has the potential to provide significant insights that could be adapted to future deployment of low-income EE programs, the Company should provide a report to the Collaborative describing the specific budget and operational approaches utilized, a detailed explanation of impact results, specific lessons learned, and recommended next steps. He also encouraged DEC to continue making increasing savings for low-income customers a priority, and to continue working with advocates who have made increasing efficiency savings for low-income customers a central priority for the Collaborative. (Id. at 359-60.)

Witness Bradley-Wright expressed disappointment in the Company's 2021 savings forecast, in which it projected a decline in savings to approximately 0.89% of annual retail sales. He added that, going forward, clear direction from the Commission could encourage Duke to find additional savings even if they are harder to achieve. He suggested that the Commission direct DEC to explain future forecast declines and show what steps are being taken to prevent them. He also suggested that DEC provide details to the Collaborative from the 5-year program planning projections the Company is using as inputs for their DSM/EE modeling in the 2020 IRP. Lastly, he suggested that the Commission request a report from the Collaborative by January 31, 2021, that would "examine the reasons for the

forecasted declines in 2020, and explore options for preventing or correcting a decline in future DSM/EE savings.” He added that the report should include consideration of projected declines in 2021. (Id. at 361-64.) Witness Bradley-Wright also testified that in order to increase savings beyond DEC’s current projections, the Company should continue to explore and develop new program concepts and strategies for achieving increased energy savings, and increase participation in existing programs. (Id. at 365.)

In his rebuttal testimony, DEC witness Evans responded to witness Bradley-Wright’s testimony regarding the Company’s projected decline in energy savings. He stated that program or measure ideas that may garner additional savings must sometimes be set aside not because they are “difficult,” but because the benefits will not exceed the costs. He noted that the Company’s approach to program development and design is what has made the Company the leader in EE savings across the Southeast, that the Company actively seeks ways to improve and expand its programs, and that the Company is committed to offering all cost-effective EE opportunities. (Id. at 84-85.) He added that the projections of savings below previous years reflect market conditions and projected participation, and that the Company is committed to offering robust programs across customer classes. He stated that the Company continues to seek opportunities for new and improved programs within the cost-effectiveness guidelines approved by the Commission. (Id. at 85.) He further testified that because projections in the rider filings are used to set rates, the Company is often conservative with its projections in order to avoid

raising rates unnecessarily and over-collecting from customers. He added that the Company does not use projections as a cap. (Id. at 85.)

In his rebuttal testimony, witness Evans also responded to witness Bradley-Wright's recommendation that the Commission request a report directly from the Collaborative. He argued that the Collaborative was formed as an advisory group to provide "an important forum for Duke to receive input from a variety of stakeholders," and stated that if members feel it is necessary to communicate directly with the Commission, that they can do so by intervening in this or future dockets. He added that he does not think it is necessary or consistent with the purpose of the Collaborative to assign a written report to organizations which choose not to intervene. (Id. at 86.)

Witness Bradley-Wright further testified concerning the 1% annual savings target, stating that the Commission should continue to assess DEC's performance in comparison to this target, and recommending that the Commission direct the Company to provide a detailed plan to achieve the 1% annual savings target in its next annual DSM/EE Rider filing. (Id. at 364-65.)

Witness Bradley-Wright also testified that it would be beneficial for the Commission to provide guidance that it supports larger budgets to pursue expanded savings for low-income customers in 2021 and future years. He recommended that the Commission express affirmative support for DEC pursuing higher savings for low-income customers, with correspondingly higher budgets, and that the Commission direct DEC to provide a plan in its next DSM/EE rider

filing showing how it plans to ramp up low-income efficiency savings over the next three to five years, including strategies for addressing energy burdens with deep efficiency cuts as well as neighborhood-style approaches that reach large numbers of customers. (Id. at 366-67.)

With respect to the COVID-19 pandemic, witness Bradley-Wright testified that since March 2020, many programs have been temporarily halted or altered to function in a remote manner, and that even after lockdown conditions ease, ongoing adaptations may be needed. He recommended that, in order to help adapt EE program delivery to continue during the pandemic, the Commission should direct DEC to assess expanding residential and commercial programs for replacement of major equipment like heat pumps, heat pump water heaters, and central air conditioning systems. He also suggested the use of virtual audits to increase customer engagement, promote low- and no-cost steps for lowering energy use, provide customized EE kits by mail, and create a queue for more comprehensive measure installation once restrictions are lifted. He added that the pandemic is creating a looming economic crisis that warrants urgent action to expand energy efficiency programs aimed at assisting vulnerable and financially struggling families. (Id. at 367-69.) He recommended that DEC and the Commission consider a significant expansion of funding for EE programs that substantially reduce energy use and customer bills for low-income customers, and that the Commission express support for deploying targeted energy efficiency programs to help customers mitigate the impact of the pandemic. He recommended that the Commission direct DEC to submit a summary of the

program changes that it has assessed and an implementation-ready plan by July 31, 2020, outlining its proposed programmatic responses and including modified program budgets, savings goals, and customer targeting strategies. (Id. at 369-71.)

In his rebuttal testimony, witness Evans stated that because Duke has launched a corporate strategy to address the needs of customers during the pandemic, the Company does not plan to file a plan outlining targeted EE programs to address the effects of the pandemic on customers. He stated that while the Company has had to suspend programs that require in-home consultations or installations temporarily, it has updated its customer communication with more tips related to working from home, and it continues to offer energy savings kits and free LEDs by mail to qualifying customers. He added that all programs will resume once the Company is confident that the safety of its customers and employees can be ensured. (Id. at 85-86.)

Witness Bradley-Wright also discussed several ways in which the Company's DSM/EE rider proceedings intersect with other policy considerations before the Commission, including: Integrated Resource Planning; new programs and program modifications; review of the Mechanism, rate impact, and possible efficiency targets; rate cases; and the DEP DSM/EE rider. In addition to several general observations, he recommended that the Company provide carbon emissions reduction figures associated with achieved savings (annual and cumulative over time) in its annual rider filings and correlate them to CEP emissions reduction targets and the Company's own corporate carbon reduction goals. (Id. at 391.)

While the Commission finds the testimony and opinions of witness Bradley-Wright on additional recommended changes to the procedures of the Collaborative informative and helpful, the Commission concludes that the Collaborative is the appropriate forum for discussion and consideration of the issues he raises, as outlined herein.

In particular, the Commission notes the forecasted decline in DEC's DSM/EE savings and concludes that it would be helpful to have the Collaborative examine the reasons for the forecasted decline, and explore options for preventing or correcting a decline in future DSM/EE savings. The Commission further finds that, in any future rider filing in which the Company is forecasting a decline in DSM/EE savings, the Company should include an explanation for the forecast decline and discuss its plans for preventing or correcting such a decline. Because the Company's forecasted decline in DSM/EE savings will be discussed in the Collaborative, and because a discussion of any future forecast declines will be included in the Company's future rider filings, the Commission declines to require a report from the Collaborative as recommended by witness Bradley-Wright.

With respect to witness Bradley-Wright's concerns regarding the Company's heavy reliance on behavioral programs and lighting measures, the Commission concludes that it would be helpful for the Collaborative to assess whether the Company should place more focus on programs targeting large energy end uses such as heating and cooling and water heating.

The Commission also notes that a detailed review of the Company's Direct Weatherization Pilot could provide insights that would benefit the deployment of other low-income EE programs, and therefore concludes that the Company should provide a report to the Collaborative on the Direct Weatherization Pilot, to include a description of the budget and operational approaches utilized, a detailed explanation of impact results, lessons learned, and recommended next steps.

With respect to the annual 1% savings target, the Commission finds that the Company's plans for achieving the target is an appropriate topic for discussion in the Collaborative. Likewise, while the Commission believes that the Company should pursue higher energy savings for low-income customers, the Commission is of the opinion that the Collaborative is the appropriate forum for discussions around the Company's plans for low-income energy efficiency savings, including strategies for addressing energy burdens for low-income customers and utilization of neighborhood-style approaches.

The Commission is persuaded by the testimony of witness Evans that the Company is continuing to offer EE services during the pandemic. The Commission notes that the Company continues to offer energy savings kits and free LEDs by mail, as well as communications with tips related to working from home, and that all programs will resume when the safety of the Company's customers and employees can be ensured. The Commission therefore declines to direct the Company to assess expanding residential and commercial programs for replacement of major equipment, or to submit a summary of program changes to the Commission. Instead, the Commission concludes that the Company should

discuss in the Collaborative potential steps for helping customers mitigate the impact of the pandemic, including through an expansion of funding for EE programs and a focus on low-income customers.

Lastly, the Commission notes that it would be informative and useful for the Commission and intervening parties to have information on the carbon emissions reductions associated with the Company's DSM/EE savings, and therefore concludes that the company should provide carbon emissions reductions figures associated with its achieved savings (annual and cumulative over time for each program) in its annual rider filings moving forward. The Commission declines, however, as witness Bradley-Wright recommends, to require that such reported figures be correlated to CEP emission reduction targets or the Company's corporate carbon reduction goals.

IT IS, THEREFORE, ORDERED as follows:

1. That the Commission hereby approves the calculation of Rider EE as filed in the Supplemental Testimony and Revised Exhibit I of Michael C. Maness, and the resulting billing factors as set forth in Supplemental Miller Exhibit 1 and Revised Maness Exhibit I, to go into effect for the rate period January 1, 2021 through December 31, 2021, subject to appropriate true-ups in future cost recovery proceedings consistent with the Sub 1032 Order, the Sub 1130 Order, and other relevant orders of the Commission.

2. That DEC shall work with the Public Staff to prepare a proposed Notice to Customers of the rate changes approved herein. Within 30 days from the

date of this Order, the Company shall file said notice and the proposed time for service of such notice for Commission approval.

3 That in future proceedings, should DEC make any changes to the methodology used for calculating the rider, it should identify the changes in testimony, including the reasons for and the impacts of the changes, as well as whether a revision to the Mechanism is requested.

4 That if the Residential Smart \$aver program continues to demonstrate a prospective TRC result of less than 1.0 for Vintage 2022, the Company should include in its next rider filing a discussion of the actions being taken to maintain or improve cost-effectiveness, or alternatively, its plans to terminate the program.

5 That the Company shall: (1) perform an analysis explaining how GIP will affect the performance of individual DSM/EE programs and their ability to produce peak demand and energy savings, and file the report with the Commission in the current docket by January 1, 2021; (2) in the next rider proceeding, explain how the Company will distinguish peak demand and energy savings between GIP and DSM and EE programs; and (3) provide in its next rider filing a list of GIP projects that have been implemented and explain how those projects have affected the performance of the Company's DSM/EE portfolio, if at all.

6 That the combined DEC/DEP Collaborative shall continue to meet every two months.

7. That in any future rider filing in which the Company is forecasting a decline in DSM/EE savings, the Company should include an explanation for the forecast decline and discuss its plans for preventing or correcting such a decline.

8. That the Company should provide a report to the Collaborative on the Direct Weatherization Pilot, to include a description of the budget and operational approaches utilized, a detailed explanation of impact results, lessons learned, and recommended next steps.

9. That the Company should provide carbon emissions reductions figures associated with its achieved savings (annual and cumulative over time for each program) in its annual rider filings moving forward.

ISSUED BY ORDER OF THE COMMISSION.

This the __ day of _____, 2020.

NORTH CAROLINA UTILITIES COMMISSION

Kimberley A. Campbell, Chief Clerk