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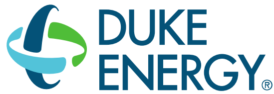

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August 13, 2020

VIA ELECTRONIC FILING

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

Re: Duke Energy Carolinas, LLC's Proposed Order
Docket No. E-7 Sub 1230

Dear Ms. Campbell:

Please find enclosed for filing in the above-referenced docket the Proposed Order of Duke Energy Carolinas, LLC. An electronic copy of the Proposed Order is being emailed to briefs@ncuc.net. DEC is also making a separate filing of its Post-Hearing Brief.

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

Kendrick C. Fentress

Kendrick C. Fentress

Enclosure

cc: Parties of Record

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's Proposed Order, in Docket No. E-7, Sub 1230, has been served on all parties of record either by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid.

This the 13th day of August, 2020.

Kendrick C. Fentress
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STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1230

In the Matter of

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

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

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

APPEARANCES:

For Duke Energy Carolinas, LLC:

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For the Carolina Industrial Group for Fair Utility Rates III:

Warren K. Hicks
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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 Housing Coalition, and the Southern Alliance for Clean Energy:

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

For the Using and Consuming Public:

Lucy E. Edmondson
Nadia L. Luhr
Public Staff – North Carolina Utilities Commission
4326 Mail Service Center
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BY THE COMMISSION: N.C. Gen. Stat. § 62-133.9(d) authorizes the North Carolina Utilities Commission ("Commission") to approve an annual rider to the rates of electric public utilities, outside of a general rate case, for recovery of all reasonable and prudent costs incurred for adoption and implementation of new demand-side management ("DSM") and energy efficiency ("EE") measures. The Commission is also authorized to award incentives to electric companies for adopting and implementing new DSM/EE measures, including, but not limited to, appropriate rewards based on (1) the sharing of savings achieved by the DSM and EE measures and/or (2) the capitalization of a percentage of avoided costs achieved by the measures. Commission Rule R8-69(b) provides that every year the Commission will conduct a proceeding for each electric public utility to establish an annual DSM/EE rider to recover the reasonable and prudent costs incurred by the electric

utility in adopting and implementing new DSM/EE measures previously approved by the Commission pursuant to Commission Rule R8-68. Further, Commission Rule R8-69(b) provides for the establishment of a DSM/EE experience modification factor ("EMF") rider to allow the electric public utility to collect the difference between reasonable and prudently incurred costs and the revenues that were realized during the test period under the DSM/EE rider then in effect. Commission Rule R8-69(c) permits the utility to request the inclusion of utility incentives (the rewards authorized by the statute), including net lost revenues ("NLR"), in the DSM/EE rider and the DSM/EE EMF rider.

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 EE[1] or Rider 12) for 2021[2] ("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.

On March 17, 2020, the Commission issued an order scheduling a hearing for June 9, 2020, establishing discovery guidelines, providing for intervention and testimony by other parties, and requiring public notice. DEC filed the affidavits of publication for the public notice as required by the Commission's March 17, 2020 Order.

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[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 twelfth Rider EE and includes components that relate to Vintages 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.

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 ("CIGFUR") 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"), the North Carolina Housing Coalition ("NC Housing Coalition") and the Southern Alliance for Clean Energy ("SACE") filed a petition to intervene, which was granted on April 21, 2020. On May 8, 2020, the Carolina Utility Customers Association, Inc. ("CUCA") filed a petition to intervene, which was granted on May 12, 2020.

On May 11, 2020, DEC filed the supplemental testimony and revised exhibits of witness Miller and revised exhibits of witness Evans. On May 13, 2020, DEC filed a motion for additional public hearing and a proposed Revised Public Notice. On May 13, 2020, the Commission issued an order requiring publication of a second public notice.

On May 14, 2020, the NC Justice Center, NC Housing Coalition, and SACE (collectively, "NC Justice Center, et al.") filed a motion for extension of time to file testimony and requested that parties be allowed to appear remotely at the June 9, 2020 hearing due to the ongoing Covid-19 pandemic. On May 18, 2020, the Commission granted the motion for extension and took under advisement the motion for remote hearing.

On May 22, 2020, the NC Justice Center, et al. filed the testimony and exhibits of Forest Bradley-Wright, the Energy Efficiency Director for SACE; and the Public Staff filed the testimony and exhibits of Michael C. Maness, Director of the Accounting Division,

David Williamson, Staff Engineer in the Electric Division, and John R. Hinton, Director, Economic Research Division.

On May 29, 2020, the Commission issued an order scheduling a remote hearing for expert witness testimony and requiring parties to file written statements of consent or objection by June 3, 2020 and to file potential cross-examination exhibits by June 4, 2020. All parties filed statements of consent to holding the expert witness hearing by remote means.

On June 1, 2020, DEC filed the rebuttal testimony of Timothy J. Duff and witness Evans.

On June 3, 2019, 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 supplemental testimony and revised exhibits of witnesses Williamson and Maness.

On June 9, 2020, DEC, the Public Staff and the NC Justice Center, et al. filed testimony summaries for their respective witnesses appearing at the remote evidentiary hearing.

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

On June 25, 2020, the Commission issued a notice requiring that briefs and proposed orders be filed by July 24, 2020. On July 21, 2020, the Commission issued an order extending the due date until August 13, 2020.

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 ("NRDC"), and the Southern Environmental Law Center ("SELC") ("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 net lost revenues ("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*. In this Order, the Commission 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

[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.

proceeding), and that the test period for Rider 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* ("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*, 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 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

[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.

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 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.

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. For the calculation of the underlying avoided energy credits to be used to derive the program-specific avoided

[5] Each vintage under the Sub 1032 Mechanism is referred to by the calendar year of its respective rate period (e.g., Vintage 2019).

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.

The Sub 1032 Mechanism, as revised by the Sub 1130 Order, is set forth in Maness Exhibit II and referred to herein as the "Mechanism."

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. Gen. Stat. § 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; EE Education; Energy Efficient Appliances and Devices; Residential Smart $aver EE; Multi-Family EE; MyHER; Income-Qualified EE and Weatherization; Power Manager; Non-Residential Smart $aver Energy Efficient Food Service Products; Non-Residential Smart $aver Energy Efficient HVAC Products; Non-Residential Smart $aver Energy Efficient IT Products; Non-Residential Smart $aver Energy Efficient Lighting Products; Non-Residential Smart $aver Energy Efficient Process Equipment Products; Non-Residential Smart $aver Energy Efficient Pumps and Drives Products; Non-Residential Smart $aver Custom; Non-Residential Smart $aver Custom Energy Assessments;

PowerShare; PowerShare Call Option (canceled effective January 31, 2018); Small Business Energy $aver; Smart Energy in Offices (canceled effective June 30, 2018); 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.

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.

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; 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 and Energy Assessment Program; PowerShare; Small Business Energy Saver Program; EnergyWise for Business; and Non-Residential Smart $aver Performance Incentive Program.

4. Pursuant to the Paragraph 19 of the Mechanism, the Income-Qualified EE and Weatherization 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.

5. Modifications to the Residential Smart $aver EE Program have resulted in improved cost-effectiveness scores under the UCT, the TRC, the Rate Impact Measure

("RIM") Test and the Participant Test. Accordingly, the Commission finds and concludes that no action by the Company is required at this time with respect to this program.

6. The Food Service and Information Technology measures of the Non-residential Smart $aver Program were not currently cost effective under the TRC test; however, these are only two measures of a larger program, and no party recommended that the Company take action. Accordingly, the Commission finds and concludes that no further action by the Company is required with respect to those measures at this time.

7. To sustain the benefit that low-income customers and multi-family residences obtain from A-line bulbs, the Company should continue to provide A-line bulbs to low-income customers and continue to replace inefficient lighting through its multi-family direct install program.

8. Requiring DEC to include information on projected future impacts of the Grid-Improvement Plan on its DSM/EE portfolio is premature and not necessary.

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

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

11. Pursuant to the Commission's Sub 938 Second Waiver Order and the Sub 1032 Order, the rate period for the purposes of this proceeding is January 1, 2021 through December 31, 2021.

12. Rider 12 includes EMF components for Vintage 2019 DSM and EE programs. Consistent with the Sub 938 Second Waiver Order and the Sub 1032 Order, the

test period for these EMF components is the period from January 1, 2019 through December 31, 2019 (Vintage 2018).

13. DEC's proposed rates for Rider 12 are comprised of both prospective and EMF components. The prospective components include factors designed to collect estimated program costs and PPI for the Company's Vintage 2021 DSM and EE programs, as well as estimated NLR for the Company's Vintage 2018-2021 EE programs. The EMF components include the whole or partial true-up of Vintage 2019 program costs, NLR, and PPI, as well as whole or partial true-ups of NLR and PPI for Vintage Year 2018, and NLR for Vintages 2016 and 2017. DEC, as reflected in the testimony and exhibits of Company witnesses Miller and Evans, has appropriately calculated the components of Rider 12 to reflect the Commission's findings and conclusions in this Order, as well as the Commission's findings and conclusions as set forth in the Sub 1032 Order, as revised by the Sub 1130 Order.

14. The Company appropriately applied a 17% reserve margin adjustment to the avoided capacity associated with EE programs because it is consistent with past practices and reflective of how EE resources are treated in the Integrated Resource Plan.

15. The Company's seasonal allocation of avoided capacity value is consistent with the Commission's most recent avoided cost proceeding and is appropriate.

16. The reasonable and prudent Rider 12 billing factor for <u>residential</u> customers[6] is 0.4184 cents per kWh, which, as is the case for all the other billing factors stated in these findings of fact, includes the regulatory fee.

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[6] 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.

17. 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 0.3522 cents per kWh.

18. 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 0.1200 cents per kWh.

19. 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.

20. 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 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.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. 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 2020) is 0.0000 cents per kWh.

27. 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.

28. 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.

29. 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.

30. 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.

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.

N.C. Gen. Stat. § 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.

N.C. Gen. Stat. § 62-133.9, along with Commission Rules R8-68 and R8-69, establish a procedure whereby an electric public utility files an application in a unique docket for the Commission's approval of an annual rider for recovery of reasonable and prudent costs of approved DSM and EE programs. The procedure outlined in N.C. Gen. Stat. § 62-133.9 and Commission Rules R8-68 and R8-69 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 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 Program; Non-Residential Smart $aver Custom Energy Assessments Program; PowerShare Non-Residential and Load Curtailment Program; PowerShare Call Option Program[7]; Small Business Energy Saver; Smart Energy in Offices Program[8]; EnergyWise for Business Program; and Non-Residential Smart $aver Performance Incentive Program. (Tr. at 58-59.)

In his affidavit, 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 236-38.) He also noted the Commission approved DEC's modifications to the Residential Energy Saver and Residential Neighborhood Energy Saver program since the prior Rider proceeding/ (Tr. at 238.)

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. 4-9

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[7] This program was canceled effective January 31, 2018 pursuant to the Sub 1130 Order.

[8] This program was canceled effective June 30, 2018 pursuant to the Commission's February 7, 2018 order in Docket No. E-7, Sub 961.

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 witnesses Williamson and Maness, and the testimony of NC Justice, et al. 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, except for the Income-Qualified EE and Weatherization Program (which was not cost-effective at the time of Commission approval), the Residential Smart $aver EE Program, which is continuing its transformation to an all referral channel, and elements of the Non-Residential Smart $aver Program, the aggregate portfolio continues to be cost-effective. Witness Evans testified that there is no reason to discontinue any of DEC's programs, but the Company will continue to examine its programs for potential modifications to increase their effectiveness, regardless of current cost-effectiveness results. (*Id.*)

NC Justice Center, et al. witness Bradley-Wright testified that DEC's DSM/EE portfolio is cost-effective, with the value of DEC's DSM/EE programs significantly exceeding the costs and delivering strong financial value to customers. (Tr. at 356.)

Public Staff witness Williamson stated in his testimony that the Public Staff reviewed DEC's calculations of cost-effectiveness under each of the four standard cost-effectiveness tests: UCT, TRC, Participant test, and RIM test. (*Id.* at 240.) The Public Staff also compared the cost-effectiveness test results in previous DSM/EE proceedings to the current filing and developed a trend of cost-effectiveness that serves as the basis for the

Public Staff's recommendation of whether a program should be terminated. (*Id*. at 243-44.)

Witness Williamson testified that while many programs continue to be cost-effective, the TRC and UC test scores as filed by the Company for all programs have a natural ebb and flow, mainly due to the changes in avoided cost rate determinations. (Tr. at 242.) He stated that the decreasing cost-effectiveness is also partially attributable to anticipated unit savings being lower than expected as determined through EM&V of the programs. (*Id*.) Also, as programs mature, baseline standards increase, or avoided cost rates decrease, and it becomes more difficult for a program to produce cost-effective savings. Witness Williamson further remarked that, in contrast, some programs, have experienced greater than expected participation. (*Id*.)

Witness Williamson also identified three areas of concern with the Company's portfolio: lighting-related measures; grid improvement plans ("GIP") and the Residential Smart Saver EE program's Referral Channel.

<u>Lighting</u>

With respect to the lighting-related measures, witness Williamson recalled that the Public Staff had previously noted several trends related to transformation of the EE lighting market in North Carolina resulting from the growing accessibility of non-specialty light emitting diode ("LED") lighting. Based on those trends, he predicted that LED lighting will likely become the baseline standard for general service bulb technologies by January 2020, thereby decreasing the savings from any EE program that includes general service bulb technologies. (Tr. at 246-47.)

Witness Williamson further testified about how changes in the implementation of lighting standards may impact DEC's EE programs going forward. He recounted that on January 19, 2017, the United States Department of Energy ("DOE") published final rules adopting a revised definition for general service lamp ("GSL") and general service incandescent lamp ("GSIL"); however, on February 11, 2019, the DOE issues a notice of proposed rulemaking and request for comment that potentially could withdraw the currently approved language on GSL and GSIL. On September 5, 2019, the DOE published a notice of proposed determination in which it initially determined the energy conservation standards for GSILs do not need to be amended. On December 27, 2019, the DOE published a final determination in which it responded to comments from September 2019 and determined that amending energy conservation standards would not be economically justified. (Tr. at 247.)

Witness Williamson testified that North Carolina's lighting market was transforming more quickly than initially recognized because of changes to the federal lighting standards since 2007 and customer preference for LEDs. He recommended that, because of these factors, LED lighting should be considered the baseline standard for general service bulb technologies. He further testified that "market transformation" or routine adoption of EE measures had occurred in the lighting market. As a result, the Public Staff agrees with the Company's approach to focus on specialty LED bulb technologies. He concluded, however, by recommending that, beginning in 2021, the Commission consider only specialty LED lighting for recognition as energy efficiency. (Tr. at 249.)

Company witness Evans opposed Public Staff witness Williamson's recommendation because, despite changes in the efficiency lighting market, the Company still sees an ongoing need for non-specialty energy efficient A-line bulbs for low-income and multifamily residences. Witness Evans reported that, to allow those customers to share in the benefits of energy efficiency lighting, the Company intends to continue providing A-line bulbs to low-income customers through its direct install Neighborhood Energy Saver Program and through outlets such as Good Will, Dollar General, and Habitat stores. Additionally, the Company intends to continue to replace inefficient lighting through its Multifamily direct install program. Future needs for these two customer groups will be monitored as independent EM&V studies for these programs determine their saturation. (Tr. at 82-83.)

<u>GIP</u>

Public Staff witness Williamson testified that since the last rider proceeding, DEC has filed a general rate case in which, among other things, it has proposed a GIP, along with the referral of certain investments. As proposed, the GIP will improve capacity, data analytics/collection and power flow capabilities, and the Public Staff believes these improvements will impact DSM/EE savings. Specifically, witness Williamson identified the MyHER and DSM programs he believed would be most impacted by the GIP. As for the MyHER program, he testified that the Company's wide deployment of AMI meters, the resulting Duke Energy Mobile App, and a functionality similar to Green Button Download had enabled customers to access their usage data directly and deliver to third parties if desired. In witness Williamson's opinion, the provision of "energy efficiency tips" only differentiates MyHER from the other items, and this is not sufficient to justify

the cost and utility incentives associated with the MyHER program. Thus, witness Williamson recommended that the Commission require the Company to reassess the costs and benefits of continuing to offer the MyHER program. (Tr. at 253.)

Witness Williamson also testified that, because the Company's DSM program relies 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, the Company's plan to build grid infrastructure to enable Integrated Volt/Var controls ("IVVC") will reduce the Company's demand savings from the Company's DSM programs. Upon questions by Commissioner Brown-Bland, witness Williamson stated that regardless of "whether or not it could be captured in the EM&V," he reviewed trends, and the GIP was changing the utility's business model. For this reason, he wanted to ensure that they are getting only the impact associated with the DSM and EE programs. (Tr. at 296-97.) Thus, witness Williamson recommended that the Commission direct the Company to do the following: (i) analyze GIP to explain how it will affect DSM/EE program performance to produce peak demand and energy savings; (ii) explain in the next rider proceeding how the Company will distinguish between peak demand and energy savings between GIP and DSM and EE programs; and (iii) provide a list of GIP projects that have been implemented and how those projects have affected performance of the Company's DSM/EE portfolio if at all, and be prepared to discuss any impacts the GIP has had on the day-to-day systems operations, as well as customer expectations for utility service in general, and the availability of customer data. (Tr. at 254-56.)

Company witness Evans responded to the Public Staff's GIP concerns by testifying on rebuttal that the Company had already provided voluminous data, analyses, and general

information about the Companies' GIP program, including IVVC, as part of the ongoing general rate cases in Docket Nos. E-7, Sub 1214, and E-2, Sub 1219. He affirmed that the Company was not opposed to reporting information related to IVVC, but the additional analysis recommended by witness Williamson was unnecessary. He further confirmed that any influence or interaction between GIP and the DSM/EE programs will be evaluated and captured in the existing reporting protocols. Additionally, witness Evans confirmed that GIP program will not be in place until 2024 (Tr. at 130.) Furthermore, witness Evans cautioned that integrating additional GIP status reporting into separate DSM/EE proceedings could lead to confusion as the programs are separate initiatives designed to achieve clearly defined, distinguishable goals. (Tr. at 83-84.)

With respect to witness Williamson's recommendation that the Company reassess its MyHER program in light of the smart energy usage app and smart meter installation, witness Evans testified that MyHER is designed to engage the customers and includes a motivational aspect for customers resulting from the normative comparison of a customer's usage to their peers that the mere provision of energy usage information to customers through the app does not provide. Moreover, customers have had access to their usage data for years, albeit without as much precision, but MyHER has continued to provide significant benefits to DEC's customer base. (Tr. at 134, 158-59.)

<u>Residential Smart $aver EE Program's Referral Channel</u>

Although Public Staff witness Williamson testified that he did not believe that DEC had violated any Commission rules or flexibility guidelines addressing how program modifications should be addressed, he remarked on the Company's Smart $aver EE program's use of a referral channel to offset some of the costs associated with the program

and to bolster the cost-effectiveness of it. On September 11, 2017, the Commission approved the conversion of the program to include additional household related measures, as well as an online store. Witness Williamson testified that the referral channel has been expanded to include a variety of items beyond "the original focus" of HVAC equipment-related contractor referrals. The Company's website provides the contractor referral information under the marketing name "Find it Duke." The services listed include heating and air conditioning, insulation, plumbing, electrical, pool, solar; and tree removal. (Tr. at 261-62.) Witness Williamson explained that all the revenues that DEC receives from contractors participating in the referral channel are used to offset program costs for the benefit of the Smart $aver program and DEC's customers. This includes revenues from solar and tree service contractors, which at the time represent only a very small portion of the overall revenues received. (Tr. at 262-63.) Public Staff witness Maness also testified that the referral service may be may include referral services for non-regulated services to be performed by third parties; however, witness Maness did not make any recommendations about this possibly non-regulated component of the referral service. (Tr. at 330.) Witnesses Williamson and Maness both concluded by indicating that the Public Staff would continue to discuss the matter of the referral channel with the Company and, as part of those discussions, address whether the flexibility guidelines should be revised to address this type of program modification in the future. (Tr. at 263, 330.)

Conclusions

Based upon the foregoing, the Commission concludes that for purposes of inclusion in Rider 12, except for the Income-Qualified EE and Weatherization Program (which was not cost-effective at the time of Commission approval), the Residential Smart $aver EE

Program, which is continuing its transformation to an all referral channel, and elements of the Non-Residential Smart $aver Program, the aggregate portfolio continues to be cost-effective. Because the Commission is concerned that low-income and multifamily residences continue to share in the benefits of energy efficient lighting, it declines to approve the Public Staff's recommendation that it consider only specialty LED lighting for recognition as energy efficiency in these proceedings. Instead, to sustain the benefit that low-income customers and multifamily residences obtain from A-line bulbs, the Commission directs the Company to continue to provide A-line bulbs to low-income customers through its direct install Neighborhood Energy Saver program and to provide them through outlets such as Good Will, Dollar General, and Habitat stores. The Commission further approves the Company's proposal to continue replacing inefficient lighting through its Multifamily direct install program where the Company is certain that inefficient lighting options are being replaced. The Company should continue to closely monitor the future needs of low-income and multifamily residences as independent EM&V studies for these programs determine their saturation with standard high efficiency lighting.

The Commission further concludes that it does not approve the Public Staff's recommendation that the Company include reporting on its GIP implementation or reassess its MyHER program at this time. The Commission has received and reviewed voluminous evidence on GIP implementation in the pending general rate cases, especially through the direct and rebuttal testimony of Jay W. Oliver. Additional status reporting in the DSM/EE docket will only duplicate reporting done in other proceedings and complicate the already extensive reporting requirements in the DSM/EE proceedings. Moreover, requiring GIP status reporting in the DSM/EE proceedings does not appear narrowly tailored to convey

only the GIP's actual impacts on the Company's DSM/EE portfolio. As witness Evans proposed, the more effective method for conveying GIP impacts on the DSM/EE portfolio for purposes of the DSM/EE rider proceedings is through EM&V reporting protocols that are already submitted in these proceedings. Witness Williamson did not dispute that the EM&V reports would reflect events caused by GIP. (Tr. at 295.) Although the GIP implementation information may be helpful for spotting trends in utility operations, compelling DEC to include information on projected future impacts on the DSM/EE portfolio, when the GIP program will not fully in place until 2024, is premature and unnecessary.

Moreover, the Commission recognizes that there is a distinction between a customer receiving additional and more precise data about their energy usage from smart meters or from the smart meter usage app, which do not act as energy efficiency programs, and a utility program, like MyHER, that engages customers through normative comparison of their usage to that of their peers and empowers customers to act on that data. Therefore, the Commission declines to accept the Public Staff's request to direct the Company to reassess its successful MyHER program at this time.

Finally, the Commission agrees with Public Staff witness Williamson that the Company has not violated the flexibility guidelines or any Commission rules or orders in implementing the Residential Smart $aver EE Program's referral channel. The Commission directs the Public Staff and the Company to continue discuss the matter as recommended by witness Williamson.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 10

The evidence in support of these findings and conclusions 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 approved by the Commission in its *Order Approving DSM/EE Rider and Requiring Filing of Proposed Customer Notice,* issued November 8, 2011 in Docket No. E-7, Sub 979 ("EM&V Agreement"). In addition, actual participation and evaluated load impacts are used prospectively to update estimated NLR. (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) Program Evaluation Report: 2017 (Evans Exhibit A); My Home Energy Report Program Evaluation: 2017-2018 (Evans Exhibit B); Power Share Program Evaluation: 2018 (Evans Exhibit C); Energy Efficiency Education in Schools Evaluation Report: 2017-2018 (Evans Exhibit D); Smart $aver Evaluation Report: 2016-2017 (Revised) (Evans Exhibit E). He testified that the reports labeled as Evans Exhibits A through E should be considered complete. (Tr. at 264-68.)

In his testimony, Public Staff witness Williamson testified that he had investigated and reviewed the EM&V reports filed in this proceeding, labeled as Evans Exhibits A through E. He further testified that he had confirmed that the Company's calculations had incorporated the verified savings of the various EM&V reports. (Tr. at 269.) With respect

to Evans Exhibit A, which presented the evaluation of the performance of the Neighborhood Energy Saver ("NES") program, he stated that the results apply to program participation from June 30, 2018 through the end of the sampling period associated with the next evaluation. Witness Williamson further stated that the evaluator of the NES program used an engineering analysis that relied upon information from other sources to determine program savings, and so a billing analysis was not done. Witness Williamson did not dispute that the engineering analysis was an appropriate analytical approach for the NES program; however, he preferred a billing analysis. (Tr. at 265-66.) Witness Williamson also raised a second issue with respect to the net-to-gross ratio ("NTGR"). He likewise did not dispute the use of the engineering analysis assuming an NTGR of 1.0, indicating that was standard practice for income-qualified programs. Nevertheless, he noted that lighting accounted for 38% of the program's gross savings and that there had been significant changes in the lighting market in recent years. Witness Williamson found Evans Exhibit A acceptable for purposes of verifying the NES program savings. He recommended, however, that the next evaluation of NES rely on a billing analysis for assessing the savings attributable to NES. He reported that the Company agreed to initiate the next analysis very soon. (Tr. at 265-66.)

Witness Williamson also expressed concern about cases in which a similar or identical measure is offered across multiple programs, but with different contractors performing evaluations of those measures, using different assumptions. Witness Williamson recommended that in the future DEC work to ensure that these measures be evaluated consistently. Otherwise, the Company should justify the differences. Witness

Williamson concluded that the EM&V reports filed in this proceeding should be accepted as complete. (Tr. 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 CONCLUSION FOR FINDING OF FACT NO. 11

The evidence in support of this finding and conclusion can be found in the Sub 938 Second Waiver Order, the Sub 1032 Order, the testimony of Company witnesses Miller and Evans, and the testimony of Public Staff witness Maness. The rate period and the scope of the EMF components of Rider 12 are consistent with the Commission's ruling in the Sub 938 Second Waiver Order and the Sub 1032 Order and are uncontested by any party.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 12 - 28

The evidence in support of these findings and conclusions can be found in the Sub 1032 Order, the Sub 1130 Order, the testimony of Company witnesses Duff, Evans, and Miller, and the testimony of Public Staff witnesses Maness, Hinton, and Williamson.

On February 25, 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 costs[9] 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 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 70-75.)

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 25.) 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*.) 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

[9] 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.

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 26.)

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 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 is to file its proposal to flow back the excess deferred taxes by June 22, 2021 or in its next general rate case, whichever is sooner. Witness Miller then confirmed that DEC intended to file a general rate case in 2019. At the time DEC filed for EE/DSM cost recovery in Rider 11, it was expected that the Commission would resolve the method to flow back EDIT to customers during the planned 2019 rate case, but the timing and methodology of that anticipated flowback has yet to be determined. Therefore, DEC incorporated a placeholder for the return of EDIT in Rider 11 to mitigate potential overcollection. Witness Miller explained that for Rider 11 only, the Company included a reduction of $10 million to Year 2020 lost revenues collected from each Vintage 2017 – 2020. She reported that this will be trued-up to actual EDIT impact on the lost revenue rate in the next DSM/EE rider filing after an order is issued in DEC's pending base rate case, Docket No. E-7, Sub 1214. Witness Miller also testified that EDIT resulting from the Tax Cuts and Jobs Act has not been incorporated in the calculation of

net lost revenues for year 2021. The Company currently has a pending general rate case in which it has proposed that all excess deferred taxes be returned to customers through a separate rider. Therefore, according to witness Miller, there is no need for a placeholder in this proceeding. (Tr. at 27-28.)

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.)

In each of its annual rider filings, DEC performs an annual true-up process for the prior calendar year vintages. (*Id*. at 20.) 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. 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*. at 20-21.) 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*. at 20-21.)

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*. at 28.) 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 28.) 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*. at 28-29.)

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 22-23.) For non-residential rates, the forecasted sales exclude the estimated sales to

customers who have elected to opt out of paying Rider EE. (*Id*. at 23.) The non-residential billing factors are separately computed for each vintage. (*Id*. at 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*. at 23.) The portion of revenue requirements related to NLR is computed based on the kW and kWh savings of North Carolina retail customers. (*Id*. at 24.)

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. (*Id*. at 24.) 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*. at 24.) 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*. at 24.)

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*. at 21.) 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. (*Id*. at 21.) 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*. at 21.)

<u>Prospective Components of Rider 12</u>

Rider 12 consists of five prospective components: (1) a prospective Vintage 2020 component designed to collect program costs and the PPI for DEC's 2020 vintage of DSM programs; (2) a prospective Vintage 2020 component to collect program costs, the PPI, and the first year of NLR for DEC's 2020 vintage of EE programs; (3) a prospective Vintage 2019 component designed to collect the second year of estimated NLR for DEC's 2019 vintage of EE programs; (4) a prospective Vintage 2018 component designed to collect the third year of estimated NLR for DEC's 2018 vintage of EE programs; and (5) a prospective Vintage 2017 component designed to collect the fourth year of estimated lost revenues for DEC's 2017 vintage of 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 12 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 2017 EE programs. (*Id.* at 30-31.) 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.* at 30.) Certain non-residential lost revenues associated with vintages through the test period January 1, 2018 through December 31, 2018, of Docket No. E-7, Sub 1214, have been removed from the prospective period as of August 1, 2020, assuming new base rates recover the new lost revenues associated with those specific kWh sales reductions. All amounts will be "trued up" pending resolution of Docket No. E-7, Sub 1214 during the next EMF period. (Tr. at 30.)

For Vintage 2019, the Company determined the estimated revenue requirements separately for residential and non-residential customer classes and bases them on the third year of net lost revenues for its Vintage 2019 EE programs. The amounts are based on estimated North Carolina retail kW and kWh reductions and DEC's rates approved in its most recent general rate case, adjusted to recover only the fixed cost component. Certain residential lost revenues through the updated test period February 1, 2019 through January 31, 2020 of Docket No. E-7, Sub 1214, have been removed from the prospective period as of August 1, 2020, assuming new base rates recover the net lost revenues associated with

those specific kWh sales reductions. All amounts will be trued up pending resolution of Docket No. E-7, Sub 1214 during the next EMF period.

Witness Miller also explained that the Company determines the estimated revenue requirements for Vintage 2020 separately for residential and non-residential customer classes and bases them on the second year of net lost revenues 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 its most recent general rate case, adjusted to only recover the fixed cost component. Certain residential lost revenues 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 will recover the net lost revenues associated with those specific kWh sales reductions. All amounts will be "trued-up" pending resolution of Docket No. E-7, Sub 1214 during the next EMF period.

With respect to Vintage 2021, witness Miller described the basis for the rate period revenue requirements. She testified that the estimated revenue requirements for Vintage 2021 EE programs include program costs, PPI, and the first year of net lost revenues determined separately for residential and non-residential customer classes. The estimated revenue requirements for Vintage 2021 DSM programs include program costs and PPI. The program costs and shared savings incentive are computed at the system level and allocated to North Carolina based on the allocation methodologies described by witness Miller. The net lost revenues for EE programs are based on estimated North Carolina retail kW and kWh reductions and the rates approved in DEC's most recent general rate case. (Tr. at 30-32.)

DEC witness Miller further testified about modifications to the calculation of how much lost revenue is included in the kWh sales for the test period. She recommended using the same methodology as used to calculate how much lost revenue should be included in kWh sales for the test period in the Commission's November 29, 2018 *Order Approving DSM/EE Rider and Requiring Customer Notice* in Docket No. E-2, Sub 1174. Because the twelve-month test period uses actual kWh sales, and participation in EE measures occurs throughout the year, in any given twelve-month period, a full year of lost revenues is not captured in test period kWh sales as all measures were not in place at the beginning of the test period. Therefore, quantifying the actual, incremental savings by month during that twelve-month rate case test period to calculate the amount of lost revenues that is truly being reflected in the new base rates that will be recovered from customers is appropriate. The difference between the annualized amount of energy savings and the actual amount of energy savings should be recovered through the Company's DSM/EE rider. (Tr. at 30-31.)

EMF Components of Rider 12

Rider 12 includes the following EMF components: (1) an EMF component which consists of a true-up of Vintage 2015 participation for DSM/EE programs based on additional EM&V results received; (2) a true-up of Vintage 2016 participation for DSM/EE programs based on additional EM&V results received; (3) a true-up of Vintage 2017 PPI and participation for DSM/EE programs based on additional EM&V results received; and (4) a true-up of Vintage 2018 program costs, PPI and participation 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. 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, and the test period for the Vintage 2017 EMF component is January 1, 2017 through December 31, 2017. (*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. (*Id*. at 33.) Estimated participation for Vintage 2019 was updated for actual participation for the period January 2019 through December 2019. (*Id*. at 34.) Regarding NLR, estimated participation for the Year 1 Vintage 2019 estimate assumed a January 1, 2019 sign-up date and used a half-year convention, while the NLR Year 1 Vintage 2019 true-up was updated for actual participation for the period January through December 2019 and actual 2019 lost revenue rates. (*Id*. at 33.) Found revenues for Year 1 of Vintage 2019 were trued up according to Commission-approved guidelines. (*Id*. at 35.) To reflect the results of EM&V, Vintage 2019 estimated avoided cost savings were updated pursuant to the EM&V Agreement. (*Id*. at 33.) Finally, while the Vintage 2019 estimate included only the programs approved prior to the filing of the estimated Vintage 2019 revenue requirement, the Vintage 2019 true-up was updated for new programs and pilots approved and implemented during Vintage 2019. (*Id*. at 33.) 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 35.) The rates applied to the kW and kWh savings are those in effect for 2019, reduced by

fuel and variable operation costs. (*Id.*) NLR were then offset by actual found revenues for Year 1 NLR of Vintage 2019. (*Id.* at 35.) 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. (*Id.* at 35.) 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, Docket No. E-7, Sub 1146. (*Id.* at 35.) 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. (*Id.*) 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.)

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.* at 35.) She explained that the actual kW and kWh savings were as experienced during the period January 1, 2017 through December 31, 2017. (*Id.*) 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 36.)

Witness Miller's supplemental testimony and exhibits reflected EMF billing factors for Rider 12 of 0.1011 cents per kWh for all North Carolina retail residential customers, (0.0001) cents per kWh for Vintage 2016 DSM participants, 0.0193 cents per kWh for Vintage 2016 EE participants, 0.0000 per kWh for Vintage 2017 DSM participants, 0.0342 cents per kWh for Vintage 2017 EE participants, (0.0014) cents per kWh for Vintage 2018

DSM participants, (0.0049) cents per kWh for Vintage 2018 EE participants, 0.0019 cents per kWh for Vintage 2019 DSM participants and (0.0225) cents per kWh for Vintage 2019 EE participants.

Public Staff Review of Company Rider 12 Calculations

As discussed above, Public Staff witness Williamson filed testimony in this proceeding discussing EM&V and cost-effectiveness issues related to future DSM/EE proceedings for the Company. None of these topics and issues necessitates an adjustment to the Company's billing factor 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 Stipulation, the Sub 1130 Order, and the Mechanism; and (b) otherwise adhered to sound ratemaking concepts and principles. (Tr. at 323.) Except for the items discussed below, witness Maness testified that he believes that the Company has calculated the Rider 12 billing factors in a manner consistent with N.C. Gen. Stat. § 62-133.9, Commission Rule R8-69, the Sub 1032 Stipulation, the Sub 1130 Order, the Mechanism, and other relevant Commission orders. (*Id*. at 324.)

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*. at 323.) 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. (*Id*. at 323.) Review of this sample is intended to test whether the costs included by the Company in the DSM/EE riders are valid costs of approved DSM and EE programs. As of the date of the

filing of the Public Staff's testimony, this program cost audit was still underway. (*Id*. at 323.) Witness Maness noted in his testimony that if any issues or necessary adjustments are found during the completion of this process, the Public Staff would file supplemental information in this proceeding. (*Id*. at 324.)

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

- <u>Review of Vintage year 2019 Program Costs</u> – 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, the Company and the Public Staff made adjustments to the program costs included in the calculation or 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, to calculate Vintage Year 2019, North Carolina retail program costs for purposes of Rider 12 to be set in this proceeding, the Company rightly undertook to reverse the credits recorded in the general ledger in 2019 that have already been reflected in the Rider 11 calculation. Witness Maness reported, however, that during its investigation in this case, the Public Staff determined that the Company had 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 agreed with the adjustment, and subsequently incorporated it into witnesses Evans and Miller's Supplemental Testimony and Exhibits.

- Return on Deferred Program Costs and Interest on Overrecoveries – As stated in past proceedings, the Public Staff reserves the right to raise the issue of the appropriate interest rate on overrecoveries of utility incentives in the future proceedings.

Witness Maness also included two adjustments in his testimony. He concluded the adjustments he recommended be incorporated into the DSM/EE billing factors, and that these factors should be approved subject to any true-ups in future cost recovery proceedings consistent with the Sub 1032 Settlement, the Sub 1130 Order, and the Revised Mechanism, as well as other relevant orders, including the Commission's final order in this proceeding. (Tr. at 328-29.)

Application of Reserve Margin to Avoided Capacity Costs

Public Staff witness Hinton testified that he opposed the Company's inclusion of a 17% reserve margin adder for the demand reduction benefits associated by energy efficiency programs. He used a table to illustrate his opposition to this addition by noting that the table showed that in 2020, DEC projects generating reserves of 3,591 MW, for a reserve margin of 19.3%. Witness Hinton then stated that if DEC had 100 MW more EE during this year, the load forecast would be reduced by 100 MW, which increases the reserve margin to 3,691 MW, or 20.0%. He characterized DEC's position supporting the 17% adjustment as providing that due to that 100 MW load reduction from EE, DEC is able to reduce its existing generating capacity by 119 MW to maintain the actual reserve margin that it held before the 100 MW of EE. Witness Hinton contended that customers

did not benefit from this and that, therefore, DEC's EE programs should not have their capacity benefits increased to reflect this benefit. (Tr. at 207-08.)

Witness Hinton did agree, however, that DEC customers will ultimately see a benefit of the 100 MW of load reductions due to an EE program, although he questioned what the appropriate value was for customers to pay for a MW load reduction, and how that value was calculated. He states that a weakness in DEC's argument is the inequity of asking customers to pay 17% more for the same MW reduction from an EE program, as compared to a MW reduction from a DSM program. Witness Hinton acknowledged that DEC had a theoretical basis from a planning standpoint, but he described it as deficient from a ratemaking standpoint. (Tr. at 209.)

Witness Hinton further disagreed with including the 17% reserve margin with EE programs because it will increase what customers will pay for avoided capacity costs above the approved rate. The rate is comprised of an approved annual combustion turbine carrying cost and other factors including a Performance Adjustment Factor ("PAF"). Witness Hinton recounted a brief history of the PAF in the Commissions' avoided cost cases. He concluded by recommending that the Company not use the reserve margin adder in the demand reduction benefits associated with its EE programs. He also indicated that this was not the appropriate proceeding to evaluate such a significant change to avoided energy cost rates. He cited previous testimony where he endorsed using PURPA-based avoided costs to link the savings and financial incentives afforded the Company for its DSM/EE programs with the rates it pays QFs for avoided energy and avoided capacity. (Tr. at 211-12.) He believed the proposed reserve margin adjustment diverges too far from the application of avoided cost energy rates in this proceeding and the approved avoided

energy costs in the last avoided cost case, Docket No. E-100, Sub 158. Instead he recommended that a change such as this should be addressed in the next mechanism review. He further stated in response to questions from the Commission that if the Commission were persuaded to add a reserve margin adder, he agreed with witness Duff's "back-up plan" of netting out the reserve margin adjustment (Tr. at 292.) The revenue impact of Witness Hinton's removal of the reserve margin on the PPI would be $618,791. (Tr. at 213.)

Company witness Duff testified that applying a reserve margin factor to determine the avoided cost value associated with the Company's EE programs for vintage 2021 is appropriate. Because EE is treated as a load reduction in the IRP, rather than as a load serving resource, it should have a 17% reserve margin factor applied to it just as it would be appropriate to apply a 17% planning reserve margin factor to an increase in system load. Witness Duff testified that because of every kW of load reduction that comes from EE, the Company does not need to plan for the 1.17kW of capacity required to serve that load. (Tr. at 119.)

Company witness Duff also clarified several assertions in witness Hinton's testimony. First, he noted that witness Hinton's statement that the reserve margin was applied by the Company to all the MW reductions (demand reduction benefits) associated with the Company's EE programs beginning with vintage year 2021 required clarification that the Company had only applied the adjustment to avoided capacity benefits but not to avoided transmission and distribution benefits. Next, witness Duff described how witness Hinton's testimony and table did not accurately reflect DEC's proposal and position on this issue. The Company proposes to use the 17% reserve margin, in which case the 100 MW

load reduction example from witness Hinton's testimony would yield a 117 MW reduction in generating capacity needs, not the 119 MW shown in witness Hinton's table. (Tr. at 120-21.)

DEC witness Duff further testified that, contrary to Public Staff witness Hinton's testimony, DEC's customers will benefit from this proposal. Witness Duff stated that witness Hinton's assertion that customers will not realize the claimed value of the reserve margin adjustment is incorrect. He explained that although the 2019 IRP shows DEC's actual reserve margin is greater than 17% in the near term, there is no reason to assume that there is no capacity value to building EE resources several years before the in-service date of a new generating unit. The majority of EE measures in DEC's vintage 2021 portfolio have a life more than six years, which is about the time that the DEC's 2019 IRP demonstrates the need for new combustion turbine generation. Therefore, those EE measures with longer lives directly contribute peak load and reserve margin savings during and after the in-service date of the next planned generating unit. Witness Duff noted that even witness Hinton acknowledged that customers will ultimately see a benefit of the 100 MW of load reduction due to an EE program and that witness Hinton recognized that it was likely that in the future supply-side resources will be below the 17% margin and customers would see the value of the 100 MW of added demand reduction from EE programs. Because EE programs are built one customer or measure at a time, it typically takes several years to build a significant amount of peak load savings from EE customers. Therefore, witness Duff concluded, EE needs to start being implemented well in advance of when it is needed. (Tr. at 121.)

Witness Duff also disputed witness Hinton's contention that the PAF used in calculating the Company's avoided cost rates appropriately reflects a reserve margin and not simply an effective forced outage rate. Even if it did, witness Duff testified, an appropriate adjustment would not be to remove the reserve margin adjustment, but instead to apply a 11.429% adder to the Avoided Capacity value for EE programs in order to factor in a 5% PAF to reflect a total 17% reserve margin. (Tr. at 123.) Upon questions from the Commission, witness Duff further explained that although the PAF had initially been thought of as a reserve margin adjustment, it is now a reflection of the effective forced outage rate associated with capacity. (Tr. at 168-69.) Additionally, witness Duff testified that, contrary to witness Hinton's assertion that the Company had not previously applied a reserve margin factor in its analysis of EE programs, prior to merger of Duke Energy Corporation and Progress Energy, Inc., Duke Energy Progress ("DEP") used the Strategist model cost-effectiveness tool, and that tool modeled a reserve margin factor associated with capacity savings from energy efficiency. (Tr. at 177.)

Seasonal Allocation

Public Staff witness Hinton expressed concern about the Company's use of seasonal allocation factors for "legacy" DSM programs. He indicated that DEC distinguished between "legacy" and "incremental" DSM programs in the evaluation of its DSM portfolio and cost-effectiveness, and that DEC maintains that its legacy DSM programs should continue to be valued using a 100% summer seasonal allocation weighting. (Tr. at 213-14.)

Witness Hinton agreed that the Company is winter planning, and he agreed with the Company's treatment of its incremental DSM programs with respect to the seasonal

allocation weightings, but he did not agree with the Company's treatment of legacy DSM programs. Because the Company was now winter planning, he concluded that the value of summer DSM is diminished for resource planning purposes in terms of a capacity resource at the expected time of peak and the dollar per kW associated with the demand reductions. (Tr. at 216.) Therefore, he recommended that the Commission direct the Company to treat its legacy DSM programs as it had treated its incremental DSM programs. (Tr. at 216.)

Witness Hinton supported his recommendation by testifying that his proposal would provide "added motivation" to the Company to find ways to reduce winter peak. (Tr. at 217.) Although he was aware that the Company had already begun such an investigation, he believed that his proposed method of applying 10% seasonal capacity value to these legacy DSM programs would appropriately direct the Company to emphasize on programs that focus on reducing load for the winter season, as it increases the incentives for reducing the growth of winter peak demands. (Tr. at 217.)

Witness Hinton also provided confidential testimony on the Company's system lambdas. He provided illustrations of the Company's last three years of DEC's day-ahead lambdas, which he indicated showed the relative lower and less volatile day-ahead lambdas or expected marginal costs during the summer seasons relative to the winter seasons. (Tr. at 219.) He concluded by stating that the intent of his discussing DEC's historical DSM activations is merely to show the evolving role that these programs play in providing sufficient capacity, and that the capacity value has changed on par with the shifting seasonal weighting capacity needs from summer to winter. (Tr. 219-221.)

Witness Hinton then observed that his recommendation would not result in the DSM programs causing any of the legacy DSM programs to fail cost-effectiveness. He

stated that the fact that these programs remain cost-effective is, in part, due to the significant role that avoided transmission and distribution ("T&D") cost, which provide almost the same beneficial value that 100% of the avoided capacity cost. (Tr. at 222.)

Company witness Duff opposed witness Hinton's recommendations in his rebuttal testimony. First, witness Duff summarized the agreement that DEC had reached with the Public Staff in Docket No. E-7, Sub 1130 ("Sub 1130 Agreement"). (Tr. at 102-105.) He testified that consistent with that Sub 1130 Agreement, DEC had used the peaker method. He disagreed with witness Hinton's assertion that the Company had acted inconsistently with the Commission's order in Docket No. E-7, Sub 1130 in not applying the 10% seasonal allocation factor to the avoided cost associated with DEC's legacy DSM programs. (Tr. at 106-07.) DEC was surprised by the Public Staff's position on Docket No. E-7, Sub 1130, because it did not believe that the revisions to the Sub 1130 Agreement amended how the Company calculated the avoided capacity costs used to evaluate existing programs that have already been approved by the Commission and part of the Company's existing portfolio of programs. (Tr. at 107.) Witness Duff explained that that to recognize the growing need for winter capacity and to encourage EE and DSM programs that will provide winter capacity savings, however, the Company voluntarily applied the 90% winter 10% summer seasonal allocation approved in the most recent Avoided Cost Proceeding to Vintage 2021. In addition to encouraging winter DSM, witness Duff believed that this approach aligned better with how new QFs receive capacity value from the last avoided cost proceeding. (Tr. at 109.) Witness Duff pointed out that this approach is consistent with how new QF capacity is treated in the Commission's Notice of Decision and April 15, 2020 *Order Establishing Standard Rates and Contract Terms for Qualifying Facilities*

in Docket No. E-100, Sub 158 ("Sub 158 Order"). (Tr. at 108.) In the Sub 158 Order, the Commission acknowledged that the currently high solar penetrations in Duke's service territory that it expects to continue in the future will have different impacts of summer versus winter loads net of solar contribution in the past. (Tr. at 109.)

Witness Duff acknowledged that neither the Company nor the Public Staff had ever raised the argument that the seasonal allocation that the Commission approved in Docket No. E-100, Sub 148, but the Company raised it in this proceeding for the reasons he discussed. (Tr. at 110.) Witness Duff highlighted that just as the Commission did not retroactively apply its Sub 158 seasonal allocation factors to QFs that had previously established power purchase agreements ("PPAs") at avoided cost rates that were approved based on past prevailing circumstances, the Company did not retroactively apply the seasonal allocations approved in Sub 158 to legacy DSM programs. (Tr. at 111.)

Witness Duff also testified that the Company's treatment of legacy DSM programs was consistent with the Commission's order in the 2018 DSM/EE proceeding in Docket No. E-7, Sub 1164. In that proceeding, the Public Staff recommended that the Commission assign zeros to capacity for legacy DSM programs until the first year of need as shown in the Company's IRP, based on the Commission's order in the then preceding avoided cost case, Docket No. E-100, Sub 148, and House Bill 589's recent amendments to N.C. Gen. Stat. § 62-156(b)(3). The Company opposed this recommendation, arguing that its DSM programs had been established over a number of years and were a useful resource. The Company had additionally argued that legacy DSM programs should be treated as QFs that established legally enforceable obligations prior to November 15, 2016, with respect to the

conclusions of the Commission and House Bill 589, which did not retroactively apply to those QFs. (Tr. at 112.)

Witness Duff also informed the Commission that DEC's legacy DSM programs were viewed from an integrated resource planning ("IRP") standpoint as a "dispatchable resource that is available for the entire fifteen-year planning period." (Tr. at 113.) He noted resource has the flexibility to dispatch any time throughout the day depending on the net load on the system after accounting for the must-take solar output on the grid. Power Manager is available to dispatch into the evening hours when net load is still high due to diminished solar output, a circumstance known as the "duck curve." Conversely, he indicated that, if solar is lost due to midafternoon cloud cover, demand response can be used to make up for diminished irradiance. (Tr. at 113.) As an IRP resource, both existing AC demand response and existing solar resources are oriented toward summer peak demand reduction, helping to meet customer peak demand in the summer. The capacity value from these resources is at least in part why incremental resource decisions are now geared toward winter peak demand needs. (Tr. at 113.)

Witness Duff countered witness Hinton's contentions why DEC's legacy DSM should have the 10% summer allocation applied to them. First, he explained that witness Hinton's argument that DEC's DSM programs were short-lived was erroneous. Witness Duff agreed that the Company recognizes a one-year measure life, but he noted that that was a function of the cost-recovery method DEC uses to recover its DSM/EE costs. Although DEC recognizes a one-year measure life, a legacy DSM resource has been built over time and has a term of implicit contract with customers. This more closely resembles the life of a load control switch than it does a one-year measure life. (Tr. at 114.) He

further explained that DEC's legacy DSM programs have a 1% annual net attrition rate after factoring in that most residences where an existing DSM-participating customer moves out, the new customer in that residence chooses to continue participation in the DSM program. (Tr. at 114.) He cited the Public Staff's previous acknowledgment that the DSM programs in the DEC IRP were "stable and expected to continue for the foreseeable future." (Tr. at 114.)

Witness Duff next disputed witness Hinton's contention that the capacity value of the legacy summer DSM resources has changed because of changes in the Company's system lambda. As witness Duff explained, changes in the Company's system lambdas could just as easily be explained by the milder 2017-19 summers when compared to the summer of 2016, where summer DSM programs were activated a significant number of times. (Tr. at 115.) Witness Duff stated that his cursory examination of historical temperatures indicated that the summer of 2016 was much hotter than normal. (Tr. 116.) Moreover, the full value of a summer DSM resource occurs during extreme weather days where the ability to dispatch a summer DSM program provides peak load reduction that is less expensive to customers than starting up and running a more expensive peaking generation. (Tr. at 116.) The value to customers is having the capacity available when you need it. (Tr. at 148.)

Witness Duff also stated that the Public Staff's recommended approach was not necessary to better encourage the Company to promote winter-focused DSM and EE programs. The Company is already investigating winter DSM programs with the Collaborative and adjusted its seasonal allocations for new and incremental programs to encourage winter-focused DSM. (Tr. at 149.) Witness Duff testified, however, that if the

Commission changes seasonal allocations in the next avoided cost proceeding and then applies those changes retroactively, it can make planning those winter DSM programs "exceedingly hard" because it would be changing the resource that the Company had planned with a certain value. (Tr. at 163) This could adversely impact cost-effectiveness as well. (Tr. at 163, 117.) Witness Duff cautioned that, although he agreed that witness Hinton's assertion that his recommendation would not result in the legacy DSM programs becoming non-cost effective for Vintage Year 2021, recognizing only 10% of the avoided capacity value on legacy DSM results in the majority of the avoided costs associated with the legacy resource coming from avoided T&D. Because the avoided T&D rates are required by the Commission to be studied and updated prior to 2022, it makes the continued cost-effectiveness of these programs uncertain, particularly if there is a drop in these T&D values. Witness Duff cited the Commission's order in Docket No. E-7, Sub 1164, where the Commission stated that assigning a zero-capacity value to DSM programs would under-value the contributions of those programs and send the wrong pricing signal. He concluded that based on that order, it logically follows that assigning a 10% value for avoided capacity to an existing summer DSM resource would undervalue the value of this capacity resource. (Tr. at 118.)

Finally, witness Duff noted that witness Maness had testified that the Public Staff's proposed reduction to the PPI of $5,093,947 was based on an erroneous data request response that the Company had sent. The Company had notified the Public Staff of the error, but the correction had not been incorporated into witness Maness's testimony. The corrected amount of the Public Staff's proposed reduction is $3,624,753. (Tr. at 119.)

Supplemental Adjustments

In her supplemental testimony and exhibits, Company witness Miller updated the lost revenue of Vintages 2018, 2019, and 2021 because of the Company's internal review process, which identified an EM&V update was necessary. This update resulted in a decrease of ($34,729) to lost revenue. Her supplemental testimony and exhibits also reflected adjustments to Vintage 2019 program costs resulting from the Public Staff's program cost audit and the inclusion of Vintage 2016 lost revenues due to an inadvertent omission of exhibits from the original filing. Company witness Miller explained that correcting the error that the Public Staff had discovered in its audit resulted in a reduction of system level program cost expenses in the amount of $992,045.69 and an increase in the PPI of $83,560. Witness Miller also testified that the Company had determined that Vintage 2016 had been inadvertently excluded from the original Rider 12 filing. the Commission determined that a modification in the calculation of how much lost revenue is included in kWh sales for the test period of the rate case. According to witness Miller, non-residential lost revenues associated with the test period (twelve months ending December 31, 2016) of the Company's general rate case proceeding in Docket No. E-7, Sub 1146 were adjusted based on specific enrollment dates, and a portion of these lost revenues were removed from the prospective period as of August 1, 2018 and included in base rates. The remaining portion of the lost revenues should have been included in calendar year 2019 for Vintage 2016. Witness Miller reported no changes were made to residential lost revenue or the non-residential Vintage 2016 DSM calculations, the 2016 revenues collected have been incorporated in the exhibits, and any applicable interest has been calculated.

The changes described by witness Miller in her supplemental testimony impacted the following proposed rates: the residential EMF rate, non-residential Vintage Year EE 2016 EMF rate, non-residential Vintage Year DSM 2016 EMF rate, and the non-residential Vintage Year DSM 2019 EMF rate. These updates were reflected on Supplemental Miller Exhibits 1-4; Supplemental Miller Exhibits 6-7; and Supplemental Evans Exhibits 1-3. (Tr. at 42-44.)

Additionally, in her Supplemental Testimony, witness Miller requested approval of the following annual billing adjustments, on a cents per kWh basis, with regulatory fee included:

Residential Billing Factors	**¢/kWh**
Residential Billing Factor for Rider 12 Prospective Components	0.4184
Residential Billing Factor for Rider 12 EMF Components	0.1011

Non-Residential Billing Factors for Rider 12 Prospective Components	**¢/kWh**
Vintage 2018 EE Participant	0.0137
Vintage 2019 EE Participant	0.0687
Vintage 2020 EE Participant	0.0612
Vintage 2021 EE Participant	0.3522
Vintage 2021 DSM Participant	0.1200

Non-Residential Billing Factors EMF Component	**¢/kWh**
Vintage 2019 EE Participant	(0.0225)
Vintage 2019 DSM Participant	0.0019
Vintage 2018 EE Participant	(0.0049)
Vintage 2018 DSM Participant	(0.0014)
Vintage 2017 EE Participant	0.0342
Vintage 2017 DSM Participant	0.0000
Vintage 2016 Participant	0.0193
Vintage 2106 Participant	(0.0001)

Public Staff witness Maness filed supplemental testimony on June 8, 2020, in which he stated that the Public Staff had completed its two-year review of test year program costs and other than the items mentioned in his direct testimony and adjusted by the Company in its supplemental testimony, had found no material difference between the program costs

as filed by the Company and reflected in the supporting documentation examined. (Tr. at 340.)

Conclusions on Calculations of Rider EE

Based on the foregoing, the Commission finds and concludes that the components of Rider 12 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. The Commission approves the Company's calculation of the DSM/EE rates for Vintage 2021 as reflected in the supplemental testimony and exhibits of DEC witness Miller.

Reserve Margin Conclusions

With respect to the Company's application of the reserve margin to the avoided capacity associated with EE programs, the Commission concludes that it is appropriate and consistent with past Commission practices and orders to include the reserve margin adder. The Commission agrees that the PAF no longer represents a reserve margin adder and that EE is treated as a load resource in the Company's IRP. Thus, the Commission agrees that with every kW of load reduction that comes from EE, the Company does not need to plan for 1.17 kW of load serving capacity.

Seasonal Allocation Conclusions

The Commission also approves the Company's proposed use of the seasonal allocation weightings to new, incremental DSM programs, and does not approve the Public Staff's recommendation to extend those seasonal allocation weightings to DEC's legacy DSM programs. The Commission agrees that the Company's distinctions between legacy DSM, which is the capacity resource that has been built from historic and planned DSM

programs or the amount of DSM capacity in the Company's 2018 IRP forecast as a load serving resource and incremental or new DSM capacity, which are the capacity resources that are built from new participation in DSM programs that were not factored into the Company's IRP as a load serving resource, is appropriate for purposes of this proceeding. The Commission further concludes that the Company's applying the 10% summer and 90% winter seasonal allocation factor to the avoided capacity cost associated with its new, incremental DSM program for estimating program cost effectiveness and the Company's projected PPI is consistent with the method approved in Docket No. E-7, Sub 1130. Although the Commission recognizes that the Sub 1130 Agreement does not expressly and directly compel the Company to apply the seasonal allocation weightings, and that neither the Company nor the Public Staff has previously included them in their calculations, the Company's application of the seasonal allocation weighting is wholly consistent with the intent of the Sub 1130 Agreement, which directs that the PPI and any PPI true-up 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 Avoided Cost Proceeding. The issue of seasonal allocation was litigated and included in the Commission's conclusions in the Sub 158 Order. *See e.g. Notice of Decision*, Docket No. E-100, Sub 158 at 8; and Sub 158 Order at Finding of Fact Nos. 6 and 7 and at 17-29. Therefore, the Company's adoption of the seasonal allocation weightings in the present DSM/EE proceeding is completely consistent with the Sub 1130 Agreement, as it reflects the most recent biennial determination of avoided cost rates for electric utility purchases.

The Commission additionally finds that the Company's adoption of the recently approved seasonal allocation of avoided capacity values for new incremental programs and

participation in this proceeding is also consistent with the Sub 158 Order's directive for the Company to "place additional emphasis on defining and implementing cost-effective DSM programs that will be available to respond to winter demands." Sub 158 Order at 28-29. Before this proceeding, winter DSM programs had zero capacity value assigned to them for cost effectiveness and PPI calculations. (Tr. at 155.) Accordingly, and as DEC witness Duff responded to Chair Brown-Bland's inquiry, to recognize the growing need for winter capacity and to encourage EE and DSM programs that will provide winter capacity savings, the Company applied the seasonal weighting for future capacity needs of 90% in the winter and 10% in the summer to encourage the development and specific promotion of new EE and DSM programs that provide winter capacity savings. The Commission does not conclude that applying the 10% seasonal weighting to existing DSM programs is necessary or appropriate for the Company to turn its focus at this time to winter-oriented DSM programs.

Although the PURPA method contemplates treating legacy DSM/EE programs as legacy QFs are treated for purposes of applying Avoided Cost Proceeding conclusions prospectively, it does not mandate that the Commission view the value of demand response capacity the same as the value of capacity from a QF. The Commission has previously rejected equating QF capacity and DSM capacity in its *Order Approving DSM/EE Rider and Requiring Filing of Customer Notice*, Docket No. E-7, Sub 1164, issued Sept. 11, 2018 ("Sub 1164 Order"). In that docket, the Public Staff had attempted to argue that because the Commission had approved the use of zeros for capacity costs in years where the Company did not show a need for capacity to calculate avoided cost rates for new and incremental QFs in Docket No. E-100, Sub 148, the Mechanism compelled DEC to

likewise apply zeros to its calculation of avoided capacity costs for purposes of calculating the PPI and cost-effectiveness in DSM/EE proceedings. The Commission, however, recognized that DSM provides a capacity value to customers that is different from that provided by QFs. The Commission concluded in the Sub 1164 Order that "evaluating the contributions that DSM/EE measures make to a utility avoiding future capacity needs to determine cost-effectiveness is inherently different than the evaluation taken to determine the capacity costs avoided through the purchase of electric output from a QF." Sub 1164 Order at 44. It logically follows that assigning a 10% value for avoided capacity to an existing DSM resource, as the Public Staff urges in this case, would also undervalue this capacity resource.

The Commission further concludes that that DEC's legacy DSM programs, should not be treated as new or incremental. The evidence at the hearing showed that DEC's DSM programs included in the IRP block are stable and expected to continue for the foreseeable future. (Tr. at 114.) From a system planning perspective, the peak MW capability of the DSM programs is included in all 15 years of the IRP. (Tr. at 113, 172-73.) In other words, the legacy DSM programs are viewed as a dispatchable resource that is available for the entire 15-year IRP planning horizon. (Tr. at 114.) As an IRP resource, both existing demand response and existing solar QF resources are oriented toward summer peak demand reduction, helping to meet customer peak demand in the summer. The capacity value from these resources is at least in part why incremental resource decisions are now geared toward winter peak demand needs. (Tr. at 113.) This does not mean that the existing summer-oriented resources have less value, but recognizes that *incremental*

additions to those resources, whether they are solar or DSM, would have diminished incremental value.

The Commission also agrees that although DEC adopted a one-year measure life for DSM programs for cost-recovery purposes (DEC does not amortize for cost recovery purposes under N.C. Gen. Stat. § 62-133.9), this does not mean that is legacy DSM programs should be treated as incremental. The Commission notes that DEP, which recovers its DSM/EE costs differently, recognizes 25 years of peak reduction impacts at the point a new customer signs up for DSM. (Tr. at 114.) The recognized measure life ties to the switch life, which is 25 years. (Tr. at 142.) As with DEC, the Commission approved new seasonal allocation weightings for DEP in Sub 158 as well – 100% winter. If the Commission applied the Public Staff's argument to DEP, it would lead to the illogical conclusion of retroactive application of zero value seasonal allocation weightings for a DSM resource that has already been deemed used and useful for a 25-year life.

The Commission is also not persuaded that DEC's legacy summer DSM programs should have the 10% seasonal allocation weighting because DEC has had fewer activations of them in the past four years. As witness Duff testified, that decrease in activations could just as easily be explained by the milder 2017-19 summers when compared to the summer of 2016, where summer DSM programs were activated a significant number of times. (Tr. at 115.) Witness Duff stated that his cursory examination of historical temperatures indicated that the summer of 2016 was much hotter than normal. (Tr. at 116.) No party contested witness Duff's testimony in this regard. Moreover, the full value of a summer DSM resource occurs during extreme weather days where the ability to dispatch a summer DSM program provides peak load reduction that is less expensive to customers than

starting up and running a more expensive peaking generation. (Tr. at 116.) In this respect, existing summer DSM capacity provides a reliable value to customers. Thus, legacy DSM capacity should not be valued the same as incremental, new QF capacity.

The Commission also concludes that the Public Staff's approach to legacy DSM programs makes them less cost-effective and changes pre-existing methods of valuing legacy DSM programs. Although the Public Staff's approach does not result in the Company's legacy DSM programs being not cost-effective for Vintage 2021, the approach does have potential adverse long-term impacts on this important legacy summer resource. With only 10% of the avoided capacity value being recognized under the Public Staff's approach, most of the avoided costs associated with this legacy resource come from avoided T&D value. The Commission has required the avoided T&D rates to be studied and updated prior to 2022. If T&D costs decrease, it would further imperil the cost-effectiveness of these programs. Given that uncertainty, the Public Staff's approach jeopardizes the cost-effectiveness of these programs, and thereby potentially jeopardizes their continuation. Building back a DSM resource after it has become non-cost-effective takes time. (Tr. at 164, 191.) Although avoided T&D costs may increase rather than decrease, this does not mitigate the Commission's concern about the continued cost-effectiveness of these programs. As witness Duff pointed out, the general trends of avoided costs have been downward. (Tr. at 190.)

The Commission is also concerned that the Public Staff's position impedes the Company's ability to be able to effectively plan DSM programs, especially winter DSM programs. By applying the 90% seasonal allocation weighting to new, incremental EE and DSM winter programs and participation, the Company has complied with the

Commission's direction in Sub 158 to develop winter oriented DSM and EE programs. (Tr. at 116, 155.) The Company has already started to discuss these types of programs within the Collaborative. However, if seasonal allocation weightings applications can change every two years and be applied retroactively to legacy DSM and EE, planning for those resource becomes "exceedingly hard." (Tr. at 163.) The Commission has indicated that it revisit seasonal allocations in future avoided cost proceedings. *Id*. Therefore, under the Public Staff's proposed method, as the Company builds its winter DSM resources, it has no certainty, based on the variables listed above, that seasonal allocations may shift in the future or that T&D avoided costs may decrease. Adopting the Public Staff's approach, therefore, potentially undermines the long-term viability of winter DSM programs.

Finally, the Commission agrees that legacy DSM programs are a desirable resource that is not only encouraged but mandated by the State. Senate Bill 3 was passed in August 2007 "to promote the development of renewable energy and energy efficiency through the implementation of a Renewable Energy and Energy Efficiency Portfolio Standard (REPS)." N.C. Gen. Stat. § 62-2(10). The stated goals of the legislation are to diversify the resources used to reliably meet the energy needs of consumers in the State, provide greater energy security through the use of indigenous energy resources available within the State, encourage private investment in renewable energy and EE, and provide improved air quality and other benefits to energy consumers and citizens of the State. Id. To this end, Senate Bill 3 provides that electric utilities "shall implement demand-side management and energy efficiency measures and use supply-side resources to establish the least cost mix of demand reduction and generation measures that meet the electricity needs of its customers." *See* N.C. Gen. Stat. § 62-133.9. Through the enactment of REPS, Senate Bill

3 also requires each electric public utility in the State to meet increasing percentages of its energy needs each year through EE measures. *See* N.C. Gen. Stat. § 62-133.8. Finally, this legislation provides that the utilities shall be compensated for their DSM/EE efforts and allows incentives to be awarded, including rewards based upon shared savings and avoided costs achieved by DSM/EE measures. *See* N.C. Gen. Stat. § 62-133.9. Therefore, it is inconsistent with North Carolina policy to reduce the Company's incentive based on the Public Staff's method. The Commission approves the Company's seasonal allocation methodology.

Although the Commission believes that both the reserve margin adjustment and the seasonal allocation methodology are appropriate, it does understand the Public Staff's concerns about the significance of the Mechanism in setting expectations on how the Company recovers its program costs, net lost revenues, and PPI. The Mechanism refers to the most recent avoided cost case as a guide to how the Company calculates its cost-effectiveness for programs. However, because the Commission must establish avoided cost rates based on the economic and regulatory circumstances present every two years, avoided cost methodologies may change from time to time. The PAF is a good example. Therefore, to account for interim changes in the economic and regulatory circumstances reflected in the biennial avoided cost proceedings, the Commission directs the Company in future DSM/EE proceedings to specifically address in its direct testimony if it has altered its methodology for calculating avoided energy and capacity costs from the previous proceeding and identify how the most recent avoided cost case justifies that change.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 29-30

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

Company witness Evans described the Collaborative's activities after the June 11, 2019 hearing in the previous EE/DSM rider docket. Since then, the Collaborative continued to meet bimonthly for formal meetings in July, September, and November of last year and in January of 2020. Between the meetings interested stakeholders joined conference calls in June, September, October and February, and informal meetings in July and November to focus on certain agenda items or priorities that could not be fully explored in the formal meetings. Witness Evans stated that meetings and calls will continue similarly through 2020 as well.

Witness Evans also described how members of the Collaborative participated and provided input to the Company. He noted that the Company had begun to bring program ideas to the Collaborative during the research phase before all assumptions are decided so that members can meaningfully contribute to proposals for new programs or modifications to existing ones. (Tr. at 77.) Although the Collaborative sometimes explored ideas that did not result in new or modified programs, witness Evans asserted that the lively and diverse discussions may lead to discovering new ideas. (*Id.*) Additionally, witness Evans testified that a Collaborative member had pointed the Company to tax credits that had benefitted low-income customers. The Collaborative has also identified other programs for low-and middle-income customers, manufactured homes, and renters. Witness Evans indicated that the Company looked forward to working with the Collaborative on these opportunities. (Tr. at 78.) Finally, witness Evans testified that in response to some who

have expressed a desire for a standard reporting protocol, the Company is developing a new structure for reporting DEC's and DEP's program performance metric to the Collaborative. (Tr. at 79.)

Company witness Evans also testified that opt-outs by qualifying industrial and commercial customers have had a negative effect on the Company's overall non-residential impacts. (*Id*. at 73.) For Vintage 2019, 4,962 eligible customer accounts opted out of participating in DEC's non-residential portfolio of EE programs, and 5,537 eligible customer accounts opted out of participating in the Company's non-residential DSM programs. (*Id*. at 72.) During 2019, however, 11 opt-out eligible customers opted into the EE portion of the Rider, and 28 opt-out eligible customers opted into the DSM portion of the Rider. Witness Evans explained that because the Company does not participate in its customers' economic benefit analyses or decision-making processes, providing a reason for the increase in opt-outs is difficult. The Company believes, however, that its non-residential customers are economically savvy and may be best equipped at determining the economic benefit of participating in the Company's DSM/EE programs. This knowledge, coupled with the increases to Rider EE's rates, may be leading to the increase in eligible customer opt-outs. (*Id*. at 74.)

Witness Evans stated that to reduce opt-outs, the Company continues to evaluate and revise its non-residential portfolio of programs to accommodate new technologies, eliminate product gaps, remove barriers to participation, and make its programs more attractive to opt-out eligible customers. (*Id*. at 73.) It also continues to leverage its Large Account Management Team to make sure customers are informed about product offerings

and their ability to opt into the Company's DSM and/or EE offerings during the March opt-in window. (*Id*. at 74-75.)

SACE witness Bradley-Wright gave DEC "high marks" for their DSM/EE performance and testified that DEC continues to be a regional leader for EE in the Southeast. (Tr. at 351.) He noted that for the two previous years the Company has exceeded a one percent savings mark. Witness Bradley-Wright reported that in 2019, DEC delivered 794.9 gigawatt-hours (GWh) of efficiency savings at the meter, equal to .98% of the previous year's retail sales, reflecting a 2% decline in incremental savings from 2018. (Tr. at 355.) Savings from low-income efficiency programs were 30% higher than in 2018, however. Witness Bradley-Wright also noted that a further 10% decline in savings was projected for 2021, however.

To address the projected decline in savings, witness Bradley-Wright made several recommendations. First, he recommended that the Commission direct the Company to provide specific documentation explaining any projected decline in savings in future and how the Company intends to prevent such declines in future DSM/EE proceedings.

Witness Bradley-Wright next recommended that the Commission endorse the goal of achieving higher savings for low-income customers, supported by increased budgets. He testified that the Company should submit a plan to the Commission to both increase low-income efficiency savings levels overall and deliver efficiency savings to customers who struggle with high energy burdens.

Witness Bradley-Wright also recommended that the Commission include energy efficiency in the state's response to the coronavirus pandemic. To that end, he urged the Commission to direct the Company to present a plan to increase efficiency assistance to

customers suffering from the current economic downturn and to address the program delivery challenges resulting from the coronavirus pandemic.

With respect to the Collaborative, witness Bradley-Wright described the progress of the Collaborative over the past year. Witness Bradley-Wright focused on the work to expand energy efficiency savings to low-income customers. He further discussed how in the 2019 order that the Commission concluded that it would be helpful to have the Collaborative examine the reasons for the Company's forecasted savings decline and how to prevent the decline in future proceedings. He further recommended that the members of the Collaborative work with Company representatives to prepare a report before the next DSM/EE recover rider proceeding.

Witness Bradley-Wright concluded his testimony by addressing a number of policy and regulatory matters relating to DEC's energy savings achievements and efforts to cut carbon emissions in North Carolina. Included in that discussion were integrated resource planning, program applications, rate cases and performance incentive mechanism review.

In his rebuttal testimony, DEC witness Evans responded to witness Bradley-Wright's testimony regarding the Collaborative. He disputed witness Bradley-Wright's implication that DEC's projected decline in savings was a result of a lack of effort. Rather, witness Evans explained, the projected decline reflected market conditions and projected participation. Witness Evans confirmed that the Company continues to seek opportunities for new and improved programs. Witness Evans also cautioned against setting higher savings projections to indicate the Company aspires to higher achieved savings. Projections are used to set rates; therefore, the Company is conservative in its projections

to avoid raising rates and overcollecting from customers. The projections, witness Evans noted, are not a cap on savings.

Witness Evans testified that because the Company had launched a corporate strategy to address the needs of customers during the pandemic, a strategy specific to EE programs was not necessary. The corporate plan included a moratorium on disconnections and suspension of reconnection fees. Additionally, the Duke Foundation provided financial support for food banks and agencies to provide bill assistance. Although the Company has had to suspend programs that require in-home consultations, it has updated its customer communications with more tips about working from home. Consequently, witness Evans concluded a specific EE plan was not necessary. (Tr. at 85-86.)

Witness Evans opposed SACE witness Bradley-Wright's recommendation that the Commission request a report directly from the Collaborative. He noted that the Collaborative was formed by the Commission in Docket No. E-7, Sub 831 as an advisory group to provide "an important forum for Duke to receive input from a variety of stakeholders." If any of the members want to communicate with the Commission, they can do so through future interventions. Assigning a written report for members of the Collaborative to complete is not necessary when organizations have chosen not to intervene. (Tr. at 86.)

Conclusions

The Commission reviewed the issues raised by SACE witness Bradley-Wright. With regard to the recommendations of the NC Justice Center, et al., the Commission concludes the following:

1. The forecasted decline in DEC's DSM/EE savings in 2021 is a matter of concern. Consequently, the Collaborative should examine the reasons for the forecasted decline and explore options for preventing or correcting a decline in future DSM/EE savings.
2. The Collaborative should continue to place emphasis on developing EE programs to assist low-income customers in saving energy and as such lessening their energy burdens.
3. Due to the uncertainty and risks posed by the coronavirus pandemic the Commission is unwilling to direct DEC to file a plan to increase efficiency assistance, however, the Commission urges DEC to continue its efforts to benefit its customers in the form of lessened energy burdens and report on those efforts in its 2021 DSM/EE rider application.
4. In lieu of a report from the Collaborative, the Company should continue reporting on Collaborative activities in its testimony filed in these proceedings. In addition, other parties are encouraged to address Collaborative activities through future interventions.

IT IS, THEREFORE, ORDERED as follows:

1. That the Commission hereby approves the calculation of Rider EE as filed by DEC and revised in the Supplemental Testimony and Exhibits of Carolyn T. Miller, and the resulting billing factors as set forth in Supplemental Miller Exhibit 1, 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 DEC and the Collaborative participants shall give particular attention to the four directives stated by the Commission in this Order, and DEC shall include in its 2021 DSM/EE rider application a report on the progress made in satisfying the directives.

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

5. That the Commission hereby approves the calculation of Rider EE as filed by DEC and revised in the supplemental testimony and exhibits of Carolyn T. Miller, and the resulting billing factors as set forth in Supplemental Miller Exhibit 1, 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.

6. 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.

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

ISSUED BY ORDER OF THE COMMISSION.

This the ____ day of ______, 2020.

NORTH CAROLINA UTILITIES COMMISSION

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Kimberly A. Campbell, Chief Clerk