

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1249

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 )

TESTIMONY OF  
MICHAEL C. MANESS  
PUBLIC STAFF – NORTH  
CAROLINA UTILITIES  
COMMISSION

May 10, 2021

1    **Q.    PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND**  
2           **PRESENT POSITION.**

3    A.    My name is Michael C. Maness. My business address is 430 North  
4           Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am  
5           Director of the Accounting Division of the Public Staff – North  
6           Carolina Utilities Commission (Public Staff).

7    **Q.    BRIEFLY STATE YOUR QUALIFICATIONS AND DUTIES.**

8    A.    A summary of my qualifications and duties is set forth in Appendix B  
9           of this testimony.

10   **Q.    WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

11   A.    The purpose of my testimony is to present my recommendations  
12           regarding the overall Demand-Side Management/Energy Efficiency  
13           (DSM/EE) rider (Rider 13) proposed by Duke Energy Carolinas, LLC  
14           (DEC or the Company), in its Application filed in this docket on  
15           February 23, 2021, pursuant to N.C. Gen. Stat. § 62-133.9 and  
16           Commission Rule R8-69.

17   **Q.    HOW IS YOUR TESTIMONY ORGANIZED?**

18   A.    My testimony begins with a review of the statutory framework for  
19           DSM/EE cost recovery by electric utilities and the historical  
20           background of DEC's Application in this docket. I then discuss the  
21           Company's proposed billing factors and other aspects of its filing.

1 Following a summary of my investigation, I present my findings,  
2 conclusions, and recommendations regarding approval of proposed  
3 Rider 13.

4 **THE RATE-SETTING PROCESS FOR DEC'S DSM/EE REVENUE**  
5 **REQUIREMENTS**

6 **Q. PLEASE DESCRIBE THE BASIS FOR THE COMPANY'S FILING.**

7 A. N.C. Gen. Stat. § 62-133.9(d) allows a utility to petition the  
8 Commission for approval of an annual rider to recover: (1) the  
9 reasonable and prudent costs of new DSM and EE measures; and  
10 (2) other incentives to the utility for adopting and implementing new  
11 DSM and EE measures. However, N.C. Gen. Stat. § 62-133.9(f)  
12 allows industrial and certain large commercial customers to opt out  
13 of participating in the power supplier's DSM/EE programs or paying  
14 the DSM/EE rider, if each such customer notifies its electric power  
15 supplier that it has implemented or will implement, at its own  
16 expense, alternative DSM and EE measures. Commission Rule  
17 R8-69, which was adopted by the Commission pursuant to N.C. Gen.  
18 Stat. § 62-133.9(h), sets forth the general parameters and  
19 procedures governing approval of the annual rider, including but not  
20 limited to: (1) provisions for both (a) a DSM/EE rider to recover the  
21 estimated costs and utility incentives applicable to the "rate period"  
22 in which that DSM/EE rider will be in effect; and (b) a DSM/EE

1 experience modification factor (EMF) rider to recover the difference  
2 between the DSM/EE rider in effect for a given test period (plus a  
3 possible extension) and the actual recoverable amounts incurred  
4 during that test period; and (2) provisions for interest or return on  
5 amounts deferred and on refunds to customers.

6 The costs and utility incentives proposed to be recovered via Rider  
7 13 are all related to DSM and EE measures actually or expected to  
8 be installed or implemented during calendar years 2017-2022  
9 (Vintage Years 2017 through 2022). DEC has calculated each  
10 proposed Rider 13 billing factor related to Vintage Years 2017  
11 through 2021 by use of the Cost Recovery and Incentive Mechanism  
12 for Demand-Side Management and Energy Efficiency Programs  
13 approved on October 29, 2013, in Docket No. E-7, Sub 1032 (the  
14 2013 Sub 1032 Order), as revised in the 2017 DSM/EE rider  
15 proceeding, Docket No. E-7, Sub 1130 (2017 Mechanism). However,  
16 on October 20, 2020, also in Docket No. E-7, Sub 1032 (the 2020  
17 Sub 1032 Order), the Commission approved a revised Cost  
18 Recovery and Incentive Mechanism of Duke Energy Carolinas, LLC,  
19 for Demand-Side Management and Energy Efficiency Programs  
20 (2020 Mechanism), to be effective January 1, 2022.<sup>1</sup> Therefore the

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<sup>1</sup> In the same order, which was also issued in Docket No. E-2, Sub 931, the Commission also approved a revised DSM/EE Cost Recovery and Incentive Mechanism for Duke Energy Progress, LLC (DEP).

1 Rider 13 billing factors related to estimated Vintage Year 2022 costs  
2 and utility incentives have been calculated by use of the 2020  
3 Mechanism. In the following paragraphs, I will describe the essential  
4 characteristics of the 2017 and 2020 Mechanisms; however, each  
5 Mechanism includes and is subject to many additional and more  
6 detailed criteria than are set forth in this testimony.

7 **Q. PLEASE DESCRIBE THE DEVELOPMENT OF THE 2017 AND**  
8 **2020 MECHANISMS AND THEIR MAJOR COMPONENTS.**

9 A. In the 2013 Sub 1032 Order, the Commission approved an  
10 Agreement and Stipulation of Settlement, filed on August 19, 2013,  
11 and amended on September 23, 2013, by and between DEC, the  
12 Public Staff, and certain other intervenors<sup>2</sup> (Sub 1032 Settlement),  
13 which incorporated the mechanism at that time. However, as the  
14 result of discussions that took place during the Company's 2017 Sub  
15 1130 proceeding, the Company and the Public Staff recommended  
16 certain changes to Paragraphs 19, 23, and 69 of the mechanism, and  
17 the addition of new Paragraphs 23A through 23D. These revisions  
18 were set forth in Public Staff witness Maness Exhibit II filed in Sub  
19 1130, and were approved as set forth therein by the Commission in

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<sup>2</sup> The parties to the Sub 1032 Settlement were DEC; the North Carolina Sustainable Energy Association; the Environmental Defense Fund; the Southern Alliance for Clean Energy; the South Carolina Coastal Conservation League; the Natural Resources Defense Council; the Sierra Club; and the Public Staff.

1        its *Order Approving DSM/EE Rider, Revising DSM/EE Mechanism,*  
2        *and Requiring Filing of Proposed Customer Notice*, issued August  
3        23, 2017 (Sub 1130 Order).

4        The overall purpose of the 2017 Mechanism was to: (1) allow DEC  
5        to recover all reasonable and prudent costs incurred for adopting and  
6        implementing new DSM and new EE measures; (2) establish certain  
7        requirements, in addition to those of Commission Rule R8-68, for  
8        requests by DEC for approval, monitoring, and management of DSM  
9        and EE programs; (3) establish the terms and conditions for the  
10       recovery of certain utility incentives - net lost revenues (NLR) and a  
11       Portfolio Performance Incentive (PPI) to reward DEC for adopting  
12       and implementing new DSM and EE measures and programs; and  
13       (4) provide for an additional incentive to further encourage kilowatt-  
14       hour (kWh) savings achievements. The 2017 Mechanism included  
15       provisions addressing mechanism continuity and review, program  
16       modification flexibility, and the treatment of opted-out and opted-in  
17       customers, as well as provisions directly affecting the calculation of  
18       the DSM/EE and DSM/EE EMF riders. A summary of these  
19       provisions is set forth in Appendix A of this testimony.<sup>3</sup> The 2017

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<sup>3</sup> A consolidated version of the entire 2017 Mechanism was filed on May 22, 2018 as Maness Exhibit II in DEC's 2018 DSM/EE rider proceeding, Docket No. E-7, Sub 1164.

1 Mechanism adopted and continued certain requirements from  
2 several prior Commission orders.

3 The purpose of the 2020 Mechanism remains largely the same as  
4 the 2017 Mechanism. However the 2020 Mechanism, as approved  
5 by the Commission, also includes the following new characteristics:

6 1. Addition of a Program Return Incentive (PRI) – The PRI is an  
7 incentive to encourage DEC to pursue savings from existing and  
8 new low-income DSM/EE programs, and to maintain and  
9 increase the cost effectiveness of these programs. For these  
10 types of programs, the PRI initially will be based on 10.6% of the  
11 net present value of the avoided costs savings achieved by those  
12 DSM and EE programs. The percentage ultimately used to  
13 determine the PRI for each Vintage Year will be based on the  
14 Company's ability to maintain or improve the cost effectiveness  
15 of the PRI-eligible programs over and above that initially  
16 estimated for the Vintage Year. At no time will the PRI percentage  
17 utilized fall below 2.65% or rise above 13.25%.

18 2. Reduction of PPI Percentage – Beginning with Vintage Year  
19 2022, the PPI percentage is reduced from 11.50% to 10.60%.

20 3. Cap and Floor on PPI - The amount of pre-tax PPI allowed will  
21 not exceed or fall below the amount that produces a specified  
22 margin over the aggregate pre-tax program costs for the PPI-

1 eligible programs. The maximum margin is set at 19.50% for  
2 Vintage Year 2022 and afterward, until completion of the next  
3 Mechanism review. Additionally, a minimum margin over  
4 aggregate pre-tax program costs for PPI-eligible programs will be  
5 established at 10% for Vintage Year 2022, 6% for Vintage Year  
6 2023, and 2.50% for Vintage Year 2024 and afterward, until  
7 completion of the next Mechanism review.

- 8 4. Clarification of the Criteria for Bundling Measures within  
9 Programs – Measures bundled within a DSM/EE program must  
10 be consistent with and related to the measure technologies or  
11 delivery channels of the program, unless otherwise ordered by  
12 the Commission.
- 13 5. Use of the Utility Cost Test (UCT) – The test used to calculate the  
14 prospective cost-effectiveness of new and ongoing programs is  
15 changed from the Total Resource Cost (TRC) Test to the UCT.
- 16 6. Review of Avoided Transmission and Distribution (T&D) Costs –  
17 The Public Staff and DEC will review avoided T&D costs no later  
18 than December 31, 2021, and make recommendations for any  
19 adjustment in the rider proceedings thereafter. Avoided T&D  
20 costs will be reviewed at least every three years and will be  
21 updated if they change by at least 20%.



- 1           7. Additional Incentive and Penalty - If the Company achieves  
2           annual energy savings of 1.0% of the prior year's system retail  
3           electricity sales in any year during the four-year period of 2022-  
4           2025, it will receive an additional incentive of \$500,000 for that  
5           year. During that same period, if the Company fails to achieve  
6           annual energy savings of 0.5% of retail sales, net of sales  
7           associated with customers opting out of the Company's EE  
8           programs, it will reduce its EE revenue requirement by \$500,000.
- 9           8. Non-Energy Benefits - The definition of the TRC Test is revised  
10          to provide that non-energy benefits, as approved by the  
11          Commission, may be considered in the determination of TRC  
12          results.
- 13          In addition to the above, the 2020 Sub 1032 Order requires,  
14          consistent with the recommendation of the parties to the 2020  
15          Stipulation, that "DEC and DEP shall work with the DSM/EE  
16          Collaborative to develop a scope for a one-time study on the market  
17          penetration of EE programs with low and moderate income  
18          customers to be performed by qualified independent third-party  
19          EM&V providers. . . . [U]pon Commission approval for recovery of  
20          study costs, they shall have the study completed prior to the cost

1 recovery Mechanism modifications approved herein taking effect in  
2 2022.”<sup>4</sup>

3 The entire text of the 2020 Mechanism is attached to the 2020 Sub  
4 1032 Order as Attachment A.<sup>5</sup>

5 **THE COMPANY’S PROPOSED BILLING FACTORS AND OTHER**  
6 **ASPECTS OF ITS FILING**

7 **Q. PLEASE DESCRIBE THE BILLING FACTORS AND VINTAGE**  
8 **YEARS BEING CONSIDERED IN THIS PROCEEDING.**

9 A. In witnesses Listebarger’s and Evans’s separately filed Testimonies  
10 and Exhibits, DEC has requested approval of 14 billing factors  
11 [including the North Carolina Regulatory Fee (NCRF)] comprising  
12 Rider 13, which is to be charged for service rendered during the rate  
13 period January 1, 2022, through December 31, 2022. These  
14 proposed billing factors are set forth on Listebarger Exhibit 1, Pages  
15 1 and 2.

16 For purposes of the Company’s filing, the identified vintage years  
17 correspond to the following time periods:

18 Vintage Year 2017: The year ended December 31, 2017.

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<sup>4</sup> Additional details regarding the performance of the study are included in the body of the 2020 Sub 1032 Order.

<sup>5</sup> The revisions to the Mechanism recommended by the Public Staff were also supported by DEC, DEP, the North Carolina Sustainable Energy Association; the Southern Alliance for Clean Energy; the South Carolina Coastal Conservation League; the Natural Resources Defense Council; the Sierra Club; and the North Carolina Attorney General’s Office.

1           Vintage Year 2018:     The year ended December 31, 2018.  
2           Vintage Year 2019:     The year ended December 31, 2019.  
3           Vintage Year 2020:     The year ended December 31, 2020.  
4           Vintage Year 2021:     The year ended December 31, 2021.  
5           Vintage Year 2022:     The year ended December 31, 2022.

6   **Q.     WHAT ARE THE GENERAL CHARACTERISTICS OF DEC'S**  
7       **PROPOSED DSM/EE BILLING FACTORS?**

8   A.     DEC's proposed billing factors have the following general  
9       characteristics<sup>6</sup>:

- 10       1.     For Vintage Year 2022, proposed Rider 13 includes billing  
11               factors (or components of billing factors) intended to recover  
12               estimated program costs, a PPI, and a PRI, as well as  
13               estimated calendar year 2022 NLR, applicable to DSM and  
14               EE measures projected to be installed or implemented during  
15               Vintage Year 2022, all subject to future true-up;
- 16       2.     For Vintage Year 2021, the proposed Rider includes billing  
17               factors (or components of billing factors) intended to  
18               prospectively recover estimated calendar year 2022 NLR  
19               associated with Vintage Year 2021 installations, subject to  
20               future true-up;

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<sup>6</sup> In addition to the 2017 and 2020 Mechanisms, particular billing factors may also be subject to Commission rulings in Docket No. E-7, Subs 831, 938, 979, and 1032, as well as DEC's various annual DSM/EE cost and incentive recovery proceedings and individual program approval proceedings.

- 1           3.     For Vintage Year 2020, the proposed Rider includes billing  
2                 factors (or components of billing factors) intended to: (a)  
3                 prospectively recover estimated calendar year 2022 NLR  
4                 associated with Vintage Year 2020 installations, subject to  
5                 future true-up; and (b) true up 2020 program cost and, to the  
6                 extent evaluation, measurement, and verification (EM&V) of  
7                 these results has been completed, Vintage Year 2020  
8                 participation and per-participant avoided cost savings and  
9                 calendar year 2020 NLR;
- 10          4.     For Vintage Year 2019, the proposed Rider includes billing  
11                 factors (or components of billing factors) intended to: (a)  
12                 prospectively recover estimated calendar year 2022 NLR  
13                 associated with Vintage Year 2019 installations, subject to  
14                 future true-up; and (b), to the extent EM&V of these results  
15                 has been completed, true up Vintage Year 2019 participation  
16                 and per-participant avoided cost savings and calendar years  
17                 2019 and/or 2020 NLR;
- 18          5.     For Vintage Year 2018, the proposed Rider includes billing  
19                 factors intended to, to the extent EM&V of these results has  
20                 been completed, true up Vintage Year 2018 participation and  
21                 per-participant avoided cost savings and calendar years  
22                 2018, 2019, and/or 2020 NLR; and

1           6.     For Vintage Year 2017, the proposed Rider includes billing  
2                   factors intended to true up calendar years 2017, 2018, 2019,  
3                   and/or 2020 NLR.

4           The calculations of the billing factors for each vintage year may also  
5           include adjustments to the return on undercollections or  
6           overcollections of DSM/EE revenue requirements, as well as to  
7           amounts to be collected to compensate DEC for the NCRF.

8   **Q.     COULD THERE BE FUTURE TRUE-UPS OF THE DSM/EE**  
9   **REVENUE REQUIREMENTS?**

10   A.    Certain components of the revenue requirements related to certain  
11           prior, current, and future years will remain subject to prospective  
12           update adjustments and/or retrospective true-ups in the future. The  
13           various types of other expected or possible adjustments to the  
14           revenue requirements for these vintage years include prospective  
15           recovery of NLR requirements; true-ups of program cost; and true-  
16           ups of the PPI, PRI, and NLR requirements to reflect the results and  
17           possible adjustments to participation and EM&V analyses.

18   **Q.     WHAT IS THE IMPACT OF THE COMPANY'S PROPOSED**  
19   **BILLING FACTORS IN THIS PROCEEDING ON CUSTOMERS'**  
20   **RATES?**

21   A.    Based on the pro forma kWh sales used by the Company to calculate  
22           the DSM/EE riders in this case, the Company-proposed Residential

1 DSM/EE combined prospective and EMF revenue requirement is  
2 approximately \$104.6 million, an approximate \$9.0 million decrease  
3 from the revenue that would be produced by the rates currently in  
4 effect. The decrease in the monthly bill of a Residential customer  
5 using 1,000 kilowatt-hours of energy resulting from this revenue  
6 requirement decrease would be \$0.41. For the Non-Residential  
7 class, the proposed overall combined revenue requirement is  
8 approximately \$89.1 million, an approximate \$19.3 million reduction.  
9 The change in a Non-Residential customer's bill would depend on  
10 which particular Vintage Years of DSM and/or EE rates for which the  
11 customer is opted out or opted in.

12 **INVESTIGATION AND CONCLUSIONS**

13 **Q. PLEASE DESCRIBE YOUR INVESTIGATION OF DEC'S FILING.**

14 A. My investigation of DEC's filing in this proceeding focused on  
15 whether the Company's proposed DSM/EE billing factors were: (a)  
16 calculated in accordance with, as appropriate, the 2017 or 2020  
17 Mechanism and the Commission Orders with which they are  
18 associated; and (b) otherwise adhered to sound ratemaking  
19 concepts and principles. The procedures I and other members of the  
20 Public Staff's Accounting Division utilized included a review of the  
21 Company's filing, relevant Commission proceedings and orders, and  
22 workpapers and source documentation used by the Company to

1 develop the proposed billing factors. Performing the investigation  
2 required the review of responses to written and verbal data requests,  
3 as well as discussions with Company personnel. As part of its  
4 investigation, the Public Staff performed a review of the DSM/EE  
5 program costs incurred by DEC during the 12-month period ended  
6 December 31, 2020. To accomplish this, the Public Staff selected  
7 and reviewed samples of source documentation for test year costs  
8 included by the Company for recovery through the DSM/EE riders.  
9 Review of this sample, which is still underway as of the filing date of  
10 this testimony, is intended to test whether the costs included by the  
11 Company in the DSM/EE riders are valid costs of approved DSM and  
12 EE programs.

13 **Q. WHAT ARE YOUR FINDINGS AND CONCLUSIONS?**

14 A. With the exception of items specifically described later in this  
15 testimony, as well as subject to the outcome of the Public Staff's  
16 program cost review described above, I am of the opinion that the  
17 Company has calculated the Rider 13 billing factors in a manner  
18 consistent with N.C. Gen. Stat. § 62-133.9, Commission Rule R8-69,  
19 the 2017 and 2020 Mechanisms (and the Commission Orders with  
20 which they are associated), and other relevant Commission Orders.  
21 However, this conclusion is subject to the caveat that the Public Staff  
22 is still in the process of reviewing certain data responses recently

1 received from the Company, including documentation of costs  
2 selected for review in the Public Staff's sample. Once this review is  
3 complete, the Public Staff will file with the Commission any findings  
4 not already set forth in testimony.

5 I would like to note the following regarding the Public Staff's  
6 investigation:

7 1. Review of Vintage Year 2020 Program Costs – The Public  
8 Staff's review of the selected sample items from the  
9 population of 2020 DSM/EE program costs has resulted in  
10 one matter of concern, to date. This matter is further  
11 discussed below.

12 2 Return on Deferred Program Costs and Interest on  
13 Overrecoveries – As stated in past proceedings, the Public  
14 Staff reserves the right to raise the issue of the appropriate  
15 interest rate on overrecoveries of utility incentives in future  
16 proceedings.

17 **Q. PLEASE EXPLAIN FURTHER THE CONCERNS YOU HAVE**  
18 **REGARDING THE PUBLIC STAFF'S REVIEW OF 2020 DSM/EE**  
19 **PROGRAM COSTS.**

20 A. As described in my testimony in DEC's 2020 DSM/EE Rider  
21 proceeding (Docket No. E-7, Sub 1230), and in Public Staff witness  
22 Williamson's testimony in that proceeding and this year's



1 proceeding, DEC operates a referral channel (entitled "FinditDuke"  
2 for marketing purposes). This referral channel enables DEC  
3 customers, as well as non-DEC customers located within or  
4 surrounding the Duke Energy service territory, to locate contractors  
5 who may be able to provide certain services. The contractors pay a  
6 fee to DEC for performing referrals, and this fee is used to offset  
7 program costs of the Company's Residential SmartSaver EE  
8 program. The referable services include those that are associated  
9 with measures under the Residential SmartSaver Program, but have  
10 been expanded since the referral channel began to include other  
11 Residential and non-Residential services, including electrical  
12 residential solar, and tree services that are unrelated to DSM/EE.  
13 While some of these services could result in higher efficiency  
14 measures being installed, the remaining do not appear to be related  
15 to DEC's currently approved DSM/EE programs. Furthermore, it  
16 appears possible that some of the services that could be referred  
17 through FinditDuke are services that are not regulated by the  
18 Commission. Thus, DEC may be operating a referral service that  
19 includes referrals for non-regulated services to be performed by third  
20 parties.

21 Mr. Williamson testifies in this proceeding that it appears that some  
22 of the revenues received through the FinditDuke program should be  
23 recorded to accounts not related to the Company's DSM/EE

1 programs, in that the related services are not part of the Company's  
2 DSM/EE efforts, and that they may be related to services provided  
3 to non-customers of DEC. He recommends that the Company work  
4 to refine its accounting so that the only revenues that are credited as  
5 offsets against DSM/EE program cost accounts are those that are  
6 attributable to referrals that are actually related to DSM/EE measures  
7 that are installed as a result of the referral.

8 This principle should also apply to the costs incurred by DEC to  
9 administer and operate the FinditDuke effort. For example, in its  
10 review of 2020 DSM/EE program costs, the Public Staff discovered  
11 costs related to the production of a video advertisement promoting  
12 the FinditDuke program. In its review of the accounting details of the  
13 costs of production, it was not evident that any of the costs were  
14 charged to non-DSM/EE accounts. However, when viewing the  
15 video advertisement, there was nothing to indicate that the contractor  
16 referrals being promoted were limited to contractors that would be  
17 specifically providing DSM/EE-related services. Thus, there appears  
18 to be a mismatch between the potential effects of the advertisement  
19 (referral of contractors for a potentially broad spectrum of services)  
20 and the accounting and ratemaking for the advertisement's cost (only  
21 charged to DSM/EE).

1 I believe that the principles elucidated by Mr. Williamson with regard  
2 to the revenues associated with FinditDuke are equally appropriate  
3 with regard to the costs of administering and operating the referral  
4 effort. Therefore, I recommend that the Company refine its referral  
5 channel accounting to also properly assign, apportion, or allocate  
6 costs to DSM/EE, and non-DSM/EE efforts, working in conjunction  
7 with third party vendor-managers where appropriate. While such  
8 assignment may require estimates and approximations of the  
9 appropriate assignments and allocations, the effort is highly likely to  
10 produce a better result than the current approach of simply assigning  
11 100% of all the revenues and costs to the Residential SmartSaver  
12 Program. Otherwise, the current practice could result in distorted  
13 cost-effectiveness results for the program as well as over- or  
14 underpayments of PPI and PRI utility incentives to the Company.

15 **Q. WHAT OTHER IMPACTS DOES THE TESTIMONY OF PUBLIC**  
16 **STAFF WITNESS WILLIAMSON HAVE ON YOUR**  
17 **CONCLUSIONS REGARDING THE DSM/EE RIDERS IN THIS**  
18 **PROCEEDING?**

19 A. Mr. Williamson has filed testimony in this proceeding discussing  
20 several other topics related to the Company's filing. None of the  
21 matters discussed by Mr. Williamson necessitate an adjustment in  
22 this particular proceeding to the Company's billing factor

1 calculations, although some of them may affect the determination of  
2 the factors in future proceedings.

3 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE**  
4 **RIDER 13 BILLING FACTORS.**

5 A. In summary, although we have general concerns regarding  
6 FinditDuke accounting that we believe should be followed up, the  
7 Public Staff has found no errors or other issues necessitating an  
8 adjustment to the Rider 13 billing factors, subject to completion of  
9 our program cost sample review.

10 **RECOMMENDATION**

11 **Q. WHAT IS YOUR RECOMMENDATION IN THIS PROCEEDING?**

12 A. Based on the results of the Public Staff's investigation (subject to  
13 completion of its review of 2018 program costs), I recommend that  
14 the billing factors proposed by the Company, as set forth in  
15 Listebarger Exhibit 1, be approved by the Commission. These  
16 factors should be approved subject to any true-ups in future cost  
17 recovery proceedings consistent with the 2017 and 2020  
18 Mechanisms and the Commission Orders with which they are  
19 associated, as well as other relevant orders of the Commission,  
20 including the Commission's final order in this proceeding. Most  
21 specifically, I recommend that the application of the 2020 Mechanism  
22 to the estimated costs and utility incentives associated with Vintage

1 Year 2022 not be considered final until those costs and utility  
2 incentives are trued up in future rider proceedings.

3 In making its recommendations in this proceeding, the Public Staff  
4 notes that reviewing the calculation of the DSM/EE rider is a process  
5 that involves reviewing numerous assumptions, inputs, and  
6 calculations, and its recommendation with regard to this proposed  
7 rider is not intended to indicate that the Public Staff will not raise  
8 questions in future proceedings regarding the same or similar  
9 assumptions, inputs, and calculations.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 **A.** Yes, it does.

APPENDIX A  
PAGE 1 OF 3**SUMMARY OF CERTAIN PORTIONS OF DEC'S 2017 DSM/EE MECHANISM<sup>1</sup>**

1. With the exception of Low-Income Programs or certain other societally beneficial non-cost-effective programs approved by the Commission, all programs submitted for approval will have an estimated Total Resource Cost (TRC) and Utility Cost (UC) test result greater than 1.00. For purposes of calculating cost-effectiveness for program approval, the Company shall use projected avoided capacity and energy benefits specifically calculated for the program, as 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 the date of the program approval filing, but using, for program-specific avoided energy benefits, the projected EE portfolio hourly shape rather than an assumed 24x7 100 MW reduction.
2. In each annual DSM/EE cost recovery filing, DEC shall perform and file (a) prospective cost-effective test evaluations for each of its approved DSM and EE programs, and (b) prospective aggregated portfolio-level cost-effectiveness test evaluations for its approved DSM/EE programs, using the same methodology for determining avoided capacity and energy benefits as set forth in the Revised Mechanism for program approval, except that the reference Commission-approved avoided cost credits shall be derived from those approved as of December 31 of the year immediately preceding the date of the annual DSM/EE rider filing. For any program that initially demonstrates a TRC result, determined pursuant to paragraph 23A above, of less than 1.00, the Company shall either terminate the program or undertake a process over the next two years to improve program cost-effectiveness. For programs that demonstrate a prospective TRC result of less than 1.00 in a third DSM/EE rider proceeding after the initial non-cost-effective result, 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.

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<sup>1</sup> For a summary of revisions made to the 2017 Mechanism by the 2020 Mechanism, please see the testimony accompanying this Appendix.

3. Industrial and large commercial customers have the flexibility to opt out of either or both of the DSM and EE categories of programs for one or more vintage years, as well as the ability to opt back into either or both the categories for a later vintage year. If a customer opts back into the DSM category, it cannot opt out again for three years; however, a customer has the freedom to opt in or out of the EE category for each vintage year. Additionally, if a customer opts out of paying the rider for a vintage year after one or more years in which the customer was “opted in,” DEC may charge the customer subsequent DSM/EE and DSM/EE EMF riders only for those vintage years in which the customer actually participated in a DSM/EE program.
4. DSM/EE and DSM/EE EMF riders will be calculated on a vintage year basis, with separate riders being calculated for the Residential customer class and for those rate schedules within the Non-Residential customer class that have DEC DSM/EE program options in which they can participate.
5. Incurred DSM and EE program costs will be directly recovered as part of the annual riders. Deferral accounting for over- and underrecoveries of costs is allowed, and the balance in the deferral account(s), net of deferred income taxes, may accrue a return at the net-of-tax rate of return approved in DEC’s then most recent general rate case.
6. DEC will be allowed to recover NLR as an incentive (with the exception of those amounts related to research and development or the promotion of general awareness and education of EE and DSM activities), but will be limited for each measurement unit installed in a given vintage year to those dollar amounts resulting from kWh sales reductions experienced during the first 36 months after the installation of the measurement unit. NLR related to pilot programs are subject to additional qualifying criteria.
7. The eligibility of kWh sales reductions to generate recoverable NLR during the applicable 36-month period will cease upon the implementation of a Commission-approved alternative recovery mechanism that accounts for NLR, or new rates approved by the Commission in a general rate case or comparable proceeding.

8. NLR will be reduced by net found revenues (as defined in the Revised Mechanism) that occur in the same 36-month period. Net found revenues will continue to be determined according to the “Decision Tree” process approved by the Commission on February 8, 2011, in Docket No. E-7, Sub 831.<sup>2</sup>
9. DEC will be allowed to recover a PPI for its DSM and EE portfolio based on a sharing of actually achieved and verified energy and peak demand savings (excluding those related to general programs and measures and research and development activities). Any PPI related to pilot programs is subject to additional qualifying criteria. Unless the Commission determines otherwise in an annual DSM/EE rider proceeding, the amount of the pre-income-tax PPI initially to be recovered for the entire DSM/EE portfolio for a vintage year will be equal to 11.5% multiplied by the present value of the estimated net dollar savings associated with the DSM/EE portfolio installed in that vintage year. Low-income programs with expected UC test results less than 1.00 and other non-cost-effective programs with similar societal benefits as approved by the Commission will not be included in the portfolio for purposes of the PPI calculation. The PPI for each vintage year will ultimately be trued up based on net dollar savings as verified by the EM&V process and approved by the Commission. For Vintage Years 2019 and afterwards, the program-specific per kilowatt (kW) avoided capacity benefits and per kWh avoided energy benefits used for the initial estimate of 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 Commission-approved Biennial Determination of Avoided Cost Rates as of December 31 of the year immediately preceding the date of the annual DSM/EE rider filing, but using, for program-specific avoided energy benefits, the projected EE portfolio hourly shape rather than an assumed 24x7 100 MW reduction.
10. If the Company achieves incremental energy savings of 1% of its prior year’s system retail electricity sales in any year during the five-year 2014-2018 period, the Company will receive a bonus incentive of \$400,000 for that year.

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<sup>2</sup> Additionally, in its Order issued on August 21, 2015, in Docket No. E-7, Sub 1073, the Commission found that “it is reasonable, for purposes of this proceeding, for DEC to include negative found revenues associated with its current initiative to replace mercury vapor (MV) lighting with light emitting diode (LED) fixtures in the calculation of net found revenues used in the Company’s calculation of NLR.”



**QUALIFICATIONS AND EXPERIENCE**

MICHAEL C. MANESS

I am a graduate of the University of North Carolina at Chapel Hill with a Bachelor of Science degree in Business Administration with Accounting. I am a Certified Public Accountant and a member of both the North Carolina Association of Certified Public Accountants and the American Institute of Certified Public Accountants.

As Director of the Accounting Division of the Public Staff, I am responsible for the performance, supervision, and management of the following activities: (1) the examination and analysis of testimony, exhibits, books and records, and other data presented by utilities and other parties under the jurisdiction of the Commission or involved in Commission proceedings; and (2) the preparation and presentation to the Commission of testimony, exhibits, and other documents in those proceedings. I have been employed by the Public Staff since July 12, 1982.

Since joining the Public Staff, I have filed testimony or affidavits in a number of general, fuel, and demand-side management/energy efficiency rate cases of the utilities currently organized as Duke Energy Carolinas, LLC, Duke Energy Progress, LLC., and Virginia Electric and Power Company (Dominion Energy North Carolina) as well as in several water and sewer general rate cases. I have also filed testimony or affidavits in other proceedings, including applications for certificates of public convenience and necessity for the construction of generating

facilities, applications for approval of self-generation deferral rates, applications for approval of cost and incentive recovery mechanisms for electric utility demand-side management and energy efficiency (DSM/EE) efforts, and applications for approval of cost and incentive recovery pursuant to those mechanisms.

I have also been involved in several other matters that have come before this Commission, including the investigation undertaken by the Public Staff into the operations of the Brunswick Nuclear Plant as part of the 1993 Carolina Power & Light Company fuel rate case (Docket No. E-2, Sub 644), the Public Staff's investigation of Duke Power's relationship with its affiliates (Docket No. E-7, Sub 557), and several applications for business combinations involving electric utilities regulated by this Commission. Additionally, I was responsible for performing an examination of Carolina Power & Light Company's accounting for the cost of Harris Unit 1 in conjunction with the prudence audit performed by the Public Staff and its consultants in 1986 and 1987.

I have had supervisory or management responsibility over the Electric Section of the Accounting Division since 1986, and also was assigned management duties over the Water Section of the Accounting Division during the 2009-2012 time frame. I was promoted to Director of the Accounting Division in late December 2016.