

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1273

In the Matter of	)	<b>DIRECT TESTIMONY OF</b>
Application of Duke Energy Progress, LLC	)	<b>SHANNON R. LISTEBARGER</b>
for Approval of Demand-Side Management	)	<b>FOR</b>
and Energy Efficiency Cost Recovery Rider	)	<b>DUKE ENERGY PROGRESS,</b>
Pursuant to N.C. Gen. Stat. § 62-133.9 and	)	<b>LLC</b>
Commission Rule R8-69	)	

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JUN 15 2021

1 I. INTRODUCTION AND PURPOSE

2 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION  
3 WITH DUKE ENERGY CORPORATION.

4 A. My name is Shannon R. Listebarger, and my business address is 550 South  
5 Tryon Street, Charlotte, North Carolina. I am a Manager, Rates & Regulatory  
6 Strategy for Duke Energy Carolinas, LLC (“DEC”), supporting both Duke  
7 Energy Progress, LLC (“DEP” or the “Company”) and DEC.

8 Q. PLEASE BRIEFLY STATE YOUR EDUCATIONAL BACKGROUND  
9 AND EXPERIENCE.

10 A. I have a Bachelor of Business Administration from DeVry University and a  
11 Master of Business Administration from Keller Graduate School of  
12 Management. I began my career in 2001 with American Electric Power. During  
13 my time there I held a variety of positions in Corporate Accounting, Regulatory  
14 and Financial Forecasting. In 2018, I began working with Duke Energy as a  
15 lead load forecast analyst. I joined the Rates Department in 2020 as Manager,  
16 Rates and Regulatory Strategy.

17 Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN MATTERS  
18 BROUGHT BEFORE THIS COMMISSION?

19 A. Yes, I have provided testimony in support of DEP’s previous application for  
20 approval of its DSM/EE cost recovery riders in Docket No. E-2, Sub 1252 and  
21 DEC’s application for approval of its DSM/EE cost recovery riders in Docket  
22 No. E-7, Sub 1249.

23 Q. WHAT ARE YOUR CURRENT RESPONSIBILITIES?

1 A. I am responsible for providing regulatory support for retail rates and providing  
2 guidance on DEC's and DEP's DSM/EE cost recovery process.

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

4 A. The purpose of my testimony is to explain and support DEP's proposed  
5 DSM/EE cost recovery rider and Experience Modification Factor ("EMF") and  
6 provide information required by Commission Rule R8-69.

7 **Q. PLEASE DESCRIBE THE EXHIBITS ATTACHED TO YOUR**  
8 **TESTIMONY.**

9 A. Listebarger Exhibit 1 provides a summary of the proposed annual rates by  
10 customer class. Listebarger Exhibit 2, pages 1 through 3, shows the calculation  
11 of the DSM and EE rates for the rate period, as well as the breakdown by  
12 program of the various components of the estimated revenue requirement.  
13 Listebarger Exhibit 2, pages 4 through 6, presents the calculation of the DSM  
14 EMF and EE EMF rates for the test period, as well as the breakdown by program  
15 of the various components of the final revenue requirement. Adjustments  
16 resulting from Evaluation, Measurement and Verification ("EM&V") of the  
17 Company's DSM/EE programs are also presented in Listebarger Exhibit 2,  
18 page 7. Listebarger Exhibit 3, pages 1 through 4, calculates the amount of  
19 interest or return due on over- and under-collections for Vintage 2020. Exhibit  
20 4 shows a summary of revenue collected during calendar year 2020 by program  
21 type and customer class. Listebarger Exhibit 5, pages 1 through 7, presents the  
22 allocation factors used in the development of the rider, including the energy  
23 allocation factors applicable to DSM and EE program costs, the North Carolina  
24 and South Carolina retail allocation factors, and the lighting allocation factors.

1 Listebarger Exhibit 6 includes both forecasted 2022 sales from the Spring 2021  
2 forecast and the impact of opt-outs.

3 **Q. WERE LISTEBARGER EXHIBITS 1-6 PREPARED BY YOU OR AT**  
4 **YOUR DIRECTION AND SUPERVISION?**

5 A. Yes.

6 **II. SUMMARY OF DSM/EE COSTS**

7 **Q. CAN YOU PROVIDE A SUMMARY OF THE COSTS FOR WHICH DEP**  
8 **IS REQUESTING RECOVERY IN THIS PROCEEDING?**

9 A. Yes. The DSM/EE costs DEP is requesting to recover through the rates  
10 proposed in this proceeding are associated with the costs incurred during the  
11 test period, as well as the costs forecasted to be incurred during the rate period.  
12 The test period utilized in the development of the DSM/EE EMF is January 1,  
13 2020 through December 31, 2020. The North Carolina allocated share of  
14 recoverable DSM/EE costs for the test period is \$160,435,281. For the rate  
15 period of January 1, 2022 through December 31, 2022, the North Carolina  
16 allocated share of forecasted DSM/EE costs is \$183,344,499. The total North  
17 Carolina allocated share of DSM/EE costs for the test period plus the rate period  
18 is \$343,779,780.

19 A summary of the costs associated with DEP's recovery request by  
20 period and by DSM/EE program/measure is provided in the following table:

Program/Measure	Test Period	Rate Period
	1/1/20 through 12/31/20	1/1/22 through 12/31/22
CIG DR	\$1,379,153	\$2,018,114
EnergyWise	\$16,902,241	\$14,897,321
EnergyWise for Business	\$1,789,006	\$2,331,730
DSDR Implementation	\$19,680,927	\$29,665,823
Residential Home Advantage	\$140,907	\$517
Residential Smart Saver/Home Energy Improvement	\$6,416,860	\$3,744,221
Residential Low Income – NES	\$540,495	\$3,204,041
Energy Efficient Lighting	\$15,422,146	\$10,898,385
Appliance Recycling	\$2,439,918	\$31,968
My Home Energy Report	\$15,595,776	\$15,217,210
Small Business Energy Saver	\$8,965,975	\$14,091,160
Residential New Construction	\$18,110,154	\$16,903,342
Multi-Family EE	\$2,839,491	\$3,586,869
Energy Education Program for Schools	\$598,122	\$1,702,418
Save Energy & Water Kit	\$3,058,899	\$9,103,101
Residential Energy Assessments	\$3,058,060	\$5,203,850
Smart Saver Prescriptive	\$19,453,808	\$22,047,514
Smart Saver Custom	\$4,684,474	\$6,413,357
Smart Saver Performance Incentive	\$388,449	\$667,817
Administrative & General Costs	\$4,974,760	\$6,891,535
Carrying Cost on Balances	\$14,079,746	\$14,746,380
Found Revenue (total)	\$(84,089)	\$(22,173)
Lost Revenue Decrement		
Total Cost	\$160,435,281	\$183,344,499

1 In addition to the summary table above, Listebarger Exhibit 2, page 3,  
2 and Listebarger Exhibit 2, page 6, provide additional categorizations by cost  
3 element.

4 **Q. ARE DEP'S PROPOSED RATES DESIGNED TO RECOVER THE**  
5 **TOTAL NORTH CAROLINA ALLOCATED SHARE OF \$343,779,780?**

6 A. No. Because many of the expenses incurred during the current test period to  
7 develop and implement DEP's DSM/EE programs produce benefits covering  
8 several years, a significant portion of those expenses will be deferred and

1 recovered over varying amortization periods. A summary of the amortization  
 2 periods for program expenses and Program/Portfolio Performance Incentive  
 3 (“PPI”)<sup>1</sup> is shown below:

Length of Amortization Period				
Program Name	Program Cost – batches prior to 2016	Program Cost – 2016 – present	PPI – vintages prior to 2016	PPI – 2016 – present
CIG DR	10	3	10	3
EnergyWise	10	10	10	10
EnergyWise for Business	N/A	3	N/A	1
DSDR Implementation	10	10	N/A	N/A
Residential Home Advantage	10	N/A	10	N/A
Residential Smart Saver/Home Energy Improvement	10	10	10	10
Residential Low Income – NES	10	10	10	10
Energy Efficient Lighting	5	5	10	5
Appliance Recycling	10	10	10	10
My Home Energy Report	1	1	1	1
Residential New Construction	10	10	10	10
CFL Pilot	10	N/A	10	N/A
Solar Hot Water Pilot	10	N/A	10	N/A
Multi-Family EE	5	5	5	5
Energy Education	5	5	5	5
CIG EE	10	3	10	3
Save Water & Energy Kit	N/A	5	N/A	5
Residential Energy Assessments	N/A	5	N/A	5
Small Business Energy Saver	10	3	10	3
Smart Saver Prescriptive	3	3	3	3

<sup>1</sup> As explained further below, for vintages prior to 2016, incentives are calculated on a program basis. Pursuant to the Commission’s *Order Approving Revised Cost Recovery Mechanism and Granting Waivers* issued January 20, 2015 in Docket No. E-2, Sub 931 (“Order Approving Revised Mechanism”), which applies to Vintages 2016 and forward, incentives under the Company’s revised cost recovery mechanism are calculated on a portfolio basis. For ease of reference, I will refer to both incentives as “PPI.”

Length of Amortization Period				
Program Name	Program Cost – batches prior to 2016	Program Cost – 2016 – present	PPI – vintages prior to 2016	PPI – 2016 – present
Smart \$aver Performance	3	3	3	3
Smart \$aver Custom	3	3	3	3
Admin. & General	3	3	3	N/A

In addition to the aforementioned deferrals, DEP's proposed rates include the recognition and amortization of prior period deferrals. In total, the EMF-related calculations based on test period costs reflect an estimated under-recovery of \$12,551,970. The DSM/EE rate calculations associated with rate period estimates are based on a revenue requirement of \$177,186,661. The rate period and EMF revenue requirements produce a combined revenue requirement of \$189,738,629. Listebarger Exhibit 2, pages 1 and 2, and Listebarger Exhibit 2, pages 4 and 5, detail the calculation of these amounts.

### III. EMF REVENUE REQUIREMENT

**Q. HOW WAS THE DSM/EE EMF UNDER-RECOVERY OF \$12,551,970 DETERMINED?**

A. The EMF under-recovery is a function of the sum of test period costs, including amounts relating to the amortization of deferred costs from prior periods, and credits for actual DSM/EE rider revenues for the period January 1, 2020 through December 31, 2020. The following table illustrates the relationship of these elements with respect to the determination of the DSM/EE EMF:

Rate Element	Amounts
Test Period Revenue Requirement	\$166,226,042
Net DSM/EE Rate Revenue	\$154,802,417
Add: Other Adjustments	(\$1,128,344)
Total EMF Adjustments	\$153,674,073
Adjusted DSM/EE EMF Revenue Requirement	\$12,551,970

1 Listebarger Exhibit 2, pages 4 through 7, provides additional details  
2 associated with the development of these amounts.

3 **Q. PLEASE DESCRIBE THE (\$1,128,344) THAT HAS BEEN**  
4 **CATEGORIZED AS “OTHER ADJUSTMENTS.”**

5 A. The (\$1,128,344) in “Other Adjustments” is the sum of lines 2 through 8 on  
6 page 7 of Listebarger Exhibit 2. Line 2 is reserved for potential prospective  
7 uncollectible allowances in DEP’s DSM/EE rates. DEP is not requesting a  
8 prospective uncollectible adjustment as a part of its cost recovery request in this  
9 proceeding. However, the actual uncollectibles experienced in test period 2020  
10 exceeded amounts recovered in base rates; therefore, the incremental portion  
11 associated with EE billings has been included on Line 3. In addition, the  
12 adjustments found on lines 4 through 7 reflect the true-up of PPI for Vintage  
13 2019 and net lost revenues for 2017, 2018 and 2019 vintage. The last of these  
14 adjustments, found on line 8, recognizes estimated interest owed to customers  
15 for revenue over- collections and interest owed to the Company for revenue  
16 under-collections during the period extending from January 1, 2020 through  
17 December 31, 2020. The Direct Testimony of Company witness Robert P.  
18 Evans provides further detail on program-specific impacts to PPI and net lost  
19 revenues.

20 **IV. RATE PERIOD REVENUE REQUIREMENT**

21 **Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE**  
22 **REQUIREMENT.**

23 A. As indicated previously, the estimated revenue requirement for the rate period  
24 is \$177,186,661. This amount reflects the anticipated costs and necessary



1 recoveries for the rate period, which extends from January 1, 2022 through  
2 December 31, 2022. The \$177,186,661 revenue requirement includes: (1)  
3 \$24,462,595 for anticipated rate period program expenses; (2) amortizations  
4 and carrying costs associated with deferred prior period costs totaling  
5 \$74,888,773; (3) recovery of Distribution System Demand Response (“DSDR”)  
6 depreciation and capital costs totaling \$23,864,734; (4) net lost revenues for the  
7 rate period totaling \$36,418,070 for vintage years 2019 through 2022; and (5)  
8 PPI totaling \$17,552,489 associated with vintage years 2013 through 2022. In  
9 addition, under the Commission’s October 20, 2020 *Order Approving Revisions*  
10 *to Demand-Side Management and Energy Efficiency Cost Recovery*  
11 *Mechanisms*, issued by the Commission in Docket Nos. E-2, Sub 931 and E-7,  
12 Sub 1032 (the “2020 Sub 1032 order”), beginning in 2022, the Income-  
13 Qualified EE and Weatherization programs are eligible to receive a Program  
14 Return Incentive (“PRI”) based on shared savings achieved by these programs.  
15 Witness Evans’ testimony provides additional information on this matter.

16 **V. JURISDICTIONAL COST ALLOCATION**

17 **Q. HOW ARE DSM AND EE PROGRAM COSTS ALLOCATED TO THE**  
18 **NORTH CAROLINA RETAIL JURISDICTION?**

19 **A.** DEP determines the total amount of recoverable costs and separates these costs  
20 into three categories: (1) DSM-related costs, (2) EE-related costs, and (3) costs  
21 that provide a system benefit in support of both DSM and EE programs. For  
22 each of these categories, different allocation methods are employed to assign  
23 those costs to the appropriate jurisdiction.

1   **Q.    HOW ARE COSTS IDENTIFIED AS EE-RELATED ALLOCATED TO**  
2   **NORTH CAROLINA?**

3   A.   Any program costs that are identified as being EE-related, including  
4       administrative and general (“A&G”) costs, are allocated to the North Carolina  
5       retail jurisdiction based upon the ratio of North Carolina retail sales to DEP  
6       system retail sales at the point of generation. For calendar year test periods  
7       beginning in year 2016, the allocation percentage for the entire calendar year  
8       test period is based on the latest cost of service study available at the time of  
9       filing.

10   **Q.   HOW ARE DSM-RELATED COSTS ALLOCATED TO NORTH**  
11   **CAROLINA?**

12   A.   Any program costs that are identified as being DSM-related, including A&G  
13       costs, are allocated to the North Carolina retail jurisdiction based upon the ratio  
14       of the North Carolina retail demand to the DEP system retail demand at the hour  
15       of the annual summer system peak. For calendar year test periods beginning in  
16       year 2016, the allocation percentage for the entire calendar year test period is  
17       based on the latest cost of service study available at the time of filing.

18   **Q.   PLEASE ELABORATE ON THE METHODOLOGY USED TO**  
19   **ALLOCATE DSM/EE COSTS THAT OFFER A SYSTEM BENEFIT.**

20   A.   Certain A&G costs provide a system benefit in support of both DSM and EE  
21       programs and, therefore, are allocated in both categories. The allocation of  
22       these costs into either the DSM or EE category is based upon the percentage of  
23       program costs for each type of expenditure anticipated during the next forecast  
24       calendar year. For example, if 30% of direct program costs in the forecast

1 period are EE-related, then 30% of these A&G costs will be considered EE-  
2 related costs for allocation purposes. The use of a forecast period recognizes  
3 the types of new programs DEP will offer in the immediate future that will be  
4 supported by these administrative costs. The assignment of A&G costs as either  
5 DSM- or EE- related is reviewed annually based upon forecasted program costs  
6 for the next calendar year. The A&G costs in this proceeding have been  
7 assigned to these categories based upon forecasted DSM and EE costs for 2022.

8 **Q. IN LISTEBARGER EXHIBIT 2, PAGE 3, AND LISTEBARGER**  
9 **EXHIBIT 2, PAGE 6, THE DSDR PROGRAM IS SEPARATED FROM**  
10 **THE OTHER DSM/EE PROGRAMS. HOW IS THE DSDR PROGRAM**  
11 **CLASSIFIED?**

12 A. The DSDR program has been classified by the Commission, for purposes of  
13 ratemaking, as an EE program. Due to the scope and nature of DSDR, its costs  
14 are being tracked separately. This separate tracking includes both direct costs  
15 and A&G costs associated with the program.

16 **VI. UTILITY INCENTIVES AND NET LOST REVENUES**

17 **Q. HOW ARE THE PPI AND PRI CALCULATED?**

18 A. The PPI is calculated pursuant to the *Order Approving Revised Mechanism* and  
19 is based on the savings achieved by the portfolio of PPI-eligible DSM/EE  
20 programs. Under the terms of the *Order Approving Revised Mechanism*, the  
21 amount of PPI to be recovered during the rate period is 11.75 percent of the net  
22 benefits produced by the portfolio of PPI-eligible programs prior to 2022.  
23 Pursuant to the related 2020 Sub 1032 Order and other orders in Docket No. E-  
24 7, Sub 1032, starting in 2022, this percentage is lowered to 10.6%. Estimated

1 net savings for all periods are determined by multiplying the number of  
2 measurement units projected to be installed for a specific program or measure  
3 in a vintage year by the most current estimate of the annual per installation  
4 kilowatt (“kW”) and kilowatt-hour (“kWh”) savings over the measurement  
5 unit’s life and by the annual kW and kWh avoided costs. DEP then subtracts  
6 the estimated utility costs over the measurement unit’s life related to the  
7 projected installations in that vintage year and discounts the result to determine  
8 a net present value.

9 The PPI for each program vintage is converted into a stream of up to ten  
10 levelized annual payments. DEP’s overall weighted average net-of-tax rate of  
11 return approved in DEP’s most recent general rate case is used as the  
12 appropriate discount rate. Pursuant to the *Order Approving Revised*  
13 *Mechanism*, PPI recoveries are subject to true-up on the basis of future EM&V  
14 results. PPI calculations are based on calendar year vintages. The PPI vintage  
15 assigned to the test period in this filing encompasses calendar year 2020. These  
16 values will be trued-up on the basis of future EM&V results. The estimated PPI  
17 for the rate period used in this filing is based on calendar year 2022 and will be  
18 trued-up as a part of DEP’s 2023 DSM/EE cost recovery proceeding. In  
19 addition, as discussed above, Income-Qualified EE and Weatherization  
20 programs are eligible to receive a PRI beginning in 2022. Company witness  
21 Evans further describes the specifics of the PPI and PRI calculations in his  
22 testimony. Please see Evans Exhibit 1 for additional detail by program.

23 **Q. HOW WERE NET LOST REVENUES DETERMINED?**

1     A.     The Company determines net lost revenues, which are applicable to both DSM  
2           and EE programs, by multiplying the estimated reduction in kWh sales  
3           associated with a program or measure by a margin-based net lost revenue rate.  
4           The following formula illustrates the basic components of the net lost revenue  
5           calculations: Net Lost Revenues (\$) = Lost Sales (kWh) x Net Lost Revenue  
6           Rate (\$/kWh).

7                 Lost Sales are those sales that do not occur as a result of implementation  
8           of DEP DSM/EE measures. These values are initially based on engineering  
9           estimates and/or past impact evaluations. Future periods are based on updated  
10          impact evaluations resulting from EM&V activities and are applied  
11          prospectively and in conjunction with applicable net lost revenue true-ups. The  
12          Net Lost Revenue rate represents the difference between the average retail rate  
13          applicable to the customer class impacted by the measure and the sum of (1) the  
14          embedded regulatory fees, (2) the related average customer charge component  
15          of that rate, (3) the average fuel component of the rate, and (4) the incremental  
16          variable operations and maintenance rate as filed in DEP's last Cogeneration  
17          and Small Power Producer tariff. When multiple customer classes are impacted  
18          by a DSM/EE measure, as with the DSDR program, a weighted or system-wide  
19          net lost revenue rate is employed.

20                 Pursuant to the *Order Approving Revised Mechanism*, DEP may only  
21          recover net lost revenues for up to 36 months of an installed measure's life, and  
22          as with the PPI, recoveries are subject to true-up on the basis of future EM&V  
23          results.

1 Residential and non-residential lost revenues associated with  
2 participants enrolled during the test period, twelve months ending December  
3 31, 2018, extended to May 31, 2020, of the Company's general rate case  
4 proceeding, Docket No. E-2, Sub 1219, have been adjusted based on specific  
5 enrollment dates, and a portion of these lost revenues have been removed from  
6 the prospective period as of September 1, 2020 and included in interim base  
7 rates.

8 **Q. HAVE EXCESS DEFERRED INCOME TAXES RESULTING FROM**  
9 **THE TAX CUTS AND JOBS ACT BEEN INCORPORATED INTO THE**  
10 **CALCULATION OF NET LOST REVENUES?**

11 A. The final order in the general rate case, issued April 16, 2021 in Docket No. E-  
12 2, Sub 1219 (the "Final Order"), directed DEP to refund certain amounts owed  
13 to customers related to excess deferred income taxes ("EDIT"), resulting from  
14 the reduction in federal corporate income taxes according to the Tax Cuts and  
15 Jobs Act, through a reduction in base rates rather than through a rider. The  
16 refunded amounts are the "protected" EDIT amounts, generally related to  
17 Property, Plant and Equipment, for which there are specific ratemaking  
18 requirements prescribed by the Internal Revenue Service. Lost revenue rates  
19 for 2020 have been trued up to reflect the Final Order, and the projected 2022  
20 lost revenue rates also reflect the Final Order.

21 **VII. COST ALLOCATION METHODOLOGY**

22 **Q. HOW ARE DSM- AND EE-RELATED COSTS ALLOCATED TO EACH**  
23 **RATE CLASS?**

1 A. Costs are assigned to customer classes based on program design and  
2 participation. In other words, residential program costs are allocated solely to  
3 residential customers, general service program costs are allocated solely to  
4 general service customers, and lighting program costs are allocated solely to  
5 lighting customers. Where programs benefit multiple customer groups, the  
6 costs are allocated directly to groups receiving benefits or by employing annual  
7 energy- and/or coincident peak demand-based allocation factors.

8 Listebarger Exhibit 2, pages 1 and 2, and Listebarger Exhibit 2, pages 4  
9 and 5, demonstrate how the costs associated with a specific program have been  
10 assigned to customer groups.

11 **Q. HOW ARE SALES AND DEMAND ADJUSTED FOR THE IMPACT OF**  
12 **OPT-OUT CUSTOMERS?**

13 A. Commercial customers with annual consumption of 1,000,000 kWh or greater  
14 in the billing months of the prior calendar year and all industrial customers who  
15 implement or will implement alternative DSM/EE measures may elect not to  
16 participate in DEP's DSM and/or EE programs. DEP reviewed its customer  
17 records and identified that commercial and industrial customers choosing to opt  
18 out of EE programs consumed 11,746,852,167 kWh during the year ended  
19 December 31, 2020. In addition, DEP identified that commercial and industrial  
20 customers choosing to opt out of DSM programs consumed 11,772,985,490  
21 kWh during the year ended December 31, 2020.

22 DEP developed rate class allocation factors based on the assumption  
23 that customers that have elected to opt out of the Company's DSM/EE rider will

1 remain opted out. If customers decide to change their opt-out status, revenue  
2 gains or losses will be recognized in subsequent DSM/EE EMF calculations.

3 Sales for the year ended December 31, 2020 for all customers electing  
4 to opt out of the DSM/EE rate are provided in Listebarger Exhibit 6.

5 **Q. THE SALES FOR OPT-OUT CUSTOMERS ARE EASILY**  
6 **IDENTIFIED, BUT HOW IS THE COINCIDENT PEAK OF THESE**  
7 **CUSTOMERS ESTIMATED?**

8 A. Currently installed metering for a great number of opt-out customers does not  
9 provide sufficient detail to determine their contribution to the system coincident  
10 peak hour load. Instead, the impact is estimated based upon the ratio of opt-out  
11 sales to total sales for the rate class multiplied by the rate class peak demand.  
12 This approach should accurately approximate the demand of opt-out accounts.  
13 This calculation can be seen at Listebarger Exhibit 5, page 6.

14 **Q. AFTER ADJUSTING ENERGY AND DEMAND FOR OPT-OUT**  
15 **CUSTOMERS, HOW ARE THE RESULTING ALLOCATION**  
16 **FACTORS THEN USED TO DETERMINE THE REVENUE**  
17 **REQUIREMENT FOR EACH RATE CLASS?**

18 A. Energy- and demand-based allocators are used in cases where programs or  
19 measures directly benefit multiple rate groups. When a DSM or EE program  
20 benefits multiple rate groups, DEP multiplies EE costs by rate class energy  
21 allocation factors and multiplies any associated DSM costs by rate class demand  
22 allocation factors for purposes of cost assignment.

23 Since usage for opt-out customers is not forecasted, the rate class energy  
24 allocation factors were developed from the forecasted rate class usage after



1 subtracting actual sales for opt-out customers for the year ended December 31,  
2 2020. Listebarger Exhibit 5, page 5, provides the energy allocation factors  
3 applicable to each rate class based upon the forecast of rate class sales for the  
4 rate period of January 1, 2022 through December 31, 2022.

5 The allocation rate class demand allocation factors are based on the  
6 summer coincident peak demand for 2020 after subtracting the estimated  
7 demand for opt-out customers as discussed above. The forecast does not  
8 provide rate class coincident peak demands; therefore, the most recent historic  
9 data was deemed to be representative of future demand impacts. Listebarger  
10 Exhibit 5, page 6, shows the demand allocation factors applicable to each rate  
11 class for the rate period.

12 **Q. WHICH OF DEP'S PROGRAMS OR MEASURES BENEFIT**  
13 **MULTIPLE CUSTOMER CLASSES?**

14 A. The Company's DSDR program benefits all customer classes. To allocate  
15 DSDR costs, DEP employs rate class energy allocation factors. These  
16 allocation procedures are elements of Listebarger Exhibit 2, pages 1 and 4. In  
17 addition, DEP's Energy Efficient Lighting Program provides benefits to both  
18 the residential and general service customer classes. These costs were allocated  
19 based on the bulbs provided to those classes using EM&V results as shown in  
20 Listebarger Exhibit 5, page 7.

21 **Q. HOW DOES DEP DETERMINE RATE CLASS DSM/EE RATES?**

22 A. The calculated rate class DSM and EE revenue requirements are divided by  
23 forecasted rate class sales, after adjustment for opt-out customers, to establish  
24 the rate class DSM/EE rate. Listebarger Exhibit 2, page 1, provides the

1 derivation of the EE rate. Listebarger Exhibit 2, page 2, provides the derivation  
2 of the DSM rate.

3 **Q. HOW DOES DEP DETERMINE RATES FOR THE DSM/EE EMF?**

4 A. As with DSM/EE rate determination, the calculated rate class DSM and EE  
5 EMF revenue requirements, adjusted for cost recoveries, are divided by  
6 forecasted rate class sales, after adjustment for opt-out customers, to establish  
7 the rate class DSM/EE EMF rate. Listebarger Exhibit 2, page 4, provides the  
8 derivation of the EE EMF rate. Listebarger Exhibit 2, page 5, provides the  
9 derivation of the DSM EMF rate.

10 **VIII. PROPOSED RATES**

11 **Q. WHAT RATES ARE PROPOSED FOR EACH RATE CLASS?**

12 A. Listebarger Exhibit 1 is populated with the DSM/EE rates and EMF rates  
13 proposed in this proceeding. The DSM/EE rates recover costs forecasted to be  
14 incurred from January 1, 2022 through December 31, 2022. The DSM/EE EMF  
15 is a true-up mechanism recognizing costs and recoveries for the test period of  
16 January 1, 2020 through December 31, 2020. DEP proposes the following  
17 rates, exclusive of North Carolina regulatory fees, for each rate class:

Rate Class	DSM Rate (¢/kWh)	EE Rate (¢/kWh)	DSM EMF (¢/kWh)	EE EMF Rate (¢/kWh)	DSM/EE Annual Rider (¢/kWh)
Residential	0.114	0.549	0.001	0.056	0.720
General Service EE		0.637		0.040	0.677
General Service DSM	0.061		(0.008)		0.053
Lighting		0.119		0.005	0.124

1 **Q. WHAT ARE THE RATES INCLUDING NORTH CAROLINA**  
2 **REGULATORY FEES?**

3 A. The following table reflects the proposed billing rates, including North Carolina  
4 regulatory fees, for each rate class:

Rate Class	DSM Rate (¢/kWh)	EE Rate (¢/kWh)	DSM EMF (¢/kWh)	EE EMF (¢/kWh)	Annual DSM/EE Rider (¢/kWh)
Residential	0.114	0.550	0.001	0.056	0.721
General Service EE		0.638		0.040	0.678
General Service DSM	0.061		(0.008)		0.053
Lighting		0.119		0.005	0.124

5 **Q. HOW WILL DEP REVISE ITS TARIFFS TO RECOVER THESE**  
6 **RATES?**

7 A. The Company will update its Annual Billing Adjustment, Rider BA, to  
8 recognize these rates, adjusted for the North Carolina regulatory fees.

9 **IX. CONCLUSION**

10 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

11 A. Yes.