

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1265

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

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)

DIRECT TESTIMONY OF
SHANNON R. LISTEBARGER
FOR
DUKE ENERGY CAROLINAS,
LLC

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Mar 01 2022

1 **I. INTRODUCTION AND PURPOSE**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Shannon R. Listebarger, and my business address is 526 South
4 Church Street, Charlotte, North Carolina, 28202.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am a Rates Manager for Duke Energy Carolinas, LLC (“DEC” or the
7 “Company” supporting both DEC and Duke Energy Progress, LLC (“DEP”).

8 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL**
9 **QUALIFICATIONS.**

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. WHAT ARE YOUR PRESENT RESPONSIBILITIES FOR DEC?**

18 A. I am responsible for providing regulatory support and guidance on DEC’s
19 demand-side management (“DSM”) and energy efficiency (“EE”) cost recovery
20 process.

21 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS**
22 **COMMISSION?**

1 A. Yes. I have provided testimony in support of DEC's Rider 13 application for
2 approval of its DSM/EE cost recovery rider in Docket No. E-7, Sub 1249 and
3 DEP's Rider 12 and Rider 13 applications for approval of its DSM/EE cost
4 recovery riders.

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
6 **PROCEEDING?**

7 A. The purpose of my testimony is to explain and support DEC's proposed
8 DSM/EE cost recovery rider (Rider 14), including prospective and Experience
9 Modification Factor ("EMF") components, and provide information required
10 by Commission Rule R8-69.

11 **Q. PLEASE DESCRIBE THE EXHIBITS ATTACHED TO YOUR**
12 **TESTIMONY.**

13 A. Listebarger Exhibit 1 summarizes the individual rider components for which
14 DEC requests approval in this filing. Listebarger Exhibit 2 shows the
15 calculation of revenue requirements for each vintage, with separate calculations
16 for non-residential DSM and EE programs within each vintage. Listebarger
17 Exhibit 3 presents the return calculations for Vintages 2018, 2019, 2020 and
18 2021. Listebarger Exhibit 4 shows the actual and estimated prospective
19 amounts collected from customers via Riders 9-13 pertaining to Vintages 2018
20 through 2022. Listebarger Exhibit 5 provides the calculation of the allocation
21 factors used to allocate system DSM and EE costs to DEC's North Carolina
22 retail jurisdiction. Listebarger Exhibit 6 presents the forecasted sales for the
23 rate period (2023) and the estimated sales related to customers that have opted

1 out of various vintages. These amounts are used to determine the forecasted
2 sales to which the Rider 14 amounts will apply. Listebarger Exhibit 7 is the
3 proposed tariff sheet for Rider 14.

4 **Q. WERE LISTEBARGER EXHIBITS 1-7 PREPARED BY YOU OR AT**
5 **YOUR DIRECTION AND SUPERVISION?**

6 A. Yes.

7 **II. GENERAL STRUCTURE OF RIDERS**

8 **Q. PLEASE DESCRIBE THE STRUCTURE OF RIDER 14.**

9 A. Rider 14 was calculated in accordance with the Company's currently effective
10 cost recovery and incentive mechanism ("Mechanism") and portfolio of
11 programs approved in the Commission's *Order Approving DSM/EE Programs*
12 *and Stipulation of Settlement*, issued on October 29, 2013 ("the Stipulation"),
13 in Docket No. E-7, Sub 1032 and the prospective Mechanism approved in the
14 Commission's *Order Approving Revisions to Demand-Side Management and*
15 *Energy Efficiency Cost Recovery Mechanisms*, issued on October 20, 2020, in
16 Docket Nos. E-2, Sub 931 and E-7, Sub 1032 ("2020 Sub 1032 Order").¹

17 The approved cost recovery mechanism is designed to allow DEC to
18 collect revenue equal to its incurred program costs² for a rate period plus a
19 Portfolio Performance Incentive ("PPI") based on shared savings achieved by
20 DEC's DSM/EE programs, and to recover net lost revenues for EE programs

¹ The Stipulation is still currently in effect; however, the new Mechanism applies prospectively to costs projected in 2022. Therefore, this cost recovery proceeding falls under the Commission's orders approving both Mechanisms in Docket No. E-7, Sub 1032 (Sub 1032 Orders).

² Program costs are defined under Rule R8-68(b)(1) as all reasonable and prudent expenses expected to be incurred by the electric public utility, during a rate period, for the purpose of adopting and implementing new DSM and EE measures previously approved pursuant to Rule R8-68.

1 only. In addition, per the 2020 Sub 1032 Order, beginning in 2022 the Income-
2 Qualified EE and Weatherization programs are eligible to receive a Program
3 Return Incentive (“PRI”) based on shared savings achieved by these programs.
4 Witness Evans’s testimony provides additional information on this matter.

5 The Company is allowed to recover net lost revenues associated with a
6 particular vintage of an EE measure for the lesser of 36 months or the life of the
7 measure and provided that the recovery of net lost revenues shall cease upon
8 the implementation of new rates in a general rate case to the extent that the new
9 rates are set to recover net lost revenues.

10 The Company’s cost recovery mechanism employs a vintage year
11 concept based on the calendar year.³ In each of its annual rider filings, DEC
12 performs an annual true-up process for the prior calendar year vintages. The
13 true-up will reflect actual participation and verified Evaluation, Measurement
14 and Verification (“EM&V”) results for completed vintages, applied in the same
15 manner as agreed upon by DEC, the Southern Alliance for Clean Energy, and
16 the Public Staff, and approved by the Commission in its *Order Approving*
17 *DSM/EE Rider and Requiring Filing of Proposed Customer Notice* issued on
18 November 8, 2011, in Docket No. E-7, Sub 979 (“EM&V Agreement”). In
19 accordance with the 2020 Sub 1032 Order, DEC continues to apply EM&V in
20 accordance with the EM&V Agreement.

21 The Company has implemented deferral accounting for over- and
22 under-recoveries of costs that are eligible for recovery through the annual

³ Each vintage is referred to by the calendar year of its respective rate period (e.g., Vintage 2020).

1 DSM/EE rider. The balance in the deferral account(s), net of deferred income
2 taxes, may accrue a return at the net-of-tax rate of return rate approved in DEC's
3 then most recent general rate case. The methodology used for the calculation
4 of interest shall be the same as that typically utilized for DEC's Existing DSM
5 Program rider proceedings. Pursuant to Commission Rule R8-69(c)(3), DEC
6 will not accrue a return on net lost revenues or the PPI. Listebarger Exhibit 3,
7 pages 1 through 16, shows the calculation performed as part of the true-up of
8 Vintage 2018, Vintage 2019, Vintage 2020, and Vintage 2021.

9 The Company expects that most EM&V will be available in the time
10 frame needed to true-up each vintage in the following calendar year. If any
11 EM&V results for a vintage are not available in time for inclusion in DEC's
12 annual rider filing, however, then the Company will make an appropriate
13 adjustment in the next annual filing.

14 DEC calculates one integrated (prospective) DSM/EE rider and one
15 integrated DSM/EE EMF rider for the residential class, to be effective each rate
16 period. The integrated residential DSM/EE EMF rider includes all true-ups for
17 each applicable vintage year. Given that qualifying non-residential customers
18 can opt out of DSM and/or EE programs, DEC calculates separate DSM and
19 EE billing factors for the non-residential class. Additionally, the non-
20 residential DSM and EE EMF billing factors are determined separately for each
21 applicable vintage year, so that the factors can be appropriately charged to non-
22 residential customers based on their opt-in/out status and participation for each
23 vintage year.

1 **Q. WHAT ARE THE COMPONENTS OF RIDER 14?**

2 A. The prospective components of Rider 14 include: (1) a prospective Vintage
3 2023 component designed to collect program costs and the PPI for DEC's 2023
4 vintage of DSM programs; (2) a prospective Vintage 2023 component to collect
5 program costs, PPI, PRI, and the first year of net lost revenues for DEC's 2023
6 vintage of EE programs; (3) a prospective Vintage 2022 component designed
7 to collect the second year of estimated net lost revenues for DEC's 2022 vintage
8 of EE programs; (4) a prospective Vintage 2021 component designed to collect
9 the third year of estimated net lost revenues for DEC's 2021 vintage of EE
10 programs; and (5) a prospective Vintage 2020 component designed to collect
11 the fourth year of estimated lost revenues for DEC's 2020 vintage of EE
12 programs. The EMF components of Rider 14 include: (1) a true-up of Vintage
13 2018 lost revenues, PPI and participation for DSM/EE programs based on
14 additional EM&V results received; (2) a true-up of Vintage 2019 lost revenues,
15 PPI and participation for DSM/EE programs based on additional EM&V results
16 received; (3) a true-up of Vintage 2020 lost revenues, PPI and participation for
17 DSM/EE programs based on additional EM&V results received; and (4) a true-
18 up of Vintage 2021 lost revenues, program costs and PPI for DSM/EE
19 programs.

20 **Q. HOW DOES DEC CALCULATE THE PROPOSED BILLING**
21 **FACTORS?**

22 A. The billing factor for residential customers is computed by dividing the
23 combined revenue requirements for DSM and EE programs by the forecasted

1 sales for the rate period. For non-residential rates, the billing factors are
2 computed by dividing the revenue requirements for DSM and EE programs
3 separately by forecasted sales for the rate period. The forecasted sales exclude
4 the estimated sales to customers who have elected to opt out of Rider EE.
5 Because non-residential customers are allowed to opt out of DSM and/or EE
6 programs separately in an annual election, non-residential billing factors are
7 computed separately for each vintage.

8 **III. COST ALLOCATION METHODOLOGY**

9 **Q. HOW DOES DEC ALLOCATE REVENUE REQUIREMENTS TO THE**
10 **NORTH CAROLINA RETAIL JURISDICTION AND TO THE**
11 **RESIDENTIAL AND NON-RESIDENTIAL RATE CLASSES?**

12 A. The Company allocates the revenue requirements related to program costs and
13 incentives for EE programs targeted at retail residential customers across North
14 Carolina and South Carolina to its North Carolina retail jurisdiction based on
15 the ratio of North Carolina retail kWh sales (grossed up for line losses) to total
16 retail kWh sales (grossed up for line losses), and then recovers them only from
17 North Carolina residential customers. The revenue requirements related to EE
18 programs targeted at retail non-residential customers across North Carolina and
19 South Carolina are allocated to the North Carolina retail jurisdiction based on
20 the ratio of North Carolina retail kWh sales (grossed up for line losses) to total
21 retail kWh sales (grossed up for line losses), and then recovered from only
22 North Carolina retail non-residential customers. The portion of revenue
23 requirements related to net lost revenues for EE programs is not allocated to the

1 North Carolina retail jurisdiction, but rather is specifically computed based on
2 the kW and kWh savings of North Carolina retail customers.

3 For DSM programs, because residential and non-residential programs
4 are similar in nature, the aggregated revenue requirement for all retail DSM
5 programs targeted at both residential and non-residential customers across
6 North Carolina and South Carolina are allocated to the North Carolina retail
7 jurisdiction based on North Carolina's contribution to total retail peak demand.
8 Both residential and non-residential customer classes are allocated a share of
9 total system DSM revenue requirements based on each group's contribution to
10 total retail peak demand.

11 The allocation factors used in DSM/EE EMF true-up calculations for
12 each vintage are based on DEC's most recently filed Cost of Service studies at
13 the time that the Rider EE filing incorporating the initial true-up for each
14 vintage is made. If there are subsequent true-ups for a vintage, DEC will use
15 the same allocation factors as those used in the original DSM/EE EMF true-up
16 calculations.

17 **IV. UTILITY INCENTIVES AND NET LOST REVENUES**

18 **Q. HOW DOES DEC CALCULATE THE PPI AND PRI?**

19 A. Pursuant to the Stipulation, DEC calculates the dollar amount of PPI by
20 multiplying the shared savings achieved by the system portfolio of DSM/EE
21 programs by 11.5% prior to 2022. Pursuant to the related 2020 Sub 1032 and
22 other Sub 1032 orders, starting in 2022, this percentage is lowered to 10.6%.
23 In addition, as discussed above, Income-Qualified EE and Weatherization

1 programs are eligible to receive a PRI.

2 Company witness Evans further describes the specifics of the PPI and PRI
3 calculations in his testimony. In addition, Evans Exhibit 1, pages 1 through 4,
4 shows the revised PPI for Vintage 2018, Vintage 2019, Vintage 2020, and
5 Vintage 2021, respectively, based on updated EM&V results, and Evans
6 Exhibit 1, page 5, shows the estimated PPI and PRI by program type and
7 customer class for Vintage 2023. The system amount of PPI and PRI is then
8 allocated to North Carolina retail customer classes to derive customer rates.

9 **Q. HOW DOES DEC CALCULATE THE NET LOST REVENUES FOR**
10 **THE PROSPECTIVE COMPONENTS OF RIDER EE?**

11 A. For the prospective components of Rider EE, net lost revenues are estimated by
12 multiplying the portion of DEC's tariff rates that represent the recovery of fixed
13 costs by the estimated North Carolina retail kW and kWh reductions applicable
14 to EE programs by rate schedule, and reducing this amount by estimated found
15 revenues. The Company calculates the portion of North Carolina retail tariff
16 rates (including certain riders) representing the recovery of fixed costs by
17 deducting the recovery of fuel and variable operation and maintenance
18 ("O&M") costs from its tariff rates. The lost revenues totals for residential and
19 non-residential customers are then reduced by North Carolina retail found
20 revenues computed using the weighted average lost revenue rates for each
21 customer class. The testimony and exhibits of Company witness Evans provide
22 information on the actual and estimated found revenues which offset lost
23 revenues.

1 **Q. HOW DOES DEC CALCULATE THE NET LOST REVENUES FOR**
2 **THE EMF COMPONENTS OF RIDER EE?**

3 A. For the EMF components of Rider EE, DEC calculates the net lost revenues by
4 multiplying the portion of its tariff rates that represent the recovery of fixed
5 costs by the actual and verified North Carolina retail kW and kWh reductions
6 applicable to EE programs by rate schedule, then reducing this amount by actual
7 found revenues.

8 **V. OPT-OUT PROVISIONS**

9 **Q. PLEASE EXPLAIN THE OPT-OUT PROCESS FOR NON-**
10 **RESIDENTIAL CUSTOMERS.**

11 A. Pursuant to the Commission's *Order Granting Waiver, in Part, and Denying*
12 *Waiver, in Part* ("Waiver Order") issued April 6, 2010, in Docket No. E-7, Sub
13 938 and the Sub 1032 Orders, the Company is allowed to permit qualifying non-
14 residential customers⁴ to opt out of the DSM and/or EE portion of Rider EE
15 during annual election periods. If a customer opts into a DSM program (or
16 never opted out), the customer is required to participate for three years in the
17 approved DSM programs and rider. If a customer chooses to participate in an
18 EE program (or never opted out), that customer is required to pay the EE-related
19 program costs, shared savings incentive and the net lost revenues for the
20 corresponding vintage of the programs in which it participated. Customers that
21 opt out of DEC's DSM and/or EE programs remain opted-out unless they

⁴ Individual commercial customer accounts with annual energy usage of not less than 1,000,000 kWh and any industrial customer account.

1 choose to opt back in during any of the succeeding annual election periods,
2 which occur from November 1 to December 31 each year, or any of the
3 succeeding annual opt-in periods in March as described below. If a customer
4 participates in any vintage of programs, the customer is subject to all true-up
5 provisions of the approved Rider EE for any vintage in which the customer
6 participates.

7 DEC provides an additional opportunity for qualifying customers to opt
8 in to DEC's DSM and/or EE programs during the first five business days of
9 March. Customers who choose to begin participating in DEC's EE and DSM
10 programs during the special "opt-in period" during March of each year will be
11 retroactively billed the applicable Rider EE amounts back to January 1 of the
12 vintage year, such that they will pay the appropriate Rider EE amounts for the
13 full rate period.

14 **Q. DOES DEC ADJUST THE RATE FOR NON-RESIDENTIAL**
15 **CUSTOMERS TO ACCOUNT FOR THE IMPACT OF "OPT-OUT"**
16 **CUSTOMERS?**

17 A. Yes. The impact of opt-out results is considered in the development of the Rider
18 EE billing rates for non-residential customers. Since the revenue requirements
19 will not be recovered from non-residential customers that opt out of DEC's
20 programs, the forecasted sales used to compute the rate per kWh for non-
21 residential rates exclude sales to customers that have opted out of the vintage to
22 which the rate applies. This adjustment is shown on Listebarger Exhibit 6.
23

1 **VI. PROSPECTIVE COMPONENTS**

2 **Q. WHAT IS THE RATE PERIOD FOR THE PROSPECTIVE**
3 **COMPONENTS OF RIDER 14?**

4 A. In accordance with the Commission's *Order on Motions for Reconsideration*
5 issued on June 3, 2010, in Docket No. E-7, Sub 938 ("Second Waiver Order")
6 and the 2020 Sub 1032 Order, DEC has calculated the prospective components
7 of Rider 14 using the rate period January 1, 2023 through December 31, 2023.

8 **Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE**
9 **REQUIREMENTS RELATING TO VINTAGE 2020.**

10 A. The Company determines the estimated revenue requirements for Vintage 2020
11 separately for residential and non-residential customer classes and bases them
12 on the fourth year of net lost revenues for its Vintage 2020 EE programs. The
13 amounts are based on estimated North Carolina retail kW and kWh reductions
14 and DEC's rates approved in its most recent general rate case, which became
15 effective June 1, 2021, adjusted as described above to recover only the fixed
16 cost component.

17 **Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE**
18 **REQUIREMENTS RELATING TO VINTAGE 2021.**

19 A. The Company determines the estimated revenue requirements for Vintage 2021
20 separately for residential and non-residential customer classes and bases them
21 on the third year of net lost revenues for its Vintage 2021 EE programs. The
22 amounts are based on estimated North Carolina retail kW and kWh reductions
23 and DEC's rates approved in its most recent general rate case, which became

1 effective June 1, 2021, adjusted as described above to recover only the fixed
2 cost component.

3 **Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE**
4 **REQUIREMENTS RELATING TO VINTAGE 2022.**

5 A. The Company determines the estimated revenue requirements for Vintage 2022
6 separately for residential and non-residential customer classes and bases them
7 on the second year of net lost revenues for its Vintage 2022 EE programs. The
8 amounts are based on estimated North Carolina retail kW and kWh reductions
9 and DEC's rates approved in its most recent general rate case, which became
10 effective June 1, 2021, adjusted as described above to only recover the fixed
11 cost component.

12 **Q. PLEASE DESCRIBE THE BASIS FOR THE RATE PERIOD REVENUE**
13 **REQUIREMENTS RELATING TO VINTAGE 2023.**

14 A. The estimated revenue requirements for Vintage 2023 EE programs include
15 program costs, PPI, PRI and the first year of net lost revenues determined
16 separately for residential and non-residential customer classes. The estimated
17 revenue requirements for Vintage 2023 DSM programs include program costs
18 and PPI. The program costs and shared savings incentive are computed at the
19 system level and allocated to North Carolina based on the allocation
20 methodologies discussed earlier in my testimony. The amounts are based on
21 estimated North Carolina retail kW and kWh reductions and DEC's rates
22 approved in its most recent general rate case, which became effective June 1,
23 2021, adjusted as described above to only recover the fixed cost component.

VII. EMF

Q. WHAT IS THE TEST PERIOD FOR THE EMF COMPONENT?

A. Pursuant to the Second Waiver Order and the Stipulation, the test period for the EMF component is defined as the most recently completed vintage year at the time of DEC's Rider EE cost recovery application filing date, which in this case is Vintage 2021 (January 1, 2021 through December 31, 2021). In addition, the Second Waiver Order allows the EMF component to cover multiple test periods, so the EMF component for Rider 14 includes Vintage 2018 (January 2018 through December 2018), Vintage 2019 (January 2019 through December 2019) and Vintage 2020 (January 2020 through December 2020) as well.

Q. WHAT IS BEING TRUED UP FOR VINTAGE 2021?

A. The chart below demonstrates which components of the Vintage 2021 estimate filed in 2020 are being trued up in the Vintage 2020 EMF component of Rider 14. Listebarger Exhibit 2, page 4 contains the calculation of the true-up for Vintage 2021. The second year of net lost revenues for Vintage 2021, which are a component of Rider 13 billings during 2022, will be trued up to actual amounts during the next rider filing.

	Vintage 2021 Estimate (2021) As Filed (Filed 2020)	Vintage 2021 True-Up (2021) (Filed February 2022)
	Rider 12	Rider 14 EMF
Participation	Estimated participation using half-year convention	Update for actual participation for January – December 2021
EM&V	Initial assumptions of load impacts	Updated according to Commission-approved EM&V Agreement

	Vintage 2021 Estimate (2021) As Filed (Filed 2020)	Vintage 2021 True-Up (2021) (Filed February 2022)
	Rider 12	Rider 14 EMF
Lost Revenues	Estimated 2021 participation using half-year convention	Update for actual participation for January – December 2021 and actual 2021 lost revenue rates
Found Revenues	Estimated according to Commission-approved guidelines	Update for actual according to Commission-approved guidelines
New Programs	Only includes programs approved prior to estimated filing	Update for any new programs and pilots approved and implemented since estimated filing

1 In addition, DEC has implemented deferral accounting for the under/over
2 collection of program costs and calculated a return at the net-of-tax rate of
3 return rate approved in DEC's most recent general rate case. The methodology
4 used for the calculation of return is the same as that typically utilized for DEC's
5 Existing DSM Program rider proceedings. Pursuant to Commission Rule R8-
6 69(c)(3), DEC is not accruing a return on net lost revenues or the PPI. Please
7 see Listebarger Exhibit 3, pages 1 through 16 for the calculation performed as
8 part of the true-up of Vintage 2018, Vintage 2019, Vintage 2020 and Vintage
9 2021.

10 **Q. HOW WERE THE LOAD IMPACTS UPDATED?**

11 A. For DSM programs, the contracted amounts of kW reduction capability from
12 participants are considered to be components of actual participation. As a
13 result, the Vintage 2021 true-up reflects the actual quantity of demand reduction
14 capability for the Vintage 2021 period. The load impacts for EE programs were
15 updated in accordance with the Commission-approved EM&V Agreement.

1 **Q. HOW WERE ACTUAL NET LOST REVENUES COMPUTED FOR**
2 **THE VINTAGE 2021 TRUE-UP?**

3 A. Net lost revenues for year one (2021) of Vintage 2021 were calculated using
4 actual kW and kWh savings by North Carolina retail participants by customer
5 class based on actual participation and load impacts reflecting EM&V results
6 applied according to the EM&V Agreement. The actual kW and kWh savings
7 were as experienced during the period January 1, 2021 through December 31,
8 2021. The rates applied to the kW and kWh savings are the retail rates that
9 were in effect for the period January 1, 2021 through December 31, 2021,
10 reduced by fuel and other variable costs. The lost revenues were then offset by
11 actual found revenues for year one of Vintage 2021 as explained by Company
12 witness Evans. The calculation of net lost revenues was performed by rate
13 schedule within the residential and non-residential customer classes.

14 **Q. WHAT IS BEING TRUED UP FOR VINTAGE 2020?**

15 A. Avoided costs for Vintage 2020 DSM programs are being trued up to update
16 EM&V participation results. Avoided costs for Vintage 2020 EE programs are
17 also being trued up based on updated EM&V results. The actual kW and kWh
18 savings were as experienced during the period January 1, 2020 through
19 December 31, 2020. The rates applied to the kW and kWh savings are the retail
20 rates that were in effect during each period the lost revenues were earned,
21 reduced by fuel and other variable costs.

22 **Q. WHAT IS BEING TRUED UP FOR VINTAGE 2019?**

1 A. Net lost revenues for all years were trued up for updated EM&V results. The
2 actual kW and kWh savings were as experienced during the period January 1,
3 2019 through December 31, 2019. The rates applied to the kW and kWh
4 savings are the retail rates that were in effect during each period the lost
5 revenues were earned, reduced by fuel and other variable costs.

6 **Q. WHAT IS BEING TRUED UP FOR VINTAGE 2018?**

7 A. Net lost revenues for all years were trued up for updated EM&V results. The
8 actual kW and kWh savings were as experienced during the period January 1,
9 2018 through December 31, 2018. The rates applied to the kW and kWh
10 savings are the retail rates that were in effect during each period the lost
11 revenues were earned, reduced by fuel and other variable costs.

12 **VIII. PROPOSED RATES**

13 **Q. WHAT ARE THE PROPOSED INITIAL BILLING FACTORS**
14 **APPLICABLE TO NORTH CAROLINA ELECTRIC CUSTOMERS**
15 **FOR THE PROSPECTIVE COMPONENTS OF RIDER 14?**

16 A. The Company's proposed initial billing factor for the Rider 14 prospective
17 components is 0.4291 cents per kWh for DEC's North Carolina retail residential
18 customers. For non-residential customers, the amounts differ depending upon
19 customer elections of participation. The following chart depicts the options and
20 rider amounts:

Non-Residential Billing Factors for Rider 14 Prospective Components	¢/kWh
Vintage 2020 EE participant	0.0259
Vintage 2021 EE participant	0.0671

Non-Residential Billing Factors for Rider 14 Prospective Components	¢/kWh
Vintage 2022 EE participant	0.0995
Vintage 2023 EE participant	0.4323
Vintage 2023 DSM participant	0.0970

1 **Q. WHAT ARE DEC'S PROPOSED EMF BILLING FACTORS**
2 **APPLICABLE TO NORTH CAROLINA ELECTRIC CUSTOMERS**
3 **FOR THE TRUE-UP COMPONENTS OF RIDER 14?**

4 A. The Company's proposed EMF billing factor for the true-up components of
5 Rider 14 is (0.0903) cents per kWh for DEC's North Carolina retail residential
6 customers. For non-residential customers, the amounts differ depending upon
7 customer elections of participation. The following chart depicts the options and
8 rider amounts:

Non-Residential Billing Factors for Rider 14 EMF Components	¢/kWh
Vintage 2021 EE Participant	(0.0833)
Vintage 2021 DSM Participant	(0.0173)
Vintage 2020 EE Participant	(0.0012)
Vintage 2020 DSM Participant	(0.0002)
Vintage 2019 EE participant	0.0064
Vintage 2019 DSM participant	0.0003
Vintage 2018 EE participant	(0.0021)
Vintage 2018 DSM participant	(0.0002)

9
10

1 **IX. CONCLUSION**

2 **Q. PLEASE SUMMARIZE THE SPECIFIC RATE MAKING APPROVAL**
3 **REQUESTED BY DEC.**

4 A. DEC seeks approval of the Rider 14 billing factors to be effective throughout
5 2023. As discussed above, Rider 14 contains (1) a prospective component,
6 which includes the fourth year of net lost revenues for non-residential Vintage
7 2020, the third year of net lost revenues for Vintage 2021, the second year of
8 net lost revenues for Vintage 2022, and the revenue requirements for Vintage
9 2023; and (2) an EMF component which represents a true-up of Vintage 2018,
10 Vintage 2019, Vintage 2020, and Vintage 2021. Consistent with the
11 Stipulation, for DEC's North Carolina residential customers, the Company
12 calculated one integrated prospective billing factor and one integrated EMF
13 billing factor for Rider 14. Also in accordance with the Stipulation, the non-
14 residential DSM and EE billing factors have been determined separately for
15 each vintage year and will be charged to non-residential customers based on
16 their opt-in/out status and participation for each vintage year.

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

18 A. Yes.

DSM/EE Cost Recovery Rider 14
Docket Number E-7 Sub 1265
Exhibit Summary of Rider EE Exhibits and Factors

Residential Billing Factor for Rider 14 True-up (EMF) Components

Line			
1	Year 2018 EE/DSM True-Up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 1, Line 15	(86,005)
2	Year 2019 EE/DSM True-Up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 2, Line 15	932,065
3	Year 2020 EE/DSM True-Up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 3, Line 15	899,910
4	Year 2021 EE/DSM True-Up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 4, Line 15	(22,334,861)
5	Total True-up (EMF) Revenue Requirement	Sum Lines 1-4	\$ (20,588,890)
6	Projected NC Residential Sales (kWh) for rate period	Listebarger Exhibit 6, Line 1	22,809,393,337
7	EE/DSM Revenue Requirement EMF Residential Rider EE (cents per kWh)	Line 5 / Line 6 * 100	(0.0903)

Residential Billing Factor for Rider 14 Prospective Components

8	Vintage 2020 Total EE/DSM Prospective Amounts Revenue Requirement	Listebarger Exhibit 2 pg 3, Line 15	2,568,275
9	Vintage 2021 Total EE/DSM Prospective Amounts Revenue Requirement	Listebarger Exhibit 2 pg 4, Line 15	3,959,003
10	Vintage 2022 Total EE/DSM Prospective Amounts Revenue Requirement	Listebarger Exhibit 2 pg 5, Line 1	6,791,458
11	Vintage 2023 Total EE/DSM Prospective Amounts Revenue Requirement	Listebarger Exhibit 2 pg 6, Line 11	84,567,117
12	Total Prospective Revenue Requirement	Sum Lines 8-11	\$ 97,885,853
13	Projected NC Residential Sales (kWh) for rate period	Listebarger Exhibit 6, Line 1	22,809,393,337
14	EE/DSM Revenue Requirement Prospective Residential Rider EE (cents per kWh)	Line 12 / Line 13 * 100	0.4291

Total Revenue Requirements in Rider 14 from Residential Customers

15	Total True-up (EMF) Revenue Requirement	Line 5	\$ (20,588,890)
16	Total Prospective Revenue Requirement	Line 12	97,885,853
17	Total EE/DSM Revenue Requirement for Residential Rider EE	Line 15 + Line 16	\$ 77,296,962
18	Total EE/DSM Revenue Requirement for Residential Rider EE (cents per kWh)	Line 7 + Line 14	0.3388

Non-Residential Billing Factors for Rider 14 True-up (EMF) Components

19	Vintage Year 2018 EE True-up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 1, Line 25	\$ (320,101)
20	Projected Year 2018 EE Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 4	15,445,061,521
21	EE Revenue Requirement Year 2018 EMF Non-Residential Rider EE (cents per kWh)	Line 19 / Line 20 * 100	(0.0021)
22	Vintage Year 2018 DSM True-up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 1, Line 35	\$ (33,726)
23	Projected Year 2018 DSM Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 5	16,537,337,560
24	DSM Revenue Requirement Year 2018 EMF Non-Residential Rider EE (cents per kWh)	Line 22 / Line 23 * 100	(0.0002)
25	Vintage Year 2019 EE True-up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 2, Line 25	\$ 991,169
26	Projected Year 2019 EE Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 6	15,395,466,337
27	EE Revenue Requirement Year 2019 EMF Non-Residential Rider EE (cents per kWh)	Line 25 / Line 26 * 100	0.0064
28	Vintage Year 2019 DSM True-up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 2, Line 35	\$ 57,650
29	Projected Year 2019 DSM Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 7	16,570,566,722
30	DSM Revenue Requirement Year 2019 EMF Non-Residential Rider EE (cents per kWh)	Line 28 / Line 29 * 100	0.0003
31	Vintage Year 2020 EE True-up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 3, Line 25	\$ (173,740)
32	Projected Year 2020 EE Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 8	14,831,584,100
33	EE Revenue Requirement Year 2020 EMF Non-Residential Rider EE (cents per kWh)	Line 31 / Line 32 * 100	(0.0012)
34	Vintage Year 2020 DSM True-up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 3, Line 35	\$ (32,830)
35	Projected Year 2020 DSM Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 9	16,609,571,340
36	DSM Revenue Requirement Year 2020 EMF Non-Residential Rider EE (cents per kWh)	Line 34 / Line 35 * 100	(0.0002)
37	Vintage Year 2021 EE True-up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 4, Line 25	\$ (12,407,806)
38	Projected Year 2021 EE Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 10	14,903,909,177
39	EE Revenue Requirement Year 2021 EMF Non-Residential Rider EE (cents per kWh)	Line 37 / Line 38 * 100	(0.0833)
40	Vintage Year 2021 DSM True-up (EMF) Revenue Requirement	Listebarger Exhibit 2 pg 4, Line 35	\$ (2,882,278)
41	Projected Year 2021 DSM Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 11	16,646,430,078
42	DSM Revenue Requirement Year 2021 EMF Non-Residential Rider EE (cents per kWh)	Line 40 / Line 41 * 100	(0.0173)

Non-Residential Billing Factors for Rider 14 Prospective Components

43	Vintage Year 2020 EE Prospective Amounts Revenue Requirement	Listebarger Exhibit 2 pg 3, Line 25	\$	3,845,961
44	Projected Vintage 2020 EE Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 8		14,831,584,100
45	<i>EE Revenue Requirement Vintage 2020 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 43 / Line 44 * 100		0.0259
46	Vintage Year 2021 EE Prospective Amounts Revenue Requirement	Listebarger Exhibit 2 pg 4, Line 25	\$	10,003,040
47	Projected Vintage 2021 EE Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 10		14,903,909,177
48	<i>EE Revenue Requirement Vintage 2021 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 46 / Line 47 * 100		0.0671
49	Vintage Year 2022 EE Prospective Amounts Revenue Requirement	Listebarger Exhibit 2 pg 5, Line 4	\$	15,132,477
50	Projected Vintage 2022 EE Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 12		15,209,154,609
51	<i>EE Revenue Requirement Vintage 2022 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 49 / Line 50 * 100		0.0995
52	Vintage Year 2023 EE Prospective Amounts Revenue Requirement	Listebarger Exhibit 2 pg 6, Line 18	\$	65,748,787
53	Projected Vintage 2023 EE Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 14		15,209,154,609
54	<i>EE Revenue Requirement Vintage 2023 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 52 / Line 53 * 100		0.4323
55	Vintage Year 2023 DSM Prospective Amounts Revenue Requirement	Listebarger Exhibit 2 pg 6, Line 25	\$	16,406,881
56	Projected Vintage 2023 DSM Participants NC Non-Residential Sales (kwh) for rate period	Listebarger Exhibit 6, Line 15		16,907,663,645
57	<i>DSM Revenue Requirement Vintage 2023 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 55 / Line 56 * 100		0.0970
	Total EMF Rate			(0.0976)
	Total Prospective Rate			0.7218

Total Revenue Requirements in Rider 14 from Non-Residential Customers

56	Vintage Year 2018 EE True-up (EMF) Revenue Requirement	Line 19		(320,101)
57	Vintage Year 2018 DSM True-up (EMF) Revenue Requirement	Line 22		(33,726)
58	Vintage Year 2019 EE True-up (EMF) Revenue Requirement	Line 25		991,169
59	Vintage Year 2019 DSM True-up (EMF) Revenue Requirement	Line 28		57,650
60	Vintage Year 2020 EE True-up (EMF) Revenue Requirement	Line 31		(173,740)
61	Vintage Year 2020 DSM True-up (EMF) Revenue Requirement	Line 34		(32,830)
62	Vintage Year 2021 EE True-up (EMF) Revenue Requirement	Line 37		(12,407,806)
63	Vintage Year 2021 DSM True-up (EMF) Revenue Requirement	Line 40		(2,882,278)
64	Vintage Year 2020 EE Prospective Amounts Revenue Requirement	Line 43		3,845,961
65	Vintage Year 2021 EE Prospective Amounts Revenue Requirement	Line 46		10,003,040
66	Vintage Year 2022 EE Prospective Amounts Revenue Requirement	Line 49		15,132,477
67	Vintage Year 2023 EE Prospective Amounts Revenue Requirement	Line 52		65,748,787
68	Vintage Year 2023 DSM Prospective Amounts Revenue Requirement	Line 55		16,406,881
	Total Non-Residential Revenue Requirement in Rider 14	Sum (Lines 56-68)		96,335,484

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
True Up of Year 1, 2 and 3 Lost Revenues for Vintage Year 2018

RESIDENTIAL Energy Efficiency Programs

Line	Reference	E-7 Sub 1130 Rider 9 Year 1 Estimate	E-7 Sub 1164 Year 2018 Yr 2 LR Estimate	E-7 Sub 1192 Rider 11 True up	E-7 Sub 1192 Year 2018 Year 3 Estimate	E-7 Sub 1230 Rider 12 True Up	E-7 Sub 1230 Year 2018 Yr 4 LR Estimate	E-7 Sub 1249 Rider 13 True up	E-7 Sub 1265 Rider 14 True up	Year 2018
1	Residential EE Program Cost	41,623,609		14,606,717		\$ (0)		\$ -	\$ -	\$ 56,230,326
2	Residential EE Earned Utility Incentive	5,511,264		4,154,068		140,649		(22,279)	157,616	9,941,319
3	Return on overcollection of Residential EE Program Costs			244,540		1,024,850		750,744	(2,580)	2,017,553
4	Total EE Program Cost and Incentive Components	47,134,873		19,005,325		1,165,498		728,465	155,036	68,189,197
5	Residential DSM Program Cost	9,903,130		(124,235)		0		-	-	9,778,895
6	Residential DSM Earned Utility Incentive	2,569,925		17,215		(5,581)		(289)	573	2,581,843
7	Return on undercollection of Residential DSM Program Costs			(128,626)		(40,884)		(21,193)	18,109	(72,593)
8	Total DSM Program Cost and Incentive Components	12,473,055		(135,646)		(46,465)		(21,481)	18,682	12,288,145
9	Total EE/DSM Program Cost and Incentive Components	59,607,928		18,869,679		1,119,034		706,984	173,718	80,477,343
10	Revenue-related taxes and regulatory fees factor **	1,001,402		1,001,352		1,001,302		1,001,302	1,001,302	
11	Total EE/DSM Program Cost and Incentive Revenue Requirement	59,691,498		18,895,191		1,120,491		707,904	173,944	80,589,028
12	Residential Net Lost Revenues	19,612,717	6,294,025	894,901	9,715,212	1,534,156	-	2,310,499	(86,953)	40,274,557
13	Total Residential EE/DSM Revenue Requirement	79,304,216	6,294,025	19,790,092	9,715,212	2,654,647	-	3,018,403	86,992	120,863,586
14	Total Collected for Vintage Year 2018 (through estimated Rider 13)									120,949,591
15	Total Residential EE/DSM Revenue Requirement								\$	(86,005)

See Listebarger Exhibit A for rate

NON-RESIDENTIAL Energy Efficiency Programs

Line	Reference	E-7 Sub 1130 Rider 9 Year 1 Estimate	E-7 Sub 1164 Year 2018 Yr 2 LR Estimate	E-7 Sub 1192 Rider 11 True up	E-7 Sub 1192 Year 2018 Year 3 Estimate	E-7 Sub 1230 Rider 12 True Up	E-7 Sub 1230 Year 2018 Yr 4 LR Estimate	E-7 Sub 1249 Rider 13 True up	E-7 Sub 1265 Rider 14 True up	Year 2018
16	Non-Residential EE Program Cost	40,592,949		(3,317,005)		0		-	-	37,275,944
17	Non-Residential EE Earned Utility Incentive	11,623,199		2,818,045		(25,396)		(10,579)	-	14,405,269
18	Return on undercollection of Non-residential EE Program Costs			461,049		592,305		407,815	49,904	1,511,074
19	Total EE Program Cost and Incentive Components	52,216,148		(37,911)		566,910		397,236	49,904	53,192,287
20	Revenue-related taxes and regulatory fees factor	1,001,402		1,001,352		1,001,302		1,001,302	1,001,302	
21	Total Non-Residential EE Program Cost and Incentive Revenue Requirements	52,289,355		(37,962)		567,648		397,753	49,969	53,266,763
22	Non-Residential Net Lost Revenues	5,167,253	8,746,000	2,933,863	9,507,185	(1,090,744)	2,182,027	(2,030,437)	(47,064)	25,378,082
23	Total Non-Residential EE Revenue Requirement	57,456,608	8,746,000	2,895,901	9,507,185	(523,097)	2,182,027	(1,622,684)	2,905	78,644,845
24	Total Collected for Vintage Year 2018 (through estimated Rider 13)									78,964,947
25	Non-Residential EE Revenue Requirement									(320,101)
26	Projected NC Residential Sales (kWh)									15,445,061,521
27	NC Non-Residential EE billing factor (Cents/kWh)									(0.0021)

DSM Programs

Line	Reference	E-7 Sub 1130 Rider 9 Year 1 Estimate	E-7 Sub 1192 Rider 11 True up	E-7 Sub 1230 Rider 12 True Up	E-7 Sub 1249 Rider 13 True up	E-7 Sub 1265 Rider 14 True up	Year 2018
28	Non-Residential DSM Program Cost	11,959,889	651,281	(0)	-	-	12,611,170
29	Non-Residential DSM Earned Utility Incentive	3,103,667	232,789	(7,197)	(372)	-	3,329,626
30	Return on undercollection of Non-residential DSM Program Costs		37,743	76,651	54,598	40,422	209,414
31	Total Non-Residential DSM Program Cost and Incentive Components	15,063,556	921,813	69,454	54,225	41,161	16,150,209
32	Revenue-related taxes and regulatory fees factor	1,001,402	1,001,352	1,001,302	1,001,302	1,001,302	
33	Total Non-Residential DSM Revenue Requirement	15,084,675	923,059	69,544	54,296	41,215	16,172,789
34	Total Collected for Vintage Year 2018 (through estimated Rider 13)						16,206,515
35	Non-Residential EE Revenue Requirement True-up Amount						(33,726)
36	Projected NC Non-Residential Sales (kWh)						16,537,337,560
37	NC Non-Residential DSM billing factor						(0.0002)

** Actual regulatory fee rate in effect in year of collection. May differ from original filed estimates.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Year 4 Lost Revenue and True Up of Year 1 and Year 2 for Vintage Year 2019

RESIDENTIAL Energy Efficiency Programs

Line	Reference	E-7 Sub 1164 Rider 10 Year 1 Estimate	E-7 Sub 1192 Year 2019 Yr 2 LR Estimate	E-7 Sub 1230 Rider 12 True up	E-7 Sub 1230 Year 2019 Yr 3 LR Estimate	E-7 Sub 1249 Rider 13 True up	E-7 Sub 1249 Year 2020 Yr 4 LR Estimate	E-7 Sub 1265 Rider 14 True up	Year 2019
1	Residential EE Program Cost								
	Evans Exhibit 1 pg. 2, Line 9 * NC Alloc. Factor	\$ 41,002,874		\$ 13,243,503		\$ (0)		\$ 0	\$ 54,246,377
2	Residential EE Earned Utility Incentive	3,801,819		3,296,056		(124,962)		90,385	7,063,299
3	Return on undercollection of Residential EE Program Costs			55,738		750,744		511,698	1,318,179
4	Total EE Program Cost and Incentive Components								
	Line 1 + Line 2 + Line 3	44,804,694		16,595,296		625,782		602,083	62,627,855
5	Residential DSM Program Cost								
	Evans Exhibit 1 pg. 2, Line 10 + Line 26 * NC Alloc. Factor	10,577,352		(308,751)		(0)		(0)	10,268,601
6	Residential DSM Earned Utility Incentive								
	Evans Exhibit 1 pg. 2, Line 10 + Line 26 * NC Alloc. Factor	2,773,086		541,821		0		26,383	3,341,290
7	Return on undercollection of Residential DSM Program Costs								
	Listebarger Exhibit 3 pg 6			(6,600)		(21,193)		5,935	(21,858)
8	Total DSM Program Cost and Incentive Components								
	Line 5 + Line 6 + Line 7	13,350,438		226,469		(21,193)		32,318	13,588,033
9	Total EE/DSM Program Cost and Incentive Components								
	Line 4 + Line 8	58,155,132		16,821,766		604,589		634,402	76,215,888
10	Revenue-related taxes and regulatory fees factor **								
	Listebarger Exhibit 2, pg. 7	1.001402		1.001352		1.001302		1.001302	
11	Total EE/DSM Program Cost and Incentive Revenue Requirement								
	Line 9 * Line 10	58,236,665		16,844,509		605,376		635,228	76,321,778
12	Residential Net Lost Revenues								
	Evans Exhibit 2 pg 1 - 6	18,783,204	5,519,302	6,704,043	5,292,331	(1,623,869)	2,233,068	236,622	37,144,701
13	Total Residential EE/DSM Revenue Requirement								
	Line 11 + Line 12	77,019,869	5,519,302	23,548,552	5,292,331	(1,018,493)	2,233,068	871,850	113,466,479
14	Total Collected for Vintage Year 2019 (through estimated Rider 13)								112,534,414
15	Total Residential EE/DSM Revenue Requirement								\$ 932,065

Note: No prospective Year 4 lost revenue is included in this exhibit because the rate case test period was extended for residential customers.

See Listebarger Exhibit A for rate

NON-RESIDENTIAL Energy Efficiency Programs

Line	Reference	E-7 Sub 1164 Rider 10 Year 1 Estimate	E-7 Sub 1192 Year 2019 Yr 2 LR Estimate	E-7 Sub 1230 Rider 12 True up	E-7 Sub 1230 Year 2019 Yr 3 LR Estimate	E-7 Sub 1249 Rider 13 True up	E-7 Sub 1249 Year 2020 Yr 4 LR Estimate	E-7 Sub 1265 Rider 14 True up	Year 2019
16	Non-Residential EE Program Cost								
	Evans Exhibit 1 pg. 2, Line 23 * NC Alloc. Factor	41,671,833		(8,698,625)		-		0	32,973,208
17	Non-Residential EE Earned Utility Incentive								
	Evans Exhibit 1 pg. 2, Line 23 * NC Alloc. Factor	8,464,629		1,873,850		759,937		(0)	11,098,417
18	Return on undercollection of Non-residential EE Program Costs								
	Listebarger Exhibit 3 page 7			(553,659)		(275,034)		(228,890)	(1,057,583)
19	Total EE Program Cost and Incentive Components								
	Line 16 + Line 17 + Line 18	50,136,462		(7,378,434)		484,904		(228,890)	43,014,042
20	Revenue-related taxes and regulatory fees factor								
	Listebarger Exhibit 2, pg. 7	1.001402		1.001352		1.001302		1.001302	
21	Total Non-Residential EE Program Cost and Incentive Revenue Requirements								
	Line 19 * Line 20	50,206,753		(7,388,410)		485,535		(229,188)	43,074,691
22	Non-Residential Net Lost Revenues								
	Evans Exhibit 2 pg 1 - 6	5,590,446	9,219,870	452,216	10,794,655	(8,183,962)	2,074,187	874,289	20,821,700
23	Total Non-Residential EE Revenue Requirement								
	Line 21 + Line 22	55,797,199	9,219,870	(6,936,194)	10,794,655	(7,698,427)	2,074,187	645,101	63,896,391
24	Total Collected for Vintage Year 2019 (through estimated Rider 13)								62,905,222
25	Non-Residential EE Revenue Requirement								
	Line 23 - Line 24								991,169
26	Projected NC Residential Sales (kWh)								15,395,466,327
27	NC Non-Residential EE billing factor (Cents/kWh)								0.0064

Note: Only non-residential customer lost revenues earned after the rate case test period have been included.

DSM Programs

Line	Reference	E-7 Sub 1164 Rider 10 Year 1 Estimate	E-7 Sub 1230 Rider 12 True up	E-7 Sub 1249 Rider 13 True up	E-7 Sub 1265 Rider 14 True up	Year 2019
28	Non-Residential DSM Program Cost					
	Evans Exhibit 1 pg. 2, Line 10 + Line 26 * NC Alloc. Factor	12,538,168	(462,163)	-	(0)	12,076,005
29	Non-Residential DSM Earned Utility Incentive					
	Evans Exhibit 1 pg. 2, Line 10 + Line 26 * NC Alloc. Factor	3,287,157	611,215	-	31,027	3,929,399
30	Return on undercollection of Non-residential DSM Program Costs					
	Listebarger Exhibit 3 page 8	-	(9,744)	7,619	2,253	128
31	Total Non-Residential DSM Program Cost and Incentive Components					
	Line 28 + Line 29 + Line 30	15,825,325	139,308	7,619	33,279	16,005,532
32	Revenue-related taxes and regulatory fees factor					
	Listebarger Exhibit 2, pg. 7	1.001402	1.001352	1.001302	1.001302	
33	Total Non-Residential DSM Revenue Requirement					
	Line 31 * Line 32	15,847,512	139,497	7,629	33,323	16,027,961
34	Total Collected for Vintage Year 2019 (through estimated Rider 13)					15,970,311
35	Non-Residential EE Revenue Requirement True-up Amount					57,650
36	Projected NC Non-Residential Sales (kWh)					16,570,566,722
37	NC Non-Residential DSM billing factor					0.0003

** Actual regulatory fee rate in effect in year of collection. May differ from original filed estimates.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Year 3 Lost Revenue and True Up of Year 1 for Vintage Year 2020

RESIDENTIAL Energy Efficiency Programs

Line	Reference	Year 2020 Yr 4 LR Estimate
1 Residential EE Program Cost	Evans Exhibit 1 pg. 3, Line 9 * NC Alloc. Factor	
2 Residential EE Earned Utility Incentive	Evans Exhibit 1 pg. 3, Line 9 * NC Alloc. Factor	
3 Return on undercollection of Residential EE Program Costs	Listebarger Exhibit 3 pg 13	
4 Total EE Program Cost and Incentive Components	Line 1 + Line 2 + Line 3	
5 Residential DSM Program Cost	Evans Exhibit 1 pg. 3, Line 10 + Line 26 * NC Alloc. Factor	
6 Residential DSM Earned Utility Incentive	Evans Exhibit 1 pg. 3, Line 10 + Line 26 * NC Alloc. Factor	
7 Return on overcollection of Residential DSM Program Costs	Listebarger Exhibit 3 pg 10	
8 Total DSM Program Cost and Incentive Components	Line 5 + Line 6 + Line 7	
9 Total EE/DSM Program Cost and Incentive Components	Line 4 + Line 8	
10 Revenue-related taxes and regulatory fees factor **	Listebarger Exhibit 2, pg. 7	
11 Total EE/DSM Program Cost and Incentive Revenue Requirement	Line 9 * Line 10	
12 Residential Net Lost Revenues	Evans Exhibit 2 pg. 1-6	\$ 2,568,275
13 Total Residential EE/DSM Revenue Requirement	Line 11 + Line 12	2,568,275
14 Total Collected for Vintage Year 2020 (through estimated Rider 13)	Listebarger Exhibit 4, Line 3	
15 Total Residential EE/DSM Revenue Requirement	Line13 - Line 14	\$ 2,568,275

E-7 Sub 1192 Rider 11 Year 1 Estimate	E-7 Sub 1230 Year 2020 Yr 2 LR Estimate	E-7 Sub 1249 Rider 13 True up	E-7 Sub 1249 Year 2020 Yr 3 LR Estimate	E-7 Sub 1265 Rider 14 True up	Year 2020
\$ 33,551,578		\$ 4,000,501		\$ -	\$ 37,552,079
3,173,534		1,218,929		90,910	4,483,373
		147,060		434,746	581,806
36,725,112		5,366,490		525,656	42,617,258
12,243,392		(2,355,317)		-	9,888,075
3,189,876		7,301		14,471	3,211,648
		(62,603)		(198,174)	(260,777)
15,433,268		(2,410,619)		(183,703)	12,838,946
52,158,380		2,955,871		341,953	55,456,205
1.001402		1.001302		1.001302	
52,231,506		2,959,720		342,398	55,533,624
14,667,095	4,495,479	6,588,261	5,386,818	609,516	31,747,169
66,898,602	4,495,479	9,547,981	5,386,818	951,915	87,280,793
					86,380,883
					\$ 899,910

See Listebarger Exhibit A for rate

NON-RESIDENTIAL Energy Efficiency Programs

Line	Reference	Year 2020 Yr 4 LR Estimate
16 Non- Residential EE Program Cost	Evans Exhibit 1 pg. 3, Line 23 * NC Alloc. Factor	
17 Non-Residential EE Earned Utility Incentive	Evans Exhibit 1 pg. 3, Line 23 * NC Alloc. Factor	
18 Return on overcollection of Non-residential EE Program Costs	Listebarger Exhibit 3 page 11	
19 Total EE Program Cost and Incentive Components	Line 16 + Line 17 + Line 18	
20 Revenue-related taxes and regulatory fees factor	Listebarger Exhibit 2, pg. 7	
21 Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 19 * Line 20	
22 Non-Residential Net Lost Revenues	Evans Exhibit 2 pg. 1 - 6	3,845,961
23 Total Non-Residential EE Revenue Requirement	Line 21 + Line 22	3,845,961
24 Total Collected for Vintage Year 2020 (through estimated Rider 13)	Listebarger Exhibit 4 Line 9	
25 Non-Residential EE Revenue Requirement	Line 23 - Line 24	3,845,961
26 Projected NC Residential Sales (kWh)	Listebarger Exhibit 6, Line 8	14,831,584,100
27 NC Non-Residential EE billing factor (Cents/kWh)	Line 25/Line 26*100	0.0259

E-7 Sub 1192 Rider 11 Year 1 Estimate	E-7 Sub 1230 Year 2020 Yr 2 LR Estimate	E-7 Sub 1249 Rider 13 True up	E-7 Sub 1249 Year 2020 Yr 3 LR Estimate	E-7 Sub 1265 Rider 14 True up	Year 2020
37,708,077		(15,681,234)		-	22,026,843
10,010,194		(2,909,256)		98,425	7,199,363
		(324,916)		(767,827)	(1,092,743)
47,718,271		(18,915,406)		(669,402)	28,133,463
1.001402		1.001302		1.001302	
47,785,172		(18,940,034)		(670,274)	28,174,865
5,183,193	9,376,721	(4,169,004)	6,802,676	1,081,898	18,275,484
52,968,365	9,376,721	(23,109,038)	6,802,676	411,625	46,450,349
					46,624,089
					(173,740)
					14,831,584,100
					(0.0012)

DSM Programs

Line	Reference	Year 2020 Yr 4 LR Estimate
28 Non-Residential DSM Program Cost	Evans Exhibit 1 pg. 3, Line 10 + Line 26 * NC Alloc. Factor	
29 Non-Residential DSM Earned Utility Incentive	Evans Exhibit 1 pg. 3, Line 10 + Line 26 * NC Alloc. Factor	
30 Return on overcollection of Non-residential DSM Program Costs	Listebarger Exhibit 3 page 12	
31 Total Non-Residential DSM Program Cost and Incentive Components	Line 28 + Line 29 + Line 30	
32 Revenue-related taxes and regulatory fees factor	Listebarger Exhibit 2, pg. 7	
33 Total Non-Residential DSM Revenue Requirement	Line 31 * Line 32	
34 Total Collected for Vintage Year 2020 (through estimated Rider 13)	Listebarger Exhibit 4 Line 14	
35 Non-Residential EE Revenue Requirement True-up Amount	Line 33- Line 34	
36 Projected NC Non-Residential Sales (kWh)	Listebarger Exhibit 6, Line 9	
37 NC Non-Residential DSM billing factor	Line 35/Line 36*100	

E-7 Sub 1192 Rider 11 Year 1 Estimate	E-7 Sub 1249 Rider 13 True up	E-7 Sub 1265 Rider 14 True up	Year 2020
15,789,462	(3,918,078)	-	11,871,383
4,113,764	(275,311)	17,373	3,855,826
-	(63,113)	(4,377)	(67,490)
19,903,226	(4,256,502)	12,996	15,659,720
1.001402	1.001302	1.001302	
19,931,130	(4,262,044)	13,013	15,682,099
			15,714,929
			(32,830)
			16,609,571,340
			(0.0002)

** Actual regulatory fee rate in effect in year of collection. May differ from original filed estimates.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Year 3 Lost Revenue and True Up of Year 1 for Vintage Year 2021

RESIDENTIAL Energy Efficiency Programs

Line	Reference	Year 2021 Yr 3 LR Estimate
1 Residential EE Program Cost	Evans Exhibit 1 pg. 4, Line 9 * NC Alloc. Factor	
2 Residential EE Earned Utility Incentive	Evans Exhibit 1 pg. 4, Line 9 * NC Alloc. Factor	
3 Return on undercollection of Residential EE Program Costs	Listebarger Exhibit 3 pg 13	
4 Total EE Program Cost and Incentive Components	Line 1 + Line 2 + Line 3	
5 Residential DSM Program Cost	Evans Exhibit 1 pg. 4, Line 10 + Line 26 * NC Alloc. Factor	
6 Residential DSM Earned Utility Incentive	Evans Exhibit 1 pg. 4, Line 10 + Line 26 * NC Alloc. Factor	
7 Return on overcollection of Residential DSM Program Costs	Listebarger Exhibit 3 pg 14	
8 Total DSM Program Cost and Incentive Components	Line 5 + Line 6 + Line 7	
9 Total EE/DSM Program Cost and Incentive Components	Line 4 + Line 8	
10 Revenue-related taxes and regulatory fees factor **	Listebarger Exhibit 2, pg. 7	
11 Total EE/DSM Program Cost and Incentive Revenue Requirement	Line 9 * Line 10	
12 Residential Net Lost Revenues	Evans Exhibit 2 pg. 1-6	\$ 3,959,003
13 Total Residential EE/DSM Revenue Requirement	Line 11 + Line 12	3,959,003
14 Total Collected for Vintage Year 2021 (through estimated Rider 13)	Listebarger Exhibit 4, Line 4	
15 Total Residential EE/DSM Revenue Requirement	Line 13 - Line 14	\$ 3,959,003

E-7 Sub 1230 Rider 12 Year 1 Estimate	E-7 Sub 1249 Year 2021 Yr 2 LR Estimate	E-7 Sub 1265 Rider 14 True up	Year 2021
\$ 37,155,471		\$ (10,923,999)	\$ 26,231,472
2,774,995		(244,088)	2,530,907
		(427,153)	(427,153)
39,930,466		(11,595,240)	28,335,226
13,699,485		(2,210,071)	11,489,414
3,521,313		(751,140)	2,770,173
		(105,961)	(105,961)
17,220,797		(3,067,171)	14,153,626
57,151,264		(14,662,411)	42,488,852
1,001,302		1,001,302	
57,225,674		(14,681,502)	42,544,173
25,205,298	6,249,665	(8,091,427)	23,363,537
82,430,974	6,249,665	(22,772,928)	65,907,710
			88,242,571
			\$ (22,334,861)

See Listebarger Exhibit A for rate

NON-RESIDENTIAL Energy Efficiency Programs

Line	Reference	Year 2021 Yr 3 LR Estimate
16 Non- Residential EE Program Cost	Evans Exhibit 1 pg. 4, Line 23 * NC Alloc. Factor	
17 Non-Residential EE Earned Utility Incentive	Evans Exhibit 1 pg. 4, Line 23 * NC Alloc. Factor	
18 Return on overcollection of Non-residential EE Program Costs	Listebarger Exhibit 3 page 15	
19 Total EE Program Cost and Incentive Components	Line 16 + Line 17 + Line 18	
20 Revenue-related taxes and regulatory fees factor	Listebarger Exhibit 2, pg. 7	
21 Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 19 * Line 20	
22 Non-Residential Net Lost Revenues	Evans Exhibit 2 pg. 1-6	10,003,040
23 Total Non-Residential EE Revenue Requirement	Line 21 + Line 22	10,003,040
24 Total Collected for Vintage Year 2021 (through estimated Rider 13)	Listebarger Exhibit 4 Line 10	
25 Non-Residential EE Revenue Requirement	Line 23 - Line 24	10,003,040
26 Projected NC Residential Sales (kWh)	Listebarger Exhibit 6, Line 10	14,903,909,177
27 NC Non-Residential EE billing factor (Cents/kWh)	Line 25/Line 26*100	0.0673

E-7 Sub 1230 Rider 12 Year 1 Estimate	E-7 Sub 1249 Year 2021 Yr 2 LR Estimate	E-7 Sub 1265 Rider 14 True up	Year 2021
38,264,959		(8,510,352)	29,754,607
8,888,527		(1,494,004)	7,394,523
		(580,644)	(580,644)
47,153,486		(10,585,000)	36,568,486
1,001,302		1,001,302	
47,214,880		(10,598,782)	36,616,098
6,360,715	13,494,665	(4,819,745)	15,035,634
53,575,595	13,494,665	(15,418,527)	51,651,733
			64,059,539
			(12,407,806)
			14,903,909,177
			(0.0833)

DSM Programs

Line	Reference	Year 2021 Yr 3 LR Estimate
28 Non-Residential DSM Program Cost	Evans Exhibit 1 pg. 4, Line 10 + Line 26 * NC Alloc. Factor	
29 Non-Residential DSM Earned Utility Incentive	Evans Exhibit 1 pg. 4, Line 10 + Line 26 * NC Alloc. Factor	
30 Return on overcollection of Non-residential DSM Program Costs	Listebarger Exhibit 3 page 16	
31 Total Non-Residential DSM Program Cost and Incentive Components	Line 28 + Line 29 + Line 30	
32 Revenue-related taxes and regulatory fees factor	Listebarger Exhibit 2, pg. 7	
33 Total Non-Residential DSM Revenue Requirement	Line 31 * Line 32	
34 Total Collected for Vintage Year 2020 (through estimated Rider 13)	Listebarger Exhibit 4 Line 15	
35 Non-Residential EE Revenue Requirement True-up Amount	Line 33 - Line 34	
36 Projected NC Non-Residential Sales (kWh)	Listebarger Exhibit 6 Line 11	
37 NC Non-Residential DSM billing factor	Line 35/Line 36*100	

E-7 Sub 1230 Rider 12 Year 1 Estimate	E-7 Sub 1265 Rider 14 True up	Year 2021
16,110,767	(3,154,656)	12,956,111
4,141,109	(1,017,305)	3,123,804
-	(77,597)	(77,597)
20,251,876	(4,249,558)	16,002,318
1,001,302	1,001,302	
20,278,244	(4,255,091)	16,023,153
		18,905,431
		(2,882,278)
		16,646,430,078
		(0.0173)

** Actual regulatory fee rate in effect in year of collection. May differ from original filed estimates.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Year 2 Lost Revenues for Vintage Year 2022

RESIDENTIAL

Line

- 1 Residential Net Lost Revenues
- 2 Projected NC Residential Sales (kWh)
- 3 NC Residential EE Billing Factor (Cents/kWh)

Reference
Evans Exhibit 2 pg 1 - 6
Listebarger Exhibit 6, Line 1
Line 1/Line 2*100

2022
6,791,458
\$ 22,809,393,337
0.0298

NON-RESIDENTIAL

Energy Efficiency Programs

- 4 Non-Residential Net Lost Revenues
- 5 Projected NC Non-Residential Sales (kWh)
- 6 NC Non-Residential EE billing factor (Cents/kWh)

Reference
Evans Exhibit 2 pg 1 - 6
Listebarger Exhibit 6, Line 12
Line 4/Line 5*100

2022
15,132,477
15,209,154,609
0.0995

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Program Costs, Earned Incentive and Lost Revenues for Vintage Year 2023

RESIDENTIAL

Line	Reference	2023
1 Residential EE Program Cost	Evans Exhibit 1, pg. 5, Line 10 * NC Alloc. Factor	\$ 43,514,258
2 Residential EE Earned Utility Incentive	Evans Exhibit 1, pg. 5, Line 10	5,293,270
3 Total EE Program Cost and Incentive Components	Line 1 + Line 2	48,807,528
4 Residential DSM Program Cost	Evans Exhibit 1 pg. 5, Line 11	12,159,515
5 Residential DSM Earned Utility Incentive	Evans Exhibit 1 pg. 5, Line 11	2,371,105
6 Total DSM Program Cost and Incentive Components	Line 4 + Line 5	14,530,620
7 Total EE/DSM Program Cost and Incentive Components	Line 3 + Line 6	63,338,148
8 Revenue-related taxes and regulatory fees factor	Listebarger Exhibit 2, pg. 7	1.001302
9 Total EE/DSM Program Cost and Incentive Revenue Requirement	Line 7 * Line 8	63,420,614
10 Residential Net Lost Revenues	Evans Exhibit 2 pg 1 - 6	21,146,502
11 Total Residential EE Revenue Requirement	Line 9 + Line 10	\$ 84,567,117

See Listebarger Exhibit 1 for rate

NON-RESIDENTIAL Energy Efficiency Programs

	Reference	2023
12 Non- Residential EE Program Cost	Evans Exhibit 1, pg. 5, Line 24 * NC Alloc. Factor	\$ 45,838,354
13 Non-Residential EE Earned Utility Incentive	Evans Exhibit 1, pg. 6, Line 24	12,167,415
14 Total EE Program Cost and Incentive Components	Line 12 + Line 13	58,005,769
15 Revenue-related taxes and regulatory fees factor	Listebarger Exhibit 2, pg. 7	1.001302
16 Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 14 * Line 15	58,081,293
17 Non-Residential Net Lost Revenues	Evans Exhibit 2 pg 1 - 6	7,667,494
18 Total Non-Residential EE Revenue Requirement	Line 16 + Line 17	\$ 65,748,787
19 Projected NC Residential Sales (kWh)	Listebarger Exhibit 6, Line 14	15,209,154,609
20 NC Non-Residential EE billing factor (Cents/kWh)	Line 18/Line 19*100	0.4323

DSM Programs

		2023
21 Non-Residential DSM Program Cost	Evans Exhibit 1 pg. 6, Line 10 + Line 26 * NC Alloc. Factor	\$ 13,711,755
22 Non-Residential DSM Earned Utility Incentive	Evans Exhibit 1 pg. 6, Line 10 + Line 26 * NC Alloc. Factor	2,673,792
23 Total Non-Residential DSM Program Cost and Incentive Components	Line 21 + Line 22	16,385,547
24 Revenue-related taxes and regulatory fees factor	Listebarger Exhibit 2, pg. 7	1.001302
25 Total Non-Residential DSM Revenue Requirement	Line 23 * Line 24	16,406,881
26 Projected NC Non-Residential Sales (kWh)	Listebarger Exhibit 6, Line 15	16,907,663,645
27 NC Non-Residential DSM billing factor	Line 25/Line 26*100	0.0970

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Gross Receipts Tax Years 2018 through estimated 2022

	<u>Year</u>		<u>Actual GRT Rate In Effect</u>
Rider 9	2018		1.001402
Rider 10	2019		1.001402
	2020	Jan - June	1.001402
	2020	July - Dec	1.001302
Rider 11	2020	Weighted Average	1.001352
Rider 12	2021		1.001302
Rider 13	2022		1.001302
Rider 14	2033		1.001302

Note: the current rate is used as the estimate for 2022 and 2023. This will be subject to true-up based on actual rates in effect.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1249
Estimated Return Calculation - Residential EE Programs Vintage 2018

		Residential EE Program Costs		NC Allocated EE Program Costs	NC Residential Revenue Collected	NC Residential EE Program Collection %	EE Program Costs Revenue Collected	(Over)/Under Collection
NC Residential EE		Incurred	NC Allocation %					
Listebarger Exhibit 5 pg. 2, Line 4								
						see calc. at right		
Beginning Balance		77,331,818		56,230,324	96,550,755			(54,997)
2021	January		72.7130507%	-	162,555	-1.6199%	2,633	2,633
2021	February		72.7130507%	-	311,915	-1.6199%	5,053	5,053
2021	March		72.7130507%	-	304,265	-1.6199%	4,929	4,929
2021	April		72.7130507%	-	241,514	-1.6199%	3,912	3,912
2021	May		72.7130507%	-	196,271	-1.6199%	3,179	3,179
2021	June		72.7130507%	-	270,416	-1.6199%	4,381	4,381
2021	July		72.7130507%	-	327,081	-1.6199%	5,298	5,298
2021	August		72.7130507%	-	337,132	-1.6199%	5,461	5,461
2021	September		72.7130507%	-	324,456	-1.6199%	5,256	5,256
2021	October		72.7130507%	-	225,806	-1.6199%	3,658	3,658
2021	November		72.7130507%	-	207,102	-1.6199%	3,355	3,355
2021	December		72.7130507%	-	597,245	-1.6199%	9,675	9,675
		77,331,818		56,230,324	100,056,516		56,790	1,794

Program Costs to be Recovered in Rider 11	(54,997)
Revenues to be Collected in Rider 11	3,395,034
% Revenue related to Program Costs	-1.6199%

		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
NC Residential EE		1/2020 - 12/2020					6.56%			0.766497	
2021	January	(52,364)	0.233503	615	615	(52,978)	0.005469	(145)	(145)	0.766497	(189)
2021	February	(47,311)	0.233503	1,180	615	(47,926)	0.005469	(276)	(421)	0.766497	(549)
2021	March	(42,382)	0.233503	1,151	1,766	(44,148)	0.005469	(252)	(673)	0.766497	(877)
2021	April	(38,470)	0.233503	914	1,528	(39,998)	0.005469	(230)	(903)	0.766497	(1,178)
2021	May	(35,290)	0.233503	742	2,508	(37,798)	0.005469	(213)	(1,115)	0.766497	(1,455)
2021	June	(30,910)	0.233503	1,023	2,551	(33,461)	0.005469	(195)	(1,310)	0.766497	(1,709)
2021	July	(25,611)	0.233503	1,237	3,745	(29,357)	0.005469	(172)	(1,482)	0.766497	(1,934)
2021	August	(20,150)	0.233503	1,275	3,827	(23,976)	0.005469	(146)	(1,628)	0.766497	(2,124)
2021	September	(14,894)	0.233503	1,227	4,973	(19,867)	0.005469	(120)	(1,748)	0.766497	(2,280)
2021	October	(11,236)	0.233503	854	4,681	(15,917)	0.005469	(98)	(1,846)	0.766497	(2,408)
2021	November	(7,881)	0.233503	783	5,756	(13,637)	0.005469	(81)	(1,926)	0.766497	(2,513)
2021	December	1,794	0.233503	2,259	6,940	(5,146)	0.005469	(51)	(1,978)	0.766497	(2,580)
								(1,978)			(2,580)

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential DSM Programs Vintage 2018

NC Residential DSM		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
		1/2021 - 12/2021					6.56%			0.272869	
Beginning Balance		(91)			(5,458)	6,170					
2021	January	25,567	72.7131%	18,657	13,199	12,368	0.005469	51	51	0.272869	186
2021	February	77,239	72.7131%	37,572	50,771	26,468	0.005469	106	157	0.272869	575
2021	March	127,577	72.7131%	36,603	87,374	40,203	0.005469	182	339	0.272869	1,243
2021	April	166,979	72.7131%	28,650	116,024	50,955	0.005469	249	588	0.272869	2,157
2021	May	198,494	72.7131%	22,916	138,940	59,554	0.005469	302	891	0.272869	3,264
2021	June	242,933	72.7131%	32,313	171,253	71,680	0.005469	359	1,250	0.272869	4,579
2021	July	297,248	72.7131%	39,494	210,747	86,501	0.005469	433	1,682	0.272869	6,165
2021	August	353,315	72.7131%	40,768	251,515	101,800	0.005469	515	2,197	0.272869	8,052
2021	September	407,173	72.7131%	39,161	290,676	116,496	0.005469	597	2,794	0.272869	10,239
2021	October	443,836	72.7131%	26,659	317,335	126,501	0.005469	664	3,459	0.272869	12,675
2021	November	477,240	72.7131%	24,289	341,624	135,616	0.005469	717	4,175	0.272869	15,301
2021	December	510,005	72.7131%	23,824	365,449	144,556	0.005469	766	4,941	0.272869	18,109
								4,941			18,109

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential DSM Programs Vintage 2018

Interest Calculation

2018 - Rider 11	Month	NC Program Costs		Overcollected Balance	PPI	Revenue Collected	Undercollected Balance	Total Cumulative Over/Under Collected			
		Incurred	Revenue Collected								
	January	577,730	496,812	80,919	217,020	132,319	84,701	165,620	DSM Program Costs	9,778,895	0.79
	February	492,253	976,135	(483,881)	217,020	259,980	(42,960)	(361,221)	DSM PPI & GRT	2,604,245	0.21
	March	560,931	718,111	(157,180)	217,020	191,259	25,761	(492,640)	Total Revenue Requirement	12,383,141	
	April	580,847	723,243	(142,396)	217,020	192,626	24,394	(610,642)			
	May	458,541	632,349	(173,807)	217,020	168,417	48,603	(735,846)			
	June	981,302	901,517	79,786	217,020	240,107	(23,086)	(679,147)			
	July	1,134,268	1,034,845	99,423	217,020	275,617	(58,596)	(638,320)			
	August	1,151,622	952,221	199,402	217,020	253,611	(36,591)	(475,509)			
	September	1,295,899	1,022,050	273,849	217,020	272,209	(55,189)	(256,849)			
	October	1,127,691	722,072	405,619	217,020	192,314	24,706	173,477			
	November	528,490	667,394	(138,904)	217,020	177,751	39,269	73,842			
	December	889,322	1,555,855	(666,533)	217,020	414,381	(197,360)	(790,051)			
YTD Balance		9,778,896	10,402,600	(623,705)	2,604,245	2,770,592	(166,347)	(790,051)			

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential DSM Programs Vintage 2018

Interest Calculation

2019 - Rider 12	Month	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total Cumulative Over/Under Collected
Beginning Balance		9,778,896	10,402,600	(623,705)	2,604,245	2,770,592	(166,347)	(790,051)
January				-			-	(790,051)
February				-			-	(790,051)
March				-			-	(790,051)
April				-			-	(790,051)
May				-			-	(790,051)
June				-			-	(790,051)
July				-			-	(790,051)
August				-			-	(790,051)
September				-			-	(790,051)
October				-			-	(790,051)
November				-			-	(790,051)
December				-			-	(790,051)
YTD Balance		9,778,896	10,402,600	(623,705)	2,604,245	2,770,592	(166,347)	(790,051)

Note: Year 2 of all residential vintages goes toward the collection of Year 2 lost revenues. Therefore, no revenues offset the overcollection of Program costs or PPI. Interest continued to accrue on beginning balance.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential DSM Programs Vintage 2018

Interest Calculation

2020 - Rider 13	Month	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total Cumulative Over/Under Collected
Beginning Balance		9,778,896	10,402,600	(623,705)	2,604,245	2,770,592	(166,347)	(790,051)
January			(23,068)	(600,636)		(6,152)	(160,194)	(760,831)
February			(56,262)	(544,374)		(15,006)	(145,189)	(689,563)
March			(48,859)	(495,515)		(13,031)	(132,158)	(627,673)
April			(41,587)	(453,928)		(11,092)	(121,066)	(574,994)
May			(38,349)	(415,579)		(10,228)	(110,838)	(526,417)
June			(49,065)	(366,514)		(13,086)	(97,752)	(464,266)
July			(65,763)	(300,750)		(17,540)	(80,212)	(380,963)
August			(68,628)	(232,122)		(18,304)	(61,909)	(294,031)
September			(56,896)	(175,226)		(15,175)	(46,734)	(221,960)
October			(38,900)	(136,326)		(10,375)	(36,359)	(172,685)
November			(40,266)	(96,059)		(10,739)	(25,620)	(121,679)
December			(95,988)	(72)		(25,601)	(19)	(91)
YTD Balance		-	(623,633)			(166,328)		
Cumulative Ending Balance		9,778,896	9,778,968	(72)	2,604,245	2,604,265	(19)	(91)

Revenue Requirement:

Program Costs	(623,705)	0.79
PPI	(166,347)	0.21
Total	(790,051)	
Revenue Given back	(818,586)	
Less Interest given back	(28,626)	
Total	(789,960)	
Check Point Difference	(789,960)	
	-	

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential DSM Programs Vintage 2018

Interest Calculation

2021 -		NC Program Costs		Undercollected		Revenue	Undercollected	Total Cumulative
Rider 14	Month	Incurred	Revenue Collected	Balance	PPI	Collected	Balance	Over/Under Collected
	Beginning Balance	9,778,896	9,778,968	(72)	2,604,245	2,604,265	(19)	(91)
	January		(25,639)	25,567		(6,838)	6,819	32,386
	February		(51,672)	77,239		(13,781)	20,600	97,839
	March		(50,338)	127,577		(13,426)	34,026	161,603
	April		(39,401)	166,979		(10,509)	44,535	211,513
	May		(31,516)	198,494		(8,405)	52,940	251,434
	June		(44,439)	242,933		(11,852)	64,792	307,725
	July		(54,315)	297,248		(14,486)	79,278	376,527
	August		(56,067)	353,315		(14,953)	94,232	447,547
	September		(53,858)	407,173		(14,364)	108,596	515,769
	October		(36,663)	443,836		(9,778)	118,375	562,211
	November		(33,403)	477,240		(8,909)	127,283	604,523
	December		(32,765)	510,005		(8,739)	136,022	646,027
	YTD Balance	-	(510,077)			(136,041)		
	Cumulative Ending Balance	9,778,896	9,268,891	510,005	2,604,245	2,468,223	136,022	646,027

Revenue Requirement:		
Program Costs	(72)	0.79
PPI	(19)	0.21
Total	(91)	
Revenue Given back	(687,055)	
Less Interest given back	(40,937)	
Total	(646,118)	
Check Point Difference	(646,118)	

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Non- Residential EE Programs Vintage 2018

NC Non- Residential EE	Non-Residential EE Program Costs		NC Allocated EE Program Costs	NC Residential Revenue Collected	NC Non- Residential EE Program Collection %	Non-Residential EE Program Costs Revenue Collected	(Over)/Under Collection
	Incurred	NC Allocation %					
	Listebarger Exhibit 5, pg 1, Line 4				See calc. at right		
Beginning Balance	51,264,448		37,275,944	64,192,958		20,546,481	1,342,401
2021 January		72.7130507%	-	376,128	96.0330337%	(361,207)	(361,206)
2021 February		72.7130507%	-	139,345	96.0330337%	(133,817)	(133,817)
2021 March		72.7130507%	-	104,126	96.0330337%	(99,995)	(99,995)
2021 April		72.7130507%	-	102,159	96.0330337%	(98,106)	(98,106)
2021 May		72.7130507%	-	94,315	96.0330337%	(90,573)	(90,573)
2021 June		72.7130507%	-	118,155	96.0330337%	(113,468)	(113,468)
2021 July		72.7130507%	-	135,313	96.0330337%	(129,945)	(129,945)
2021 August		72.7130507%	-	131,110	96.0330337%	(125,908)	(125,908)
2021 September		72.7130507%	-	143,390	96.0330337%	(137,702)	(137,702)
2021 October		72.7130507%	-	114,526	96.0330337%	(109,983)	(109,983)
2021 November		72.7130507%	-	99,907	96.0330337%	(95,944)	(95,944)
2021 December		72.7130507%	-	154,161	96.0330337%	(148,046)	(148,046)
	51,264,448		37,275,944	65,905,594		18,901,785	(302,294)

Program Costs to be Recovered in Rider 12	1,342,401
Revenues to be Collected in Rider 12	1,397,854

% Revenue to be assigned to Program Costs	96.03%
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NC Non-Residential EE		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax	
			1/2021 - 12/2021				6.56%	0.766497				
2021	January	981,195	0.233503	(84,342.73)	(84,343)	1,065,538	0.005469	2,914	2,914	0.766497	3,801	
2021	February	847,377	0.233503	(31,246.78)	(115,590)	962,967	0.005469	5,547	8,461	0.766497	11,038	
2021	March	747,382	0.233503	(23,349.22)	(138,939)	886,321	0.005469	5,057	13,518	0.766497	17,636	
2021	April	649,276	0.233503	(22,908.11)	(161,847)	811,123	0.005469	4,642	18,160	0.766497	23,692	
2021	May	558,703	0.233503	(21,149.13)	(182,996)	741,698	0.005469	4,246	22,406	0.766497	29,232	
2021	June	445,234	0.233503	(26,495.13)	(209,491)	654,726	0.005469	3,819	26,225	0.766497	34,214	
2021	July	315,289	0.233503	(30,342.59)	(239,834)	555,123	0.005469	3,308	29,533	0.766497	38,530	
2021	August	189,381	0.233503	(29,400.01)	(269,234)	458,614	0.005469	2,772	32,305	0.766497	42,147	
2021	September	51,679	0.233503	(32,153.87)	(301,388)	353,066	0.005469	2,220	34,525	0.766497	45,043	
2021	October	(58,304)	0.233503	(25,681.28)	(327,069)	268,765	0.005469	1,700	36,225	0.766497	47,261	
2021	November	(154,248)	0.233503	(22,403.25)	(349,472)	195,224	0.005469	1,269	37,494	0.766497	48,916	
2021	December	(302,294)	0.233503	(34,569.12)	(384,041)	81,747	0.005469	757	38,252	0.766497	49,904	
								38,252			49,904	

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation -Non - Residential DSM Programs Vintage 2018

		Total System NC DSM Program	NC Non- Residential DSM Allocation %	NC Allocated DSM Non- Residential Program Costs	NC Non-Residential DSM Revenue Collected	NC Non- Residential DSM Program Collection %	Non-Residential DSM Program Costs Revenue Collected	(Over)/Under Collection
NC Non- Residential DSM		Costs Incurred						
See Listebarger Exhibit 5 pg. 1, Line 10								
Beginning Balance		30,409,405	41.4712829%	12,611,170	1,218,346		(12,466,415)	144,755
2021	January	25,567	41.4712829%	10,603	33,936	-59.5662739%	20,214	30,817
2021	February	77,239	41.4712829%	32,032	(10,867)	-59.5662739%	(6,473)	25,559
2021	March	127,577	41.4712829%	52,908	(17,268)	-59.5662739%	(10,286)	42,622
2021	April	166,979	41.4712829%	69,248	(16,980)	-59.5662739%	(10,115)	59,134
2021	May	198,494	41.4712829%	82,318	(15,445)	-59.5662739%	(9,200)	73,118
2021	June	242,933	41.4712829%	100,748	(19,453)	-59.5662739%	(11,587)	89,160
2021	July	297,248	41.4712829%	123,273	(22,697)	-59.5662739%	(13,520)	109,753
2021	August	353,315	41.4712829%	146,524	(22,169)	-59.5662739%	(13,205)	133,319
2021	September	407,173	41.4712829%	168,860	(23,209)	-59.5662739%	(13,825)	155,035
2021	October	443,836	41.4712829%	184,065	(17,763)	-59.5662739%	(10,580)	173,484
2021	November	477,240	41.4712829%	197,917	(18,286)	-59.5662739%	(10,892)	187,025
2021	December	510,005	41.4712829%	211,505	(17,874)	-59.5662739%	(10,647)	200,858
		33,737,012		13,991,172	1,050,271		(12,566,531)	1,424,640

Program Costs to be Recovered in Rider 12 144,755
Revenues to be Collected in Rider 12 (243,015)

% Revenue to be assigned to Program Costs -59.57%

		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
NC Non-Residential DSM		1/2021 - 12/2021					6.56%			0.766497	
2021	January	175,572	0.233503	7,196	7,196	168,376	0.005469	460	460	0.766497	601
2021	February	201,131	0.233503	5,968	13,164	187,967	0.005469	974	1,435	0.766497	1,872
2021	March	243,753	0.233503	9,952	23,116	220,637	0.005469	1,117	2,552	0.766497	3,330
2021	April	302,887	0.233503	13,808	36,924	265,963	0.005469	1,331	3,883	0.766497	5,066
2021	May	376,005	0.233503	17,073	53,998	322,008	0.005469	1,608	5,491	0.766497	7,163
2021	June	465,165	0.233503	20,819	74,817	390,349	0.005469	1,948	7,439	0.766497	9,705
2021	July	574,918	0.233503	25,628	100,444	474,474	0.005469	2,365	9,804	0.766497	12,790
2021	August	708,238	0.233503	31,130	131,575	576,663	0.005469	2,874	12,678	0.766497	16,540
2021	September	863,273	0.233503	36,201	167,776	695,497	0.005469	3,479	16,157	0.766497	21,079
2021	October	1,036,757	0.233503	40,509	208,285	828,472	0.005469	4,167	20,324	0.766497	26,516
2021	November	1,223,782	0.233503	43,671	251,956	971,826	0.005469	4,923	25,247	0.766497	32,939
2021	December	1,424,640	0.233503	46,901	298,857	1,125,783	0.005469	5,736	30,984	0.766497	40,422
								30,984			40,422

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential EE Programs Vintage 2019

		Residential EE Program Costs		NC Allocated EE Program Costs	NC Residential Revenue Collected	NC Residential EE Program Collection %	EE Program Costs Revenue Collected	(Over)/Under Collection
NC Residential EE		Incurred	NC Allocation %					
Listebarger Exhibit 5 pg. 2, Line 4								
						see calc. at right		
Beginning Balance		74,218,205		54,246,377	63,652,577		(39,726,803)	14,519,574
2021	January		73.0903918%	-	1,381,718	50.2421%	(694,204)	(694,204)
2021	February		72.7130507%	-	2,651,280	50.2421%	(1,332,058)	(1,332,058)
2021	March		72.7130507%	-	2,586,255	50.2421%	(1,299,389)	(1,299,389)
2021	April		72.7130507%	-	2,052,872	50.2421%	(1,031,406)	(1,031,406)
2021	May		72.7130507%	-	1,668,307	50.2421%	(838,192)	(838,192)
2021	June		72.7130507%	-	2,298,538	50.2421%	(1,154,834)	(1,154,834)
2021	July		72.7130507%	-	2,780,192	50.2421%	(1,396,827)	(1,396,827)
2021	August		72.7130507%	-	2,865,623	50.2421%	(1,439,749)	(1,439,749)
2021	September		72.7130507%	-	2,757,880	50.2421%	(1,385,617)	(1,385,617)
2021	October		72.7130507%	-	1,919,352	50.2421%	(964,323)	(964,323)
2021	November		72.7130507%	-	1,760,369	50.2421%	(884,446)	(884,446)
2021	December		72.7130507%	-	4,187,905	50.2421%	(2,104,091)	(2,104,091)
		74,218,205		54,246,377	92,562,868		(54,251,938)	(5,561)

Program Costs to be Recovered in Rider 12	14,519,574
Revenues to be Collected in Rider 12	28,899,221
% Revenue related to Program Costs	50.2421%

NC Residential EE	Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
		1/2021 - 12/2021				6.56%			0.766497	
Beginning Balance	14,519,574			3,390,364	11,129,210					
2021 January	13,825,370	0.233503	(162,099)	3,228,265	10,597,105	0.005469	59,413	59,413	0.766497	77,512
2021 February	12,493,311	0.233503	(311,040)	2,917,226	9,576,086	0.005469	55,165	114,578	0.766497	149,483
2021 March	11,193,923	0.233503	(303,411)	2,613,815	8,580,108	0.005469	49,650	164,228	0.766497	214,257
2021 April	10,162,517	0.233503	(240,836)	2,372,978	7,789,539	0.005469	44,764	208,992	0.766497	272,658
2021 May	9,324,325	0.233503	(195,720)	2,177,258	7,147,067	0.005469	40,845	249,837	0.766497	325,947
2021 June	8,169,491	0.233503	(269,657)	1,907,601	6,261,890	0.005469	36,668	286,505	0.766497	373,785
2021 July	6,772,664	0.233503	(326,163)	1,581,437	5,191,227	0.005469	31,320	317,825	0.766497	414,646
2021 August	5,332,915	0.233503	(336,186)	1,245,252	4,087,664	0.005469	25,374	343,199	0.766497	447,750
2021 September	3,947,299	0.233503	(323,546)	921,706	3,025,593	0.005469	19,452	362,651	0.766497	473,127
2021 October	2,982,976	0.233503	(225,172)	696,534	2,286,442	0.005469	14,526	377,177	0.766497	492,079
2021 November	2,098,530	0.233503	(206,521)	490,013	1,608,517	0.005469	10,651	387,828	0.766497	505,975
2021 December	(5,561)	0.233503	(491,312)	(1,299)	(4,263)	0.005469	4,387	392,215	0.766497	511,698
							392,215			511,698

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential DSM Programs Vintage 2019

NC Residential DSM	Total System NC DSM Program Costs Incurred	NC Allocation %	NC Allocated DSM Program Costs	NC Residential Revenue Collected	NC Residential DSM Program Collection %	DSM Program Costs Revenue Collected	(Over)/Under Collection
	Listebarger Exhibit 5 pg. 2, Line 9			see calc. at right			
Beginning Balance	30,097,219		10,268,600	13,367,259		(10,090,987)	177,614
2021 January		34.1181040%		10,556	77.7199%	(8,204)	(8,204)
2021 February		34.1181040%	-	20,254	77.7199%	(15,742)	(15,742)
2021 March		34.1181040%	-	19,757	77.7199%	(15,355)	(15,355)
2021 April		34.1181040%	-	15,683	77.7199%	(12,189)	(12,189)
2021 May		34.1181040%	-	12,745	77.7199%	(9,905)	(9,905)
2021 June		34.1181040%	-	17,559	77.7199%	(13,647)	(13,647)
2021 July		34.1181040%	-	21,239	77.7199%	(16,507)	(16,507)
2021 August		34.1181040%	-	21,892	77.7199%	(17,014)	(17,014)
2021 September		34.1181040%	-	21,069	77.7199%	(16,374)	(16,374)
2021 October		34.1181040%	-	14,663	77.7199%	(11,396)	(11,396)
2021 November		34.1181040%	-	13,448	77.7199%	(10,452)	(10,452)
2021 December		34.1181040%	-	(31,620)	77.7199%	24,575	24,575
	30,097,219		10,268,600	13,524,504		(10,213,197)	55,403

Program Costs to be Recovered in Rider 12	177,614
Revenues to be Collected in Rider 12	228,531
% Revenue related to Program Costs	77.7199%

NC Residential DSM	Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
	1/2021 - 12/2021					6.56%			0.766497	
2021 January	169,410	0.233503	41,473	41,473	127,937	0.005469	350	350	0.766497	456
2021 February	153,668	0.233503	(3,676)	37,798	115,871	0.005469	667	1,017	0.766497	1,326
2021 March	138,313	0.233503	(3,586)	34,212	104,101	0.005469	602	1,618	0.766497	2,111
2021 April	126,124	0.233503	(2,846)	31,366	94,758	0.005469	544	2,162	0.766497	2,820
2021 May	116,219	0.233503	(2,313)	29,053	87,166	0.005469	497	2,659	0.766497	3,470
2021 June	102,572	0.233503	(3,187)	25,866	76,705	0.005469	448	3,108	0.766497	4,054
2021 July	86,065	0.233503	(3,854)	22,012	64,053	0.005469	385	3,492	0.766497	4,556
2021 August	69,051	0.233503	(3,973)	18,039	51,011	0.005469	315	3,807	0.766497	4,967
2021 September	52,676	0.233503	(3,823)	14,216	38,460	0.005469	245	4,052	0.766497	5,286
2021 October	41,280	0.233503	(2,661)	11,555	29,726	0.005469	186	4,238	0.766497	5,529
2021 November	30,828	0.233503	(2,441)	9,114	21,714	0.005469	141	4,379	0.766497	5,713
2021 December	55,403	0.233503	5,738	14,852	40,551	0.005469	170	4,549	0.766497	5,935
							4,549			5,935

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Non- Residential EE Programs Vintage 2019

NC Non- Residential EE	Non-Residential EE Program Costs		NC Allocated EE Program Costs	Program Performance Incentives	Lost Revenues	Total Costs	NC Residential Revenue Collected	NC Non-Residential EE Program Collection %	Non-Residential EE Program Costs		(Over)/Under Collection
	Incurred	NC Allocation %							Revenue Collected		
	Listebarger Exhibit 5, pg 3, Line 4							100% used due to overcollection			
Beginning Balance	45,112,919		32,973,209	10,338,479	14,874,342	58,186,030	61,095,561		(61,095,561)		(2,909,531)
2021 January		73.0903918%		63,328	495,613	558,941	286,260	100.00%	(286,260)		272,682
2021 February		73.0903918%		63,328	495,613	558,941	529,758	100.00%	(529,758)		29,183
2021 March		73.0903918%		63,328	495,613	558,941	539,266	100.00%	(539,266)		19,676
2021 April		73.0903918%		63,328	495,613	558,941	532,898	100.00%	(532,898)		26,043
2021 May		73.0903918%		63,328	495,613	558,941	495,950	100.00%	(495,950)		62,992
2021 June		73.0903918%		63,328	495,613	558,941	616,582	100.00%	(616,582)		(57,640)
2021 July		73.0903918%		63,328	495,613	558,941	708,170	100.00%	(708,170)		(149,229)
2021 August		73.0903918%		63,328	495,613	558,941	684,592	100.00%	(684,592)		(125,650)
2021 September		73.0903918%		63,328	495,613	558,941	747,597	100.00%	(747,597)		(188,656)
2021 October		73.0903918%		63,328	495,613	558,941	601,473	100.00%	(601,473)		(42,521)
2021 November		73.0903918%		63,328	495,613	558,941	522,512	100.00%	(522,512)		36,429
2021 December		73.0903918%		63,328	495,613	558,941	655,807	100.00%	(655,807)		(96,866)
	45,112,919		32,973,209	11,098,417	20,821,700	64,893,326	68,016,425		(68,016,425)		(3,123,099)

Since Rider 13 was overcollected, interest has continued to be calculated on the entire balance. Lost revenues earned in 2021 were applied to the outstanding balance and all revenues collected in 2021 were also applied to the outstanding balance.

		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
NC Non-Residential EE		1/2021 - 12/2021									
							6.56%			0.766497	
2021	January	(2,636,849)	0.233503	63,672	63,672	(2,700,521)	0.005469	(7,385)	(7,385)	0.766497	(9,634)
2021	February	(2,607,666)	0.233503	6,814	70,486	(2,678,152)	0.005469	(14,708)	(22,093)	0.766497	(28,824)
2021	March	(2,587,990)	0.233503	4,594	75,081	(2,663,071)	0.005469	(14,606)	(36,699)	0.766497	(47,879)
2021	April	(2,561,947)	0.233503	6,081	81,162	(2,643,109)	0.005469	(14,510)	(51,210)	0.766497	(66,810)
2021	May	(2,498,955)	0.233503	14,709	95,871	(2,594,826)	0.005469	(14,324)	(65,533)	0.766497	(85,497)
2021	June	(2,556,596)	0.233503	(13,459)	82,411	(2,639,007)	0.005469	(14,312)	(79,846)	0.766497	(104,169)
2021	July	(2,705,825)	0.233503	(34,845)	47,566	(2,753,391)	0.005469	(14,746)	(94,592)	0.766497	(123,408)
2021	August	(2,831,475)	0.233503	(29,340)	18,226	(2,849,701)	0.005469	(15,322)	(109,914)	0.766497	(143,397)
2021	September	(3,020,131)	0.233503	(44,052)	(25,826)	(2,994,305)	0.005469	(15,981)	(125,895)	0.766497	(164,247)
2021	October	(3,062,663)	0.233503	(9,931)	(35,757)	(3,026,906)	0.005469	(16,466)	(142,360)	0.766497	(185,728)
2021	November	(3,026,233)	0.233503	8,506	(27,250)	(2,998,983)	0.005469	(16,478)	(158,838)	0.766497	(207,226)
2021	December	(3,123,099)	0.233503	(22,618)	(49,869)	(3,073,230)	0.005469	(16,605)	(175,443)	0.766497	(228,890)
								(175,443)			(228,890)

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation -Non - Residential DSM Programs Vintage 2019

		Total System NC DSM Program	NC Non- Residential DSM Allocation %	NC Allocated DSM Non- Residential Program Costs	NC Non-Residential DSM Revenue Collected	NC Non- Residential DSM Program Collection %	Non-Residential DSM Program Costs Revenue Collected	(Over)/Under Collection
NC Non- Residential DSM		Costs Incurred						
See Listebarger Exhibit 5 pg. 2, Line 10								
Beginning Balance		30,097,219		12,076,004	15,942,519		(12,035,182)	40,822
2021	January	-	40.1233224%	-	2,569	13.0447472%	(335)	(335)
2021	February	-	40.1233224%	-	21,868	13.0447472%	(2,853)	(2,853)
2021	March	-	40.1233224%	-	23,522	13.0447472%	(3,068)	(3,068)
2021	April	-	40.1233224%	-	23,121	13.0447472%	(3,016)	(3,016)
2021	May	-	40.1233224%	-	21,046	13.0447472%	(2,745)	(2,745)
2021	June	-	40.1233224%	-	26,538	13.0447472%	(3,462)	(3,462)
2021	July	-	40.1233224%	-	30,892	13.0447472%	(4,030)	(4,030)
2021	August	-	40.1233224%	-	30,170	13.0447472%	(3,936)	(3,936)
2021	September	-	40.1233224%	-	31,654	13.0447472%	(4,129)	(4,129)
2021	October	-	40.1233224%	-	24,152	13.0447472%	(3,151)	(3,151)
2021	November	-	40.1233224%	-	24,992	13.0447472%	(3,260)	(3,260)
2021	December	-	40.1233224%	-	28,089	13.0447472%	(3,664)	(3,664)
		30,097,219		12,076,004	16,231,132		(12,072,831)	3,173

Program Costs to be Recovered in Ride	40,822
Revenues to be Collected in Rider 12	312,940
% Revenue related to Program Costs	13.0447%

NC Non-Residential DSM		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
		1/2021 - 12/2021						6.56%	0.766497		
2021	January	40,487	0.233503	(78)	(78)	40,565	0.005469	111	111	0.766497	145
2021	February	37,634	0.233503	(666)	(744)	38,379	0.005469	216	327	0.766497	426
2021	March	34,566	0.233503	(716)	(1,461)	36,027	0.005469	203	530	0.766497	692
2021	April	31,550	0.233503	(704)	(2,165)	33,715	0.005469	191	721	0.766497	941
2021	May	28,805	0.233503	(641)	(2,806)	31,611	0.005469	179	900	0.766497	1,174
2021	June	25,343	0.233503	(808)	(3,614)	28,957	0.005469	166	1,065	0.766497	1,390
2021	July	21,313	0.233503	(941)	(4,555)	25,868	0.005469	150	1,215	0.766497	1,585
2021	August	17,377	0.233503	(919)	(5,474)	22,852	0.005469	133	1,348	0.766497	1,759
2021	September	13,248	0.233503	(964)	(6,439)	19,687	0.005469	116	1,465	0.766497	1,911
2021	October	10,098	0.233503	(736)	(7,174)	17,272	0.005469	101	1,566	0.766497	2,043
2021	November	6,838	0.233503	(761)	(7,936)	14,773	0.005469	88	1,653	0.766497	2,157
2021	December	3,173	0.233503	(856)	(8,791)	11,964	0.005469	73	1,727	0.766497	2,253
								1,727			2,253

Note 1: Amounts represent all revenue actually collected through 2020.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential EE Programs Vintage 2020

NC Residential EE	Residential EE Program Costs		NC Allocated EE Program Costs	NC Residential Revenue Collected	NC Residential EE Program Collection %	EE Program Costs Revenue Collected		(Over)/Under Collection
	Incurred	NC Allocation %				Collected		
	Listebarger Exhibit 5 pg. 3, Line 4				see calc. at right			
Beginning Balance	51,310,734		37,570,373	51,645,101	59.3631972%	(30,658,183)		6,912,190
2021 January		73.2212736%			0.0000%			
2021 February		73.2212736%			0.0000%			
2021 March		73.2212736%			0.0000%			
2021 April		73.2212736%			0.0000%			
2021 May		73.2212736%			0.0000%			
2021 June		73.2212736%			0.0000%			
2021 July		73.2212736%			0.0000%			
2021 August		73.2212736%			0.0000%			
2021 September		73.2212736%			0.0000%			
2021 October		73.2212736%			0.0000%			
2021 November		73.2212736%			0.0000%			
2021 December		73.2212736%			0.0000%			
	51,310,734		37,570,373	51,645,101				6,912,190

Note: All revenues collected in Rider 12 were to collect Y2 of lost revenue. Therefore, no revenue received in 2021 would offset the under collected balance of program costs and a return would still be earned.

NC Residential EE		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
		1/2021 - 12/2021					6.56%			0.766497	
2021 January		6,912,190	0.233503	1,614,017	1,614,017	5,298,173	0.005469	14,488	14,488	0.766497	18,902
2021 February		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	43,465	0.766497	56,706
2021 March		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	72,442	0.766497	94,510
2021 April		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	101,418	0.766497	132,314
2021 May		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	130,395	0.766497	170,118
2021 June		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	159,372	0.766497	207,922
2021 July		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	188,348	0.766497	245,726
2021 August		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	217,325	0.766497	283,530
2021 September		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	246,302	0.766497	321,334
2021 October		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	275,278	0.766497	359,138
2021 November		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	304,255	0.766497	396,942
2021 December		6,912,190	0.233503	-	1,614,017	5,298,173	0.005469	28,977	333,231	0.766497	434,746
								333,231			434,746

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential DSM Programs Vintage 2020

NC Residential DSM	Total System NC DSM Program Costs Incurred	NC Allocation %	NC Allocated DSM Program Costs	Program Incentives	Total Costs	NC Residential Revenue Collected	NC Residential DSM Program Collection %	DSM Program Costs Revenue Collected	(Over)/Under Collection
	Listebarger Exhibit 5 pg. 4, Line 9						100% used due to overcollection		
Beginning Balance - Source	29,327,255		9,888,075	3,194,120	13,082,195	15,504,312		(15,504,312)	(2,422,117)
2021 January		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 February		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 March		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 April		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 May		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 June		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 July		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 August		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 September		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 October		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 November		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
2021 December		33.7163333%	-	1,461	1,461		100.0000%	-	1,461
	29,327,255		9,888,075	3,211,648	13,099,723	15,504,312		(15,504,312)	(2,404,589)

Since Rider 13 was overcollected, interest has continued to be calculated on the entire balance.

NC Residential DSM	Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
	1/2021 - 12/2021					6.56%			0.766497	
2021 January	(2,420,656)	0.233503	341	341	(2,420,997)	0.005469	(6,620)	(6,620)	0.766497	(8,637)
2021 February	(2,419,196)	0.233503	341	682	(2,419,878)	0.005469	(13,238)	(19,858)	0.766497	(25,908)
2021 March	(2,417,735)	0.233503	341	1,023	(2,418,758)	0.005469	(13,232)	(33,090)	0.766497	(43,170)
2021 April	(2,416,274)	0.233503	341	1,364	(2,417,639)	0.005469	(13,226)	(46,315)	0.766497	(60,425)
2021 May	(2,414,814)	0.233503	341	1,705	(2,416,519)	0.005469	(13,219)	(59,535)	0.766497	(77,671)
2021 June	(2,413,353)	0.233503	341	2,046	(2,415,400)	0.005469	(13,213)	(72,748)	0.766497	(94,910)
2021 July	(2,411,892)	0.233503	341	2,387	(2,414,280)	0.005469	(13,207)	(85,955)	0.766497	(112,141)
2021 August	(2,410,432)	0.233503	341	2,729	(2,413,160)	0.005469	(13,201)	(99,156)	0.766497	(129,363)
2021 September	(2,408,971)	0.233503	341	3,070	(2,412,041)	0.005469	(13,195)	(112,351)	0.766497	(146,578)
2021 October	(2,407,511)	0.233503	341	3,411	(2,410,921)	0.005469	(13,189)	(125,540)	0.766497	(163,784)
2021 November	(2,406,050)	0.233503	341	3,752	(2,409,802)	0.005469	(13,183)	(138,723)	0.766497	(180,983)
2021 December	(2,404,589)	0.233503	341	4,093	(2,408,682)	0.005469	(13,177)	(151,899)	0.766497	(198,174)
							(151,899)			(198,174)

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Non- Residential EE Programs Vintage 2020

NC Non- Residential EE	Non-Residential EE Program Costs		NC Allocated EE Program Costs	Program Performance Incentives	Lost Revenues	Total Costs	NC Residential Revenue Collected	NC Non-Residential EE Program Collection %	Non-Residential EE	
	Incurred	NC Allocation %							Revenue Collected	(Over)/Under Collection
		Listebarger Exhibit 5, pg 3, Line 4						100% used due to overcollection		
Beginning Balance	30,082,572		22,026,843	7,142,705	3,839,208	33,008,756	44,023,239		(44,023,239)	(11,014,483)
2021 January		73.2212736%		4,721	1,203,023	1,207,744	1,383,560	100.00%	(1,383,560)	(175,816)
2021 February		73.2212736%		4,721	1,203,023	1,207,744	790,679	100.00%	(790,679)	417,065
2021 March		73.2212736%		4,721	1,203,023	1,207,744	696,234	100.00%	(696,234)	511,510
2021 April		73.2212736%		4,721	1,203,023	1,207,744	687,469	100.00%	(687,469)	520,275
2021 May		73.2212736%		4,721	1,203,023	1,207,744	628,499	100.00%	(628,499)	579,246
2021 June		73.2212736%		4,721	1,203,023	1,207,744	788,734	100.00%	(788,734)	419,010
2021 July		73.2212736%		4,721	1,203,023	1,207,744	906,904	100.00%	(906,904)	300,841
2021 August		73.2212736%		4,721	1,203,023	1,207,744	869,438	100.00%	(869,438)	338,306
2021 September		73.2212736%		4,721	1,203,023	1,207,744	959,762	100.00%	(959,762)	247,983
2021 October		73.2212736%		4,721	1,203,023	1,207,744	764,101	100.00%	(764,101)	443,643
2021 November		73.2212736%		4,721	1,203,023	1,207,744	668,944	100.00%	(668,944)	538,800
2021 December		73.2212736%		4,721	1,203,023	1,207,744	821,567	100.00%	(821,567)	386,178
	30,082,572		22,026,843	7,199,363	18,275,484	47,501,689	53,989,132		(53,989,132)	(6,487,442)

No program cost allocation is needed since Rider 13 was overcollected, in total and interest due was calculated on the entire vintage. Lost revenues earned in 2021 were applied to the outstanding balance and all revenues collected in 2021 were also applied to the outstanding balance.

Therefore, 100% of all revenues offset the overcollected balance.

NC Non-Residential EE		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
		1/2021 - 12/2021					6.56%			0.766497	
2021	January	(11,190,299)	0.233503	(41,054)	(41,054)	(11,149,246)	0.005469	(30,489)	(30,489)	0.766497	(39,777)
2021	February	(10,773,234)	0.233503	97,386	56,332	(10,829,566)	0.005469	(60,103)	(90,592)	0.766497	(118,189)
2021	March	(10,261,724)	0.233503	119,439	175,772	(10,437,495)	0.005469	(58,157)	(148,748)	0.766497	(194,062)
2021	April	(9,741,449)	0.233503	121,486	297,257	(10,038,706)	0.005469	(55,994)	(204,742)	0.766497	(267,114)
2021	May	(9,162,203)	0.233503	135,256	432,513	(9,594,716)	0.005469	(53,689)	(258,432)	0.766497	(337,159)
2021	June	(8,743,193)	0.233503	97,840	530,353	(9,273,546)	0.005469	(51,597)	(310,029)	0.766497	(404,475)
2021	July	(8,442,352)	0.233503	70,247	600,600	(9,042,953)	0.005469	(50,088)	(360,117)	0.766497	(469,821)
2021	August	(8,104,046)	0.233503	78,995	679,596	(8,783,642)	0.005469	(48,748)	(408,865)	0.766497	(533,420)
2021	September	(7,856,064)	0.233503	57,905	737,500	(8,593,564)	0.005469	(47,520)	(456,385)	0.766497	(595,416)
2021	October	(7,412,420)	0.233503	103,592	841,093	(8,253,513)	0.005469	(46,070)	(502,454)	0.766497	(655,520)
2021	November	(6,873,620)	0.233503	125,811	966,904	(7,840,524)	0.005469	(44,011)	(546,465)	0.766497	(712,938)
2021	December	(6,487,442)	0.233503	90,174	1,057,078	(7,544,520)	0.005469	(42,072)	(588,537)	0.766497	(767,827)
								(588,537)			(767,827)

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Non - Residential DSM Programs Vintage 2020

NC Non- Residential DSM	Total System NC DSM Program Costs Incurred	NC Non- Residential DSM Allocation %	NC Allocated DSM Non- Residential Program Costs	Program Incentives	Total Costs	NC Non-Residential DSM Revenue Collected	NC Non- Residential DSM Program Collection %	Non-Residential DSM Program Costs Revenue Collected	(Over)/Under Collection
	See Listebarger Exhibit 5 pg. 4, Line 10					100% used due to overcollection			
Beginning Balance	29,327,255		11,871,383	3,860,688	15,732,071	17,715,486		(17,715,486)	(1,983,414)
2021 January		40.4790117%	-	(405)	(405)	-	100.00000000%		(405)
2021 February		40.4790117%	-	(405)	(405)	74,520	100.00000000%	(74,520)	(74,925)
2021 March		40.4790117%	-	(405)	(405)	671	100.00000000%	(671)	(1,077)
2021 April		40.4790117%	-	(405)	(405)	8	100.00000000%	(8)	(413)
2021 May		40.4790117%	-	(405)	(405)	71	100.00000000%	(71)	(407)
2021 June		40.4790117%	-	(405)	(405)	12	100.00000000%	(12)	(418)
2021 July		40.4790117%	-	(405)	(405)	52	100.00000000%	52	(353)
2021 August		40.4790117%	-	(405)	(405)	626	100.00000000%	(626)	(1,031)
2021 September		40.4790117%	-	(405)	(405)	(626)	100.00000000%	626	221
2021 October		40.4790117%	-	(405)	(405)	635	100.00000000%	(635)	(1,040)
2021 November		40.4790117%	-	(405)	(405)				
2021 December		40.4790117%	-	(405)	(405)	(39,231)	100.00000000%	39,231	38,826
	29,327,255		-	3,855,826	15,727,210	17,752,122		(17,752,122)	(2,024,912)

No program cost allocation is needed since Rider 13 was overcollected, in total and interest due was calculated on the entire vintage. Lost revenues earned in 2021 were applied to the outstanding balance and all revenues collected in 2021 were also applied to the outstanding balance.

Therefore, 100% of all revenues offset the overcollected balance.

NC Non-Residential DSM	Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
	1/2021 - 12/2021					6.56%			0.766497	
2021 January	(405)	0.233503	(95)	(95)	(311)	0.005469	(1)	(1)	0.766497	(1)
2021 February	(75,331)	0.233503	(17,495)	(17,590)	(57,741)	0.005469	(159)	(160)	0.766497	(208)
2021 March	(76,407)	0.233503	(251)	(17,841)	(58,566)	0.005469	(318)	(478)	0.766497	(623)
2021 April	(76,820)	0.233503	(96)	(17,938)	(58,882)	0.005469	(321)	(799)	0.766497	(1,042)
2021 May	(77,226)	0.233503	(95)	(18,033)	(59,194)	0.005469	(323)	(1,122)	0.766497	(1,463)
2021 June	(77,703)	0.233503	(111)	(18,144)	(59,559)	0.005469	(325)	(1,446)	0.766497	(1,887)
2021 July	(78,120)	0.233503	(98)	(18,241)	(59,879)	0.005469	(327)	(1,773)	0.766497	(2,313)
2021 August	(78,473)	0.233503	(82)	(18,324)	(60,150)	0.005469	(328)	(2,101)	0.766497	(2,741)
2021 September	(79,505)	0.233503	(241)	(18,565)	(60,940)	0.005469	(331)	(2,432)	0.766497	(3,173)
2021 October	(79,284)	0.233503	52	(18,513)	(60,771)	0.005469	(333)	(2,765)	0.766497	(3,608)
2021 November	(80,324)	0.233503	(243)	(18,756)	(61,568)	0.005469	(335)	(3,100)	0.766497	(4,044)
2021 December	(41,498)	0.233503	9,066	(9,690)	(31,808)	0.005469	(255)	(3,355)	0.766497	(4,377)
							(3,355)			(4,377)

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential EE Programs Vintage 2021

		Residential EE Program Costs Incurred	NC Allocation %	NC Allocated EE Program Costs	Program Incentives	Lost Revenues	Total Costs	NC Residential Revenue Collected	NC Residential EE Program Collection %	EE Program Costs Revenue Collected	(Over)/Under Collection
NC Residential EE		Listebarger Exhibit 5 pg. 4, Line 4					100% used due to overcollection				
2021	January	1,806,147	73.5233682%	1,327,940	130,020	1,182,754	2,640,715	3,115,990	100.0000%	(3,115,990)	(475,275)
2021	February	2,431,280	73.5233682%	1,787,559	175,022	1,592,122	3,554,703	5,979,051	100.0000%	(5,979,051)	(2,424,347)
2021	March	2,954,841	73.5233682%	2,172,499	212,712	1,934,976	4,320,187	5,832,411	100.0000%	(5,832,411)	(1,512,224)
2021	April	3,242,259	73.5233682%	2,383,818	233,403	2,123,191	4,740,411	4,629,547	100.0000%	(4,629,547)	110,864
2021	May	2,488,632	73.5233682%	1,829,726	179,151	1,629,679	3,638,555	3,762,293	100.0000%	(3,762,293)	(123,738)
2021	June	3,246,602	73.5233682%	2,387,011	233,715	2,126,035	4,746,762	5,183,564	100.0000%	(5,183,564)	(436,802)
2021	July	2,364,378	73.5233682%	1,738,370	170,206	1,548,311	3,456,888	6,269,768	100.0000%	(6,269,768)	(2,812,880)
2021	August	2,363,589	73.5233682%	1,737,790	170,149	1,547,794	3,455,733	6,462,428	100.0000%	(6,462,428)	(3,006,694)
2021	September	3,922,710	73.5233682%	2,884,109	282,387	2,568,784	5,735,279	6,219,451	100.0000%	(6,219,451)	(484,172)
2021	October	3,464,959	73.5233682%	2,547,554	249,434	2,269,026	5,066,014	4,328,439	100.0000%	(4,328,439)	737,575
2021	November	2,674,604	73.5233682%	1,966,459	192,538	1,751,463	3,910,460	3,969,908	100.0000%	(3,969,908)	(59,448)
2021	December	4,717,732	73.5233682%	3,468,635	339,618	3,089,403	6,897,657	8,995,007	100.0000%	(8,995,007)	(2,097,350)
		35,677,735		26,231,472	2,568,356	23,363,537	52,163,365	64,747,858		(64,747,858)	(12,584,493)

Vintage is overcollected. Interest is calculated on all components.

100% of all revenues offset the overcollected balance.

		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
NC Residential EE		1/2021 - 12/2021			6.56%			0.766497			
2021	January	(475,275)	0.233503	(110,978)	(110,978)	(364,297)	0.005469	(996)	(996)	0.766497	(1,300)
2021	February	(2,899,623)	0.233503	(566,092)	(677,071)	(2,222,552)	0.005469	(7,074)	(8,070)	0.766497	(10,529)
2021	March	(4,411,847)	0.233503	(353,109)	(1,030,180)	(3,381,667)	0.005469	(15,325)	(23,395)	0.766497	(30,523)
2021	April	(4,300,983)	0.233503	25,887	(1,004,292)	(3,296,690)	0.005469	(18,263)	(41,658)	0.766497	(54,349)
2021	May	(4,424,721)	0.233503	(28,893)	(1,033,186)	(3,391,535)	0.005469	(18,290)	(59,948)	0.766497	(78,210)
2021	June	(4,861,523)	0.233503	(101,995)	(1,135,180)	(3,726,343)	0.005469	(19,464)	(79,412)	0.766497	(103,604)
2021	July	(7,674,403)	0.233503	(656,816)	(1,791,996)	(5,882,407)	0.005469	(26,276)	(105,688)	0.766497	(137,884)
2021	August	(10,681,098)	0.233503	(702,072)	(2,494,068)	(8,187,029)	0.005469	(38,474)	(144,162)	0.766497	(188,079)
2021	September	(11,165,270)	0.233503	(113,056)	(2,607,124)	(8,558,146)	0.005469	(45,791)	(189,953)	0.766497	(247,820)
2021	October	(10,427,695)	0.233503	172,226	(2,434,898)	(7,992,797)	0.005469	(45,260)	(235,213)	0.766497	(306,868)
2021	November	(10,487,143)	0.233503	(13,881)	(2,448,779)	(8,038,364)	0.005469	(43,839)	(279,052)	0.766497	(364,061)
2021	December	(12,584,493)	0.233503	(489,737)	(2,938,517)	(9,645,976)	0.005469	(48,359)	(327,411)	0.766497	(427,153)
								(327,411)			(427,153)

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Residential DSM Programs Vintage 2021

NC Residential DSM		Total System NC DSM Program Costs Incurred	NC Allocation %	NC Allocated EE Program Costs	Program Incentives	Total Costs	NC Residential Revenue Collected	NC Residential EE Program Collection %	EE Program Costs Revenue Collected	(Over)/Under Collection
Listebarger Exhibit 5 pg. 4, Line 9										
2021	January	1,625,830	34.9475492%	568,188	137,912	706,100	824,386	100.0000%	(824,386)	(118,286)
2021	February	1,861,375	34.9475492%	650,505	157,892	808,397	1,581,856	100.0000%	(1,581,856)	(773,459)
2021	March	1,932,178	34.9475492%	675,249	163,898	839,147	1,543,060	100.0000%	(1,543,060)	(703,913)
2021	April	2,879,839	34.9475492%	1,006,433	244,284	1,250,717	1,224,823	100.0000%	(1,224,823)	25,895
2021	May	1,640,354	34.9475492%	573,264	139,144	712,408	995,376	100.0000%	(995,376)	(282,969)
2021	June	2,019,985	34.9475492%	705,935	171,346	877,282	1,371,397	100.0000%	(1,371,397)	(494,115)
2021	July	4,168,637	34.9475492%	1,456,836	353,607	1,810,443	1,658,770	100.0000%	(1,658,770)	151,673
2021	August	3,898,456	34.9475492%	1,362,415	330,689	1,693,104	1,709,741	100.0000%	(1,709,741)	(16,638)
2021	September	3,925,636	34.9475492%	1,371,914	332,994	1,704,908	1,645,458	100.0000%	(1,645,458)	59,450
2021	October	4,516,753	34.9475492%	1,578,494	383,136	1,961,631	1,145,160	100.0000%	(1,145,160)	816,471
2021	November	1,763,142	34.9475492%	616,175	149,560	765,735	1,050,304	100.0000%	(1,050,304)	(284,570)
2021	December	2,643,978	34.9475492%	924,006	224,277	1,148,283	2,494,717	100.0000%	(2,494,717)	(1,346,434)
		32,876,164		11,489,414	2,788,739	14,278,153	17,245,048		(17,245,048)	(2,966,895)

Vintage is overcollected. Interest is calculated on all components.

100% of all revenues offset the overcollected balance.

NC Residential DSM		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
		1/2021 - 12/2021				6.56%				0.766497	
2021	January	(118,286)	0.233503	(27,620)	(27,620)	(90,666)	0.005469	(248)	(248)	0.766497	(323)
2021	February	(891,745)	0.233503	(180,605)	(208,225)	(683,520)	0.005469	(2,117)	(2,365)	0.766497	(3,085)
2021	March	(1,595,658)	0.233503	(164,366)	(372,591)	(1,223,067)	0.005469	(5,214)	(7,579)	0.766497	(9,888)
2021	April	(1,569,764)	0.233503	6,046	(366,545)	(1,203,219)	0.005469	(6,635)	(14,214)	0.766497	(18,544)
2021	May	(1,852,732)	0.233503	(66,074)	(432,619)	(1,420,114)	0.005469	(7,174)	(21,387)	0.766497	(27,903)
2021	June	(2,346,848)	0.233503	(115,377)	(547,996)	(1,798,852)	0.005469	(8,803)	(30,190)	0.766497	(39,387)
2021	July	(2,195,174)	0.233503	35,416	(512,580)	(1,682,594)	0.005469	(9,520)	(39,710)	0.766497	(51,807)
2021	August	(2,211,812)	0.233503	(3,885)	(516,465)	(1,695,347)	0.005469	(9,237)	(48,948)	0.766497	(63,859)
2021	September	(2,152,362)	0.233503	13,882	(502,583)	(1,649,779)	0.005469	(9,148)	(58,095)	0.766497	(75,793)
2021	October	(1,335,891)	0.233503	190,648	(311,934)	(1,023,956)	0.005469	(7,312)	(65,407)	0.766497	(85,332)
2021	November	(1,620,460)	0.233503	(66,448)	(378,382)	(1,242,078)	0.005469	(6,197)	(71,603)	0.766497	(93,416)
2021	December	(2,966,895)	0.233503	(314,396)	(692,779)	(2,274,116)	0.005469	(9,615)	(81,219)	0.766497	(105,961)
								(81,219)			(105,961)

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Non- Residential EE Programs Vintage 2020

NC Non- Residential EE		Non-Residential EE Program Costs Incurred	NC Allocation %	NC Allocated EE Program Costs	Program Incentives	Lost Revenues	Total Costs	NC Residential Revenue Collected	NC Non- Residential EE Program Collection %	Non-Residential EE Program Costs Revenue Collected	(Over)/Under Collection
		Listebarger Exhibit 5, pg 4, Line 4									
		See calc. at right									
2021	January	2,630,148	73.5233682%	1,933,773	483,719	977,177	3,394,669	1,020,322	100.0000000%	(1,020,322)	913,451
2021	February	2,758,573	73.5233682%	2,028,196	507,338	1,024,890	3,560,424	3,694,780	100.0000000%	(3,694,780)	(1,666,585)
2021	March	2,414,424	73.5233682%	1,775,166	444,044	897,029	3,116,239	4,002,820	100.0000000%	(4,002,820)	(2,227,655)
2021	April	3,989,941	73.5233682%	2,933,539	733,803	1,482,379	5,149,721	3,951,018	100.0000000%	(3,951,018)	(1,017,479)
2021	May	3,182,053	73.5233682%	2,339,552	585,221	1,182,225	4,106,999	3,605,136	100.0000000%	(3,605,136)	(1,265,584)
2021	June	2,591,922	73.5233682%	1,905,668	476,689	962,975	3,345,332	4,538,733	100.0000000%	(4,538,733)	(2,633,065)
2021	July	2,744,693	73.5233682%	2,017,991	504,785	1,019,733	3,542,509	5,193,948	100.0000000%	(5,193,948)	(3,175,957)
2021	August	4,013,209	73.5233682%	2,950,647	738,082	1,491,024	5,179,753	5,011,049	100.0000000%	(5,011,049)	(2,060,403)
2021	September	3,195,742	73.5233682%	2,349,617	587,739	1,187,311	4,124,668	5,474,795	100.0000000%	(5,474,795)	(3,125,178)
2021	October	4,489,722	73.5233682%	3,300,995	825,719	1,668,063	5,794,777	4,414,912	100.0000000%	(4,414,912)	(1,113,917)
2021	November	4,420,521	73.5233682%	3,250,116	812,992	1,642,353	5,705,460	3,822,764	100.0000000%	(3,822,764)	(572,648)
2021	December	4,038,645	73.5233682%	2,969,348	742,760	1,500,474	5,212,582	5,834,596	100.0000000%	(5,834,596)	(2,865,248)
		40,469,592		29,754,607	7,442,891	15,035,634	52,233,133	50,564,874		(50,564,874)	(20,810,267)

Vintage is overcollected. Interest is calculated on all components.

100% of all revenues offset the overcollected balance.

NC Non-Residential EE		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
		1/2021 - 12/2021									
		6.56%									
		0.766497									
2021	January	913,451	0.233503	213,294	213,294	700,158	0.005469	1,915	1,915	0.766497	2,498
2021	February	(753,133)	0.233503	(389,153)	(175,859)	(577,274)	0.005469	336	2,251	0.766497	2,936
2021	March	(2,980,788)	0.233503	(520,164)	(696,023)	(2,284,765)	0.005469	(7,827)	(5,576)	0.766497	(7,274)
2021	April	(3,998,267)	0.233503	(237,584)	(933,607)	(3,064,660)	0.005469	(14,628)	(20,204)	0.766497	(26,359)
2021	May	(5,263,851)	0.233503	(295,518)	(1,229,125)	(4,034,726)	0.005469	(19,414)	(39,618)	0.766497	(51,687)
2021	June	(7,896,916)	0.233503	(614,829)	(1,843,954)	(6,052,963)	0.005469	(27,586)	(67,204)	0.766497	(87,677)
2021	July	(11,072,874)	0.233503	(741,596)	(2,585,549)	(8,487,324)	0.005469	(39,762)	(106,966)	0.766497	(139,551)
2021	August	(13,133,276)	0.233503	(481,110)	(3,066,659)	(10,066,617)	0.005469	(50,737)	(157,703)	0.766497	(205,745)
2021	September	(16,258,454)	0.233503	(729,738)	(3,796,398)	(12,462,056)	0.005469	(61,607)	(219,310)	0.766497	(286,119)
2021	October	(17,372,371)	0.233503	(260,103)	(4,056,501)	(13,315,870)	0.005469	(70,492)	(289,802)	0.766497	(378,086)
2021	November	(17,945,019)	0.233503	(133,715)	(4,190,216)	(13,754,803)	0.005469	(74,027)	(363,829)	0.766497	(474,664)
2021	December	(20,810,267)	0.233503	(669,044)	(4,859,260)	(15,951,007)	0.005469	(81,233)	(445,062)	0.766497	(580,644)
								(445,062)			(580,644)

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
Docket Number E-7 Sub 1265
Estimated Return Calculation - Non - Residential DSM Programs Vintage 2021

		Total System NC DSM Program Costs Incurred	NC Non- Residential DSM Allocation %	NC Allocated DSM Non- Residential Program Costs	Program Incentives	Total Costs	NC Non-Residential DSM Revenue Collected	NC Non-Residential DSM Program Collection %	Non-Residential DSM Program Costs Revenue Collected	(Over)/Under Collection
NC Non- Residential DSM										
See Listebarger Exhibit 5 pg. 4, Line 10										
2021	January	1,625,830	39.4088278%	640,721	155,517	796,238	368,590	100.0000000%	(368,590)	427,648
2021	February	1,861,375	39.4088278%	733,546	178,048	911,594	1,384,272	100.0000000%	(1,384,272)	(472,678)
2021	March	1,932,178	39.4088278%	761,449	184,821	946,269	1,493,559	100.0000000%	(1,493,559)	(547,289)
2021	April	2,879,839	39.4088278%	1,134,911	275,468	1,410,379	1,483,929	100.0000000%	(1,483,929)	(73,550)
2021	May	1,640,354	39.4088278%	646,444	156,907	803,351	1,328,086	100.0000000%	(1,328,086)	(524,735)
2021	June	2,019,985	39.4088278%	796,052	193,220	989,272	1,695,925	100.0000000%	(1,695,925)	(706,652)
2021	July	4,168,637	39.4088278%	1,642,811	398,747	2,041,558	1,976,636	100.0000000%	(1,976,636)	64,922
2021	August	3,898,456	39.4088278%	1,536,336	372,903	1,909,239	1,909,853	100.0000000%	(1,909,853)	(614)
2021	September	3,925,636	39.4088278%	1,547,047	375,503	1,922,550	2,013,862	100.0000000%	(2,013,862)	(91,312)
2021	October	4,516,753	39.4088278%	1,779,999	432,046	2,212,045	1,539,896	100.0000000%	(1,539,896)	672,149
2021	November	1,763,142	39.4088278%	694,834	168,652	863,486	1,592,001	100.0000000%	(1,592,001)	(728,515)
2021	December	2,643,978	39.4088278%	1,041,961	252,907	1,294,868	2,118,822	100.0000000%	(2,118,822)	(823,954)
		32,876,164		12,956,111	3,144,740	16,100,851	18,905,431		(18,905,431)	(2,804,580)

Vintage is overcollected. Interest is calculated on all components.

100% of all revenues offset the overcollected balance.

		Cumulative (Over)/Under Recovery	Current Income Tax Rate	Monthly Deferred Income Tax	Cumulative Deferred Income Tax	Net Deferred After Tax Balance	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of Return to Pretax Rate	Gross up of Return to Pretax
NC Non-Residential DSM											
		1/2021 - 12/2021					6.56%			0.766497	
2021	January	427,648	0.233503	99,857	99,857	327,791	0.005469	896	896	0.766497	1,169
2021	February	(45,030)	0.233503	(110,372)	(10,515)	(34,515)	0.005469	802	1,698	0.766497	2,216
2021	March	(592,319)	0.233503	(127,794)	(138,308)	(454,011)	0.005469	(1,336)	362	0.766497	473
2021	April	(665,869)	0.233503	(17,174)	(155,482)	(510,387)	0.005469	(2,637)	(2,275)	0.766497	(2,968)
2021	May	(1,190,604)	0.233503	(122,527)	(278,010)	(912,594)	0.005469	(3,891)	(6,166)	0.766497	(8,044)
2021	June	(1,897,257)	0.233503	(165,005)	(443,015)	(1,454,241)	0.005469	(6,472)	(12,638)	0.766497	(16,488)
2021	July	(1,832,335)	0.233503	15,159	(427,856)	(1,404,479)	0.005469	(7,817)	(20,456)	0.766497	(26,687)
2021	August	(1,832,948)	0.233503	(143)	(427,999)	(1,404,949)	0.005469	(7,683)	(28,138)	0.766497	(36,710)
2021	September	(1,924,260)	0.233503	(21,322)	(449,320)	(1,474,939)	0.005469	(7,875)	(36,014)	0.766497	(46,985)
2021	October	(1,252,110)	0.233503	156,949	(292,372)	(959,739)	0.005469	(6,658)	(42,672)	0.766497	(55,671)
2021	November	(1,980,626)	0.233503	(170,111)	(462,482)	(1,518,144)	0.005469	(6,776)	(49,448)	0.766497	(64,511)
2021	December	(2,804,580)	0.233503	(192,396)	(654,878)	(2,149,702)	0.005469	(10,030)	(59,478)	0.766497	(77,597)
								(59,478)			(77,597)

Note 1: Amounts represent all revenue actually collected through 2021.

Duke Energy Carolinas, LLC
DSM/EE Actual Revenues Collected from Years 2018-2021 (By Vintage)
and Estimated 2022 Collections from Rider 13 (by Vintage)
Docket Number E-7 Sub 1265
For Vintage Year 2018-2022 Estimate and True Up Calculations

			Actual 2018 Rider 9	Actual 2019 Rider 10	Actual 2020 Rider 11	Actual 2021 Rider 12	Estimated 2022 Rider 13 ⁽¹⁾	Total
Residential								
Line	Vintage							
	EE/DSM							
1	Year 2018		83,631,851	6,302,019	25,272,676	2,818,706	2,924,339	120,949,591
2	Year 2019			77,019,837	5,261,547	29,067,535	1,185,495	112,534,414
3	Year 2020				67,149,413	4,559,292	14,672,178	86,380,883
4	Year 2021					81,992,905	6,249,665	88,242,571
5	Year 2022						79,361,507	79,361,507
6	Total Residential		\$ 83,631,851	\$ 83,321,856	\$ 97,683,636	\$ 118,438,439	\$ 104,393,183	\$ 487,468,965
Non-Residential								
	EE							
7	Year 2018		51,998,801	12,546,122	12,194,157	1,712,636	513,230	78,964,947
8	Year 2019			52,862,599	8,232,962	6,920,864	(5,111,203)	62,905,222
9	Year 2020				44,023,239	9,965,893	(7,365,043)	46,624,089
10	Year 2021					50,564,874	13,494,665	64,059,539
11	Year 2022						68,099,841	68,099,841
	DSM							
12	Year 2018		14,074,924	777,733	1,176,922	(168,075)	345,011	16,206,515
13	Year 2019			15,674,069	268,450	288,613	(260,821)	15,970,311
14	Year 2020				17,715,486	36,636	(2,037,192)	15,714,929
15	Year 2021					18,905,431		18,905,431
16	Year 2022						18,683,620	18,683,620
17	Total Non-Residential		\$ 66,073,725	\$ 81,860,522	\$ 83,611,216	\$ 88,226,872	\$ 86,362,108	\$ 406,134,443
18	Total Revenue		\$ 149,705,576	\$ 165,182,379	\$ 181,294,852	\$ 206,665,311	\$ 190,755,292	\$ 893,603,408

⁽¹⁾ Rider 13 estimates are based on Order issued in Docket No. E-7 Sub 1249 dated 9/10/2021.

Duke Energy Carolinas, LLC
Vintage Year 2018 Allocation Factors for the Period January 1, 2018 - December 31, 2018
Docket Number E-7 Sub 1265
Allocation Factors

			MWH		
Line	New Mechanism Sales Allocator at Generator				
1	NC Retail MWH Sales Allocation	Company Records	58,534,269		
2	SC Retail MWH Sales Allocation	Company Records	21,966,093		
3	Total Retail	Line 1 + Line 2	80,500,362		
Allocation 1 to state based on kWh sales					
4	NC Retail	Line 1 / Line 3	72.7130507%		
Demand Allocators					
			NC	SC	Total
5	Residential	Company Records	5,078,308	1,617,566	6,695,874
6	Non Residential	Company Records	6,549,145	2,546,981	9,096,126
7	Total	Line 5 + Line 6	11,627,453	4,164,547	15,792,000
Allocation 2 to state based on peak demand					
8	NC Retail	Line 7, NC / Line 7 Total	73.6287551%		
Allocation 3 NC res vs non-res Peak Demand to retail system peak					
9	NC Residential	Line 5 NC/ Line 7 Total	32.1574721%		
10	NC Non-residential	Line 6 NC/ Line 7 Total	41.4712829%		

Duke Energy Carolinas, LLC
Vintage Year 2019 Allocation Factors for the Period January 1, 2019 - December 31, 2019
Docket Number E-7 Sub 1265
Allocation Factors

			MWH		
Line	New Mechanism Sales Allocator at Generator				
1	NC Retail MWH Sales Allocation	Company Records	62,147,533		
2	SC Retail MWH Sales Allocation	Company Records	22,880,788		
3	Total Retail	Line 1 + Line 2	85,028,321		
Allocation 1 to state based on kWh sales					
4	NC Retail	Line 1 / Line 3	73.0903918%		
Demand Allocators			NC	SC	Total
5	Residential	Company Records	5,420,002	1,681,673	7,101,675
6	Non Residential	Company Records	6,373,991	2,410,334	8,784,325
7	Total	Line 5 + Line 6	11,793,993	4,092,007	15,886,000
Allocation 2 to state based on peak demand					
8	NC Retail	Line 7, NC / Line 7 Total	74.2414264%		
Allocation 3 NC res vs non-res Peak Demand to retail system peak					
9	NC Residential	Line 5 NC/ Line 7 Total	34.1181040%		
10	NC Non-residential	Line 6 NC/ Line 7 Total	40.1233224%		

Duke Energy Carolinas, LLC
Vintage Year 2020 Allocation Factors for the Period January 1, 2020 - December 31, 2020
Docket Number E-7 Sub 1265
Allocation Factors

			MWH		
Line	New Mechanism Sales Allocator at Generator				
1	NC Retail MWH Sales Allocation	Company Records	61,250,523		
2	SC Retail MWH Sales Allocation	Company Records	22,400,744		
3	Total Retail	Line 1 + Line 2	83,651,267		
Allocation 1 to state based on kWh sales					
4	NC Retail	Line 1 / Line 3	73.2212736%		
Demand Allocators			NC	SC	Total
5	Residential	Company Records	5,410,460	1,632,146	7,042,606
6	Non Residential	Company Records	6,495,667	2,508,727	9,004,394
7	Total	Line 5 + Line 6	11,906,127	4,140,873	16,047,000
Allocation 2 to state based on peak demand					
8	NC Retail	Line 7, NC / Line 7 Total	74.1953449%		
Allocation 3 NC res vs non-res Peak Demand to retail system peak					
9	NC Residential	Line 5 NC/ Line 7 Total	33.7163333%		
10	NC Non-residential	Line 6 NC/ Line 7 Total	40.4790117%		

Duke Energy Carolinas, LLC
Vintage Year 2021 Allocation Factors for the Period January 1, 2021 - December 31, 2023
Docket Number E-7 Sub 1265
Allocation Factors

			MWH		
Line	New Mechanism Sales Allocator at Generator				
1	NC Retail MWH Sales Allocation	Company Records	59,254,276		
2	SC Retail MWH Sales Allocation	Company Records	21,338,163		
3	Total Retail	Line 1 + Line 2	80,592,439		
Allocation 1 to state based on kWh sales					
4	NC Retail	Line 1 / Line 3	73.5233682%		
Demand Allocators					
			NC	SC	Total
5	Residential	Company Records	5,482,921	1,710,195	7,193,116
6	Non Residential	Company Records	6,182,851	2,313,033	8,495,884
7	Total	Line 5 + Line 6	11,665,772	4,023,228	15,689,000
Allocation 2 to state based on peak demand					
8	NC Retail	Line 7, NC / Line 7 Total	74.3563771%		
Allocation 3 NC res vs non-res Peak Demand to retail system peak					
9	NC Residential	Line 5 NC/ Line 7 Total	34.9475492%		
10	NC Non-residential	Line 6 NC/ Line 7 Total	39.4088278%		

Duke Energy Carolinas, LLC
DSM/EE Cost Recovery Rider 14
Docket Number E-7 Sub 1265
Forecasted 2023 kWh Sales for Rate Period for Vintage Years 2018-2023

Fall 2021 Sales Forecast - kWhs		Forecasted 2023 sales		
North Carolina Retail:				
Line				
1	Residential	22,809,393,337		
2	Non-Residential	35,294,575,316		
3	Total Retail	58,103,968,653		
NC Opt Out Sales		Total Usage	Opt-Outs	Net Usage
Vintage 2018 Actual Opt Out				
4	EE	35,294,575,316	19,849,513,795	15,445,061,521
5	DSM	35,294,575,316	18,757,237,757	16,537,337,560
Vintage 2019 Actual Opt Out				
6	EE	35,294,575,316	19,899,108,979	15,395,466,337
7	DSM	35,294,575,316	18,724,008,595	16,570,566,722
Vintage 2020 Estimated Opt Out				
8	EE	35,294,575,316	20,462,991,216	14,831,584,100
9	DSM	35,294,575,316	18,685,003,977	16,609,571,340
Vintage 2021 Estimated Opt Out				
10	EE	35,294,575,316	20,390,666,139	14,903,909,177
11	DSM	35,294,575,316	18,648,145,239	16,646,430,078
Vintage 2022 Estimated Opt Out				
12	EE	35,294,575,316	20,085,420,707	15,209,154,609
13	DSM	35,294,575,316	18,386,911,672	16,907,663,645
Vintage 2023 Estimated Opt Out				
14	EE	35,294,575,316	20,085,420,707	15,209,154,609
15	DSM	35,294,575,316	18,386,911,672	16,907,663,645

RIDER EE (NC)
ENERGY EFFICIENCY RIDER

APPLICABILITY (North Carolina Only)

Service supplied under the Company's rate schedules is subject to approved adjustments for new energy efficiency and demand-side management programs approved by the North Carolina Utilities Commission (NCUC). The Rider Adjustments are not included in the Rate Schedules of the Company and therefore, must be applied to the bill as calculated under the applicable rate.

As of January 1, 2023, cost recovery under Rider EE consists of the four-year term program, years 2014-2017, as well as rates under the continuation of that program for years 2018-2023 as outlined below. This Rider applies to service supplied under all rate schedules, except rate schedules OL, FL, PL, GL and NL for program years 2017-2022.

GENERAL PROVISIONS

This Rider will recover the cost of new energy efficiency and demand-side management programs beginning January 1, 2014, using the method approved by the NCUC as set forth in Docket No. E-7, Sub 1032, Order dated October 29, 2013, and as revised by Docket No. E-7, Sub 1130, Order dated August 23, 2017, and Docket No. E-7, Sub 1032, Order dated October 20, 2020.

TRUE-UP PROVISIONS

Rider amounts will initially be determined based on estimated kW and kWh impacts related to expected customer participation in the programs, and will be true-up as actual customer participation and actual kW and kWh impacts are verified. If a customer participates in any vintage of programs, the customer is subject to the true-ups as discussed in this section for any vintage of programs in which the customer participated.

RIDER EE OPT OUT PROVISION FOR QUALIFYING NON-RESIDENTIAL CUSTOMERS

The Rider EE increment applicable to energy efficiency programs and/or demand-side management programs will not be applied to the energy charge of the applicable rate schedule for customers qualified to opt out of the programs where:

- a. The customer has notified the Company that it has implemented, or has plans for implementing, alternative energy efficiency measures in accordance with quantifiable goals.
- b. Electric service to the customer must be provided under:
 1. An electric service agreement where the establishment is classified as a "manufacturing industry" by the Standard Industrial Classification Manual published by the United States Government and where more than 50% of the electric energy consumption of such establishment is used for its manufacturing processes. Additionally, all other agreements billed to the same entity associated with the manufacturing industry located on the same or contiguous properties are also eligible to opt out.
 2. An electric service agreement for general service as provided for under the Company's rate schedules where the customer's annual energy use is 1,000,000 kilowatt hours or more. Additionally, all other agreements billed to the same entity with lesser annual usage located on the same or contiguous properties are also eligible to opt out.

The following additional provisions apply for qualifying customers who elect to opt out:

For customers who elect to opt out of energy efficiency programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's energy efficiency programs each calendar year only during the annual two-month enrollment period between November 1 and December 31 immediately prior to a new Rider EE becoming effective on January 1. (Qualifying new customers have sixty days after beginning service to optout.)
- Customers may not opt out of individual energy efficiency programs offered by the Company. The choice to opt out applies to the Company's entire portfolio of energy efficiency programs.
- If a customer participates in any vintage of energy efficiency programs, the customer, irrespective of future opt out decisions, remains obligated to pay the remaining portion of the lost revenues for each vintage of energy efficiency programs in which the customer participated.

**RIDER EE (NC)
ENERGY EFFICIENCY RIDER**

- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's energy efficiency programs during the first 5 business days of March each calendar year. Customers making this election will be back-billed retroactively to the effective date of the new Rider EE.

For customers who elect to opt out of demand-side management programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's demand-side management program during the enrollment period between November 1 and December 31 immediately prior to a new Rider EE becoming effective on January 1 of the applicable year. (Qualifying new customers have sixty days after beginning service to opt out.)
- If a customer elects to participate in a demand-side management program, the customer may not subsequently choose to opt out of demand-side management programs for three years.
- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's demand-side management program during the first 5 business days of March each calendar year. Customers making this election will be back-billed to the effective date of the new Rider EE.

Any qualifying non-residential customer that has not participated in an energy efficiency or demand-side management program may opt out during any enrollment period, and has no further responsibility to pay Rider EE amounts associated with the customer's opt out election for energy efficiency and/or demand-side management programs.

ENERGY EFFICIENCY RIDER ADJUSTMENTS (EEA) FOR ALL PROGRAM YEARS

The Rider EE amounts applicable to the residential and nonresidential rate schedules for the period January 1, 2023 through December 31, 2023 including utility assessments are as follows:

Residential

Vintage 2018 ¹ , 2019 ¹ , 2020 ¹ , 2021 ¹	(0.0903) ¢ per kWh
Vintage 2020 ² , 2021 ² , 2022 ² , 2023 ²	<u>0.4291 ¢ per kWh</u>
Total Residential Rate	0.3388 ¢ per kWh

Nonresidential

Vintage 2018 ³	
Energy Efficiency	(0.0021) ¢ per kWh
Demand Side Management	(0.0002) ¢ per kWh
Vintage 2019 ³	
Energy Efficiency	0.0064 ¢ per kWh
Demand Side Management	0.0003 ¢ per kWh
Vintage 2020 ³	
Energy Efficiency	0.0247 ¢ per kWh
Demand Side Management	(0.0002) ¢ per kWh
Vintage 2021 ³	
Energy Efficiency	(0.0162) ¢ per kWh
Demand Side Management	(0.0173) ¢ per kWh
Vintage 2022 ³	
Energy Efficiency	0.0995 ¢ per kWh
Demand Side Management	0.0000 ¢ per kWh

RIDER EE (NC)
ENERGY EFFICIENCY RIDER

Vintage 2023 ³	
Energy Efficiency	0.4323 ¢ per kWh
Demand Side Management	0.0970 ¢ per kWh
Total Nonresidential Rate	0.6242 ¢ per kWh

¹ Includes the true-up of program costs, shared savings and lost revenues from Vintages 2018, 2019, 2020 and 2021

² Includes prospective component of Vintages 2020, 2021, 2022 and 2023

³ Not Applicable to Rate Schedules OL, FL, PL, GL and NL

Each factor listed under Nonresidential is applicable to nonresidential customers who are not eligible to opt out and to eligible customers who have not opted out. If a nonresidential customer has opted out of a Vintage(s), then the applicable energy efficiency and/or demand-side management charge(s) shown above for the Vintage(s) during which the customer has opted out will not apply to the bill.

RIDER EE (NC) ENERGY EFFICIENCY RIDER

APPLICABILITY (North Carolina Only)

Service supplied under the Company's rate schedules is subject to approved adjustments for new energy efficiency and demand-side management programs approved by the North Carolina Utilities Commission (NCUC). The Rider Adjustments are not included in the Rate Schedules of the Company and therefore, must be applied to the bill as calculated under the applicable rate.

As of January 1, ~~2022~~2023, cost recovery under Rider EE consists of the four-year term program, years 2014-2017, as well as rates under the continuation of that program for years 2018-~~2022~~2023 as outlined below. This Rider applies to service supplied under all rate schedules, except rate schedules OL, FL, PL, GL and NL for program years 2017-2022.

GENERAL PROVISIONS

This Rider will recover the cost of new energy efficiency and demand-side management programs beginning January 1, 2014, using the method approved by the NCUC as set forth in Docket No. E-7, Sub 1032, Order dated October 29, 2013, and as revised by Docket No. E-7, Sub 1130, Order dated August 23, 2017, and Docket No. E-7, Sub 1032, Order dated October 20, 2020.

TRUE-UP PROVISIONS

Rider amounts will initially be determined based on estimated kW and kWh impacts related to expected customer participation in the programs, and will be true-up as actual customer participation and actual kW and kWh impacts are verified. If a customer participates in any vintage of programs, the customer is subject to the true-ups as discussed in this section for any vintage of programs in which the customer participated.

RIDER EE OPT OUT PROVISION FOR QUALIFYING NON-RESIDENTIAL CUSTOMERS

The Rider EE increment applicable to energy efficiency programs and/or demand-side management programs will not be applied to the energy charge of the applicable rate schedule for customers qualified to opt out of the programs where:

- a. The customer has notified the Company that it has implemented, or has plans for implementing, alternative energy efficiency measures in accordance with quantifiable goals.
- b. Electric service to the customer must be provided under:
 1. An electric service agreement where the establishment is classified as a "manufacturing industry" by the Standard Industrial Classification Manual published by the United States Government and where more than 50% of the electric energy consumption of such establishment is used for its manufacturing processes. Additionally, all other agreements billed to the same entity associated with the manufacturing industry located on the same or contiguous properties are also eligible to opt out.
 2. An electric service agreement for general service as provided for under the Company's rate schedules where the customer's annual energy use is 1,000,000 kilowatt hours or more. Additionally, all other agreements billed to the same entity with lesser annual usage located on the same or contiguous properties are also eligible to opt out.

The following additional provisions apply for qualifying customers who elect to opt out:

For customers who elect to opt out of energy efficiency programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's energy efficiency programs each calendar year only during the annual two-month enrollment period between November 1 and December 31 immediately prior to a new Rider EE becoming effective on January 1. (Qualifying new customers have sixty days after beginning service to optout.)
- Customers may not opt out of individual energy efficiency programs offered by the Company. The choice to opt out applies to the Company's entire portfolio of energy efficiency programs.
- If a customer participates in any vintage of energy efficiency programs, the customer, irrespective of future opt out decisions, remains obligated to pay the remaining portion of the lost revenues for each vintage of energy efficiency programs in which the customer participated.

RIDER EE (NC)
ENERGY EFFICIENCY RIDER

- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's energy efficiency programs during the first 5 business days of March each calendar year. Customers making this election will be back-billed retroactively to the effective date of the new Rider EE.

For customers who elect to opt out of demand-side management programs, the following provisions also apply:

- Qualifying customers may opt out of the Company's demand-side management program during the enrollment period between November 1 and December 31 immediately prior to a new Rider EE becoming effective on January 1 of the applicable year. (Qualifying new customers have sixty days after beginning service to opt out.)
- If a customer elects to participate in a demand-side management program, the customer may not subsequently choose to opt out of demand-side management programs for three years.
- Customers who elect to opt out during the two-month annual enrollment period immediately prior to the new Rider EE becoming effective may elect to opt in to the Company's demand-side management program during the first 5 business days of March each calendar year. Customers making this election will be back-billed to the effective date of the new Rider EE.

Any qualifying non-residential customer that has not participated in an energy efficiency or demand-side management program may opt out during any enrollment period, and has no further responsibility to pay Rider EE amounts associated with the customer's opt out election for energy efficiency and/or demand-side management programs.

ENERGY EFFICIENCY RIDER ADJUSTMENTS (EEA) FOR ALL PROGRAM YEARS

The Rider EE amounts applicable to the residential and nonresidential rate schedules for the period January 1, 202~~23~~ through December 31, 202~~23~~ including utility assessments are as follows:

Residential

Vintage 2017 <u>2018</u> ¹ , 2018 <u>2019</u> ¹ , 2019 <u>2020</u> ¹ , 2020 <u>2021</u> ¹	0.0516 <u>(0.0903)</u> ¢ per kWh
Vintage 2019 <u>2020</u> ² , 2020 <u>2021</u> ² , 2021 <u>2022</u> ² , 2022 <u>2023</u> ²	0.4255 <u>4291</u> ¢ per kWh
Total Residential Rate	0.4771 <u>3388</u> ¢ per kWh

Nonresidential

Vintage 2017 <u>2018</u> ³	
Energy Efficiency	0.0157 <u>(0.0021)</u> ¢ per kWh
Demand Side Management	0.0000 <u>(0.0002)</u> ¢ per kWh
Vintage 2018 <u>2019</u> ³	
Energy Efficiency	0.0030 <u>0064</u> ¢ per kWh
Demand Side Management	0.0019 <u>0003</u> ¢ per kWh
Vintage 2019 <u>2020</u> ³	
Energy Efficiency	(0.0300) <u>0.0247</u> ¢ per kWh
Demand Side Management	(0.0015) <u>0002</u> ¢ per kWh
Vintage 2020 <u>2021</u> ³	
Energy Efficiency	(0.0445) <u>0162</u> ¢ per kWh
Demand Side Management	(0.0113) <u>0173</u> ¢ per kWh
Vintage 2021 <u>2022</u> ³	
Energy Efficiency	0.0813 <u>0995</u> ¢ per kWh
Demand Side Management	0.0000 ¢ per kWh

RIDER EE (NC)
ENERGY EFFICIENCY RIDER

Vintage ~~2022~~2023³

Energy Efficiency

0.~~410~~24323 ¢ per kWh

Demand Side Management

0.~~403~~80970 ¢ per kWh

Total Nonresidential Rate

0.~~528~~66242 ¢ per kWh

¹ Includes the true-up of program costs, shared savings and lost revenues from Vintages ~~2017~~2018, ~~2018~~2019, ~~2019~~2020 and ~~2020~~2021

² Includes prospective component of Vintages ~~2019~~2020, ~~2020~~2021, ~~2021~~2022 and ~~2022~~2023

³ Not Applicable to Rate Schedules OL, FL, PL, GL and NL

Each factor listed under Nonresidential is applicable to nonresidential customers who are not eligible to opt out and to eligible customers who have not opted out. If a nonresidential customer has opted out of a Vintage(s), then the applicable energy efficiency and/or demand-side management charge(s) shown above for the Vintage(s) during which the customer has opted out will not apply to the bill.

