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OFFICIAL COPY

May 11 2020

May 11, 2020

**VIA ELECTRONIC FILING**

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

**Re: Duke Energy Carolinas, LLC's DSM/EE Cost Recovery Rider –  
Supplemental Testimony and Exhibits  
Docket No. E-7, Sub 1230**

Dear Ms. Campbell:

Enclosed for filing is Duke Energy Carolinas, LLC's ("DEC") Supplemental Testimony and Supplemental Exhibits of Carolyn T. Miller and Supplemental Exhibits of Robert P. Evans for filing in connection with the referenced matter. These Supplemental Exhibits reflect adjustments in calculations that are further detailed in the Supplemental Testimony of Carolyn T. Miller. As a result of these adjustments, some of the proposed DSM/EE rates have changed from those filed in the Company's Application in this docket.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Kendrick C. Fentress

Enclosures

cc: Parties of Record

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1230

In the Matter of	)	
Application of Duke Energy Carolinas, LLC	)	<b>SUPPLEMENTAL</b>
for Approval of Demand-Side Management	)	<b>TESTIMONY OF</b>
and Energy Efficiency Cost Recovery Rider	)	<b>CAROLYN T. MILLER FOR</b>
Pursuant to N.C. Gen. Stat. § 62-133.9 and	)	<b>DUKE ENERGY CAROLINAS,</b>
Commission Rule R8-69	)	<b>LLC</b>

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

2 A. My name is Carolyn T. Miller. My business address is 550 South Tryon  
3 Street, Charlotte, North Carolina.

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

5 A. I am a Rates Manager for Duke Energy Carolinas, LLC (“DEC” or the  
6 “Company”).

7 **Q. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY IN SUPPORT**  
8 **OF DEC’S APPLICATION IN THIS DOCKET?**

9 A. Yes.

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

12 A. The purpose of my supplemental testimony is to support the filing of  
13 Supplemental Exhibits that reflect revisions to Miller Exhibits 1, 2, 3, 4, 6 and  
14 7 and Evans Exhibits 1, 2 and 3 filed February 25, 2020 in this proceeding.  
15 These revisions are due to three corrections:

16 1. Updates to lost revenues based on Evaluation, Measurement  
17 and Verification (“EM&V”) adjustments for Vintages 2018, 2019 and 2021.

18 2. Adjustments to Vintage 2019 program costs resulting from the  
19 Public Staff of the North Carolina Utilities Commission’s (“Public Staff”)  
20 program cost audit.

21 3. Inclusion of Vintage 2016 lost revenues due to inadvertent  
22 omission of exhibits from original filing.

23

1 **Q. WHY IS THE COMPANY UPDATING LOST REVENUE AND PPI**  
2 **FOR VINTAGES 2018, 2019 AND 2021?**

3 A. As a result of its internal review process, the Company determined that one  
4 EM&V update was necessary. The update is a result of an incorrect  
5 calculation of first-year in-service rate components for LEDs, showerheads  
6 and HVAC filters in the NES Evaluation Report dated July 1, 2017 – June 30,  
7 2018. The result of this adjustment is a decrease in lost revenue of (\$34,729).  
8 The Public Staff was notified of this necessary update to the NES program.  
9 Supporting Supplemental Evans Exhibit 2 reflecting the adjustment is  
10 attached and subject to final Public Staff review.

11 **Q. WHY IS THE COMPANY REVISING VINTAGE 2019 PROGRAM**  
12 **COSTS?**

13 A. During the course of the Public Staff’s audit of Vintage 2019 program costs,  
14 the Public Staff discovered that certain corrections to the 2018 program cost  
15 audit that were entered into the general ledger in 2019 had not been removed.  
16 This results in a reduction of system level program cost expenses in the  
17 amount of \$992,045.69, and an increase of PPI (Program Performance  
18 Incentives) in the amount of \$83,560. The Company is revising Evans Exhibit  
19 1, page 3 and Evans Exhibit 3, page 1 to reflect both of these adjustments.

20 **Q. WHY IS THE COMPANY INCLUDING VINTAGE 2016 IN RIDER 12?**

21 A. The Company determined that Vintage 2016 had been inadvertently excluded  
22 from the original Rider 12 filing. A modification was made as part of Docket  
23 No. E-7, Sub 1192 in the calculation of how much lost revenue is included in

1 kWh sales for the test period of a rate case. Non-residential lost revenues  
 2 associated with the test period (twelve months ending December 31, 2016) of  
 3 the Company's general rate case proceeding in Docket No. E-7, Sub 1146  
 4 were adjusted based on specific enrollment dates, and a portion of these lost  
 5 revenues was removed from the prospective period as of August 1, 2018 and  
 6 included in base rates. The remaining portion of lost revenues should have  
 7 been included in calendar year 2019 for Vintage 2016. Although there were  
 8 no changes to residential lost revenue or the non-residential Vintage 2016  
 9 DSM calculation, the 2016 revenues collected have been incorporated into the  
 10 exhibits and any applicable interest has been calculated. Miller Exhibit 2, page  
 11 1a, Miller Exhibit 3, pages 13-16 and Evans Exhibit 2, page 6 reflect the  
 12 inclusion of those lost revenues. In addition, Miller Exhibits 4 and 6 have  
 13 been updated to include 2016 revenues and the 2016 forecast with opt-outs.

14 **Q. HOW DO THESE CHANGES IMPACT DEC'S REQUESTED RATES?**

15 A. As a result of these changes, the following rates will be impacted:

Description	Filed Rate	Revised Rate
Residential EMF Rate	0.1046	0.1011
Non-residential Vintage Year EE 2016 EMF Rate	0.0000	0.0193
Non-residential Vintage Year DSM 2016 EMF Rate	0.0000	(0.0001)
Non-residential Vintage Year DSM 2019 EMF Rate	0.0018	0.0019

16

17 **Q. WHAT SUPPLEMENTAL EXHIBITS WILL BE FILED IN**

1                   **CONJUNCTION WITH YOUR SUPPLEMENTAL TESTIMONY?**

2    A.    Only the exhibits impacted as a result of the changes outlined above will be  
3           re-filed as Supplemental Exhibits.  A description of the specific pages and  
4           contents that have been revised is provided below:

- 5                   • Supplemental Miller Exhibit 1: Summary of Rider EE Exhibits  
6                   and Factors
- 7                   • Supplemental Miller Exhibit 2, page 1a: Vintage 2016 True-up of  
8                   Year 1, Year 2, Year 3 and Year 4 Rate Calculation
- 9                   • Supplemental Miller Exhibit 2, page 2: Vintage 2018 True-up of  
10                  Year 1 and Year 2 Rate Calculation
- 11                  • Supplemental Miller Exhibit 2, page 3: Vintage 2019 True-up of  
12                  Year 1 rate Calculation
- 13                  • Supplemental Miller Exhibit 2, page 5: Vintage 2021 Estimated  
14                  Program Costs, Earned Incentive and Lost Revenues
- 15                  • Supplemental Miller Exhibit 3, pages 5 through 16: Vintage 2018,  
16                  2019 and 2016 Interest Calculations
- 17                  • Supplemental Miller Exhibit 4: DSM/EE Actual Revenues  
18                  Collected 2016-2019 and Estimated 2020 Collections
- 19                  • Supplemental Miller Exhibit 6: Forecasted 2021 kWh Sales for  
20                  Rate period for Vintage Years 2016-2021
- 21                  • Supplemental Miller Exhibit 7: Revised Tariff Sheet
- 22                  • Supplemental Evans Exhibit 1, page 3: Vintage 2019 Load  
23                  Impacts and Estimated Revenue Requirements

- 1 • Supplemental Evans Exhibit 2, pages 2, 3, 5 and 6: North Carolina
- 2 Net Lost Revenue Estimates for Vintages 2016, 2018, 2019 and
- 3 2021
- 4 • Supplemental Evans Exhibit 3, page 1: Carolinas System Level
- 5 Program Costs Years 2017 through 2019

6 **Q. WHAT ARE THE FINAL RATES REQUESTED IN THE**

7 **APPLICATION OF DEC FOR APPROVAL OF ITS DSM/EE RIDER 12**

8 **FOR 2021 AS A RESULT OF THESE REVISIONS?**

9 A. Pursuant to the provisions of N.C. Gen. Stat. § 62-133.9 and Commission

10 Rule R8-69, the Company requests Commission approval of the following

11 annual billing adjustments (all shown on a cents per kWh basis, including

12 gross receipts tax and regulatory fee):

<b>Residential Billing Factors</b>	<b>¢/kWh</b>
Residential Billing Factor for Rider 12 Prospective Components	0.4184
Residential Billing Factor for Rider 12 EMF Components	0.1011

14

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

15

1

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

2

3 **Q. DOES THIS CONCLUDE YOUR PRE-FILED SUPPLEMENTAL**  
4 **TESTIMONY?**

5 A. Yes.



Duke Energy Carolinas, LLC  
 DSM/EE Cost Recovery Rider 12  
 Docket Number E-7 Sub 1230  
 Exhibit Summary of Rider EE Exhibits and Factors

### Residential Billing Factor for Rider 12 True-up (EMF) Components

Line			
1	Year 2016 EE/DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2, pg. 1a, Line 15	\$ (57,239)
2	Year 2017 EE/DSM True-Up (EMF) Revenue Requirement	Miller Exhibit 2 pg.1 Line 15	(4,091,589)
3	Year 2018 EE/DSM True-Up (EMF) Revenue Requirement	Miller Exhibit 2 pg 2 Line 15	2,645,710
4	Year 2019 EE/DSM True-Up (EMF) Revenue Requirement	Miller Exhibit 2 pg 3 Line 15	23,835,420
5	Total True-up (EMF) Revenue Requirement	Sum Lines 1-3	\$ 22,332,301
6	Projected NC Residential Sales (kWh) for rate period	Miller Exhibit 6 pg. 1, Line 1	22,092,324,452
7	EE/DSM Revenue Requirement EMF Residential Rider EE (cents per kWh)	Line 4 / Line 5 * 100	<b>0.1011</b>

### Residential Billing Factor for Rider 12 Prospective Components

8	Vintage 2018 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 2, Line 15	-
9	Vintage 2019 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 3, Line 15	5,292,331
10	Vintage 2020 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 4, Line 1	4,495,479
11	Vintage 2021 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg 5, Line 11	82,636,375
12	Total Prospective Revenue Requirement	Sum Lines 7-10	\$ 92,424,185
13	Projected NC Residential Sales (kWh) for rate period	Miller Exhibit 6 pg. 1, Line 1	22,092,324,452
14	EE/DSM Revenue Requirement Prospective Residential Rider EE (cents per kWh)	Line 11 / Line 12 * 100	<b>0.4184</b>

#### Total Revenue Requirements in Rider 12 from Residential Customers

15	Total True-up (EMF) Revenue Requirement	Line 4	\$ 22,332,301
16	Total Prospective Revenue Requirement	Line 11	92,424,185
17	<b>Total EE/DSM Revenue Requirement for Residential Rider EE</b>	Line 14 + Line 15	<b>\$ 114,756,486</b>
18	<b>Total EE/DSM Revenue Requirement for Residential Rider EE (cents per kWh)</b>	Line 6 + Line 13	<b>0.5195</b>

### Non-Residential Billing Factors for Rider 12 True-up (EMF) Components

19	Vintage Year 2016 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1a, Line 25	\$ 3,217,376
20	Projected Year 2016 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 4	16,670,610,353
21	EE Revenue Requirement Year 2016 EMF Non-Residential Rider EE (cents per kWh)	Line 18/Line 19 * 100	<b>0.0193</b>
22	Vintage Year 2016 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1a, Line 35	\$ (18,608)
23	Projected Year 2016 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 5	16,964,126,808
24	DSM Revenue Requirement Year 2016 EMF Non-Residential Rider EE (cents per kWh)	Line 21/Line 22 * 100	<b>(0.0001)</b>
25	Vintage Year 2017 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1, Line 25	\$ 5,650,795
26	Projected Year 2017 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 4	16,498,870,944
27	EE Revenue Requirement Year 2017 EMF Non-Residential Rider EE (cents per kWh)	Line 18/Line 19 * 100	<b>0.0342</b>
28	Vintage Year 2017 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1, Line 35	\$ 6,539
29	Projected Year 2017 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 5	16,933,914,400
30	DSM Revenue Requirement Year 2017 EMF Non-Residential Rider EE (cents per kWh)	Line 21/Line 22 * 100	-
31	Vintage Year 2018 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 2, Line 25	\$ (784,173)
32	Projected Year 2018 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 6	15,929,504,199
33	EE Revenue Requirement Year 2018 EMF Non-Residential Rider EE (cents per kWh)	Line 24/Line 25 * 100	<b>(0.0049)</b>
34	Vintage Year 2018 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 2, Line 35	\$ (243,015)
35	Projected Year 2018 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 7	16,832,538,740
36	DSM Revenue Requirement Year 2018 EMF Non-Residential Rider EE (cents per kWh)	Line 27/Line 28 * 100	<b>(0.0014)</b>
37	Vintage Year 2019 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 3, Line 25	\$ (3,527,723)
38	Projected Year 2019 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 8	15,707,415,542
39	EE Revenue Requirement Year 2019 EMF Non-Residential Rider EE (cents per kWh)	Line 30/Line 31 * 100	<b>(0.0225)</b>
40	Vintage Year 2019 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 3, Line 35	\$ 312,940
41	Projected Year 2019 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 9	16,897,018,794
42	DSM Revenue Requirement Year 2019 EMF Non-Residential Rider EE (cents per kWh)	Line 33/Line 34 * 100	<b>0.0019</b>

**Non-Residential Billing Factors for Rider 12 Prospective Components**

43	Vintage Year 2018 EE Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 2, Line 25	\$	2,182,027
44	Projected Program Year 2018 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 6		15,929,504,199
45	<i>EE Revenue Requirement Vintage 2018 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 36/Line 37 * 100		<b>0.0137</b>
46	Vintage Year 2019 EE Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 3, Line 25	\$	10,794,655
47	Projected Vintage 2019 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 8		15,707,415,542
48	<i>EE Revenue Requirement Vintage 2019 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 39/Line 40 * 100		<b>0.0687</b>
49	Vintage Year 2020 EE Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 4, Line 4	\$	9,376,721
50	Projected Vintage 2020 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 10		15,330,345,599
51	<i>EE Revenue Requirement Vintage 2020 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 42/Line 43 * 100		<b>0.0612</b>
52	Vintage Year 2021 EE Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 5, Line 18	\$	53,990,117
53	Projected Vintage 2021 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 12		15,330,345,599
54	<i>EE Revenue Requirement Vintage 2021 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 45/Line 46 * 100		<b>0.3522</b>
55	Vintage Year 2021 DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 5, Line 25	\$	20,278,628
56	Projected Vintage 2021 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 13		16,898,362,794
57	<i>DSM Revenue Requirement Vintage 2021 Prospective Component for Non-Residential Rider EE (cents per kWh)</i>	Line 48/Line 49 * 100		<b>0.1200</b>
	<b>Total EMF Rate</b>			<b>0.0265</b>
	<b>Total Prospective Rate</b>			<b>0.6158</b>

**Total Revenue Requirements in Rider 12 from Non-Residential Customers**

58	Vintage Year 2016 EE True-up (EMF) Revenue Requirement	Line 19		3,217,376
59	Vintage Year 2016 DSM True-up (EMF) Revenue Requirement	Line 22		(18,608)
60	Vintage Year 2017 EE True-up (EMF) Revenue Requirement	Line 25		5,650,795
61	Vintage Year 2017 DSM True-up (EMF) Revenue Requirement	Line 28		6,539
62	Vintage Year 2018 EE True-up (EMF) Revenue Requirement	Line 31		(784,173)
63	Vintage Year 2018 DSM True-up (EMF) Revenue Requirement	Line 34		(243,015)
64	Vintage Year 2019 EE True-up (EMF) Revenue Requirement	Line 37		(3,527,723)
65	Vintage Year 2019 DSM True-up (EMF) Revenue Requirement	Line 40		312,940
66	Vintage Year 2018 EE Prospective Amounts Revenue Requirement	Line 43		2,182,027
67	Vintage Year 2019 EE Prospective Amounts Revenue Requirement	Line 46		10,794,655
68	Vintage Year 2020 EE Prospective Amounts Revenue Requirement	Line 49		9,376,721
69	Vintage Year 2021 EE Prospective Amounts Revenue Requirement	Line 52		53,990,117
70	Vintage Year 2021 DSM Prospective Amounts Revenue Requirement	Line 55		20,278,628
	<b>Total Non-Residential Revenue Requirement in Rider 12</b>	Sum (Lines 58-70)		<b>101,236,279</b>

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
True Up of Year 1, 2 and 3 for Vintage Year 2016

**RESIDENTIAL**  
**Energy Efficiency Programs**

Line	Reference	E-7 Sub 1073	E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1192	Year 2016
		Rider 7 Original Estimate	Rider 8 Year 2 Lost Revenues	Rider 9 True up (Year 1)	Year 2016 Yr 3 LR Estimate	Rider 10 True up (Year 2)	Rider 11 True Up (Year 3)	
1	Residential EE Program Cost							
2	Residential EE Earned Utility Incentive							
3	Return on undercollection of Residential EE Program Costs							
4	Total EE Program Cost and Incentive Components							
5	Residential DSM Program Cost							
6	Residential DSM Earned Utility Incentive							
7	Return on overcollection of Residential DSM Program Costs							
8	Total DSM Program Cost and Incentive Components							
9	Total EE/DSM Program Cost and Incentive Components							
10	Revenue-related taxes and regulatory fees factor **							
11	Total EE/DSM Program Cost and Incentive Revenue Requirement							
12	Residential Net Lost Revenues							
13	Total Residential EE/DSM Revenue Requirement							
14	Total Collected for Vintage Year 2016 (through estimated Rider 10)							
15	<b>Total Residential EE/DSM Revenue Requirement</b>							

See Miller Exhibit A for rate

**NON-RESIDENTIAL**  
**Energy Efficiency Programs**

Line	Reference	E-7 Sub 1073	E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1192	Year 2016
		Rider 7 Original Estimate	Rider 8 Year 2 Lost Revenues	Year 1 True up	Year 2016 Yr 3 LR Estimate	Rider 10 True up (Year 2)	Rider 11 True Up (Year 3)	
16	Non-Residential EE Program Cost							
17	Non-Residential EE Earned Utility Incentive							
18	Return on undercollection of Non-Residential EE Program Costs							
19	Total EE Program Cost and Incentive Components							
20	Revenue-related taxes and regulatory fees factor							
21	Total Non-Residential EE Program Cost and Incentive Revenue Requirements							
22	Non-Residential Net Lost Revenues							
23	Total Non-Residential EE Revenue Requirement							
24	Total Collected for Vintage Year 2016 (through estimated Rider 10)							
25	Non-Residential EE Revenue Requirement							
26	Projected NC Residential Sales (kWh)							
27	<b>NC Non-Residential EE billing factor (Cents/kWh)</b>							

**DSM Programs**

Line	Reference	E-7 Sub 1073	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1192	Year 2016
		Rider 7 Original Estimate	Rider 9 True up	Rider 10 True Up	Rider 11 True Up (Year 3)	
28	Non-Residential DSM Program Cost					
29	Non-Residential DSM Earned Utility Incentive					
30	Return on undercollection of Non-Residential DSM Program Costs					
31	Total Non-Residential DSM Program Cost and Incentive Components					
32	Revenue-related taxes and regulatory fees factor					
33	Total Non-Residential DSM Revenue Requirement					
34	Total Collected for Vintage Year 2016 (through estimated Rider 10)					
35	Non-Residential EE Revenue Requirement True-up Amount					
36	Projected NC Non-Residential Sales (kWh)					
37	<b>NC Non-Residential DSM billing factor</b>					

\* Year 4 Projected Lost Revenue is not being requested in this filing because lost revenue through the test period of Docket E7 Sub XXXX was requested as part of base rates.

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

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
True Up of Year 1, 2 and 3 Lost Revenues for Vintage Year 2017

**RESIDENTIAL**  
**Energy Efficiency Programs**

Line	Reference	E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1164	E-7 Sub 1192	E-7 Sub 1192	E-7 Sub 1230	Year 2017
		Rider 8 Year 1 Estimate	Year 2017 Yr 2 LR Estimate	Rider 10 True up	Year 2017 Year 3 Estimate	Rider 11 True Up	Year 2017 Yr 4 LR Estimate	Rider 12 True up	
1	Residential EE Program Cost								
2	Residential EE Earned Utility Incentive								
3	Return on undercollection of Residential EE Program Costs								
4	Total EE Program Cost and Incentive Components								
5	Residential DSM Program Cost								
6	Residential DSM Earned Utility Incentive								
7	Return on undercollection of Residential DSM Program Costs								
8	Total DSM Program Cost and Incentive Components								
9	Total EE/DSM Program Cost and Incentive Components								
10	Revenue-related taxes and regulatory fees factor **								
11	Total EE/DSM Program Cost and Incentive Revenue Requirement								
12	Residential Net Lost Revenues								
13	Total Residential EE/DSM Revenue Requirement								
14	Total Collected for Vintage Year 2017 (through estimated Rider 10)								
15	<b>Total Residential EE/DSM Revenue Requirement</b>								

See Miller Exhibit A for rate

**NON-RESIDENTIAL**  
**Energy Efficiency Programs**

Line	Reference	E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1164	E-7 Sub 1192	E-7 Sub 1192	E-7 Sub 1230	Year 2017
		Rider 8 Year 1 Estimate	Year 2017 Yr 2 LR Estimate	Rider 10 True up	Year 2017 Year 3 Estimate	Rider 11 True Up	Year 2017 Yr 4 LR Estimate	Rider 12 True up	
16	Non-Residential EE Program Cost								
17	Non-Residential EE Earned Utility Incentive								
18	Return on undercollection of Non-Residential EE Program Costs								
19	Total EE Program Cost and Incentive Components								
20	Revenue-related taxes and regulatory fees factor								
21	Total Non-Residential EE Program Cost and Incentive Revenue Requirements								
22	Non-Residential Net Lost Revenues								
23	Total Non-Residential EE Revenue Requirement								
24	Total Collected for Vintage Year 2017 (through estimated Rider 10)								
25	Non-Residential EE Revenue Requirement								
26	Projected NC Residential Sales (kWh)								
27	<b>NC Non-Residential EE billing factor (Cents/kWh)</b>								

**DSM Programs**

Line	Reference	E-7 Sub 1105	E-7 Sub 1164	E-7 Sub 1192	E-7 Sub 1230	Year 2017
		Rider 8 Year 1 Estimate	Rider 10 True Up	Rider 11 True Up	Rider 12 True up	
28	Non-Residential DSM Program Cost					
29	Non-Residential DSM Earned Utility Incentive					
30	Return on undercollection of Non-Residential DSM Program Costs					
31	Total Non-Residential DSM Program Cost and Incentive Components					
32	Revenue-related taxes and regulatory fees factor					
33	Total Non-Residential DSM Revenue Requirement					
34	Total Collected for Vintage Year 2017 (through estimated Rider 10)					
35	Non-Residential EE Revenue Requirement True-up Amount					
36	Projected NC Non-Residential Sales (kWh)					
37	<b>NC Non-Residential DSM billing factor</b>					

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

Duke Energy Carolinas, LLC  
 Docket No. E-7, Sub 1230  
 Estimated Year 4 Lost Revenue and True Up of Year 1 and Year 2 for Vintage Year 2018

**RESIDENTIAL**  
**Energy Efficiency Programs**

Line	Reference	Year 2018 Yr 4 LR Estimate
1	Residential EE Program Cost Evans Exhibit 1 pg. 2, Line 10 * NC Alloc. Factor	
2	Residential EE Earned Utility Incentive Evans Exhibit 1 pg. 2, Line 10 * NC Alloc. Factor	
3	Return on undercollection of Residential EE Program Costs Miller Exhibit 3 pg. 5	
4	Total EE Program Cost and Incentive Components Line 1 + Line 2 + line 3	
5	Residential DSM Program Cost Evans Exhibit 1 pg. 2, Line 11 * NC Alloc. Factor	
6	Residential DSM Earned Utility Incentive Evans Exhibit 1 pg. 2, Line 11 * NC Alloc. Factor	
7	Return on undercollection of Residential DSM Program Costs Miller Exhibit 3 pg. 6	
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 ** Miller Exhibit 2, pg. 6	
11	Total EE/DSM Program Cost and Incentive Revenue Requirement Line 9 * Line 10	
12	Residential Net Lost Revenues Evans Exhibit 2 pg. 3	\$ -
13	Total Residential EE/DSM Revenue Requirement Line 11 + Line 12	-
14	Total Collected for Vintage Year 2018 (through estimated Rider 10) Miller Exhibit 4 Line 2	
15	<b>Total Residential EE/DSM Revenue Requirement</b> Line 13 - Line 14	\$ -

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

E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1192	E-7 Sub 1192	E-7 Sub 1230	
Rider 9 Year 1 Estimate	Year 2018 Yr 2 LR Estimate	Rider 11 True up	Year 2018 Yr 3 LR Estimate	Rider 12 True up	Year 2018
\$ 41,623,609		\$ 14,606,717		\$ (0)	\$ 56,230,326
5,511,264		4,154,068		140,649	9,805,981
		244,540		1,024,850	1,269,390
47,134,873		19,005,325		1,165,498	67,305,696
9,903,130		(124,235)		0	9,778,895
2,569,925		17,215		(5,581)	2,581,559
		(28,626)		(40,884)	(69,510)
12,473,055		(135,646)		(46,465)	12,290,944
59,607,928		18,869,679		1,119,034	79,596,641
1,001,402		1,001,352		1,001,302	
59,691,498		18,895,191		1,120,491	79,707,180
19,612,717	6,294,025	894,901	9,715,212	1,534,156	38,051,011
79,304,216	6,294,025	19,790,092	9,715,212	2,654,647	117,758,491
					115,112,481
					\$ 2,645,710

See Miller Exhibit A for rate

**NON-RESIDENTIAL**  
**Energy Efficiency Programs**

Line	Reference	Year 2018 Yr 4 LR Estimate
16	Non-Residential EE Program Cost Evans Exhibit 1 pg. 2, Line 26 * NC Alloc. Factor	
17	Non-Residential EE Earned Utility Incentive Evans Exhibit 1 pg. 2, Line 26 * NC Alloc. Factor	
18	Return on undercollection of Non-residential EE Program Costs Miller Exhibit 3 page 6	
19	Total EE Program Cost and Incentive Components Line 16 + Line 17 + Line 18	
20	Revenue-related taxes and regulatory fees factor Miller 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. 3	2,182,027
23	Total Non-Residential EE Revenue Requirement Line 21 + Line 22	2,182,027
24	Total Collected for Vintage Year 2018 (through estimated Rider 10) Miller Exhibit 4 Line 7	
25	Non-Residential EE Revenue Requirement Line 23 - Line 24	2,182,027
26	Projected NC Residential Sales (kWh) Miller Exhibit 6, Line 6	15,929,504,199
27	<b>NC Non-Residential EE billing factor (Cents/kWh)</b> Line 25/Line 26*100	<b>0.0137</b>

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

E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1192	E-7 Sub 1192	E-7 Sub 1230	
Rider 9 Year 1 Estimate	Year 2018 Yr 2 LR Estimate	Rider 11 True up	Year 2018 Yr 3 LR Estimate	Rider 12 True up	Year 2018
40,592,949		(3,317,005)		0	37,275,944
11,623,199		2,818,045		(25,396)	14,415,848
		461,049		592,305	1,053,354
52,216,148		(37,911)		566,910	52,745,147
1,001,402		1,001,352		1,001,302	
52,289,355		(37,962)		567,648	52,819,041
5,167,253	8,746,000	2,933,863	9,507,185	(1,090,744)	25,263,557
57,456,608	8,746,000	2,895,901	9,507,185	(523,097)	78,082,597
					78,866,770
					(784,173)
					15,929,504,199
					(0.0049)

**DSM Programs**

Line	Reference	Year 2018 Yr 4 LR Estimate
28	Non-Residential DSM Program Cost Evans Exhibit 1, pg. 2 Line 28 * NC Alloc. Factor	
29	Non-Residential DSM Earned Utility Incentive Evans Exhibit 1, pg. 2 Line 28 * NC Alloc. Factor	
30	Return on undercollection of Non-residential DSM Program Costs Miller Exhibit 3 page 8	
31	Total Non-Residential DSM Program Cost and Incentive Components Line 28 + Line 29 + Line 30	
32	Revenue-related taxes and regulatory fees factor Miller Exhibit 2, pg. 6	
33	Total Non-Residential DSM Revenue Requirement Line 31 * Line 32	
34	Total Collected for Vintage Year 2018 (through estimated Rider 10) Miller Exhibit 4 Line 11	
35	Non-Residential EE Revenue Requirement True-up Amount Line 33- Line 34	
36	Projected NC Non-Residential Sales (kWh) Miller Exhibit 6 Line 7	
37	<b>NC Non-Residential DSM billing factor</b> Line 35/Line 36*100	

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

E-7 Sub 1105	E-7 Sub 1192	E-7 Sub 1230	
Rider 9 Year 1 Estimate	Rider 11 True Up	Rider 12 True up	Year 2018
11,959,889	651,281	(0)	12,611,170
3,103,667	232,789	(7,197)	3,329,259
-	37,743	76,651	37,743
15,063,556	921,813	69,454	15,978,172
1,001,402	1,001,352	1,001,302	
15,084,675	923,059	69,544	16,007,734
			16,250,749
			(243,015)
			16,832,538,740
			(0.0014)

Duke Energy Carolinas, LLC  
 Docket No. E-7, Sub 1230  
 Estimated Year 3 Lost Revenue and True Up of Year 1 for Vintage Year 2019

**RESIDENTIAL**  
**Energy Efficiency Programs**

Line	Reference	Year 2019 Yr 3 LR Estimate
1	Residential EE Program Cost Evans Exhibit 1 pg. 3, Line 10 * NC Alloc. Factor	
2	Residential EE Earned Utility Incentive Evans Exhibit 1 pg. 3, Line 10 * NC Alloc. Factor	
3	Return on undercollection of Residential EE Program Costs Miller Exhibit 3 pg 9	
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 11 * NC Alloc. Factor	
6	Residential DSM Earned Utility Incentive Evans Exhibit 1 pg. 3, Line 11 * NC Alloc. Factor	
7	Return on undercollection of Residential DSM Program Costs Miller 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 ** Miller Exhibit 2, pg. 6	
11	Total EE/DSM Program Cost and Incentive Revenue Requirement Line 9 * Line 10	
12	Residential Net Lost Revenues Evans Exhibit 2 pg. 3	\$ 5,292,331
13	Total Residential EE/DSM Revenue Requirement Line 11 + Line 12	5,292,331
14	Total Collected for Vintage Year 2018 (through estimated Rider 10) Miller Exhibit 4 Line 3	
15	<b>Total Residential EE/DSM Revenue Requirement</b> Line 13 - Line 14	<b>\$ 5,292,331</b>

E-7 Sub 1164 Rider 10 Year 1 Estimate	E-7 Sub 1192 Year 2019 Yr 2 LR Estimate	E-7 Sub 1230 Rider 11 True up	Year 2019
\$ 41,002,874		\$ 13,243,503	\$ 54,246,377
3,801,819		3,296,056	7,097,875
		55,738	55,738
44,804,693		16,595,296	61,399,989
10,577,352		(308,751)	10,268,601
2,773,086		541,821	3,314,907
		(6,600)	(6,600)
13,350,438		226,469	13,576,907
58,155,131		16,821,766	74,976,897
1,001,402		1,001,352	
58,236,664		16,844,509	75,081,173
18,783,204	5,519,302	6,704,043	31,006,549
77,019,869	5,519,302	23,548,552	106,087,723
			82,252,303
			\$ 23,835,420

See Miller Exhibit A for rate

**NON-RESIDENTIAL**  
**Energy Efficiency Programs**

Line	Reference	Year 2019 Yr 3 LR Estimate
16	Non- Residential EE Program Cost Evans Exhibit 1 pg. 3, Line 26 * NC Alloc. Factor	
17	Non-Residential EE Earned Utility Incentive Evans Exhibit 1 pg. 3, Line 26 * NC Alloc. Factor	
18	Return on undercollection of Non-residential EE Program Costs Miller Exhibit 3 page 12	
19	Total EE Program Cost and Incentive Components Line 16 + Line 17 + Line 18	
20	Revenue-related taxes and regulatory fees factor Miller Exhibit 2, pg. 6	
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. 3	10,794,655
23	Total Non-Residential EE Revenue Requirement Line 21 + Line 22	10,794,655
24	Total Collected for Vintage Year 2018 (through estimated Rider 10) Miller Exhibit 4 Line 8	
25	Non-Residential EE Revenue Requirement Line 23 - Line 24	10,794,655
26	Projected NC Residential Sales (kWh) Miller Exhibit 6, Line 8	15,707,415,542
27	<b>NC Non-Residential EE billing factor (Cents/kWh)</b> Line 25/Line 26*100	<b>0.0687</b>

E-7 Sub 1164 Rider 10 Year 1 Estimate	E-7 Sub 1192 Year 2019 Yr 2 LR Estimate	E-7 Sub 1230 Rider 11 True up	Year 2019
41,671,833		(8,698,625)	32,973,208
8,464,629		1,873,850	10,338,479
		(553,659)	(553,659)
50,136,462		(7,378,434)	42,758,028
1,001,402		1,001,352	
50,206,753		(7,388,410)	42,818,344
5,590,446	9,219,870	452,216	15,262,532
55,797,199	9,219,870	(6,936,194)	58,080,876
			61,608,599
			(3,527,723)
			15,707,415,542
			(0.0225)

**DSM Programs**

Line	Reference	Year 2019 Yr 3 LR Estimate
28	Non-Residential DSM Program Cost Evans Exhibit 1, pg. 3 Line 28 * NC Alloc. Factor	
29	Non-Residential DSM Earned Utility Incentive Evans Exhibit 1, pg. 3 Line 28 * NC Alloc. Factor	
30	Return on undercollection of Non-residential DSM Program Costs Miller 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 Miller Exhibit 2, pg. 6	
33	Total Non-Residential DSM Revenue Requirement Line 31 * Line 32	
34	Total Collected for Vintage Year 2018 (through estimated Rider 10) Miller Exhibit 4 Line 12	
35	Non-Residential EE Revenue Requirement True-up Amount Line 33- Line 34	
36	Projected NC Non-Residential Sales (kWh) Miller Exhibit 6 Line 9	
37	<b>NC Non-Residential DSM billing factor</b> Line 35/Line 36*100	

E-7 Sub 1164 Rider 10 Year 1 Estimate	E-7 Sub 1230 Rider 11 True Up	Year 2019
12,538,168	(462,163)	12,076,005
3,287,157	611,215	3,898,372
-	(9,744)	(9,744)
15,825,325	139,308	15,964,633
1,001,402	1,001,352	
15,847,512	139,497	15,987,009
		15,674,069
		312,940
		16,897,018,794
		0.0019

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

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
Estimated Year 2 Lost Revenues for Vintage Year 2020

**RESIDENTIAL**

Line	Reference	2020
1 Residential Net Lost Revenues	Evans Exhibit 2 pg. 3	4,495,479
2 Projected NC Residential Sales (kWh)	Miller Exhibit 6, Line 1	\$ 22,092,324,452
3 NC Residential EE Billing Factor (Cents/kWh)	Line 1/Line 2*100	0.0203

**NON-RESIDENTIAL**  
**Energy Efficiency Programs**

Line	Reference	2020
4 Non-Residential Net Lost Revenues	Evans Exhibit 2 pg. 3	9,376,721
5 Projected NC Non-Residential Sales (kWh)	Miller Exhibit 6, Line 10	15,330,345,599
6 NC Non-Residential EE billing factor (Cents/kWh)	Line 4/Line 5*100	0.0612

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
Estimated Program Costs, Earned Incentive and Lost Revenues for Vintage Year 2021

## RESIDENTIAL

Line	Reference	2021
1 Residential EE Program Cost	Evans Exhibit 1, pg. 4 * NC Alloc. Factor	\$ 37,155,471
2 Residential EE Earned Utility Incentive	Evans Exhibit 1, pg. 4 * NC Alloc. Factor	2,979,803
3 Total EE Program Cost and Incentive Components	Line 1 + Line 2, Evans Exhibit 1, Line 10	40,135,274
4 Residential DSM Program Cost	Evans Exhibit 1, pg. 4 * NC Alloc. Factor	13,699,485
5 Residential DSM Earned Utility Incentive	Evans Exhibit 1, pg. 4 * NC Alloc. Factor	3,521,640
6 Total DSM Program Cost and Incentive Components	Line 4 + Line 5, Evans Exhibit 1, Line 12	17,221,124
7 Total EE/DSM Program Cost and Incentive Components	Line 3 + Line 6	57,356,398
8 Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 6	1.001302
9 Total EE/DSM Program Cost and Incentive Revenue Requirement	Line 7 * Line 8	57,431,076
10 Residential Net Lost Revenues	Evans Exhibit 2 pg. 3	25,205,298
11 <b>Total Residential EE Revenue Requirement</b>	<b>Line 9 + Line 10</b>	<b>\$ 82,636,375</b>

See Miller Exhibit 1  
for rate

## NON-RESIDENTIAL

### Energy Efficiency Programs

Line	Reference	2021
12 Non- Residential EE Program Cost	Evans Exhibit 1, pg. 4 * NC Alloc. Factor	\$ 38,264,959
13 Non-Residential EE Earned Utility Incentive	Evans Exhibit 1, pg. 4 * NC Alloc. Factor	9,302,510
14 Total EE Program Cost and Incentive Components	Line 12 + Line 13, Evans Exhibit 1, Line 27	47,567,470
15 Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 6	1.001302
16 Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 14 * Line 15	47,629,402
17 Non-Residential Net Lost Revenues	Evans Exhibit 2 pg. 3	6,360,715
18 Total Non-Residential EE Revenue Requirement	Line 16 + Line 17	\$ 53,990,117
19 Projected NC Residential Sales (kWh)	Miller Exhibit 6, pg. 1, Line 12	15,330,345,599
20 <b>NC Non-Residential EE billing factor (Cents/kWh)</b>	<b>Line 18/Line 19*100</b>	<b>0.3522</b>

## DSM Programs

Line	Reference	2021
21 Non-Residential DSM Program Cost	Evans Exhibit 1, pg. 4 * NC Alloc. Factor	\$ 16,110,767
22 Non-Residential DSM Earned Utility Incentive	Evans Exhibit 1, pg. 4 * NC Alloc. Factor	4,141,493
23 Total Non-Residential DSM Program Cost and Incentive Components	Line 21 + Line 22, Evans Exhibit 1, Line 29	20,252,260
24 Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 6	1.001302
25 Total Non-Residential DSM Revenue Requirement	Line 23 * Line 24	20,278,628
26 Projected NC Non-Residential Sales (kWh)	Miller Exhibit 6, pg. 1, Line 13	16,898,362,794
27 <b>NC Non-Residential DSM billing factor</b>	<b>Line 25/Line 26*100</b>	<b>0.1200</b>



Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
Gross Receipts Tax Years 2017 through estimated 2021

	<u>Year</u>		<u>Actual GRT Rate In Effect</u>
Rider 8	2017		1.001402
Rider 9	2018		1.001402
Rider 10	2019	Jan - June	1.001402
		July - Dec	1.001302
		Weighted Average	<u>1.001352</u>
Rider 11	2020		1.001302
Rider 12	2021		1.001302

Note: the current rate is used as the estimate for 2020 and 2021. This will be subject to true-up based on actual rates in effect.

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
Estimated Return Calculation - Residential EE Programs Vintage 2017

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
		2019				6.84%			0.766497	
<b>Beginning Balance</b>	18,108,325			4,276,263	13,832,062					
2019 January	17,333,797	0.233503	(180,855)	4,095,408	13,238,389	0.005700	77,151	77,151	0.766497	100,654
2019 February	15,462,902	0.233503	(436,860)	3,658,549	11,804,354	0.005700	71,372	148,523	0.766497	193,768
2019 March	13,944,847	0.233503	(354,470)	3,304,078	10,640,769	0.005700	63,969	212,491	0.766497	277,224
2019 April	12,660,896	0.233503	(299,806)	3,004,272	9,656,624	0.005700	57,848	270,339	0.766497	352,694
2019 May	11,384,093	0.233503	(298,137)	2,706,135	8,677,959	0.005700	52,254	322,592	0.766497	420,866
2019 June	9,751,263	0.233503	(381,271)	2,324,864	7,426,399	0.005700	45,897	368,490	0.766497	480,745
2019 July	7,835,080	0.233503	(447,434)	1,877,429	5,957,651	0.005700	38,145	406,634	0.766497	530,510
2019 August	5,860,857	0.233503	(460,987)	1,416,443	4,444,415	0.005700	29,646	436,280	0.766497	569,187
2019 September	4,031,804	0.233503	(427,089)	989,353	3,042,451	0.005700	21,338	457,618	0.766497	597,025
2019 October	2,584,177	0.233503	(338,025)	651,328	1,932,849	0.005700	14,180	471,797	0.766497	615,524
2019 November	1,321,934	0.233503	(294,738)	356,590	965,343	0.005700	8,260	480,057	0.766497	626,300
2019 December	(2,633,637)	0.233503	(923,638)	(567,047)	(2,066,590)	0.005700	(3,139)	476,919	0.766497	622,205
							476,919			622,205

Note 1: Amounts represent all revenue actually collected through 2019.

Interest Calculation  
2019 - Rider 10

NC Residential EE	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	Lost Revenues	Revenues Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total (Over)/Under Collection
2017 January										
2017 February										
2017 March										
2017 April										
2017 May										
2017 June										
2017 July										
2017 August										
2017 September										
2017 October										
2017 November										
2017 December	47,487,858	29,379,532	18,108,326	23,357,250	14,450,538	8,906,712	8,570,768	5,302,517	3,268,251	30,283,290
YTD Balance	47,487,858	29,379,532	18,108,326	23,357,250	14,450,538	8,906,712	8,570,768	5,302,517	3,268,251	30,283,290

Revenue Requirement		
Res EE Program Costs	47,487,858	0.60
Res EE PPI & GRT	8,570,768	0.11
Res EE Lost Revenue	23,357,250	0.29
	79,415,876	
Total Revenue Collected	49,132,586	
Residential EE Rev Collected	49,132,586	

Interest Calculation  
2020 - Rider 11

NC Residential EE	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	Lost Revenues	Revenues Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total (Over)/Under Collection
Beginning Balance	47,487,858	29,379,532	18,108,326	23,357,250	14,450,538	8,906,712	8,570,768	5,302,517	3,268,251	30,283,290
2018 January					234,785			(22,935)		
2018 February					461,305			(45,062)		
2018 March					339,367			(33,151)		
2018 April					341,793			(33,388)		
2018 May					298,837			(29,192)		
2018 June					426,042			(41,618)		
2018 July					489,050			(47,773)		
2018 August					450,004			(43,958)		
2018 September					483,004			(47,182)		
2018 October					341,239			(33,334)		
2018 November					315,399			(30,810)		
2018 December				2,572,270	735,271		(251,270)	(71,824)		
YTD Balance	-	-	-	2,572,270	4,916,096	(2,343,826)	(251,270)	(480,225)	228,955	(2,114,871)
Cumulative Balance	47,487,858	29,379,532	18,108,326	25,929,520	19,366,634	6,562,886	8,319,498	4,822,291	3,497,207	28,168,419

Revenue Requirement		
Res EE PPI & GRT	(251,270)	(0.11)
Res EE Lost Revenue	2,572,270	1.11
	2,321,000	
Revenue Collected per Exhibit Checkpoint	4,435,871	
	4,435,871	

Interest Calculation	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	Lost Revenues	Revenues Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total (Over)/Under Collection
<b>2021 - Rider 12</b>										
<b>Beg. Bal. - Source Rider 11</b>	47,487,858	29,379,532	18,108,326	25,929,520	19,366,634	6,562,886	8,319,498	4,822,291	3,497,207	28,168,419
2019 January		774,528	17,333,797	165,137	459,291	6,268,732		149,582	3,347,624	26,950,154
2019 February		1,870,895	15,462,902	398,893	1,109,430	5,558,195		361,320	2,986,304	24,007,401
2019 March		1,518,055	13,944,847	323,664	900,198	4,981,661		293,177	2,693,126	21,619,635
2019 April		1,283,951	12,660,896	273,751	761,376	4,494,036		247,966	2,445,161	19,600,094
2019 May		1,276,803	11,384,093	272,227	757,137	4,009,126		246,585	2,198,576	17,591,795
2019 June		1,632,830	9,751,263	348,135	968,259	3,389,002		315,344	1,883,232	15,023,497
2019 July		1,916,183	7,835,080	408,549	1,136,286	2,661,265		370,067	1,513,165	12,009,511
2019 August		1,974,223	5,860,857	420,924	1,170,703	1,911,486		381,276	1,131,890	8,904,233
2019 September		1,829,053	4,031,804	389,972	1,084,618	1,216,839		353,240	778,650	6,027,294
2019 October		1,447,627	2,584,177	308,648	858,435	667,053		279,576	499,074	3,750,304
2019 November		1,262,243	1,321,934	269,123	748,503	187,672		243,773	255,301	1,764,907
2019 December		2,796,434	(1,474,501)	596,227	1,658,270	(874,371)		540,067	(284,766)	(2,633,637)
YTD Balance	-	19,582,827	(1,474,501)	4,175,250	11,612,507	(874,371)	-	3,781,972	(284,766)	(2,633,637)
Cumulative Balance	47,487,858	48,962,359	(1,474,501)	30,104,770	30,979,141	(874,371)	8,319,498	8,604,264	(284,766)	(2,633,637)

Revenue Requirement		
Res Program Costs	18,108,326	0.56
Res PPI & GRT	3,497,207	0.11
Res Lost Revenue	10,738,136	0.33
	<u>32,343,668</u>	
Revenue Collected in 2019	35,500,650	
Less Interest Collected (and GRT):	<u>523,344</u>	
Checkpoint	34,977,306	

NO CHANGE

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
Estimated Return Calculation - Residential DSM Programs Vintage 2017

NC Residential DSM	Total System NC DSM Program Costs Incurred	NC Residential DSM Allocation %	NC Allocated DSM Residential Program Costs	NC Residential Revenue Collected	NC Residential DSM Program Collection %	DSM Program Costs Revenue Collected	(Over)/Under Collection
	Miller Exhibit 5, pg 3 Line 9				See calc. at right		
<b>Beginning Balance</b>	29,822,653		10,082,297	12,781,955		(9,892,053)	190,244
2019 January		32.1574721%	-	10,519	73.0104618%	(7,680)	(7,680)
2019 February		32.1574721%	-	24,953	73.0104618%	(18,218)	(18,218)
2019 March		32.1574721%	-	20,307	73.0104618%	(14,827)	(14,827)
2019 April		32.1574721%	-	17,225	73.0104618%	(12,576)	(12,576)
2019 May		32.1574721%	-	17,131	73.0104618%	(12,508)	(12,508)
2019 June		32.1574721%	-	21,819	73.0104618%	(15,930)	(15,930)
2019 July		32.1574721%	-	25,549	73.0104618%	(18,653)	(18,653)
2019 August		32.1574721%	-	26,313	73.0104618%	(19,211)	(19,211)
2019 September		32.1574721%	-	24,402	73.0104618%	(17,816)	(17,816)
2019 October		32.1574721%	-	19,380	73.0104618%	(14,150)	(14,150)
2019 November		32.1574721%	-	16,940	73.0104618%	(12,368)	(12,368)
2019 December		32.1574721%	-	37,138	73.0104618%	(27,115)	(27,115)
	29,822,653		10,082,297	261,676		(10,083,104)	(807)

Program Costs to be Recovered in Rider 10	190,244
Revenues to be Collected in Rider 10	260,571
% Revenue to be assigned to Program Costs	73.01%

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
		2019				6.84%			0.766497	
<b>Beginning Balance</b>	190,244			44,926	145,318					
2019 January	182,564	0.233503	(1,793)	43,133	139,432	0.005700	812	812	0.766497	1,059
2019 February	164,346	0.233503	(4,254)	38,879	125,467	0.005700	755	1,566	0.766497	2,044
2019 March	149,520	0.233503	(3,462)	35,417	114,103	0.005700	683	2,249	0.766497	2,934
2019 April	136,943	0.233503	(2,937)	32,480	104,463	0.005700	623	2,872	0.766497	3,747
2019 May	124,436	0.233503	(2,921)	29,560	94,876	0.005700	568	3,440	0.766497	4,488
2019 June	108,506	0.233503	(3,720)	25,840	82,666	0.005700	506	3,946	0.766497	5,148
2019 July	89,853	0.233503	(4,356)	21,484	68,368	0.005700	430	4,377	0.766497	5,710
2019 August	70,641	0.233503	(4,486)	16,998	53,643	0.005700	348	4,724	0.766497	6,164
2019 September	52,825	0.233503	(4,160)	12,838	39,987	0.005700	267	4,991	0.766497	6,512
2019 October	38,676	0.233503	(3,304)	9,534	29,141	0.005700	197	5,188	0.766497	6,769
2019 November	26,308	0.233503	(2,888)	6,646	19,662	0.005700	139	5,327	0.766497	6,950
2019 December	(807)	0.233503	(6,331)	315	(1,122)	0.005700	53	5,380	0.766497	7,019
							5,380			7,019

Note 1: Amounts represent all revenue actually collected through 2019.

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
Estimated Return Calculation - Non- Residential EE Programs Vintage 2017

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 %					
	Miller Exhibit 5, pg 3, Line 4				See calc. at right		
<b>Beginning Balance</b>	97,443,527		70,947,415	46,928,129		(30,933,661)	40,013,754
2019 January		73.0903918%	-	1,115,901	59.0752989%	(659,222)	(659,221)
2019 February		73.0903918%	-	5,298,136	59.0752989%	(3,129,890)	(3,129,890)
2019 March		73.0903918%	-	4,769,940	59.0752989%	(2,817,856)	(2,817,856)
2019 April		73.0903918%	-	4,871,558	59.0752989%	(2,877,888)	(2,877,888)
2019 May		73.0903918%	-	5,351,721	59.0752989%	(3,161,545)	(3,161,545)
2019 June		73.0903918%	-	5,741,655	59.0752989%	(3,391,900)	(3,391,900)
2019 July		73.0903918%	-	6,484,109	59.0752989%	(3,830,507)	(3,830,507)
2019 August		73.0903918%	-	6,541,734	59.0752989%	(3,864,549)	(3,864,549)
2019 September		73.0903918%	-	6,393,213	59.0752989%	(3,776,809)	(3,776,809)
2019 October		73.0903918%	-	5,592,962	59.0752989%	(3,304,059)	(3,304,059)
2019 November		73.0903918%	-	4,992,945	59.0752989%	(2,949,597)	(2,949,597)
2019 December		73.0903918%	-	7,058,299	59.0752989%	(4,169,711)	(4,169,711)
	97,443,527		70,947,415	64,212,173		(68,867,194)	2,080,222

Program Costs to be Recovered in Rider 10	40,013,754
Revenues to be Collected in Rider 10	67,733,477
% Revenue to be assigned to Program Costs	59.08%

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
	2019	2019				6.84%			0.766497	
<b>Beginning Balance</b>	40,013,754			9,449,208	30,564,546					
2019 January	39,354,533	0.233503	(153,930.06)	8,710,978	30,643,555	0.005700	174,443	174,443	0.766497	227,585
2019 February	36,224,643	0.233503	(730,838.68)	7,980,139	28,244,504	0.005700	167,831	342,274	0.766497	446,543
2019 March	33,406,787	0.233503	(657,977.87)	7,322,161	26,084,626	0.005700	154,838	497,112	0.766497	648,551
2019 April	30,528,899	0.233503	(671,995.41)	6,650,166	23,878,734	0.005700	142,396	639,508	0.766497	834,325
2019 May	27,367,354	0.233503	(738,230.24)	5,911,936	21,455,419	0.005700	129,202	768,710	0.766497	1,002,887
2019 June	23,975,454	0.233503	(792,018.79)	5,119,917	18,855,538	0.005700	114,886	883,596	0.766497	1,152,772
2019 July	20,144,948	0.233503	(894,434.79)	4,225,482	15,919,466	0.005700	99,109	982,705	0.766497	1,282,073
2019 August	16,280,399	0.233503	(902,383.77)	3,323,098	12,957,301	0.005700	82,299	1,065,004	0.766497	1,389,443
2019 September	12,503,589	0.233503	(881,896.34)	2,441,202	10,062,388	0.005700	65,606	1,130,610	0.766497	1,475,035
2019 October	9,199,531	0.233503	(771,507.64)	1,669,694	7,529,836	0.005700	50,138	1,180,748	0.766497	1,540,447
2019 November	6,249,933	0.233503	(688,739.84)	980,954	5,268,979	0.005700	36,477	1,217,224	0.766497	1,588,035
2019 December	2,080,222	0.233503	(973,640.05)	7,314	2,072,908	0.005700	20,924	1,238,149	0.766497	1,615,334
							1,238,149			1,615,334

Note 1: Amounts represent all revenue actually collected through 2019.

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
Estimated Return Calculation - Non - Residential DSM Programs Vintage 2017

NC Non- Residential DSM	Total System NC	NC Non-	NC Allocated DSM Non-	NC Non-Residential	NC Non-	Non-Residential	(Over)/Under
	DSM Program	Residential DSM	Residential Program	DSM Revenue	Residential DSM	DSM Program Costs	
	Costs Incurred	Allocation %	Costs	Collected	Collection %	Revenue Collected	Collection
		See Miller Exhibit 5 pg. 3, Line 10					
<b>Beginning Balance</b>	29,822,653	40.0747013%	11,951,339	15,361,431		(11,888,233)	63,106
2019 January	-	40.1233224%	-	1,278	73.1152446%	(934)	(934)
2019 February	-	40.1233224%	-	7,283	73.1152446%	(5,325)	(5,325)
2019 March	-	40.1233224%	-	6,513	73.1152446%	(4,762)	(4,762)
2019 April	-	40.1233224%	-	6,752	73.1152446%	(4,937)	(4,937)
2019 May	-	40.1233224%	-	7,322	73.1152446%	(5,353)	(5,353)
2019 June	-	40.1233224%	-	7,794	73.1152446%	(5,699)	(5,699)
2019 July	-	40.1233224%	-	8,919	73.1152446%	(6,521)	(6,521)
2019 August	-	40.1233224%	-	8,938	73.1152446%	(6,535)	(6,535)
2019 September	-	40.1233224%	-	8,747	73.1152446%	(6,396)	(6,396)
2019 October	-	40.1233224%	-	7,718	73.1152446%	(5,643)	(5,643)
2019 November	-	40.1233224%	-	6,913	73.1152446%	(5,055)	(5,055)
2019 December	-	40.1233224%	-	8,271	73.1152446%	(6,048)	(6,048)
	29,822,653		11,951,339	15,447,879		(11,951,439)	(100)

Program Costs to be Recovered in Rider 10	63,106
Revenues to be Collected in Rider 10	86,311
% Revenue to be assigned to Program Costs	73.12%

NC Non-Residential DSM	Cumulative	Current Income	Monthly Deferred	Cumulative	Net Deferred	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of	Gross up of Return to Pretax
	(Over)/Under Recovery	Tax Rate	Income Tax	Deferred Income Tax	After Tax Balance				Return to Pretax Rate	
		2019				6.84%			0.766497	
<b>Beginning Balance</b>	63,945			15,101	48,845					
2019 January	63,011	0.233503	(218)	14,883	48,128	0.005700	276	276	0.766497	361
2019 February	57,686	0.233503	(1,243)	13,639	44,046	0.005700	263	539	0.766497	703
2019 March	52,924	0.233503	(1,112)	12,527	40,396	0.005700	241	780	0.766497	1,017
2019 April	47,987	0.233503	(1,153)	11,375	36,612	0.005700	219	999	0.766497	1,304
2019 May	42,634	0.233503	(1,250)	10,125	32,509	0.005700	197	1,196	0.766497	1,561
2019 June	36,935	0.233503	(1,331)	8,794	28,141	0.005700	173	1,369	0.766497	1,786
2019 July	30,414	0.233503	(1,523)	7,271	23,143	0.005700	146	1,515	0.766497	1,977
2019 August	23,879	0.233503	(1,526)	5,745	18,133	0.005700	118	1,633	0.766497	2,130
2019 September	17,483	0.233503	(1,493)	4,252	13,231	0.005700	89	1,722	0.766497	2,247
2019 October	11,840	0.233503	(1,318)	2,934	8,906	0.005700	63	1,785	0.766497	2,329
2019 November	6,786	0.233503	(1,180)	1,754	5,032	0.005700	40	1,825	0.766497	2,381
2019 December	738	0.233503	(1,412)	342	396	0.005700	15	1,841	0.766497	2,401
							1,841			2,401

Note 1: Amounts represent all revenue actually collected through 2019.

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
Estimated Return Calculation - Residential EE Programs Vintage 2018

		Residential EE Program Costs Incurred	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		Miller Exhibit 5 pg. 3, Line 4		see calc. at right			
2019	January	77,331,818	56,230,324	70,458,658			15,050,447
2019	February				0.000000%		
2019	March				0.000000%		
2019	April				0.000000%		
2019	May				0.000000%		
2019	June				0.000000%		
2019	July				0.000000%		
2019	August				0.000000%		
2019	September				0.000000%		
2019	October				0.000000%		
2019	November				0.000000%		
2019	December				0.000000%		
		77,331,818	56,230,324	70,458,658			15,050,447

Note: All revenues collected in Rider 10 were to collect Y2 of lost revenue. Therefore, no revenue received in 2019 would offset the under collected balance of program costs and a return would still be earned.

		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		2019					6.84%			0.766497	
2019	January	15,050,447	0.233503	3,514,324	3,514,324	11,536,122	0.005700	62,230	62,230	0.766497	81,187
2019	February	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	127,985	0.766497	166,974
2019	March	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	193,741	0.766497	252,762
2019	April	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	259,497	0.766497	338,550
2019	May	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	325,253	0.766497	424,337
2019	June	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	391,009	0.766497	510,125
2019	July	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	456,765	0.766497	595,912
2019	August	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	522,521	0.766497	681,700
2019	September	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	588,277	0.766497	767,487
2019	October	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	654,033	0.766497	853,275
2019	November	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	719,789	0.766497	939,062
2019	December	15,050,447	0.233503	-	3,514,324	11,536,122	0.005700	65,756	785,544	0.766497	1,024,850

Note 1: Amounts represent all revenue actually collected through 2019.

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1230**  
**Estimated Return Calculation - Residential DSM Programs Vintage 2018**

NC Residential EE		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
		Miller Exhibit 5 pg. 3, Line 9			see calc. at right			
2019	January	30,409,405		9,778,896	13,173,193		(10,402,600)	(623,705)
2019	February		0.0000000%	-		0.0000%	-	-
2019	March		0.0000000%	-		0.0000%	-	-
2019	April		0.0000000%	-		0.0000%	-	-
2019	May		0.0000000%	-		0.0000%	-	-
2019	June		0.0000000%	-		0.0000%	-	-
2019	July		0.0000000%	-		0.0000%	-	-
2019	August		0.0000000%	-		0.0000%	-	-
2019	September		0.0000000%	-		0.0000%	-	-
2019	October		0.0000000%	-		0.0000%	-	-
2019	November		0.0000000%	-		0.0000%	-	-
2019	December		0.0000000%	-		0.0000%	-	-
		30,409,405		9,778,896	13,173,193		(10,402,600)	(623,705)

Note: All revenues collected in Rider 10 were to collect Y2 of lost revenue. Therefore, no revenue received in 2019 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
		2019					6.84%			0.766497	
2019	January	(623,705)	0.233503	(145,637)	(145,637)	(478,068)	0.005700	(1,362)	(1,362)	0.766497	(1,778)
2019	February	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(4,087)	0.766497	(5,333)
2019	March	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(6,812)	0.766497	(8,888)
2019	April	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(9,537)	0.766497	(12,443)
2019	May	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(12,262)	0.766497	(15,998)
2019	June	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(14,987)	0.766497	(19,553)
2019	July	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(17,712)	0.766497	(23,108)
2019	August	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(20,437)	0.766497	(26,663)
2019	September	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(23,162)	0.766497	(30,219)
2019	October	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(25,887)	0.766497	(33,774)
2019	November	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(28,612)	0.766497	(37,329)
2019	December	(623,705)	0.233503	-	(145,637)	(478,068)	0.005700	(2,725)	(31,337)	0.766497	(40,884)
								(31,337)			(40,884)

Note 1: Amounts represent all revenue actually collected through 2019.



Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
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 %					
	Miller Exhibit 5, pg 3, Line 4				See calc. at right		
2019 January	51,264,448		37,275,944	51,998,801		28,240,012	9,035,932
2019 February		0.0000000%	-		0.0000000%	-	-
2019 March		0.0000000%	-		0.0000000%	-	-
2019 April		0.0000000%	-		0.0000000%	-	-
2019 May		0.0000000%	-		0.0000000%	-	-
2019 June		0.0000000%	-		0.0000000%	-	-
2019 July		0.0000000%	-		0.0000000%	-	-
2019 August		0.0000000%	-		0.0000000%	-	-
2019 September		0.0000000%	-		0.0000000%	-	-
2019 October		0.0000000%	-		0.0000000%	-	-
2019 November		0.0000000%	-		0.0000000%	-	-
2019 December		0.0000000%	-		0.0000000%	-	-
	51,264,448		37,275,944	51,998,801		28,240,012	9,035,932

Note: All revenues collected in Rider 10 were to collect Y2 of lost revenue. Therefore, no revenue received in 2019 would offset the under collected balance of program costs and a return would still be earned.

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
2019 January	9,035,932	0.233503	2,109,917.24	2,109,917	6,926,015	0.005700	19,739	19,739	0.766497	25,752
2019 February	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	59,217	0.766497	77,257
2019 March	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	98,696	0.766497	128,762
2019 April	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	138,174	0.766497	180,267
2019 May	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	177,652	0.766497	231,772
2019 June	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	217,131	0.766497	283,276
2019 July	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	256,609	0.766497	334,781
2019 August	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	296,087	0.766497	386,286
2019 September	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	335,565	0.766497	437,791
2019 October	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	375,044	0.766497	489,296
2019 November	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	414,522	0.766497	540,801
2019 December	9,035,932	0.233503	-	2,109,917	6,926,015	0.005700	39,478	454,000	0.766497	592,305

Note 1: Amounts represent all revenue actually collected through 2019.

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1230  
Estimated Return Calculation - Non - Residential DSM Programs Vintage 2018

		Total System NC DSM Program Costs Incurred	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
		See Miller Exhibit 5 pg. 3, Line 10						
2019	January	30,409,405	41.4712829%	12,611,170	14,074,924		(11,114,680)	1,496,490
2019	February	-	41.4712829%	-	249,056	78.9679563%	(196,674)	(196,674)
2019	March	-	41.4712829%	-	32,655	78.9679563%	(25,787)	(25,787)
2019	April	-	41.4712829%	-	38,629	78.9679563%	(30,505)	(30,505)
2019	May	-	41.4712829%	-	40,518	78.9679563%	(31,996)	(31,996)
2019	June	-	41.4712829%	-	43,631	78.9679563%	(34,455)	(34,455)
2019	July	-	41.4712829%	-	46,592	78.9679563%	(36,793)	(36,793)
2019	August	-	41.4712829%	-	53,325	78.9679563%	(42,110)	(42,110)
2019	September	-	41.4712829%	-	53,359	78.9679563%	(42,137)	(42,137)
2019	October	-	41.4712829%	-	52,348	78.9679563%	(41,338)	(41,338)
2019	November	-	41.4712829%	-	46,029	78.9679563%	(36,348)	(36,348)
2019	December	-	41.4712829%	-	80,167	78.9679563%	(63,306)	(63,306)
		30,409,405		12,611,170	41,424		(11,696,128)	915,042

Rider 10 included a true-up for the impact of opt-outs. All revenue collected in 2019 represents additional collections associated with that true-up. Amounts allocated at same % as calculated in Rider 10.

		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
		2019						6.84%	0.766497		
2019	January	1,496,490	0.233503	349,435	349,435	1,147,055	0.005700	3,269	3,269	0.766497	4,265
2019	February	1,299,816	0.233503	(45,924)	303,511	996,305	0.005700	6,109	9,378	0.766497	12,234
2019	March	1,274,029	0.233503	(6,021)	297,490	976,540	0.005700	5,623	15,000	0.766497	19,570
2019	April	1,243,524	0.233503	(7,123)	290,367	953,158	0.005700	5,500	20,500	0.766497	26,745
2019	May	1,211,528	0.233503	(7,471)	282,895	928,633	0.005700	5,363	25,863	0.766497	33,742
2019	June	1,177,074	0.233503	(8,045)	274,850	902,223	0.005700	5,218	31,081	0.766497	40,549
2019	July	1,140,281	0.233503	(8,591)	266,259	874,022	0.005700	5,062	36,143	0.766497	47,154
2019	August	1,098,171	0.233503	(9,833)	256,426	841,745	0.005700	4,890	41,033	0.766497	53,533
2019	September	1,056,034	0.233503	(9,839)	246,587	809,447	0.005700	4,706	45,739	0.766497	59,673
2019	October	1,014,696	0.233503	(9,653)	236,935	777,762	0.005700	4,524	50,263	0.766497	65,574
2019	November	978,348	0.233503	(8,487)	228,447	749,901	0.005700	4,354	54,616	0.766497	71,255
2019	December	915,042	0.233503	(14,782)	213,665	701,377	0.005700	4,136	58,753	0.766497	76,651
								58,753			76,651

Note 1: Amounts represent all revenue actually collected through 2019.

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1230**  
**Estimated Return Calculation - Residential EE Programs Vintage 2019**

NC Residential EE	Residential EE Program Costs Incurred	NC Allocation %	NC Allocated EE Program Costs	NC Residential Revenue Collected	NC Residential EE Program Collection %	EE Program Costs Revenue Collected	(Over)/Under Collection		
								Miller Exhibit 5 pg. 3, Line 4	see calc. at right
2019 January	3,212,930	73.0903918%	2,348,343	2,558,632	62.4119%	(1,596,892)	751,452		
2019 February	5,158,756	73.0903918%	3,770,555	6,069,759	62.4119%	(3,788,254)	(17,699)	EE Program Costs	54,246,377
2019 March	5,303,004	73.0903918%	3,875,986	4,939,785	62.4119%	(3,083,015)	792,971	EE Revenue Requirement	86,916,677
2019 April	6,291,523	73.0903918%	4,598,499	4,190,063	62.4119%	(2,615,099)	1,983,399		
2019 May	9,618,631	73.0903918%	7,030,295	4,167,172	62.4119%	(2,600,813)	4,429,482	% Revenues related to program Costs	62.4119%
2019 June	6,533,627	73.0903918%	4,775,454	5,307,354	62.4119%	(3,312,422)	1,463,031		
2019 July	6,248,948	73.0903918%	4,567,381	6,214,794	62.4119%	(3,878,773)	688,608		
2019 August	6,098,612	73.0903918%	4,457,499	6,400,667	62.4119%	(3,994,780)	462,719		
2019 September	4,923,805	73.0903918%	3,598,828	5,935,759	62.4119%	(3,704,622)	(105,794)		
2019 October	4,430,131	73.0903918%	3,238,000	4,714,238	62.4119%	(2,942,247)	295,753		
2019 November	5,485,441	73.0903918%	4,009,330	4,120,545	62.4119%	(2,571,712)	1,437,619		
2019 December	10,912,797	73.0903918%	7,976,206	9,033,809	62.4119%	(5,638,175)	2,338,031		
	74,218,205		54,246,377	63,652,577		(39,726,803)	14,519,574		

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
2019 January	751,452	0.233503	175,466	175,466	575,985	0.005700	62,230	62,230	0.766497	81,187
2019 February	751,452	0.233503	(4,133)	175,466	575,985	0.005700	3,283	65,513	0.766497	85,470
2019 March	751,452	0.233503	185,161	360,627	390,824	0.005700	2,755	68,268	0.766497	89,065
2019 April	751,452	0.233503	463,130	638,596	112,856	0.005700	1,435	69,704	0.766497	90,938
2019 May	751,452	0.233503	1,034,297	1,394,925	(643,473)	0.005700	(1,512)	68,191	0.766497	88,965
2019 June	751,452	0.233503	341,622	980,218	(228,767)	0.005700	(2,486)	65,705	0.766497	85,722
2019 July	751,452	0.233503	160,792	1,555,717	(804,265)	0.005700	(2,944)	62,761	0.766497	81,881
2019 August	751,452	0.233503	108,046	1,088,264	(336,813)	0.005700	(3,252)	59,509	0.766497	77,638
2019 September	751,452	0.233503	(24,703)	1,531,014	(779,562)	0.005700	(3,182)	56,328	0.766497	73,487
2019 October	751,452	0.233503	69,059	1,157,324	(405,872)	0.005700	(3,378)	52,949	0.766497	69,079
2019 November	751,452	0.233503	335,688	1,866,702	(1,115,250)	0.005700	(4,335)	48,614	0.766497	63,423
2019 December	751,452	0.233503	545,937	1,703,261	(951,809)	0.005700	(5,891)	42,723	0.766497	55,738
							42,723			55,738

Note 1: Amounts represent all revenue actually collected through 2019.

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1230**  
**Estimated Return Calculation - Residential DSM Programs Vintage 2019**

NC Residential EE	Total System NC DSM Program Costs Incurred	NC Allocation %	NC Allocated EE Program Costs	NC Residential Revenue Collected	NC Residential EE Program Collection %	EE Program Costs Revenue Collected	(Over)/Under Collection	
								Miller Exhibit 5 pg. 3, Line 9
2019	January	1,589,557	34.1181040%	542,327	537,321	75.4903%	(405,626)	136,701
2019	February	1,353,150	34.1181040%	461,669	1,274,670	75.4903%	(962,253)	(500,583)
2019	March	2,084,263	34.1181040%	711,111	1,037,372	75.4903%	(783,115)	(72,004)
2019	April	1,820,414	34.1181040%	621,091	879,928	75.4903%	(664,260)	(43,169)
2019	May	1,926,897	34.1181040%	657,421	875,120	75.4903%	(660,631)	(3,210)
2019	June	1,979,139	34.1181040%	675,245	1,114,563	75.4903%	(841,387)	(166,142)
2019	July	3,696,829	34.1181040%	1,261,288	1,305,128	75.4903%	(985,245)	276,043
2019	August	3,437,773	34.1181040%	1,172,903	1,344,162	75.4903%	(1,014,712)	158,191
2019	September	4,173,115	34.1181040%	1,423,788	1,246,530	75.4903%	(941,009)	482,778
2019	October	3,499,351	34.1181040%	1,193,912	990,006	75.4903%	(747,359)	446,553
2019	November	1,661,681	34.1181040%	566,934	865,329	75.4903%	(653,239)	(86,305)
2019	December	2,875,050	34.1181040%	980,913	1,897,131	75.4903%	(1,432,150)	(451,238)
		30,097,219		10,268,600	13,367,259		(10,090,987)	177,614

Program Costs	10,268,601
Revenue Requirement	13,602,540
% Revenues related to Program Costs	75.4903%

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	
											2019
2019	January	136,701	0.233503	31,920	31,920	104,781	0.005700	299	299	0.766497	390
2019	February	(363,883)	0.233503	(116,888)	(84,968)	(278,915)	0.005700	(496)	(198)	0.766497	(258)
2019	March	(435,887)	0.233503	(16,813)	(101,781)	(334,106)	0.005700	(1,747)	(1,945)	0.766497	(2,537)
2019	April	(479,056)	0.233503	(10,080)	(111,861)	(367,195)	0.005700	(1,999)	(3,943)	0.766497	(5,145)
2019	May	(482,267)	0.233503	(750)	(112,611)	(369,656)	0.005700	(2,100)	(6,043)	0.766497	(7,885)
2019	June	(648,409)	0.233503	(38,795)	(151,405)	(497,003)	0.005700	(2,470)	(8,513)	0.766497	(11,107)
2019	July	(372,366)	0.233503	64,457	(86,949)	(285,417)	0.005700	(2,230)	(10,743)	0.766497	(14,016)
2019	August	(214,175)	0.233503	36,938	(50,011)	(164,165)	0.005700	(1,281)	(12,025)	0.766497	(15,688)
2019	September	268,603	0.233503	112,730	62,720	205,883	0.005700	119	(11,906)	0.766497	(15,533)
2019	October	715,156	0.233503	104,272	166,991	548,165	0.005700	2,149	(9,757)	0.766497	(12,729)
2019	November	628,851	0.233503	(20,153)	146,839	482,013	0.005700	2,936	(6,821)	0.766497	(8,899)
2019	December	177,614	0.233503	(105,365)	41,473	136,140	0.005700	1,762	(5,059)	0.766497	(6,600)

Note 1: Amounts represent all revenue actually collected through 2019.

Duke Energy Carolinas, LLC  
 Docket No. E-7, Sub 1230  
 Estimated Return Calculation - Non- Residential EE Programs Vintage 2019

NC Non- Residential EE	Non-Residential EE Program Costs		NC Allocated EE Program Costs		Lost Revenues	Total Costs	NC Residential Revenue Collected	NC Non-Residential EE Program Collection %	Non-Residential EE Program Costs Revenue Collected	(Over)/Under Collection	
	Incurred	NC Allocation %	Program Costs	Program Incentives							
	Miller Exhibit 5, pg 3, Line 4							See calc. at right			
2019 January	3,910,661	73.0903918%	2,858,317	896,202	1,323,049	5,077,568	1,961,495	100.00000000%	(1,961,495)	896,822	
2019 February	4,042,579	73.0903918%	2,954,737	926,434	1,367,679	5,248,849	4,273,378	100.00000000%	(4,273,378)	(1,318,641)	
2019 March	3,315,615	73.0903918%	2,423,396	759,836	1,121,734	4,304,966	3,861,979	100.00000000%	(3,861,979)	(1,438,583)	
2019 April	3,318,152	73.0903918%	2,425,250	760,417	1,122,592	4,308,260	3,919,819	100.00000000%	(3,919,819)	(1,494,568)	
2019 May	3,870,647	73.0903918%	2,829,071	887,032	1,309,511	5,025,614	4,328,089	100.00000000%	(4,328,089)	(1,499,018)	
2019 June	3,876,733	73.0903918%	2,833,519	888,427	1,311,570	5,033,516	4,656,923	100.00000000%	(4,656,923)	(1,823,404)	
2019 July	3,886,284	73.0903918%	2,840,500	890,616	1,314,801	5,045,917	5,260,960	100.00000000%	(5,260,960)	(2,420,460)	
2019 August	3,186,558	73.0903918%	2,329,068	730,260	1,078,071	4,137,399	5,303,365	100.00000000%	(5,303,365)	(2,974,297)	
2019 September	3,413,373	73.0903918%	2,494,848	782,239	1,154,807	4,431,894	5,176,057	100.00000000%	(5,176,057)	(2,681,210)	
2019 October	3,726,001	73.0903918%	2,723,349	853,884	1,260,575	4,837,807	4,522,554	100.00000000%	(4,522,554)	(1,799,205)	
2019 November	2,909,750	73.0903918%	2,126,748	666,824	984,422	3,777,994	4,015,015	100.00000000%	(4,015,015)	(1,888,267)	
2019 December	5,656,566	73.0903918%	4,134,406	1,296,309	1,913,721	7,344,436	5,582,965	100.00000000%	(5,582,965)	(1,448,558)	
	45,112,919		32,973,209	10,338,479	15,262,532	58,574,220	52,862,599		(52,862,599)	(19,889,390)	

Vintage is overcollected. Interest is calculated on all components.

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
	2019						6.84%			0.766497	
2019 January		896,822	0.233503	209,411	209,411	687,412	0.005700	1,959	1,959	0.766497	2,556
2019 February		(421,819)	0.233503	(307,907)	(98,496)	(323,323)	0.005700	1,038	2,997	0.766497	3,910
2019 March		(1,860,402)	0.233503	(335,913)	(434,409)	(1,425,992)	0.005700	(4,986)	(1,989)	0.766497	(2,595)
2019 April		(3,354,970)	0.233503	(348,986)	(783,396)	(2,571,575)	0.005700	(11,393)	(13,382)	0.766497	(17,458)
2019 May		(4,853,988)	0.233503	(350,025)	(1,133,421)	(3,720,567)	0.005700	(17,933)	(31,314)	0.766497	(40,854)
2019 June		(6,677,392)	0.233503	(425,770)	(1,559,191)	(5,118,201)	0.005700	(25,190)	(56,505)	0.766497	(73,718)
2019 July		(9,097,852)	0.233503	(565,185)	(2,124,376)	(6,973,476)	0.005700	(34,461)	(90,966)	0.766497	(118,678)
2019 August		(12,072,149)	0.233503	(694,507)	(2,818,883)	(9,253,266)	0.005700	(46,246)	(137,212)	0.766497	(179,012)
2019 September		(14,753,359)	0.233503	(626,070)	(3,444,954)	(11,308,405)	0.005700	(58,601)	(195,813)	0.766497	(255,465)
2019 October		(16,552,564)	0.233503	(420,120)	(3,865,073)	(12,687,491)	0.005700	(68,388)	(264,201)	0.766497	(344,687)
2019 November		(18,440,831)	0.233503	(440,916)	(4,305,989)	(14,134,842)	0.005700	(76,444)	(340,645)	0.766497	(444,418)
2019 December		(19,889,390)	0.233503	(338,243)	(4,644,232)	(15,245,158)	0.005700	(83,733)	(424,378)	0.766497	(553,659)
								(424,378)			(553,659)

Note 1: Amounts represent all revenue actually collected through 2019.

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1230**  
**Estimated Return Calculation - Non - Residential DSM Programs Vintage 2019**

		Total System NC DSM Program Costs Incurred	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
		See Miller Exhibit 5 pg. 3, Line 10						
2019	January	1,589,557	40.1233224%	637,783	560,289	75.4903188%	(422,964)	214,819
2019	February	1,353,150	40.1233224%	542,929	1,274,361	75.4903188%	(962,019)	(419,091)
2019	March	2,084,263	40.1233224%	836,276	1,141,540	75.4903188%	(861,752)	(25,476)
2019	April	1,820,414	40.1233224%	730,411	1,195,041	75.4903188%	(902,141)	(171,730)
2019	May	1,926,897	40.1233224%	773,135	1,281,300	75.4903188%	(967,257)	(194,122)
2019	June	1,979,139	40.1233224%	794,096	1,367,817	75.4903188%	(1,032,569)	(238,473)
2019	July	3,696,829	40.1233224%	1,483,291	1,562,478	75.4903188%	(1,179,520)	303,771
2019	August	3,437,773	40.1233224%	1,379,349	1,564,861	75.4903188%	(1,181,319)	198,030
2019	September	4,173,115	40.1233224%	1,674,392	1,530,946	75.4903188%	(1,155,716)	518,676
2019	October	3,499,351	40.1233224%	1,404,056	1,350,191	75.4903188%	(1,019,263)	384,793
2019	November	1,661,681	40.1233224%	666,722	1,210,511	75.4903188%	(913,819)	(247,097)
2019	December	2,875,050	40.1233224%	1,153,566	1,634,733	75.4903188%	(1,234,065)	(80,500)
		30,097,219		12,076,004	15,674,069		(11,832,404)	243,600

Program Costs	12,076,005
Revenue Requirement	15,996,766
% Revenues related to Program Costs	75.4903%

		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	
		2019										
								6.84%				
		0.766497										
2019	January	214,819	0.233503	50,161	50,161	164,658	0.005700	469	469	0.766497	612	
2019	February	(204,271)	0.233503	(97,859)	(47,698)	(156,573)	0.005700	23	492	0.766497	642	
2019	March	(229,748)	0.233503	(5,949)	(53,647)	(176,101)	0.005700	(948)	(456)	0.766497	(595)	
2019	April	(401,478)	0.233503	(40,099)	(93,746)	(307,732)	0.005700	(1,379)	(1,835)	0.766497	(2,394)	
2019	May	(595,600)	0.233503	(45,328)	(139,074)	(456,526)	0.005700	(2,178)	(4,013)	0.766497	(5,235)	
2019	June	(834,073)	0.233503	(55,684)	(194,759)	(639,315)	0.005700	(3,123)	(7,136)	0.766497	(9,310)	
2019	July	(530,302)	0.233503	70,931	(123,827)	(406,475)	0.005700	(2,981)	(10,117)	0.766497	(13,198)	
2019	August	(332,272)	0.233503	46,241	(77,587)	(254,686)	0.005700	(1,884)	(12,001)	0.766497	(15,657)	
2019	September	186,404	0.233503	121,112	43,526	142,878	0.005700	(319)	(12,319)	0.766497	(16,072)	
2019	October	571,196	0.233503	89,850	133,376	437,820	0.005700	1,655	(10,664)	0.766497	(13,913)	
2019	November	324,099	0.233503	(57,698)	75,678	248,421	0.005700	1,956	(8,709)	0.766497	(11,362)	
2019	December	243,600	0.233503	(18,797)	56,881	186,718	0.005700	1,240	(7,469)	0.766497	(9,744)	
								(7,469)	(9,744)			

Note 1: Amounts represent all revenue actually collected through 2019.

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1230**  
**Estimated Return Calculation - Residential EE Programs Vintage 2016**

NC Residential EE	Cumulative	Current Income	Monthly	Cumulative	Net Deferred	Monthly Return	Monthly A/T Return on Deferral	YTD After Tax Interest	Gross up of	Gross up of Return to Pretax
	(Over)/Under Recovery	Tax Rate	Deferred Income Tax	Deferred Income Tax	After Tax Balance				Return to Pretax Rate	
		2019				6.84%				0.766497
<b>Beginning Balance - source</b>	(1,972,320)			(465,762)	(1,506,559)					
2019 January	(1,836,434)	0.236149	32,090	(433,672)	(1,402,762)	0.005700	(8,292)	(8,292)	0.766497	(10,817)
2019 February	(1,563,421)	0.236149	64,472	(369,200)	(1,194,221)	0.005700	(7,401)	(15,693)	0.766497	(20,474)
2019 March	(1,334,540)	0.236149	54,050	(315,150)	(1,019,390)	0.005700	(6,309)	(22,002)	0.766497	(28,704)
2019 April	(1,134,938)	0.236149	47,136	(268,015)	(866,924)	0.005700	(5,376)	(27,378)	0.766497	(35,718)
2019 May	(936,231)	0.236149	46,925	(221,090)	(715,141)	0.005700	(4,509)	(31,887)	0.766497	(41,600)
2019 June	(692,994)	0.236149	57,440	(163,650)	(529,344)	0.005700	(3,547)	(35,433)	0.766497	(46,228)
2019 July	(414,318)	0.236149	65,809	(97,841)	(316,477)	0.005700	(2,411)	(37,844)	0.766497	(49,373)
2019 August	(128,382)	0.236149	67,523	(30,317)	(98,065)	0.005700	(1,181)	(39,025)	0.766497	(50,914)
2019 September	65,075	0.236149	45,685	15,367	49,707	0.005700	(138)	(39,163)	0.766497	(51,094)
2019 October	167,811	0.236149	24,261	39,628	128,183	0.005700	507	(38,656)	0.766497	(50,432)
2019 November	259,724	0.236149	21,705	61,334	198,390	0.005700	931	(37,726)	0.766497	(49,218)
2019 December	441,214	0.236149	42,859	104,192	337,022	0.005700	1,526	(36,200)	0.766497	(47,227)

Note 1: Amounts represent all revenue actually collected through 2018.

**Interest Calculation**

2018 - Rider 9	Month	NC Program Costs	Revenue	Undercollected	PPI	Revenue	Undercollected	Lost Revenue	Revenue Collected	Undercollected	Total Cumulative Under/Over Collected	%
		Incurred	Collected	Balance		Collected	Balance		Balance			
Beginning Balance		40,021,103	28,243,964	11,777,138	6,821,368	4,814,022	2,007,346	16,669,126	11,763,849	4,905,277	18,689,761	0.63
January						-	-				18,689,761	0.11
February						-	-				18,689,761	0.26
March						-	-				18,689,761	
April						-	-				18,689,761	
May						-	-				18,689,761	
June						-	-				18,689,761	
July						-	-				18,689,761	
August						-	-				18,689,761	
September						-	-				18,689,761	
October						-	-				18,689,761	
November						-	-				18,689,761	
December						-	-				18,689,761	
YTD Balance		40,021,103	28,243,964	11,777,138	6,821,368	4,814,022	2,007,346	16,669,126	11,763,849	4,905,277	18,689,761	

EE Program Costs	40,021,103	0.63
EE PPI & GRT	6,821,368	0.11
EE Lost Revenue	16,669,126	0.26
<b>Total EE Revenue Requirement</b>	<b>63,511,597</b>	

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1192**  
**Estimated Return Calculation - Residential EE Programs Vintage 2016**

**Interest Calculation**

2019 - Rider 10	Month	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Lost Revenue	Revenue Collected	Undercollected Balance	Total Cumulative Over/Under Collected
	Beginning Balance	40,021,103	28,243,964	11,777,138	6,821,368	4,814,022	2,007,346	16,669,126	11,763,849	4,905,277	18,689,761
	January	-	-	-	-	-	-	-	-	-	18,689,761
	February	-	-	-	-	-	-	-	-	-	18,689,761
	March	-	-	-	-	-	-	-	-	-	18,689,761
	April	-	-	-	-	-	-	-	-	-	18,689,761
	May	-	-	-	-	-	-	-	-	-	18,689,761
	June	-	-	-	-	-	-	-	-	-	18,689,761
	July	-	-	-	-	-	-	-	-	-	18,689,761
	August	-	-	-	-	-	-	-	-	-	18,689,761
	September	-	-	-	-	-	-	-	-	-	18,689,761
	October	-	-	-	-	-	-	-	-	-	18,689,761
	November	-	-	-	-	-	-	-	-	-	18,689,761
	December	(2)	-	(2)	(51,566.50)	-	(51,567)	2,424,300	5,570,022	(3,145,722)	15,492,471
	YTD Balance	(2)	-	(2)	(51,567)	-	(51,567)	2,424,300	5,570,022	(3,145,722)	15,492,471
	Cumulative Ending Balance	40,021,101	28,243,964	11,777,137	6,769,802	4,814,022	1,955,779	19,093,426	17,333,871	1,759,555	15,492,471

Note: Year 2 of all residential vintages goes toward the collection of Year 2 lost revenues. Therefore, no revenues offset the undercollection of Year 1 Program costs or PPI. Interest continued to accrue on beginning balance.

**Interest Calculation**

2020- Rider 11	Month	NC Program Costs Incurred	Revenue Collected	Cumulative Under/(Over)collected Balance	PPI	Revenue Collected	Cumulative Under/(Over)collected Balance	Lost Revenue	Revenue Collected	Cumulative Under/(Over)collected Balance	Total Cumulative Over/Under Collected
	Beginning Balance	40,021,101	28,243,964	11,777,137	6,770,575	4,814,022	1,956,553	19,093,426	17,333,871	1,759,555	15,493,244
	January	-	590,101	11,187,036	-	98,034	1,858,519	1,390,664	575,924	2,574,295	15,619,850
	February	-	1,196,334	9,990,702	-	198,749	1,659,770	1,390,664	1,167,592	2,797,367	14,447,839
	March	-	869,993	9,120,709	-	144,533	1,515,237	1,390,664	849,091	3,338,940	13,974,885
	April	-	876,484	8,244,224	-	145,612	1,369,625	1,390,664	855,427	3,874,178	13,488,027
	May	-	761,524	7,482,701	-	126,513	1,243,112	1,390,664	743,228	4,521,614	13,247,426
	June	-	1,101,959	6,380,741	-	183,070	1,060,042	1,390,664	1,075,485	4,836,793	12,277,576
	July	-	1,270,589	5,110,153	-	211,085	848,957	1,390,651	1,240,063	4,987,381	10,946,491
	August	-	1,166,088	3,944,064	-	193,724	655,233	-	1,138,073	3,849,308	8,448,606
	September	-	1,254,406	2,689,658	-	208,396	446,837	-	1,224,269	2,625,039	5,761,535
	October	-	875,003	1,814,656	-	145,365	301,471	-	853,981	1,771,059	3,887,186
	November	-	805,848	1,008,808	-	133,877	167,595	-	786,488	984,571	2,160,973
	December	-	1,929,546	(920,739)	-	320,558	(152,964)	-	1,883,189	(898,618)	(1,972,320)
	Cumulative Ending Balance	40,021,101	40,941,840	(920,739)	6,770,575	6,923,539	(152,964)	28,828,063	29,726,681	(898,618)	(1,972,320)

Revenue Requirement:  
 Program Costs 11,777,137 0.47  
 PPI & GRT 1,956,553 0.08  
 Lost Revenue 11,494,191 0.46  
 Total Revenue Requirement 25,227,881

78575321.89 (2,485,918) 76,089,404  
 77,592,059.53  
 (2,917,448.31)  
 74,674,611.22

**Interest Calculation**

2021- Rider 12	Month	NC Program Costs Incurred	Revenue Collected	Cumulative Under/(Over)collected Balance	PPI	Revenue Collected	Cumulative Under/(Over)collected Balance	Lost Revenue	Revenue Collected	Cumulative Under/(Over)collected Balance	Total Cumulative Over/Under Collected
	Beginning Balance	40,021,101	40,941,840	(920,739)	6,770,575	6,923,539	(152,964)	28,828,063	29,726,681	(898,618)	(1,972,320)
	January	-	(63,436)	(857,303)	-	(10,539)	(142,425)	-	(61,912)	(836,706)	(1,836,434)
	February	-	(127,450)	(729,852)	-	(21,174)	(121,251)	-	(124,388)	(712,318)	(1,563,421)
	March	-	(106,849)	(623,004)	-	(17,751)	(103,500)	-	(104,282)	(608,036)	(1,334,540)
	April	-	(93,180)	(529,823)	-	(15,480)	(88,020)	-	(90,941)	(517,094)	(1,134,938)
	May	-	(92,763)	(437,061)	-	(15,411)	(72,610)	-	(90,534)	(426,560)	(936,231)
	June	-	(113,550)	(323,511)	-	(18,864)	(53,745)	-	(110,822)	(315,738)	(692,994)
	July	-	(130,095)	(193,416)	-	(21,613)	(32,132)	-	(126,969)	(188,769)	(414,318)
	August	-	(133,483)	(59,933)	-	(22,176)	(9,957)	-	(130,276)	(58,493)	(128,382)
	September	-	(125,007)	65,075	-	(20,768)	10,811	-	(122,004)	63,511	139,397
	October	-	(102,737)	167,811	-	(17,068)	27,879	-	(100,268)	163,780	359,470
	November	-	(91,913)	259,724	-	(15,270)	43,148	-	(89,704)	253,484	556,356
	December	-	(181,490)	441,214	-	(30,151)	73,300	-	(177,130)	430,614	945,128
	Cumulative Ending Balance	40,021,101	39,579,887 (1,361,953)	441,214	6,770,575	6,697,276 (226,263)	73,300	28,828,063	28,397,449 (1,329,232)	430,614	945,128



**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1230**  
**Estimated Return Calculation - Residential DSM Programs Vintage 2016**

NC Residential DSM	Cumulative	Current Income	Monthly	Cumulative	Net Deferred	Monthly Return	Monthly A/T Return	YTD After Tax	Gross up of	Gross up of Return
	(Over)/Under Recovery	Tax Rate	Deferred Income Tax	Deferred Income Tax	After Tax Balance		on Deferral	Interest	Return to Pretax Rate	to Pretax
	2019					6.84%			0.766497	
<b>Beginning Balance - source</b>	(11,973)			(2,827)	(9,146)					
2018 January	(12,671)	0.236149	(165)	(2,992)	(9,679)	0.005700	(54)	(54)	0.766497	(70)
2018 February	(9,760)	0.236149	687	(2,305)	(7,455)	0.005700	(49)	(102)	0.766497	(134)
2018 March	(8,011)	0.236149	413	(1,892)	(6,119)	0.005700	(39)	(141)	0.766497	(184)
2018 April	(7,032)	0.236149	231	(1,661)	(5,371)	0.005700	(33)	(174)	0.766497	(227)
2018 May	(6,076)	0.236149	226	(1,435)	(4,641)	0.005700	(29)	(202)	0.766497	(264)
2018 June	(3,949)	0.236149	502	(932)	(3,016)	0.005700	(22)	(224)	0.766497	(293)
2018 July	(889)	0.236149	723	(210)	(679)	0.005700	(11)	(235)	0.766497	(306)
2018 August	(9,528)	0.236149	(2,040)	(2,250)	(7,278)	0.005700	(23)	(257)	0.766497	(336)
2018 September	(20,713)	0.236149	(2,641)	(4,891)	(15,822)	0.005700	(66)	(323)	0.766497	(422)
2018 October	(26,835)	0.236149	(1,446)	(6,337)	(20,498)	0.005700	(104)	(427)	0.766497	(557)
2018 November	(30,495)	0.236149	(864)	(7,201)	(23,294)	0.005700	(125)	(552)	0.766497	(720)
2018 December	(54,523)	0.236149	(5,674)	(12,876)	(41,648)	0.005700	(185)	(737)	0.766497	(961)
							(737)			(961)

Note 1: Amounts represent all revenue actually collected through 2018.

**Interest Calculation**

2018 - Rider 9	Month	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total Cumulative Under/Over Collected			
									DSM Program Costs	%	
Beginning Balance		9,600,575	10,366,049	(765,474)	2,775,672	2,996,983.02	(221,311)	(986,784)	DSM Program Costs	9,600,575	0.78
January						-	-	(986,784)	DSM PPI & GRT	2,775,672	0.22
February						-	-	(986,784)	Total Revenue Requirement	12,376,248	
March						-	-	(986,784)			
April						-	-	(986,784)			
May						-	-	(986,784)			
June						-	-	(986,784)			
July						-	-	(986,784)			
August						-	-	(986,784)			
September						-	-	(986,784)			
October						-	-	(986,784)			
November						-	-	(986,784)			
December						-	-	(986,784)			
YTD Balance		9,600,575	10,366,049	(765,474)	2,775,672	2,996,983	(221,311)				

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1192**  
**Estimated Return Calculation - Residential DSM Programs Vintage 2016**

**Interest Calculation**

2019 - Rider 10	Month	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total Cumulative Over/Under Collected
	Beginning Balance	9,600,575	10,366,049	(765,474)	2,775,672	2,996,983	(221,311)	(986,784)
	January			-			-	(986,784)
	February			-			-	(986,784)
	March			-			-	(986,784)
	April			-			-	(986,784)
	May			-			-	(986,784)
	June			-			-	(986,784)
	July			-			-	(986,784)
	August			-			-	(986,784)
	September			-			-	(986,784)
	October			-			-	(986,784)
	November			-			-	(986,784)
	December			-			-	(986,784)
	YTD Balance	-	-	-	-	-	-	(986,784)
	Cumulative Ending Balance	9,600,575	10,366,049	(765,474)	2,775,672	2,996,983	(221,311)	(986,784)

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.

**Interest Calculation**

2020- Rider 11	Month	NC Program Costs Incurred	Revenue Collected	Cumulative Under/(Over)collected Balance	PPI	Revenue Collected	Cumulative Under/(Over)collected Balance	Total Cumulative Over/Under Collected
	Beginning Balance	9,600,575	10,366,049	(765,474)	2,775,672	2,996,983	(221,311)	(986,784)
	January		(38,138)	(727,336)	(6,183)	(11,026)	(216,467)	(943,803)
	February		(76,575)	(650,761)	(6,183)	(22,139)	(200,511)	(851,272)
	March		(55,884)	(594,877)	(6,183)	(16,157)	(190,537)	(785,414)
	April		(56,295)	(538,582)	(6,183)	(16,276)	(180,443)	(719,025)
	May		(49,007)	(489,575)	(6,183)	(14,169)	(172,458)	(662,033)
	June		(70,591)	(418,984)	(6,183)	(20,409)	(158,231)	(577,215)
	July		(81,283)	(337,701)	(6,183)	(23,500)	(140,914)	(478,615)
	August		(74,657)	(263,044)	(6,183)	(21,585)	(125,512)	(388,556)
	September		(80,257)	(182,787)	(6,183)	(23,204)	(108,491)	(291,278)
	October		(56,201)	(126,586)	(6,183)	(16,249)	(98,425)	(225,011)
	November		(51,817)	(74,769)	(6,183)	(14,981)	(89,627)	(164,396)
	December		(123,063)	48,294	(6,220)	(35,579)	(60,267)	(11,973)
	YTD Balance	-	(813,768)	(74,230)	(74,230)	(235,273)	(60,267)	(11,973)
	Cumulative Ending Balance	9,600,575	9,552,281	48,294	2,701,443	2,761,710	(60,267)	(11,973)

Revenue Requirement:		
Program Costs	(765,474)	0.78
PPI	(221,311)	0.22
<b>Total</b>	<b>(986,784)</b>	
Revenue Given back	(1,075,363)	
Less Interest given back	(26,322)	
<b>Total</b>	<b>(1,049,041)</b>	

**Interest Calculation**

2021- Rider 12	Month	NC Program Costs Incurred	Revenue Collected	Cumulative Under/(Over)collected Balance	PPI	Revenue Collected	Cumulative Under/(Over)collected Balance	Total Cumulative Over/Under Collected
	Beginning Balance	9,600,575	9,552,281	48,294	2,701,443	2,761,710	(60,267)	(11,973)
	January		(2,814)	51,108		3,512	(63,779)	(12,671)
	February		11,741	39,367		(14,652)	(49,127)	(9,760)
	March		7,057	32,310		(8,806)	(40,321)	(8,011)
	April		3,949	28,362		(4,928)	(35,393)	(7,032)
	May		3,854	24,508		(4,809)	(30,584)	(6,076)
	June		8,580	15,927		(10,708)	(19,876)	(3,949)
	July		12,342	3,585		(15,402)	(4,474)	(889)
	August		13,113	(9,528)		(16,364)	11,890	2,362
	September		11,185	(20,713)		(13,959)	25,848	5,135
	October		6,122	(26,835)		(7,640)	33,488	6,653
	November		3,661	(30,495)		(4,568)	38,056	7,561
	December		24,028	(54,523)		(29,985)	68,041	13,518
	YTD Balance	-	102,817	-	-	(128,309)	68,041	13,518
	Cumulative Ending Balance	9,600,575	9,655,099	(54,523)	2,701,443	2,633,401	68,041	13,518

Revenue Requirement:		
698 Program Costs	48,294	(4.03)
PPI	(60,267)	5.03
<b>Total</b>	<b>(11,973)</b>	
(979) Revenue given back	(65,419)	
(2,127) Less: Interest given back + GRT	(39,928)	
<b>Total</b>	<b>(25,491)</b>	
(2,773)	(25,491)	
(1,518)	-	
(908)		
(5,957)		

Duke Energy Carolinas, LLC  
 Docket No. E-7, Sub 1192  
 Estimated Return Calculation - Non- Residential EE Programs Vintage 2016

NC Non- Residential EE	Non-Residential EE Program Costs		NC Allocated EE Program Costs	Total Revenue Collected	Percent Attributable to Program Costs	NC Residential Revenue Collected	(Over)/Under Collection	
	Incurred	NC Allocation %						
		Miller Exhibit 5, pg 3, Line 4						
<b>Beginning Balance - Source Ride</b>	-		50,009,987	81,955,731		(48,395,713)	1,614,274	
2018 January		73.0962827%	-	587,043	-69.29044%	406,765	406,765	
2018 February		73.0962827%	-	(210,295)	-69.29044%	(145,714)	(145,714)	
2018 March		73.0962827%	-	(163,394)	-69.29044%	(113,216)	(113,216)	<b>Program Costs to be Recovered in Rider 10</b>
2018 April		73.0962827%	-	(167,528)	-69.29044%	(116,081)	(116,081)	Revenues to be Collected in Rider 10
2018 May		73.0962827%	-	(183,113)	-69.29044%	(126,880)	(126,880)	
2018 June		73.0962827%	-	(197,490)	-69.29044%	(136,842)	(136,842)	<b>% Revenue to be assigned to Program Costs</b>
2018 July		73.0962827%	-	(221,358)	-69.29044%	(153,380)	(153,380)	(0.6929)
2018 August		73.0962827%	-	(228,025)	-69.29044%	(157,999)	(157,999)	
2018 September		73.0962827%	-	(218,575)	-69.29044%	(151,452)	(151,452)	
2018 October		73.0962827%	-	(208,788)	-69.29044%	(144,670)	(144,670)	
2018 November		73.0962827%	-	(173,646)	-69.29044%	(120,320)	(120,320)	
2018 December		73.0962827%	-	(53,238)	-69.29044%	(36,889)	(36,889)	
			50,009,987	80,517,324		(49,392,392)	617,596	

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
			2019				6.84%			0.766497
<b>Beginning Balance - Source Ride</b>	1,614,274			381,209						
2018 January	2,021,039	0.236149	96,057.10	477,266	1,543,773	0.005700	4,400	4,400	0.766497	5,740
2018 February	1,875,324	0.236149	(34,410.31)	442,856	1,432,468	0.005700	8,482	12,882	0.766497	16,806
2018 March	1,762,108	0.236149	(26,735.95)	416,120	1,345,988	0.005700	7,919	20,801	0.766497	27,137
2018 April	1,646,027	0.236149	(27,412.43)	388,708	1,257,319	0.005700	7,419	28,220	0.766497	36,817
2018 May	1,519,147	0.236149	(29,962.51)	358,745	1,160,402	0.005700	6,891	35,111	0.766497	45,807
2018 June	1,382,306	0.236149	(32,314.99)	326,430	1,055,876	0.005700	6,316	41,427	0.766497	54,047
2018 July	1,228,926	0.236149	(36,220.57)	290,210	938,716	0.005700	5,685	47,112	0.766497	61,463
2018 August	1,070,926	0.236149	(37,311.37)	252,898	818,028	0.005700	5,007	52,118	0.766497	67,995
2018 September	919,475	0.236149	(35,765.15)	217,133	702,342	0.005700	4,333	56,451	0.766497	73,648
2018 October	774,804	0.236149	(34,163.73)	182,969	591,835	0.005700	3,688	60,140	0.766497	78,460
2018 November	654,485	0.236149	(28,413.42)	154,556	499,929	0.005700	3,112	63,251	0.766497	82,520
2018 December	617,596	0.236149	(8,711.31)	145,845	471,751	0.005700	2,769	66,021	0.766497	86,133
							<b>66,021</b>			<b>86,133</b>

Note 1: Amounts represent all revenue actually collected through 2018.

Duke Energy Carolinas, LLC  
 Docket No. E-7, Sub 1230  
 Estimated Return Calculation - Non - Residential DSM Programs Vintage 2016

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
		2019				6.84%			0.766497	
<b>Beginning Balance - Source Ride</b>	(250,374)			(59,126)	(191,249)					
2018 January	(251,927)	0.236149	(367)	(59,492)	(192,435)	0.005700	(1,093)	(1,093)	0.766497	(1,427)
2018 February	(230,010)	0.236149	5,176	(54,317)	(175,694)	0.005700	(1,049)	(2,143)	0.766497	(2,795)
2018 March	(210,641)	0.236149	4,574	(49,743)	(160,898)	0.005700	(959)	(3,102)	0.766497	(4,047)
2018 April	(190,319)	0.236149	4,799	(44,944)	(145,375)	0.005700	(873)	(3,975)	0.766497	(5,186)
2018 May	(168,522)	0.236149	5,147	(39,796)	(128,725)	0.005700	(781)	(4,756)	0.766497	(6,205)
2018 June	(145,244)	0.236149	5,497	(34,299)	(110,945)	0.005700	(683)	(5,439)	0.766497	(7,096)
2018 July	(118,634)	0.236149	6,284	(28,015)	(90,619)	0.005700	(574)	(6,014)	0.766497	(7,845)
2018 August	(91,977)	0.236149	6,295	(21,720)	(70,257)	0.005700	(458)	(6,472)	0.766497	(8,444)
2018 September	(65,905)	0.236149	6,157	(15,563)	(50,341)	0.005700	(344)	(6,816)	0.766497	(8,892)
2018 October	(42,923)	0.236149	5,427	(10,136)	(32,786)	0.005700	(237)	(7,053)	0.766497	(9,201)
2018 November	(22,317)	0.236149	4,866	(5,270)	(17,047)	0.005700	(142)	(7,195)	0.766497	(9,386)
2018 December	10,075	0.236149	7,649	2,379	7,696	0.005700	(27)	(7,221)	0.766497	(9,421)
								(7,221)		(9,421)

Note 1: Amounts represent all revenue actually collected through 2018.

Interest Calculation

2018 - Rider 9	Month	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total Cumulative Under/Over Collected	%
Beginning Balance		11,594,497	11,354,396	240,102	3,352,151	3,282,731	69,419	309,521	DSM Program Costs 11,594,497 0.78
January						-	-	309,521	DSM PPI & GRT 3,352,151 0.22
February						-	-	309,521	Total Revenue Requirement 14,946,648
March						-	-	309,521	
April						-	-	309,521	
May						-	-	309,521	
June						-	-	309,521	
July						-	-	309,521	
August						-	-	309,521	
September						-	-	309,521	
October						-	-	309,521	
November						-	-	309,521	
December						-	-	309,521	
YTD Balance		11,594,497	11,354,396	240,102	3,352,151	3,282,731	69,419		

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1192**  
**Estimated Return Calculation - Non - Residential DSM Programs Vintage 2016**

**Interest Calculation**

2019 - Rider 10	Month	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total Cumulative Over/Under Collected
Beginning Balance		11,594,497	11,354,396	240,102	3,352,151	3,282,731	69,419	309,521
January			192,582	(192,582)		55,678	(55,678)	61,261
February			1,806	(1,806)		522	(522)	58,933
March			(2,074)	2,074		(600)	600	61,607
April			(294)	294		(85)	85	61,986
May			20	(20)		6	(6)	61,960
June			(7)	7		(2)	2	61,969
July			(4)	4		(1)	1	61,974
August			(2,270)	2,270		(656)	656	64,901
September			(31)	31		(9)	9	64,940
October			8	(8)		2	(2)	64,930
November			(8)	8		(2)	2	64,940
December			4,982	(4,982)		1,440	(1,440)	58,517
YTD Balance		-	194,710	(194,710)	-	56,294	(56,294)	58,517
Cumulative Ending Balance		11,594,497	11,549,106	45,391	3,352,151	3,339,025	13,125	58,517

Note: There was no Non-Residential DSM Rider in Rider 10. All revenues collected represented bill corrections, so all revenues were allocated on the same basis as prior year.

**Interest Calculation**

2020- Rider 11	Month	NC Program Costs Incurred	Revenue Collected	Cumulative Under/(Over)collected Balance	PPI	Revenue Collected	Cumulative Under/(Over)collected Balance	Total Cumulative Over/Under Collected
Beginning Balance		11,594,497	11,549,106	45,391	3,352,151	3,339,025	13,125	58,517
January			7,239	38,152	(485)	(3,286)	15,927	54,079
February			41,527	(3,374)	(2,780)	(18,850)	31,998	28,623
March			36,432	(39,807)	(2,439)	(16,538)	46,097	6,290
April			39,543	(79,349)	(2,647)	(17,950)	61,400	(17,950)
May			39,817	(119,166)	(2,665)	(18,074)	76,808	(42,358)
June			47,726	(166,892)	(3,195)	(21,664)	95,278	(71,614)
July			49,697	(216,589)	(3,327)	(22,559)	114,510	(102,078)
August			48,648	(265,237)	(3,256)	(22,083)	133,337	(131,900)
September			53,915	(319,152)	(3,609)	(24,474)	154,202	(164,950)
October			56,754	(375,906)	(3,799)	(25,762)	176,165	(199,741)
November			39,299	(415,205)	(2,631)	(17,839)	191,374	(223,831)
December			43,300	(458,505)	(2,898)	(19,655)	208,130	(250,374)
YTD Balance		-	503,896	(458,505)	(33,730)	(228,735)	208,130	(250,374)
Cumulative Ending Balance		11,594,497	12,053,002	(458,505)	3,318,420	3,110,290	208,130	(250,374)

Revenue Requirement:		
Program Costs	45,391	1.83
PPI	(20,605)	(0.83)
<b>Total</b>	<b>24,787</b>	
Revenue Collected:	276,923	
Less Interest collected:	1,761	
<b>Total</b>	<b>275,161</b>	

**Interest Calculation**

2021- Rider 12	Month	NC Program Costs Incurred	Revenue Collected	Cumulative Under/(Over)collected Balance	PPI	Revenue Collected	Cumulative Under/(Over)collected Balance	Total Cumulative Over/Under Collected
Beginning Balance		11,594,497	12,053,002	(458,505)	3,318,420	3,110,290	208,130	(250,374)
January			2,504	(461,009)		(952)	209,082	(251,927)
February			(40,135)	(420,874)		18,219	190,864	(230,010)
March			(35,471)	(385,403)		16,101	174,762	(210,641)
April			(37,215)	(348,188)		16,893	157,869	(190,319)
May			(39,917)	(308,271)		18,120	139,750	(168,522)
June			(42,628)	(265,643)		19,350	120,399	(145,244)
July			(48,729)	(216,914)		22,120	98,279	(118,634)
August			(48,816)	(168,097)		22,159	76,120	(91,977)
September			(47,746)	(120,351)		21,673	54,446	(65,905)
October			(42,087)	(78,264)		19,105	35,342	(42,923)
November			(37,734)	(40,530)		17,129	18,213	(22,317)
December			(50,606)	10,075		22,789	(4,575)	5,500
YTD Balance		-	(468,580)	10,075		212,706	(4,575)	5,500
Cumulative Ending Balance		11,594,497	11,584,422	10,075	3,318,420	3,322,996	(4,575)	5,500

Revenue Requirement:		
Program Costs	(458,505)	1.83
PPI	208,130	(0.83)
<b>Total</b>	<b>(250,374)</b>	
Revenue Collected:	(258,546)	
Less Interest collected:	(2,670)	
<b>Total</b>	<b>(255,876)</b>	

Duke Energy Carolinas, LLC  
DSM/EE Actual Revenues Collected from Years 2017-2019 (By Vintage)  
and Estimated 2020 Collections from Rider 11 (by Vintage)  
Docket Number E-7, Sub 1230  
For Vintage Year 2017-2020 Estimate and True Up Calculations

			Actual 2016	Actual 2017	Actual 2018	Actual 2019	Estimated 2020	Total
			Rider 7	Rider 8	Rider 9	Rider 10	Rider 11 <sup>(1)</sup>	
<b>Residential</b>								
<b>Line</b>		<b>Vintage</b>						
1	EE/DSM	Year 2016	58,184,868	5,570,022	27,108,101	(2,551,337)	967,614	89,279,269
2	EE/DSM	Year 2017		61,914,541	4,435,871	35,762,325	5,078,935	107,191,672
3		Year 2018			83,631,851	6,302,019	25,178,611	115,112,481
4		Year 2019				77,019,837	5,232,466	82,252,303
5		Year 2020					66,898,601	66,898,601
6	<b>Total Residential</b>		<b>\$ 58,184,868</b>	<b>\$ 67,484,563</b>	<b>\$ 115,175,822</b>	<b>\$ 116,532,845</b>	<b>\$ 103,356,227</b>	<b>\$ 371,455,057</b>
<b>Non-Residential</b>								
7	EE	Year 2016	45,662,897	8,632,771	36,292,834	(1,438,407)	9,273,079	98,423,175
8		Year 2017		46,928,129	10,882,796	64,212,173	17,144,751	139,167,848
9		Year 2018			51,998,801	12,546,122	14,321,847	78,866,770
10		Year 2019				52,862,599	8,746,000	61,608,599
11		Year 2020					52,968,365	52,968,365
12	DSM	Year 2016	14,637,127	251,004	276,923	(258,546)	14,674	14,921,181
13		Year 2017		15,361,431	(1,084)	86,448	1,084	15,447,879
14		Year 2018			14,074,924	777,733	1,398,093	16,250,749
15		Year 2019				15,674,069		15,674,069
16		Year 2020					19,931,130	19,931,130
17	<b>Total Non-Residential</b>		<b>\$ 60,300,024</b>	<b>\$ 71,173,336</b>	<b>\$ 113,525,193</b>	<b>\$ 144,462,190</b>	<b>\$ 123,799,023</b>	<b>\$- \$ 513,259,766</b>
18	<b>Total Revenue</b>			<b>\$ 138,657,899</b>	<b>\$ 228,701,016</b>	<b>\$ 260,995,035</b>	<b>\$ 227,155,250</b>	<b>\$ 884,714,823</b>

<sup>(1)</sup> Rider 11 estimates are based on Order issued in Docket No. E-7 Sub 1192 dated 10/18/19

Duke Energy Carolinas, LLC  
Vintage Year 2017 Allocation Factors for the Period January 1, 2017 - December 31, 2017  
Docket Number E-7, Sub 1230  
Allocation Factors

			<u>MWH</u>		
Line	<b>New Mechanism Sales Allocator at Generator</b>				
1	NC Retail MWH Sales Allocation	Company Records	60,219,051		
2	SC Retail MWH Sales Allocation	Company Records	<u>22,489,484</u>		
3	Total Retail	Line 1 + Line 2	82,708,535		
<b>Allocation 1 to state based on kWh sales</b>					
4	NC Retail	Line 1 / Line 3	<b>72.8087506%</b>		
<b>Demand Allocators</b>			<u>NC</u>	<u>SC</u>	<u>Total</u>
5	Residential	Company Records	5,545,784	1,803,958	7,349,742
6	Non Residential	Company Records	<u>6,573,854</u>	<u>2,480,404</u>	<u>9,054,258</u>
7	Total	Line 5 + Line 6	12,119,638	4,284,362	16,404,000
<b>Allocation 2 to state based on peak demand</b>					
8	NC Retail	Line 7, NC / Line 7 Total	<b>73.8822117%</b>		
<b>Allocation 3 NC res vs non-res Peak Demand to retail system peak</b>					
9	NC Residential	Line 5 NC/ Line 7 Total	<b>33.8075104%</b>		
10	NC Non-residential	Line 6 NC/ Line 7 Total	<b>40.0747013%</b>		

Duke Energy Carolinas, LLC  
Vintage Year 2018 Allocation Factors for the Period January 1, 2018 - December 31, 2018  
Docket Number E-7, Sub 1230  
Allocation Factors

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



Duke Energy Carolinas, LLC  
Vintage Year 2019 Allocation Factors for the Period January 1, 2019 - December 31, 2021  
Docket Number E-7, Sub 1230  
Allocation Factors

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

**Duke Energy Carolinas, LLC**  
**DSM/EE Cost Recovery Rider 12**  
**Docket Number E-7 Sub 1230**  
**Forecasted 2021 kWh Sales for Rate Period for Vintage Years 2016-2021**

<b>Fall 2019 Sales Forecast - kWhs</b>		<b>Forecasted 2021 sales</b>		
<b>North Carolina Retail:</b>				
Line				
1	Residential	<b>22,092,324,452</b>		
2	Non-Residential	<b>35,749,634,396</b>		
3	Total Retail	<b>57,841,958,848</b>		
	<b>NC Opt Out Sales</b>	<b>Total Usage</b>	<b>Opt-Outs</b>	<b>Net Usage</b>
	Vintage 2016 Actual Opt Out			
2	EE	35,749,634,396	19,079,024,043	16,670,610,353
3	DSM	35,749,634,396	18,785,507,588	16,964,126,808
	Vintage 2017 Actual Opt Out			
4	EE	35,749,634,396	19,250,763,452	16,498,870,944
5	DSM	35,749,634,396	18,815,719,996	16,933,914,400
	Vintage 2018 Actual Opt Out			
6	EE	35,749,634,396	19,820,130,197	15,929,504,199
7	DSM	35,749,634,396	18,917,095,657	16,832,538,740
	Vintage 2019 Actual Opt Out			
8	EE	35,749,634,396	20,042,218,854	15,707,415,542
9	DSM	35,749,634,396	18,852,615,603	16,897,018,794
	Vintage 2020 Estimated Opt Out			
10	EE	35,749,634,396	20,419,288,797	15,330,345,599
11	DSM	35,749,634,396	18,851,271,603	16,898,362,794
	Vintage 2021 Estimated Opt Out			
12	EE	35,749,634,396	20,419,288,797	15,330,345,599
13	DSM	35,749,634,396	18,851,271,603	16,898,362,794

Rider EE (NC)  
ENERGY EFFICIENCY RIDERAPPLICABILITY (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, 2021, 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 2018-2021 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 2017-2021.

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, as revised by Docket No. E-7, Sub 1130, Order dated August 23, 2017.

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 opt out).
- 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.
- 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).

Rider EE (NC)  
 ENERGY EFFICIENCY RIDER

- 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, 2021 through December 31, 2021 including utility assessments are as follows:

<u>Residential</u>	Vintage 2016 <sup>1</sup> , 2017 <sup>1</sup> , 2018 <sup>1</sup> , 2019 <sup>1</sup>	0.1011¢ per kWh
	Vintage 2019 <sup>2</sup> , 2020 <sup>2</sup> , 2021 <sup>2</sup>	<u>0.4184¢ per kWh</u>
	Total Residential Rate	0.5195¢ per kWh
<u>Nonresidential</u>		
Vintage 2016 <sup>3</sup>		
Energy Efficiency		0.0193¢ per kWh
Demand Side Management		(0.0001)¢ per kWh
Vintage 2017 <sup>3</sup>		
Energy Efficiency		0.0342¢ per kWh
Demand Side Management		0.0000¢ per kWh
Vintage 2018 <sup>3</sup>		
Energy Efficiency		0.0088¢ per kWh
Demand Side Management		(0.0014)¢ per kWh
Vintage 2019 <sup>3</sup>		
Energy Efficiency		0.0462¢ per kWh
Demand Side Management		0.0019¢ per kWh
Vintage 2020 <sup>3</sup>		
Energy Efficiency		0.0612¢ per kWh
Demand Side Management		0.0000¢ per kWh
Vintage 2021 <sup>3</sup>		
Energy Efficiency		0.3522¢ per kWh
Demand Side Management		0.1200¢ per kWh
Total Nonresidential		0.6423¢ per kWh

<sup>1</sup> Includes the true-up of program costs, shared savings and lost revenues from Year 1 of Vintage 2019 and Year 2 of Vintage 2018, Year 3 of 2017 and Year 4 of 2016

<sup>2</sup> Includes prospective component of Vintage 2019, 2020 and 2021

<sup>3</sup> 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.

Duke Energy Carolinas, LLC  
Vintage 2017 Actual for January 1, 2017 to December 31, 2017  
Docket Number E-7, Sub 1230  
Load Impacts and Estimated Revenue Requirements, excluding Lost Revenue by Program

	System kW Reduction - Summer Peak	System Energy Reduction (kWh)	A System NPV of Avoided Cost	B System Cost	C = (A-B) *11.5% Earned Utility Incentive	D= B+C System Cost Plus Incentive	E NC Retail kWh Sales Allocation Factor (Miller Exhibit 5 pg. 1)	NC Residential Revenue Requirement D * E	
<b>Residential Programs</b>									
<b>EE Programs</b>									
1 Appliance Recycling Program	-	-	\$ -	\$ 5,307	\$ (610)	\$ 4,697	72.8087506%	\$ 3,420	
2 Energy Efficiency Education	1,393	5,932,086	3,597,724	2,077,611	174,813	2,252,424	72.8087506%	1,639,962	
3 Energy Efficient Appliances and Devices	24,605	137,909,103	105,352,687	30,340,728	8,626,375	38,967,103	72.8087506%	28,371,461	
4 Residential – Smart Saver Energy Efficiency Program	1,850	6,712,977	7,287,263	7,403,327	(13,347)	7,389,980	72.8087506%	5,380,552	
5 Income Qualified Energy Efficiency and Weatherization Assistance	771	5,341,624	3,185,867	5,505,992	-	5,505,992	72.8087506%	4,008,844	
6 Multi-Family Energy Efficiency	2,056	19,038,529	13,539,656	3,168,422	1,192,692	4,361,114	72.8087506%	3,175,272	
7 Energy Assessments	1,040	7,720,549	6,602,773	2,909,098	424,773	3,333,871	72.8087506%	2,427,350	
8 Subtotal	31,715	182,654,868	\$ 139,565,970	\$ 51,410,486	\$ 10,404,695	\$ 61,815,181		\$ 45,006,861	
9 My Home Energy Report (1)	79,070	311,368,855	21,728,369	13,812,250	910,354	14,722,603	72.8087506%	10,719,344	
10 Total for Residential Energy Efficiency Programs	110,786	494,023,724	\$ 161,294,339	\$ 65,222,736	\$ 11,315,049	\$ 76,537,785		\$ 55,726,205	
<b>NC Residential Peak Demand Allocation Factor (Miller Exhibit 5 pg. 1)</b>									
								D11* E11	
11 SubTotal DSM Programs (2)	846,941	2,943,906	105,087,510	\$ 29,822,652	\$ 8,655,459	\$ 38,478,111	33.8075104%	\$ 13,008,491	
12 Total DSM Programs									13,008,491
13 Total Residential Revenue Requirement									\$ 68,734,696
<b>Non-Residential Programs</b>									
<b>EE Programs</b>									
14 Non Residential Smart Saver Custom Energy Assessments	1,627	15,791,732	\$ 10,272,302	\$ 2,139,875	\$ 935,229	\$ 3,075,104	72.8087506%	\$ 2,238,945	
15 Non Residential Smart Saver Custom	6,010	40,609,855	34,693,083	7,304,838	3,149,648	10,454,486	72.8087506%	7,611,781	
16 Non Residential Smart Saver Energy Efficient Food Service Products	112	1,383,542	959,251	306,488	75,068	381,556	72.8087506%	277,806	
17 Non Residential Smart Saver Energy Efficient HVAC Products	894	2,954,877	2,958,336	1,560,769	160,720	1,721,489	72.8087506%	1,253,395	
18 Non Residential Smart Saver Energy Efficient Lighting Products	47,322	270,572,885	240,054,511	66,689,770	19,936,945	86,626,715	72.8087506%	63,071,829	
19 Non Residential Smart Saver Energy Efficient Pumps and Drives Products	687	4,806,849	3,070,044	528,937	292,227	821,164	72.8087506%	597,779	
20 Non Residential Smart Saver Energy Efficient IT Products	-	2,945	523	61,215	(6,980)	54,235	72.8087506%	39,488	
21 Non Residential Smart Saver Energy Efficient Process Equipment Products	99	651,289	530,295	162,413	42,306	204,719	72.8087506%	149,054	
22 Non Residential Smart Saver Performance Incentive	3	12,373	8,958	320,559	(35,834)	284,725	72.8087506%	207,305	
23 Small Business Energy Saver	17,263	90,297,362	63,169,894	17,350,972	5,269,176	22,620,148	72.8087506%	16,469,447	
24 Smart Energy in Offices	2,138	10,272,154	1,067,480	891,010	20,294	911,304	72.8087506%	663,509	
25 Business Energy Report	3	42,398	696	126,680	-	126,680	72.8087506%	92,234	
26 Sub-Total for Non-Residential Energy Efficiency Programs	76,158	437,398,260	\$ 356,785,373	\$ 97,443,527	\$ 29,838,800	\$ 127,282,328		\$ 92,672,672	
27 Total for Non-Residential Energy Efficiency Programs									\$ 92,672,672
<b>NC Non-Residential Peak Demand Allocation Factor (Miller Exhibit 5 pg. 1)</b>									
								D24*E24	
28 Total DSM Programs(2)	846,941	2,943,906	\$ 105,087,510	\$ 29,822,652	\$ 8,655,459	\$ 38,478,111	40.0747013%	\$ 15,419,988	
29 Total Non-Residential DSM Programs									15,419,988
30 Total Non-Residential Revenue Requirement									\$ 108,092,661
<b>Total DSM Program Breakdown</b>									
31 Power Manager (Residential)	501,118	-	\$ 61,074,105	\$ 14,021,500	\$ 5,411,050	\$ 19,432,549			
32 EnergyWise for Business (Non-Residential)	5,453	2,943,906	\$ 2,530,761	\$ 2,484,618	\$ 5,306	\$ 2,489,924			
33 Power Share CallOption (Non-Residential)	-	-	\$ -	\$ -	\$ -	\$ -			
34 Power Share (Non-Residential)	340,369	-	\$ 41,482,644	\$ 13,316,535	\$ 3,239,103	\$ 16,555,638			
35 Total DSM	846,941	2,943,906	\$ 105,087,510	\$ 29,822,652	\$ 8,655,459	\$ 38,478,111	73.8822117%	\$ 28,428,479	

(1) My Home Energy Report impacts reflect cumulative capability as of end of vintage year, including impacts for participants from prior vintage  
(2) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak

Duke Energy Carolinas  
Evans Exhibit 1  
Vintage 2018 True Up - January 1, 2018 to December 31, 2018  
Docket Number E-7, Sub 1230  
Load Impacts and Estimated Revenue Requirements by Program

	A	B	C	D	E	F	G	H		
				=(A-B)*C	=(B*D)					
	System kW Reduction - Summer Peak	System Energy Reduction (kWh)	System NPV of Avoided Costs	Total Cost	Shared Savings %	Incentive	System Revenue Requirement	NC Retail kWh Sales Allocation Factor	NC Allocation Factor (2)	NC Residential Revenue Requirement
<b>Residential Programs</b>										
<b>EE Programs</b>										
1 Energy Efficiency Education	967	5,530,707	\$ 2,863,507	\$ 1,992,260	11.5%	\$ 100,193	\$ 2,092,453	72.7130507%		E1 * F1 \$ 1,521,487
2 Energy Efficient Appliances and Devices	32,802	195,213,017	\$ 135,857,936	\$ 42,687,244	11.5%	\$ 10,714,630	\$ 53,401,873	72.7130507%		E2 * F2 \$ 38,830,131
3 HVAC Energy Efficiency	1,640	6,367,174	\$ 7,088,531	\$ 6,955,146	11.5%	\$ 15,339	\$ 6,970,485	72.7130507%		E3 * F3 \$ 5,068,453
4 Income Qualified Energy Efficiency and Weatherization Assistance	888	6,845,653	\$ 4,253,631	\$ 6,490,735	0.0%	\$ -	\$ 6,490,735	72.7130507%		E4 * F4 \$ 4,719,611
5 Multi-Family Energy Efficiency	2,303	21,288,910	\$ 13,857,877	\$ 3,604,921	11.5%	\$ 1,179,090	\$ 4,784,011	72.7130507%		E5 * F5 \$ 3,478,601
6 Energy Assessments	929	7,716,668	\$ 5,756,902	\$ 2,836,229	11.5%	\$ 335,877	\$ 3,172,106	72.7130507%		E6 * F6 \$ 2,306,535
7 Total for Residential Conservation Programs	39,528	242,962,129	\$ 169,678,386	\$ 64,566,534		\$ 12,345,130	\$ 76,911,664			\$ 55,924,818
8 My Home Energy Report (1)	95,887	344,759,844	\$ 22,684,688	\$ 12,765,286	11.5%	\$ 1,140,731	\$ 13,906,017	72.7130507%		E8 * F8 \$ 10,111,489
9 Total Residential Conservation and Behavioral Programs	135,416	587,721,974	\$ 192,363,074	\$ 77,331,820		\$ 13,485,861	\$ 90,817,681			\$ 66,036,307
<b>NC Residential Peak Demand Allocation Factor</b>										
10 PowerManager	533,506	-	\$ 61,924,152	\$ 14,423,610	11.5%	\$ 5,462,562	\$ 19,886,172	73.6287551%	43.675154%	(E10+E26) *F10 *G10 \$ 12,360,454
11 Total Residential	668,922	587,721,974	\$ 254,287,226	\$ 91,755,430		\$ 18,948,423	\$ 110,703,853			\$ 78,396,761
<b>Non-Residential Programs</b>										
<b>EE Programs</b>										
12 Non Residential Smart Saver Custom Technical Assessments	13	83,588	\$ 67,306	\$ 407,293	11.5%	\$ (39,099)	\$ 368,195	72.7130507%		E12 * F12 \$ 267,726
13 Non Residential Smart Saver Custom	4,054	30,333,040	\$ 23,322,046	\$ 6,068,902	11.5%	\$ 1,984,112	\$ 8,055,013	72.7130507%		E13 * F13 \$ 5,855,592
14 Non Residential Smart Saver Energy Efficient Food Service Products	59	741,466	\$ 431,679	\$ 235,605	11.5%	\$ 22,549	\$ 258,153	72.7130507%		E14 * F14 \$ 187,711
15 Non Residential Smart Saver Energy Efficient HVAC Products	893	2,908,386	\$ 2,810,168	\$ 1,620,748	11.5%	\$ 136,783	\$ 1,757,531	72.7130507%		E16 * F16 \$ 1,277,955
16 Non Residential Smart Saver Energy Efficient Lighting Products	31,556	178,171,791	\$ 146,534,847	\$ 25,872,380	11.5%	\$ 13,876,184	\$ 39,748,564	72.7130507%		E17 * F17 \$ 28,902,393
17 Non Residential Smart Saver Energy Efficient Pumps and Drives Products	421	2,669,016	\$ 1,617,749	\$ 277,785	11.5%	\$ 154,096	\$ 431,881	72.7130507%		E18 * F18 \$ 314,034
18 Non Residential Energy Efficient ITEE	-	17,639	\$ 3,025	\$ 36,875	11.5%	\$ (3,893)	\$ 32,982	72.7130507%		E19 * F19 \$ 23,982
19 Non Residential Energy Efficient Process Equipment Products	75	331,222	\$ 226,725	\$ 67,509	11.5%	\$ 18,310	\$ 85,819	72.7130507%		E20 * F20 \$ 62,402
20 Non Residential Smart Saver Performance Incentive	168	3,271,186	\$ 1,671,793	\$ 479,610	11.5%	\$ 137,101	\$ 616,711	72.7130507%		E21 * F21 \$ 448,429
21 Small Business Energy Saver	13,374	76,696,523	\$ 46,832,942	\$ 15,977,993	11.5%	\$ 3,548,319	\$ 19,526,312	72.7130507%		E22 * F22 \$ 14,198,177
22 Small Energy in Offices	310	1,488,592	\$ 143,285	\$ 219,748	11.5%	\$ (8,793)	\$ 210,954	72.7130507%		E23 * F23 \$ 153,391
23 Total for Non-Residential Conservation Programs	50,922	296,712,448	\$ 223,661,565	\$ 51,264,448		\$ 19,825,668	\$ 71,090,116			\$ 51,691,792
<b>NC Non-Residential Peak Demand Allocation Factor</b>										
24 EnergyWise for Business	7,999	2,599,904	\$ 2,279,967	\$ 3,062,816	11.5%	\$ (90,028)	\$ 2,972,789			
25 PowerShare	332,631	-	\$ 36,012,817	\$ 12,922,977	11.5%	\$ 2,655,332	\$ 15,578,309			
26 Total for Non-Residential DSM Programs	340,629	2,599,904	\$ 38,292,784	\$ 15,985,794		\$ 2,565,304	\$ 18,551,097	73.6287551%	56.324846%	(E10+E26) *F26 *G26 \$ 15,940,429
27 Total Non Residential	391,552	299,312,352	\$ 261,954,349	\$ 67,250,242		\$ 22,390,972	\$ 89,641,214			\$ 67,632,221
28 Total All Programs	1,060,474	887,034,326	\$ 516,241,575	\$ 159,005,671		\$ 41,339,396	\$ 200,345,067			\$ 146,028,982

(1) My Home Energy Report impacts reflect cumulative capability as of end of vintage year, including impacts for participants from prior vintages  
(2) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak

Duke Energy Carolinas  
Evans Exhibit 1  
Vintage 2019 True Up - January 1, 2019 to December 31, 2019  
Docket Number E-7, Sub 1230  
Load Impacts and Estimated Revenue Requirements by Program

	A	B	C	D	E	F	G	H		
				=(A-B)*C	=(B-D)					
	System kW Reduction -Summer Peak	System Energy Reduction (kWh)	System NPV of Avoided Costs	Total Cost	Shared Savings %	Incentive	System Revenue Requirement	NC Retail kWh Sales Allocation Factor	NC Allocation Factor (2)	NC Residential Revenue Requirement
<b>Residential Programs</b>										
<b>EE Programs</b>										
1 Energy Efficiency Education	941	6,713,787	\$ 2,519,645	\$ 1,644,077	11.5%	\$ 100,690	\$ 1,744,767	73.0903918%		E1 * F1 \$ 1,275,257
2 Energy Efficient Appliances and Devices	31,803	187,351,705	\$ 102,051,327	\$ 40,433,533	11.5%	\$ 7,086,046	\$ 47,519,579	73.0903918%		E2 * F2 \$ 34,732,247
3 HVAC Energy Efficiency	2,029	7,329,114	\$ 7,079,940	\$ 7,402,907	11.5%	\$ (37,141)	\$ 7,365,766	73.0903918%		E3 * F3 \$ 5,383,667
4 Income Qualified Energy Efficiency and Weatherization Assistance	1,074	8,782,273	\$ 3,570,760	\$ 7,344,325	0.0%	\$ -	\$ 7,344,325	73.0903918%		E4 * F4 \$ 5,367,996
5 Multi-Family Energy Efficiency	2,649	24,086,174	\$ 11,891,700	\$ 3,681,262	11.5%	\$ 944,200	\$ 4,625,463	73.0903918%		E5 * F5 \$ 3,380,769
6 Energy Assessments	946	7,886,916	\$ 4,413,585	\$ 3,153,757	11.5%	\$ 144,880	\$ 3,298,637	73.0903918%		E6 * F6 \$ 2,410,987
7 Total for Residential Conservation Programs	39,343	242,149,969	\$ 131,526,956	\$ 63,659,861		\$ 8,238,676	\$ 71,898,537			\$ 52,550,923
8 My Home Energy Report (1)	91,387	328,439,103	\$ 23,361,954	\$ 10,558,344	11.5%	\$ 1,472,415	\$ 12,030,759	73.0903918%		E8 * F8 \$ 8,793,329
9 Total Residential Conservation and Behavioral Programs	130,729	570,589,071	\$ 154,888,911	\$ 74,218,205		\$ 9,711,091	\$ 83,929,296			\$ 61,344,252
<b>NC Residential Peak Demand Allocation Factor</b>										
10 PowerManager	568,235	-	\$ 69,783,157	\$ 13,386,942	11.5%	\$ 6,485,565	\$ 19,872,507	74.2414264%	45.955615%	(E10+E26) *F10 *G10 \$ 13,583,508
11 Total Residential	698,965	570,589,071	\$ 224,672,068	\$ 87,605,147		\$ 16,196,656	\$ 103,801,803			\$ 74,927,760
<b>Non-Residential Programs</b>										
<b>EE Programs</b>										
12 Non Residential Smart Saver Custom Technical Assessments	148	1,930,762	\$ 691,285	\$ 296,006	11.5%	\$ 45,457	\$ 341,463	73.0903918%		E12 * F12 \$ 249,577
13 Non Residential Smart Saver Custom	10,109	52,522,612	\$ 35,884,367	\$ 8,873,872	11.5%	\$ 3,106,207	\$ 11,980,079	73.0903918%		E13 * F13 \$ 8,756,287
14 Non Residential Smart Saver Energy Efficient Food Service Products	76	870,041	\$ 364,227	\$ 339,996	11.5%	\$ 2,787	\$ 342,782	73.0903918%		E14 * F14 \$ 250,541
15 Non Residential Smart Saver Energy Efficient HVAC Products	1,367	5,950,986	\$ 4,481,911	\$ 2,208,364	11.5%	\$ 261,458	\$ 2,469,822	73.0903918%		E16 * F16 \$ 1,805,202
16 Non Residential Smart Saver Energy Efficient Lighting Products	28,280	149,658,444	\$ 97,967,602	\$ 20,834,766	11.5%	\$ 8,870,276	\$ 29,705,042	73.0903918%		E17 * F17 \$ 21,711,532
17 Non Residential Energy Efficient Pumps and Drives Products	166	1,043,899	\$ 510,415	\$ 189,172	11.5%	\$ 36,943	\$ 226,115	73.0903918%		E18 * F18 \$ 165,268
18 Non Residential Energy Efficient ITEE	-	8,442	\$ 1,038	\$ 44,335	11.5%	\$ (4,979)	\$ 39,355	73.0903918%		E19 * F19 \$ 28,765
19 Non Residential Energy Efficient Process Equipment Products	84	540,487	\$ 310,293	\$ 119,843	11.5%	\$ 21,902	\$ 141,745	73.0903918%		E20 * F20 \$ 103,602
20 Non Residential Smart Saver Performance Incentive	391	4,545,995	\$ 2,238,186	\$ 785,165	11.5%	\$ 167,097	\$ 952,262	73.0903918%		E21 * F21 \$ 696,012
21 Small Business Energy Saver	9,196	53,674,194	\$ 25,661,729	\$ 11,421,399	11.5%	\$ 1,637,638	\$ 13,059,037	73.0903918%		E22 * F22 \$ 9,544,901
22 Smart Energy in Offices	-	-	\$ -	\$ -	11.5%	\$ -	\$ -	73.0903918%		E23 * F23 \$ -
23 Total for Non-Residential Conservation Programs	49,817	270,745,861	\$ 168,111,054	\$ 45,112,917		\$ 14,144,786	\$ 59,257,703			\$ 43,311,687
<b>NC Non-Residential Peak Demand Allocation Factor</b>										
24 EnergyWise for Business	11,598	2,704,118	\$ 2,728,428	\$ 3,687,462	11.5%	\$ (110,289)	\$ 3,577,173	74.2414264%	54.044385%	(E10+E26) *F26 *G26 \$ 15,974,377
25 PowerShare	342,590	-	\$ 42,072,382	\$ 13,022,816	11.5%	\$ 3,340,700	\$ 16,363,516			\$ 59,286,064
26 Total for Non-Residential DSM Programs	354,188	2,704,118	\$ 44,800,810	\$ 16,710,278		\$ 3,230,411	\$ 19,940,689			\$ 134,213,824
27 Total Non Residential	404,005	273,449,978	\$ 212,911,864	\$ 61,823,195		\$ 17,375,197	\$ 79,198,392			\$ 59,286,064
28 Total All Programs	1,102,970	844,039,050	\$ 437,583,932	\$ 149,428,343		\$ 33,571,853	\$ 183,000,195			\$ 134,213,824

(1) My Home Energy Report impacts reflect cumulative capability as of end of vintage year, including impacts for participants from prior vintages  
(2) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak

Duke Energy Carolinas  
Evans Exhibit 1  
Vintage 2020 Estimate - January 1, 2021 to December 31, 2021  
Docket Number E-7, Sub 1230  
Load Impacts and Estimated Revenue Requirements by Program

	A	B	C	D	E	F	G	H			
				=(A-B)*C	=(B+D)						
	System kW Reduction - Summer Peak	System kW Reduction - Winter Peak	System Energy Reduction (kWh)	System NPV of Avoided Costs	Total Cost	Shared Savings %	Incentive	System Revenue Requirement	NC Retail kWh Sales Allocation Factor	NC Allocation Factor (Z)	NC Residential Revenue Requirement
<b>Residential Programs</b>											
<b>EE Programs</b>											
1 Energy Efficiency Education Program for Schools	997	1,407	7,951,567	\$ 3,022,045	\$ 2,315,055	11.5%	\$ 81,304	\$ 2,396,358	73.0903918%		E2 * F2 \$ 1,751,508
2 Energy Efficient Appliances and Devices	9,790	5,988	56,621,851	\$ 26,094,584	\$ 10,615,734	11.5%	\$ 1,780,068	\$ 12,395,802	73.0903918%		E3 * F3 \$ 9,060,140
3 HVAC Energy Efficiency	1,347	1,284	5,570,374	\$ 4,513,202	\$ 5,936,054	11.5%	\$ (163,628)	\$ 5,772,426	73.0903918%		E4 * F4 \$ 4,219,089
4 Income Qualified Energy Efficiency and Weatherization Assistance	1,635	1,798	8,977,504	\$ 5,244,432	\$ 8,077,022	0.0%	\$ -	\$ 8,077,022	73.0903918%		E5 * F5 \$ 5,903,527
5 Multi-Family Energy Efficiency	2,983	4,947	28,264,645	\$ 14,210,714	\$ 4,853,158	11.5%	\$ 1,076,119	\$ 5,929,277	73.0903918%		E6 * F6 \$ 4,333,732
6 Energy Assessments	1,778	1,264	14,921,990	\$ 7,542,872	\$ 6,105,383	11.5%	\$ 165,311	\$ 6,270,694	73.0903918%		E7 * F7 \$ 4,583,275
7 Total for Residential Conservation Programs	18,528	16,688	122,307,332	\$ 60,627,849	\$ 37,902,406		\$ 2,939,174	\$ 40,841,580			\$ 29,851,271
8 My Home Energy Report (1)	94,985	39,714	342,160,803	\$ 22,825,595	\$ 12,932,554	11.5%	\$ 1,137,700	\$ 14,070,254	73.0903918%		E9 * F9 \$ 10,284,004
9 Total Residential Conservation and Behavioral Programs	113,514	56,402	464,468,135	\$ 83,453,445	\$ 50,834,960		\$ 4,076,874	\$ 54,911,833			\$ 40,135,274
<b>NC Residential Peak Demand Allocation Factor</b>											
10 PowerManager	658,987	-	-	\$ 82,948,182	\$ 20,427,903	11.5%	\$ 7,189,832	\$ 27,617,735	74.2414264%	45.9556149%	(E11+E29) *F11 *G11 \$ 17,221,124
11 Total Residential	772,501	56,402	464,468,135	\$ 166,401,626	\$ 71,262,862		\$ 11,266,706	\$ 82,529,568			\$ 57,356,398
<b>Non-Residential Programs</b>											
<b>EE Programs</b>											
12 Non Residential Smart Saver Custom Technical Assessments	626	626	5,482,371	\$ 2,779,419	\$ 1,106,646	11.5%	\$ 192,369	\$ 1,299,015	73.0903918%		E13 * F13 \$ 949,455
13 Non Residential Smart Saver Custom	7,579	7,579	53,115,768	\$ 29,177,559	\$ 10,192,972	11.5%	\$ 2,183,228	\$ 12,376,199	73.0903918%		E14 * F14 \$ 9,045,813
14 Non Residential Smart Saver Energy Efficient Food Service Products	212	196	4,280,461	\$ 1,428,585	\$ 1,057,658	11.5%	\$ 42,657	\$ 1,100,315	73.0903918%		E16 * F16 \$ 804,224
15 Non Residential Smart Saver Energy Efficient HVAC Products	1,118	439	3,698,306	\$ 2,369,564	\$ 1,732,792	11.5%	\$ 73,229	\$ 1,806,021	73.0903918%		E17 * F17 \$ 1,320,028
16 Non Residential Smart Saver Energy Efficient Lighting Products	27,805	26,034	156,866,525	\$ 94,718,674	\$ 24,280,837	11.5%	\$ 8,100,351	\$ 32,381,188	73.0903918%		E18 * F18 \$ 23,667,537
17 Non Residential Smart Saver Energy Efficient Pumps and Drives Products	429	424	2,717,418	\$ 1,234,566	\$ 424,983	11.5%	\$ 93,102	\$ 518,085	73.0903918%		E19 * F19 \$ 378,671
18 Non Residential Energy Efficient ITEE	-	-	272,355	\$ 28,640	\$ 47,381	11.5%	\$ (2,155)	\$ 45,226	73.0903918%		E20 * F20 \$ 33,056
19 Non Residential Energy Efficient Process Equipment Products	186	206	877,998	\$ 382,954	\$ 117,383	11.5%	\$ 30,541	\$ 147,924	73.0903918%		E21 * F21 \$ 108,118
20 Non Residential Smart Saver Performance Incentive	1,701	1,701	14,901,572	\$ 7,088,559	\$ 2,365,586	11.5%	\$ 543,142	\$ 2,908,728	73.0903918%		E22 * F22 \$ 2,126,000
21 Small Business Energy Saver	9,404	5,944	50,790,447	\$ 23,817,495	\$ 11,026,688	11.5%	\$ 1,470,943	\$ 12,497,630	73.0903918%		E23 * F23 \$ 9,134,567
22 Total for Non-Residential Conservation Programs	49,060	43,150	293,003,221	\$ 163,026,017	\$ 52,352,927		\$ 12,727,405	\$ 65,080,332			\$ 47,567,470
<b>NC Non-Residential Peak Demand Allocation Factor</b>											
23 EnergyWise for Business	20,801	-	2,557,568	\$ 3,489,310	\$ 5,981,812	11.5%	\$ (286,638)	\$ 5,695,174			
24 PowerShare	344,454	664	-	\$ 43,471,361	\$ 13,743,409	11.5%	\$ 3,418,714	\$ 17,162,124			
25 Total for Non-Residential DSM Programs	365,255	664	2,557,568	\$ 46,960,671	\$ 19,725,221		\$ 3,132,077	\$ 22,857,298	74.2414264%	54.0443851%	(E11+E29) *F29 *G29 \$ 20,252,260
26 Total Non Residential	414,316	43,814	295,560,789	\$ 209,986,688	\$ 72,078,147		\$ 15,859,482	\$ 87,937,630			\$ 67,815,730
27 Total All Programs	1,186,817	100,217	760,028,924	\$ 376,388,314	\$ 143,341,010		\$ 27,126,188	\$ 170,467,198			\$ 125,176,128

(1) My Home Energy Report impacts reflect cumulative capability as of end of vintage year, including impacts for participants from prior vintages  
(2) Total System DSM programs allocated to Residential and Non-Residential based on contribution to retail system peak



Duke Energy Carolinas, LLC  
For the Period January 1, 2017 - December 31, 2021  
Docket Number E-7, Sub 1230  
North Carolina Net Lost Revenue Estimates for Vintages 2017 - 2021

Line	Vintage 2017 Residential	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total
1	Residential Energy Assessments	\$ 198,264	\$ 274,951	\$ 178,148	\$ 66,827	\$ -	718,191
2	My Home Energy Report	14,455,527	-	-	-	-	14,455,527
3	Energy Efficient Appliances and Devices	3,386,885	5,134,538	3,329,346	1,366,974	-	13,217,743
4	Residential – Smart Saver Energy Efficiency Program	197,134	264,823	171,558	62,120	-	695,635
5	Appliance Recycle Program	-	-	-	-	-	-
6	Income Qualified Energy Efficiency and Weatherization Assistance	141,450	210,612	136,514	55,631	-	544,208
7	Multi-Family Energy Efficiency	535,154	743,597	478,801	177,645	-	1,935,197
8	Energy Efficiency Education	165,283	221,302	143,362	49,313	-	579,260
9	Total Lost Revenues	19,079,697	6,849,823	4,437,730	1,778,511	-	32,145,761
10	Lost Revenue Decrement Pending Rate Case Implementation	-	-	-	289,930	-	289,930
11	Found Residential Revenues *	-	-	-	-	-	-
12	Net Lost Residential Revenues	\$ 19,079,697	\$ 6,849,823	\$ 4,437,730	\$ 1,488,581	\$ -	31,855,831
	Non-Residential	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total
13	Nonresidential Smart Saver Custom Energy Assessments	\$ 220,191	\$ 358,289	\$ 366,388	\$ 143,464	\$ -	1,088,332
14	Non Residential Smart Saver Custom	435,407	871,334	901,545	368,351	-	2,576,637
15	Energy Management Information Services	-	-	-	-	-	-
16	Non Residential Smart Saver Energy Efficient Food Service Products	28,410	40,771	41,428	12,007	-	122,616
17	Non Residential Smart Saver Energy Efficient HVAC Products	61,639	110,255	110,083	43,442	-	325,419
18	Non Residential Smart Saver Energy Efficient Lighting Products	6,200,869	10,299,304	10,366,805	3,645,665	-	30,512,643
19	Non Residential Smart Saver Energy Efficient Pumps and Drives Products	58,808	127,509	132,526	61,892	-	380,734
20	Non Residential Smart Saver Energy Efficient IT Products	82	162	162	61	-	468
21	Non Residential Smart Saver Energy Efficient Process Equipment Products	8,160	12,172	12,410	3,804	-	36,547
22	Non Residential Smart Saver Performance Incentive	66	774	759	442	-	2,041
23	Small Business Energy Saver	2,203,337	3,774,927	3,785,763	1,381,942	-	11,145,969
24	Smart Energy in Offices	209,310	149,382	-	-	-	358,692
25	Business Energy Report	-	-	-	-	-	-
26	EnergyWise for Business	85,268	158,514	158,671	65,096	-	467,549
27	Total Lost Revenues	9,511,547	15,903,393	15,876,541	5,726,167	-	47,017,648
28	Lost Revenue Decrement Pending Rate Case Implementation	-	-	-	926,185	-	926,185
29	Found Non-Residential Revenues *	-	-	-	-	-	-
30	Net Lost Non-Residential Revenues	\$ 9,511,547	\$ 15,903,393	\$ 15,876,541	\$ 4,799,982	\$ -	46,091,463

\* Found Revenues - See Evans Exhibit 4

(a) Lost revenues were estimated by applying forecasted lost revenue rates for residential and non-residential customers to state specific forecasted program participation.

Line	Vintage 2018												
	Residential	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total						
31	Residential Energy Assessments	\$	204,097	\$	359,848	\$	210,787	\$	-	\$	774,732		
32	My Home Energy Report		15,751,701		-		-		-		15,751,701		
33	Energy Efficient Appliances and Devices		4,299,434		9,243,154		5,414,309		-		18,956,897		
34	Residential – Smart Saver Energy Efficiency Program		161,443		324,295		189,962		-		675,700		
35	Appliance Recycle Program		-		-		-		-		-		
36	Income Qualified Energy Efficiency and Weatherization Assistance		154,376		340,042		199,184		-		693,602		
37	Multi-Family Energy Efficiency		500,533		1,108,252		649,218		-		2,258,002		
38	Energy Efficiency Education		128,311		265,267		155,385		-		548,962		
39	Total Lost Revenues		-	21,199,894	11,640,858	6,818,844	-	-	-	-	39,659,596		
40	Lost Revenue Decrement Pending Rate Case Implementation		-	-	-	1,608,585	-	-	-	-	1,608,585		
41	Found Residential Revenues *		-	-	-	-	-	-	-	-	-		
42	Net Lost Residential Revenues	\$	-	\$	21,199,894	\$	11,640,858	\$	5,210,259	\$	-	\$	38,051,011
Line	Non-Residential												
	Non-Residential	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total						
43	Nonresidential Smart Saver Custom Energy Assessments	\$	212	\$	866	\$	671	\$	300	\$	2,049		
44	Non Residential Smart Saver Custom		462,774		773,959		599,124		134,979		1,970,835		
45	Energy Management Information Services		-		-		-		-		-		
46	Non Residential Smart Saver Energy Efficient Food Service Products		14,117		22,612		17,505		3,772		58,006		
47	Non Residential Smart Saver Energy Efficient HVAC Products		50,245		116,447		90,192		30,218		287,102		
48	Non Residential Smart Saver Energy Efficient Lighting Products		4,102,094		6,719,187		5,203,682		1,182,368		17,207,330		
49	Non Residential Smart Saver Energy Efficient Pumps and Drives Products		66,649		87,662		67,855		8,628		230,793		
50	Non Residential Smart Saver Energy Efficient IT Products		185		876		678		317		2,056		
51	Non Residential Smart Saver Energy Efficient Process Equipment Products		6,501		10,498		8,128		1,776		26,903		
52	Non Residential Smart Saver Performance Incentive		20,243		84,759		65,573		29,373		199,948		
53	Small Business Energy Saver		1,776,069		3,462,894		2,681,778		765,602		8,686,343		
54	Smart Energy in Offices		39,733		3,847		-		-		43,580		
55	Business Energy Report		-		-		-		-		-		
56	EnergyWise for Business		66,282		120,486		93,316		24,695		304,779		
57	Total Lost Revenues		-	6,605,105	11,404,093	8,828,500	2,182,027	-	-	-	29,019,725		
58	Lost Revenue Decrement Pending Rate Case Implementation		-	-	-	1,574,142	-	-	-	-	1,574,142		
59	Found Non-Residential Revenues *		-	-	-	-	-	-	-	-	-		
60	Net Lost Non-Residential Revenues	\$	-	\$	6,605,105	\$	11,404,093	\$	7,254,358	\$	2,182,027	\$	27,445,583

\* Found Revenues - See Evans Exhibit 4

(a) Lost revenues were estimated by applying forecasted lost revenue rates for residential and non-residential customers to state specific forecasted program participation.

Vintage 2019							
Line	Residential	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total
61	Residential Energy Assessments			\$ 195,756	\$ 277,275	\$ 160,688	\$ 633,719
62	My Home Energy Report			16,556,381	-	-	16,556,381
63	Energy Efficient Appliances and Devices			4,884,189	6,969,929	4,117,409	15,971,527
64	Residential – Smart Saver Energy Efficiency Program			192,394	297,957	176,553	666,904
65	Appliance Recycle Program			-	-	-	-
66	Income Qualified Energy Efficiency and Weatherization Assistance			220,072	313,091	179,201	712,365
67	Multi-Family Energy Efficiency			645,327	911,703	503,312	2,060,342
68	Energy Efficiency Education			148,216	260,619	155,168	564,003
69	Total Lost Revenues	-		22,842,336	9,030,574	5,292,331	37,165,240
70	Lost Revenue Decrement Pending Rate Case Implementation			-	866,360	-	866,360
71	Found Residential Revenues *			-	-	-	-
72	Net Lost Residential Revenues	\$ -		\$ 22,842,336	\$ 8,164,214	\$ 5,292,331	\$ 36,298,880
Non-Residential		2017 <sup>(a)</sup>	2018	2019	2020	2021	Total
73	Nonresidential Smart Saver Custom Energy Assessments			\$ 83,809	\$ 87,137	\$ 87,137	\$ 258,083
74	Non Residential Smart Saver Custom			872,916	1,892,292	1,892,292	4,657,500
75	Energy Management Information Services			-	-	-	-
76	Non Residential Smart Saver Energy Efficient Food Service Products			11,399	22,027	22,027	55,453
77	Non Residential Smart Saver Energy Efficient HVAC Products			156,513	369,527	369,527	895,568
78	Non Residential Smart Saver Energy Efficient Lighting Products			3,333,966	5,782,387	5,782,387	14,898,740
79	Non Residential Smart Saver Energy Efficient Pumps and Drives Products			20,742	40,055	40,055	100,851
80	Non Residential Smart Saver Energy Efficient IT Products			250	448	448	1,145
81	Non Residential Smart Saver Energy Efficient Process Equipment Products			15,405	20,738	20,738	56,882
82	Non Residential Smart Saver Performance Incentive			24,374	119,631	119,631	263,637
83	Small Business Energy Saver			1,334,037	2,334,068	2,334,068	6,002,173
84	Smart Energy in Offices			-	-	-	-
85	Business Energy Report			-	-	-	-
86	EnergyWise for Business			62,574	126,345	126,345	315,263
87	Total Lost Revenues	-		5,915,986	10,794,655	10,794,655	27,505,296
88	Lost Revenue Decrement Pending Rate Case Implementation			-	1,448,109	-	1,448,109
89	Found Non-Residential Revenues *			-	-	-	-
90	Net Lost Non-Residential Revenues	\$ -		\$ 5,915,986	\$ 9,346,546	\$ 10,794,655	\$ 26,057,187

\* Found Revenues - See Evans Exhibit 4

(a) Lost revenues were estimated by applying forecasted lost revenue rates for residential and non-residential customers to state specific forecasted program participation.

NO CHANGE

Line	Vintage 2020 Residential	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total
91	Residential Energy Assessments				161,966	289,779	\$ 451,745
92	My Home Energy Report				14,686,468	-	14,686,468
93	Energy Efficient Appliances and Devices				1,237,431	1,982,233	3,219,664
94	Residential – Smart Saver Energy Efficiency Program				263,183	498,132	761,315
95	Appliance Recycle Program				-	-	-
96	Income Qualified Energy Efficiency and Weatherization Assistance				103,534	362,395	465,930
97	Multi-Family Energy Efficiency				496,249	939,264	1,435,513
98	Energy Efficiency Education				146,751	423,675	570,426
99	Total Lost Revenues	-	-	-	17,095,583	4,495,479	21,591,062
100	Lost Revenue Decrement Pending Rate Case Implementation				2,428,488	-	2,428,488
101	Found Residential Revenues *				-	-	-
102	Net Lost Residential Revenues	\$ -	\$ -	\$ -	\$ 14,667,095	\$ 4,495,479	\$ 19,162,574
	Non-Residential	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total
103	Nonresidential Smart Saver Custom Energy Assessments				\$ 136,414	\$ 250,432	\$ 386,846
104	Non Residential Smart Saver Custom				1,201,984	2,299,277	3,501,261
105	Energy Management Information Services				-	-	-
106	Non Residential Smart Saver Energy Efficient Food Service Products				93,624	138,074	231,698
107	Non Residential Smart Saver Energy Efficient HVAC Products				61,819	83,451	145,269
108	Non Residential Smart Saver Energy Efficient Lighting Products				3,029,908	4,219,711	7,249,619
109	Non Residential Smart Saver Energy Efficient Pumps and Drives Products				94,651	147,632	242,283
110	Non Residential Smart Saver Energy Efficient IT Products				6,639	10,148	16,786
111	Non Residential Smart Saver Energy Efficient Process Equipment Products				12,061	17,544	29,605
112	Non Residential Smart Saver Performance Incentive				402,902	726,898	1,129,800
113	Small Business Energy Saver				955,245	1,413,098	2,368,343
114	Smart Energy in Offices				-	-	-
115	Business Energy Report				-	-	-
116	EnergyWise for Business				46,148	70,456	116,603
117	Total Lost Revenues	-	-	-	6,041,394	9,376,721	15,418,115
118	Lost Revenue Decrement Pending Rate Case Implementation				858,201	-	858,201
119	Found Non-Residential Revenues *				-	-	-
120	Net Lost Non-Residential Revenues	\$ -	\$ -	\$ -	\$ 5,183,193	\$ 9,376,721	\$ 14,559,914

\* Found Revenues - See Evans Exhibit 4

(a) Lost revenues were estimated by applying forecasted lost revenue rates for residential and non-residential customers to state specific forecasted program participation.

		Vintage 2021					
Line	Residential	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total
121	Residential Energy Assessments					390,315	\$ 390,315
122	My Home Energy Report					22,036,642	22,036,642
123	Energy Efficient Appliances and Devices					1,461,671	1,461,671
124	Residential – Smart Saver Energy Efficiency Program					141,218	141,218
125	Appliance Recycle Program					-	-
126	Income Qualified Energy Efficiency and Weatherization Assistance					211,920	211,920
127	Multi-Family Energy Efficiency					748,492	748,492
128	Energy Efficiency Education					215,041	215,041
129	Total Lost Revenues	-	-	-	-	25,205,298	25,205,298
130	Found Residential Revenues *					-	-
131	Net Lost Residential Revenues	\$ -	\$ -	\$ -	\$ -	\$ 25,205,298	\$ 25,205,298
		Non-Residential					
Line	Non-Residential	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total
132	Nonresidential Smart Saver Custom Energy Assessments					\$ 93,807	\$ 93,807
133	Non Residential Smart Saver Custom					986,152	986,152
134	Energy Management Information Services					-	-
135	Non Residential Smart Saver Energy Efficient Food Service Products					107,100	107,100
136	Non Residential Smart Saver Energy Efficient HVAC Products					87,660	87,660
137	Non Residential Smart Saver Energy Efficient Lighting Products					3,741,050	3,741,050
138	Non Residential Smart Saver Energy Efficient Pumps and Drives Products					56,674	56,674
139	Non Residential Smart Saver Energy Efficient IT Products					5,557	5,557
140	Non Residential Smart Saver Energy Efficient Process Equipment Products					14,632	14,632
141	Non Residential Smart Saver Performance Incentive					265,513	265,513
142	Small Business Energy Saver					953,671	953,671
143	Smart Energy in Offices					-	-
144	Business Energy Report					-	-
145	EnergyWise for Business					48,898	48,898
146	Total Lost Revenues	-	-	-	-	6,360,715	6,360,715
147	Found Non-Residential Revenues *					-	-
148	Net Lost Non-Residential Revenues	\$ -	\$ -	\$ -	\$ -	\$ 6,360,715	\$ 6,360,715

\* Found Revenues - See Evans Exhibit 4

(a) Lost revenues were estimated by applying forecasted lost revenue rates for residential and non-residential customers to state specific forecasted program participation.

Vintage 2021								Total			
Line	Residential	2016	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total			
149	Residential Energy Assessments						\$	-			
150	My Home Energy Report							-			
151	Energy Efficient Appliances and Devices							-			
152	Residential – Smart Saver Energy Efficiency Program							-			
153	Appliance Recycle Program							-			
154	Income Qualified Energy Efficiency and Weatherization Assistance							-			
155	Multi-Family Energy Efficiency							-			
156	Energy Efficiency Education							-			
157	Total Lost Revenues	-	-	-	-	-	-	-			
158	Found Residential Revenues *							-			
159	Net Lost Residential Revenues	\$	- \$	-	\$	- \$	- \$	-			
Non-Residential		2016	2017 <sup>(a)</sup>	2018	2019	2020	2021	Total			
160	Nonresidential Smart Saver Custom Energy Assessments	\$	199,079	\$	389,585	\$	318,658	\$	114,463	1,021,784	
161	Non Residential Smart Saver Custom		914,009		1,703,790		1,398,549		481,717	4,498,065	
162	Energy Management Information Services		-		-		-		-	-	
163	Non Residential Smart Saver Energy Efficient Food Service Products		24,889		66,328		54,035		24,113	169,365	
164	Non Residential Smart Saver Energy Efficient HVAC Products		46,952		103,028		83,640		32,091	265,711	
165	Non Residential Smart Saver Energy Efficient Lighting Products		2,925,514		6,589,455		5,321,493		2,084,521	16,920,983	
166	Non Residential Smart Saver Energy Efficient Pumps and Drives Products		38,898		66,558		54,453		16,625	176,534	
167	Non Residential Smart Saver Energy Efficient IT Products		59,904		75,403		61,613		9,592	206,512	
168	Non Residential Smart Saver Energy Efficient Process Equipment Products		4,731		10,652		8,811		3,508	27,702	
169	Non Residential Smart Saver Performance Incentive		-		-		-		-	-	
170	Small Business Energy Saver		2,145,932		4,346,981		3,511,109		1,244,128	11,248,149	
171	Smart Energy in Offices		227,062		418,553		-		-	645,616	
172	Business Energy Report		-		-		-		-	-	
173	EnergyWise for Business		15,922		36,788		29,639		11,725	94,074	
174	Total Lost Revenues		6,602,893		13,807,121		10,841,999		4,022,482	35,274,494	
175	Found Non-Residential Revenues *		-		-		-		-	-	
176	Net Lost Non-Residential Revenues	\$	6,602,893	\$	13,807,121	\$	10,841,999	\$	4,022,482	\$	35,274,494

\* Found Revenues - See Evans Exhibit 4

(a) Lost revenues were estimated by applying forecasted lost revenue rates for residential and non-residential customers to state specific forecasted program participation.

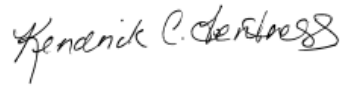
Duke Energy Carolinas, LLC  
 For the Period January 1, 2019 - December 31, 2019  
 Docket Number E-7 Sub 1230  
 Actual Program Costs for Vintage Years 2017, 2018, 2019

		Carolinas System - 12 months Ended 12/31/2017	Carolinas System - 12 months Ended 12/31/2018	Carolinas System - 12 months Ended 12/31/2019
1	Residential Energy Assessments	2,909,098	2,836,229	3,153,757
2	My Home Energy Report	13,812,250	12,765,286	10,558,344
3	Energy Efficient Appliances and Devices	30,340,728	42,687,244	40,433,533
4	Residential – Smart Saver Energy Efficiency Program	7,403,327	6,955,146	7,402,907
5	Appliance Recycle Program	5,307	-	-
6	Income Qualified Energy Efficiency and Weatherization Assistance	5,505,992	6,490,735	7,344,325
7	Multi family Energy Efficiency	3,168,422	3,604,921	3,681,262
8	Energy Efficiency Education	2,077,611	1,992,260	1,644,077
9	Nonresidential Smart Saver Custom Energy Assessments	2,139,875	407,293	296,006
10	Energy Management Information Systems	-	-	-
11	Non-Residential Smart Saver Custom	7,304,838	6,068,902	8,873,872
12	Non-Residential Smart Saver Performance Incentive	320,559	479,610	785,165
13	Non-Residential Energy Efficient Food Service Products	306,488	235,605	339,996
14	Non-Residential Smart Saver Energy Efficient HVAC Products	1,560,769	1,620,748	2,208,364
15	Non-Residential Smart Saver Energy Efficient Lighting Products	66,689,770	25,872,380	20,834,766
16	Nonresidential Energy Efficient Pumps and Drives Products	528,937	277,785	189,172
17	Nonresidential Energy Efficient ITEE	61,215	36,875	44,335
18	Nonresidential Energy Efficient Process Equipment Products	162,413	67,509	119,843
19	Smart Energy In Offices	891,010	219,748	-
20	Small Business Energy Saver	17,350,972	15,977,993	11,421,399
21	Business Energy Report	126,680	-	-
22	Power Manager	14,021,500	14,423,610	13,386,942
23	EnergyWise for Business	2,484,618	3,062,816	3,687,462
24	Power Share	13,316,535	12,922,977	13,022,816
25				
26	<b>Total Energy Efficiency &amp; Demand Side Program Costs</b>	<b>\$ 192,488,915</b>	<b>\$ 159,005,671</b>	<b>\$ 149,428,343</b>
27	NC Allocation Factor for EE programs	72.8087506%	72.7130507%	73.0903918%
28	NC Allocation Factor for DSM programs-Residential	33.8075104%	32.1574721%	34.1181040%
29	NC Allocation Factor for DSM programs-Non-Residential	40.0747013%	41.4712829%	40.1233224%
30	Residential Energy Assessments	2,118,078	2,062,308	2,305,093
31	My Home Energy Report	10,056,526	9,282,029	7,717,135
32	Energy Efficient Appliances and Devices	22,090,705	31,039,197	29,553,027
33	Residential – Smart Saver Energy Efficiency Program	5,390,270	5,057,299	5,410,814
34	Appliance Recycle Program	3,864	-	-
35	Income Qualified Energy Efficiency and Weatherization Assistance	4,008,844	4,719,611	5,367,996
36	Multi family Energy Efficiency	2,306,888	2,621,248	2,690,649
37	Energy Efficiency Education	1,512,683	1,448,633	1,201,662
38	Nonresidential Smart Saver Custom Energy Assessments	1,558,016	296,155	216,352
39	Energy Management Information Systems	-	-	-
40	Non-Residential Smart Saver Custom	5,318,561	4,412,884	6,485,948
41	Non-Residential Smart Saver Performance Incentive	233,395	348,739	573,880
42	Non-Residential Energy Efficient Food Service Products	223,150	171,315	248,504
43	Non-Residential Smart Saver Energy Efficient HVAC Products	1,136,376	1,178,495	1,614,102
44	Non-Residential Smart Saver Energy Efficient Lighting Products	48,555,988	18,812,597	15,228,212
45	Nonresidential Energy Efficient Pumps and Drives Products	385,112	201,986	138,267
46	Nonresidential Energy Efficient ITEE	44,570	26,813	32,404
47	Nonresidential Energy Efficient Process Equipment Products	118,251	49,088	87,594
48	Smart Energy In Offices	648,734	159,785	-
49	Small Business Energy Saver	12,633,026	11,618,086	8,347,945
50	Business Energy Report	92,234	-	-
51	Power Manager	10,082,296	9,778,895	10,268,601
52	EnergyWise for Business	1,879,262	2,416,251	2,664,815
53	Power Share	10,072,077	10,194,918	9,411,189
54				
55	<b>Total Energy Efficiency &amp; Demand Side Program Costs</b>	<b>\$ 140,468,909</b>	<b>\$ 115,896,335</b>	<b>\$ 109,564,190</b>

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's DSM/EE Cost Recovery Rider – Supplemental Testimony and Exhibits, in Docket No. E-7, Sub 1230, has been served by electronic mail, hand delivery, or by depositing a copy in the United States Mail, 1<sup>st</sup> Class Postage Prepaid, properly addressed to parties of record.

This the 11<sup>th</sup> day of May, 2020.



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