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May 28, 2019

**VIA ELECTRONIC FILING AND HAND DELIVERY**

Ms. M. Lynn Jarvis  
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 1192**

Dear Ms. Jarvis:

Enclosed for filing is Duke Energy Carolinas, LLC's Supplemental Testimony and Supplemental Exhibits of Carolyn T. Miller and Supplemental Exhibits of Robert P. Evans for filing in connection with the referenced matter. Fifteen (15) paper copies of the Supplemental Testimony and Supplemental Exhibits will be delivered to the Clerk's Office by close of business on May 29, 2019.

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

Sincerely,

Kendrick C. Fentress

Enclosures

cc: Parties of Record

OFFICIAL COPY

May 28 2019

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1192

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 and 7  
14 and Evans Exhibits 1, 2 and 3 filed February 26, 2019 in this proceeding.  
15 These revisions are due to two corrections:

16 1. Updates to lost revenues and PPI (Program Performance  
17 Incentives) based on Evaluation, Measurement and Verification (“EM&V”)  
18 adjustments for Vintages 2017, 2018, 2019 and 2020.

19 2. Adjustments to Vintage 2018 program costs resulting from the  
20 Public Staff of the North Carolina Utilities Commission’s (“Public Staff”)  
21 program cost audit.

22 **Q. WHY IS THE COMPANY UPDATING LOST REVENUE AND PPI  
23 FOR VINTAGES 2017, 2018 AND 2020?**

1 A. As a result of its internal review process, the Company determined that two  
2 EM&V updates were necessary. The first update is a result of an input error in  
3 the HVAC Smart \$aver Evaluation Report dated May 1, 2016 - April 30,  
4 2017. The second update is to use lighting load shapes based on assumed  
5 hours of operation instead of a ratio of hours of operation and percentage of  
6 time the lights operate. The result of these two adjustments is a decrease in  
7 lost revenue of (\$74,096) and an increase in PPI of \$92,837. The Public Staff  
8 was notified of these necessary updates to the HVAC Smart \$aver program  
9 and the lighting program. Supporting Supplemental Evans Exhibits 1 and 2  
10 reflecting the adjustments are attached and subject to final Public Staff review.

11 **Q. WHY IS THE COMPANY REVISING VINTAGE 2018 PROGRAM**  
12 **COSTS?**

13 A. During the course of the Public Staff's audit of Vintage 2018 program costs,  
14 the Public Staff and the Company discovered some charges that were not  
15 directly related to Demand-Side Management ("DSM") or Energy Efficiency  
16 ("EE") programs. The Company has agreed to remove the total costs in the  
17 amount of (\$280.00) from Vintage 2018 program costs. In addition, it was  
18 determined that certain MYHER-related invoices totaling (\$468,240) on a  
19 system basis were inadvertently misallocated. The Company is revising  
20 Evans Exhibit 1, page 4 and Evans Exhibit 3, page 1 to reflect both of these  
21 adjustments.

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

23 A. As a result of these changes, the overall residential rate will decrease from

1 0.4848 to 0.4835 cents per kilowatt-hour (“kWh”). There are no changes to  
2 non-residential rates.

3 **Q. WHAT SUPPLEMENTAL EXHIBITS WILL BE FILED IN**  
4 **CONJUNCTION WITH YOUR SUPPLEMENTAL TESTIMONY?**

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

- 8 • Supplemental Miller Exhibit 1: Summary of Rider EE Exhibits  
9 and Factors
- 10 • Supplemental Miller Exhibit 2, page 3: Vintage 2017 True-up of  
11 Year 1 and Year 2 Rate Calculation
- 12 • Supplemental Miller Exhibit 2, page 4: Vintage 2018 True-up of  
13 Year 1 Rate Calculation
- 14 • Supplemental Miller Exhibit 2, page 5: Vintage 2019 Estimated  
15 Year 2 Lost Revenues
- 16 • Supplemental Miller Exhibit 2, page 6: Vintage 2020 Estimated  
17 Program Costs, Earned Incentive and Lost Revenues
- 18 • Supplemental Miller Exhibit 3, pages 13 through 16: Vintage  
19 2018 Interest Calculations
- 20 • Supplemental Miller Exhibit 7: Revised Tariff Sheet
- 21 • Supplemental Evans Exhibit 1, page 3: Vintage 2017 Load  
22 Impacts and Estimated Revenue Requirements
- 23 • Supplemental Evans Exhibit 1, page 4: Vintage 2018 Load

- 1                   Impacts and Estimated Revenue Requirements
- 2                   • Supplemental Evans Exhibit 1, page 5; Vintage 2020 Load
- 3                   Impacts and Estimated Revenue Requirements
- 4                   • Supplemental Evans Exhibit 2, pages 2 through 5: North Carolina
- 5                   Net Lost Revenue Estimates for Vintages 2015 - 2020
- 6                   • Supplemental Evans Exhibit 3, page 1: Carolinas System Level
- 7                   Program Costs Years 2014 through 2018

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

9   **APPLICATION OF DEC FOR APPROVAL OF ITS DSM/EE RIDER 11**

10 **FOR 2020 AS A RESULT OF THESE REVISIONS?**

- 11   A.   Pursuant to the provisions of N.C. Gen. Stat. § 62-133.9 and Commission
- 12   Rule R8-69, the Company requests Commission approval of the following
- 13   annual billing adjustments (all shown on a cents per kWh basis, including
- 14   gross receipts tax and regulatory fee):

<b>Residential Billing Factors</b>	<b>¢/kWh</b>
Residential Billing Factor for Rider 11 Prospective Components	0.3891
Residential Billing Factor for Rider 11 EMF Components	0.0944

<b>Non-Residential Billing Factors for Rider 11 Prospective Components</b>	<b>¢/kWh</b>
Vintage 2017 EE Participant	0.0312
Vintage 2018 EE Participant	0.0549
Vintage 2019 EE Participant	0.0509

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<b>Non-Residential Billing Factors for Rider 11 Prospective Components</b>	<b>¢/kWh</b>
Vintage 2020 EE Participant	0.3082
Vintage 2020 DSM Participant	0.1101

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<b>Non-Residential Billing Factors EMF Component</b>	<b>¢/kWh</b>
Vintage 2018 EE Participant	0.0278
Vintage 2018 DSM Participant	0.0077
Vintage 2017 EE Participant	0.0645
Vintage 2017 DSM Participant	0.0000
Vintage 2016 EE Participant	0.0512
Vintage 2016 DSM Participant	0.0001
Vintage 2015 EE Participant	0.0064
Vintage 2015 DSM Participant	0.0001

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14 **Q. DOES THIS CONCLUDE YOUR PRE-FILED SUPPLEMENTAL**  
15 **TESTIMONY?**

16 **A. Yes.**

Duke Energy Carolinas, LLC  
 DSM/EE Cost Recovery Rider 11  
 Docket Number E-7 Sub 1192  
 Exhibit Summary of Rider EE Exhibits and Factors

### Residential Billing Factors

#### Residential Billing Factor for Rider 11 True-up (EMF) Components

Line		Adjusted
1	Year 2015 EE/DSM True-Up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1 Line 15 524,656
2	Year 2016 EE/DSM True-Up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 2 Line 15 967,614
3	Year 2017 EE/DSM True-Up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 43 Line 15 3,327,874
4	Year 2018 EE/DSM True-Up (EMF) Revenue Requirement	Miller Exhibit 2 pg 4 Line 15 <u>15,463,399</u>
5	Total True-up (EMF) Revenue Requirement	Sum Lines 1-4 \$ 20,283,544
6	Projected NC Residential Sales (kWh) for rate period	Miller Exhibit 6 pg. 1, Line 1 21,487,301,475
7	EE/DSM Revenue Requirement EMF Residential Rider EE (cents per kWh)	Line 5 / Line 6 * 100 <b>0.0944</b>

#### Residential Billing Factor for Rider 11 Prospective Components

8	Vintage 2017 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 4, Line 1 1,751,061
9	Vintage 2018 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 5, Line 1 9,715,212
10	Vintage 2019 Total EE/DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 6, Line 11 5,232,466
11	Vintage 2020 Total EE/DSM Prospective Amounts Revenue Requirement	<u>66,898,601</u>
12	Total Prospective Revenue Requirement	Sum Lines 8-11 \$ 83,597,339
13	Projected NC Residential Sales (kWh) for rate period	Miller Exhibit 6 pg. 1, Line 1 21,487,301,475
14	EE/DSM Revenue Requirement Prospective Residential Rider EE (cents per kWh)	Line 12 / Line 13 * 100 <b>0.3891</b>

#### Total Revenue Requirements in Rider 11 from Residential Customers

15	Total True-up (EMF) Revenue Requirement	Line 5 \$ 20,283,544
16	Total Prospective Revenue Requirement	Line 12 <u>83,597,339</u>
17	<b>Total EE/DSM Revenue Requirement for Residential Rider EE</b>	Line 15 + Line 16 <b>\$ 103,880,883</b>
18	<b>Total EE/DSM Revenue Requirement for Residential Rider EE (cents per kWh)</b>	Line 7 + Line 14 <b>0.4835</b>

#### Non-Residential Billing Factors for Rider 11 True-up (EMF) Components

19	Vintage Year 2015 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1, Line 25 \$ 1,171,685
20	Projected Year 2015 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 4 18,371,972,219
21	EE Revenue Requirement Year 2015 EMF Non-Residential Rider EE (cents per kWh)	Line 25/Line 26 * 100 <b>0.0064</b>
22	Vintage Year 2015 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 1, Line 35 \$ 19,262
23	Projected Year 2015 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 5 18,413,235,012
24	DSM Revenue Requirement Year 2015 EMF Non-Residential Rider EE (cents per kWh)	Line 28/Line 29 * 100 <b>0.0001</b>
25	Vintage Year 2016 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 2, Line 25 \$ 9,273,079
26	Projected Year 2016 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 6 18,126,497,772
27	EE Revenue Requirement Year 2016 EMF Non-Residential Rider EE (cents per kWh)	Line 31/Line 32 * 100 <b>0.0512</b>
28	Vintage Year 2016 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 2, Line 35 \$ 14,674
29	Projected Year 2016 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 7 18,166,831,506
30	DSM Revenue Requirement Year 2016 EMF Non-Residential Rider EE (cents per kWh)	Line 34/Line 35 * 100 <b>0.0001</b>
31	Vintage Year 2017 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 3, Line 25 \$ 11,550,961
32	Projected Year 2017 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 8 17,918,240,840
33	EE Revenue Requirement Year 2017 EMF Non-Residential Rider EE (cents per kWh)	Line 37/Line 38 * 100 <b>0.0645</b>
34	Vintage Year 2017 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 3, Line 35 \$ 1,084
35	Projected Year 2017 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 9 18,135,782,680
36	DSM Revenue Requirement Year 2017 EMF Non-Residential Rider EE (cents per kWh)	Line 40/Line 41 * 100 -

37	Vintage Year 2018 EE True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 4, Line 25	\$	4,814,662
38	Projected Year 2018 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 10		17,320,957,422
39	EE Revenue Requirement Year 2018 EMF Non-Residential Rider EE (cents per kWh)	Line 37/Line 38 * 100		<b>0.0278</b>
40	Vintage Year 2018 DSM True-up (EMF) Revenue Requirement	Miller Exhibit 2 pg. 4, Line 35	\$	1,398,093
41	Projected Year 2018 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 11		18,056,545,344
42	DSM Revenue Requirement Year 2018 EMF Non-Residential Rider EE (cents per kWh)	Line 40/Line 41 * 100		<b>0.0077</b>

**Non-Residential Billing Factors for Rider 11 Prospective Components**

43	Vintage Year 2017 EE Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 3, Line 25	\$	5,593,790
44	Projected Program Year 2017 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 8		17,918,240,840
45	EE Revenue Requirement Vintage 2017 Prospective Component for Non-Residential Rider EE (cents per kWh)	Line 43/Line 44 * 100		<b>0.0312</b>
46	Vintage Year 2018 EE Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 4, Line 25	\$	9,507,185
47	Projected Vintage 2018 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 10		17,320,957,422
48	EE Revenue Requirement Vintage 2018 Prospective Component for Non-Residential Rider EE (cents per kWh)	Line 46/Line 47 * 100		<b>0.0549</b>
49	Vintage Year 2019 EE Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 5, Line 4	\$	8,746,000
50	Projected Vintage 2019 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 12		17,184,515,812
51	EE Revenue Requirement Vintage 2019 Prospective Component for Non-Residential Rider EE (cents per kWh)	Line 49/Line 50 * 100		<b>0.0509</b>
52	Vintage Year 2020 EE Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 6, Line 18	\$	52,968,365
53	Projected Vintage 2020 EE Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 14		17,184,515,812
54	EE Revenue Requirement Vintage 2020 Prospective Component for Non-Residential Rider EE (cents per kWh)	Line 52/Line 53 * 100		<b>0.3082</b>
55	Vintage Year 2020 DSM Prospective Amounts Revenue Requirement	Miller Exhibit 2 pg. 6, Line 25	\$	19,931,130
56	Projected Vintage 2020 DSM Participants NC Non-Residential Sales (kwh) for rate period	Miller Exhibit 6 Line 15		18,099,339,344
57	DSM Revenue Requirement Vintage 2020 Prospective Component for Non-Residential Rider EE (cents per kWh)	Line 55/Line 56 * 100		<b>0.1101</b>
	<b>Total EMF Rate</b>			<b>0.1578</b>
	<b>Total Prospective Rate</b>			<b>0.5553</b>

**Total Revenue Requirements in Rider 11 from Non-Residential Customers**

58	Vintage Year 2015 EE True-up (EMF) Revenue Requirement	Line 19		1,171,685
59	Vintage Year 2015 DSM True-up (EMF) Revenue Requirement	Line 22		19,262
60	Vintage Year 2016 EE True-up (EMF) Revenue Requirement	Line 25		9,273,079
61	Vintage Year 2016 DSM True-up (EMF) Revenue Requirement	Line 28		14,674
62	Vintage Year 2017 EE True-up (EMF) Revenue Requirement	Line 31		11,550,961
63	Vintage Year 2017 DSM True-up (EMF) Revenue Requirement	Line 34		1,084
64	Vintage Year 2018 EE True-up (EMF) Revenue Requirement	Line 37		4,814,662
65	Vintage Year 2018 DSM True-up (EMF) Revenue Requirement	Line 40		1,398,093
64	Vintage Year 2017 EE Prospective Amounts Revenue Requirement	Line 43		5,593,790
65	Vintage Year 2018 EE Prospective Amounts Revenue Requirement	Line 46		9,507,185
66	Vintage Year 2019 EE Prospective Amounts Revenue Requirement	Line 49		8,746,000
67	Vintage Year 2020 EE Prospective Amounts Revenue Requirement	Line 52		52,968,365
68	Vintage Year 2020 DSM Prospective Amounts Revenue Requirement	Line 55		19,931,130
	<b>Total Non-Residential Revenue Requirement in Rider 11</b>	Sum (Lines 58-68)	\$	<b>124,989,970</b>

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
True Up of Year 1, 2, 3 and 4 of Vintage Year 2015

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

Line	Reference	E-7 Sub 1050	E-7 Sub 1073	E-7 Sub 1105	E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1192	Year 2015
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 2015 (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 1050	E-7 Sub 1073	E-7 Sub 1105	E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1192	Year 2015
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 Year 2015 (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 1050	E-7 Sub 1005	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1192	Year 2015
28	Non-Residential DSM Program Cost						
29	Non-Residential DSM Earned Utility Incentive						
30	Return on overcollection 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 Revenue Collected for Year 2015 (through estimated Rider 10)						
35	Non-Residential DSM 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 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			\$ 8,965,024		\$ (2)		\$ 40,021,101
2	Residential EE Earned Utility Incentive	Evans Exhibit 1 pg. 2, Line 10 * NC Alloc. Factor		4,361,799		(52,098)		6,702,353
3	Return on undercollection of Residential EE Program Costs	Evans Exhibit 1 pg. 2, Line 10 * NC Alloc. Factor		272,476		710,786	430,926	1,414,188
4	Total EE Program Cost and Incentive Components	Miller Exhibit 3 pg 5 Line 1 + Line 2 + Line 3		13,599,299		658,686	430,926	48,137,642
5	Residential DSM Program Cost	Evans Exhibit 1 pg. 2, Line 11 * NC Alloc. Factor		(1,012,441)		0		9,600,575
6	Residential DSM Earned Utility Incentive	Evans Exhibit 1 pg. 2, Line 11 * NC Alloc. Factor		(129,612)		(27,890)		2,729,916
7	Return on overcollection of Residential DSM Program Costs	Miller Exhibit 3 pg 6		(26,322)		(46,199)	(39,872)	(112,393)
8	Total DSM Program Cost and Incentive Components	Line 5 + Line 6 + Line 7		(1,168,375)		(74,089)	(39,872)	12,218,099
9	Total EE/DSM Program Cost and Incentive Components	Line 4 + Line 8		12,430,924		584,597	391,055	60,355,741
10	Revenue-related taxes and regulatory fees factor **	Miller Exhibit 2, pg. 7		1,001,402		1,001,402	1,001,402	
11	Total EE/DSM Program Cost and Incentive Revenue Requirement	Line 9 * Line 10		12,448,352		585,417	391,603	60,442,238
12	Residential Net Lost Revenues	Evans Exhibit 2 pg. 2	5,723,916	4,795,359	7,765,323	(3,296,616)	1,969,313	28,828,063
13	Total Residential EE/DSM Revenue Requirement	Line 11 + Line 12		17,243,711	7,765,323	(2,714,199)	2,360,916	89,270,300
14	Total Collected for Vintage Year 2016 (through estimated Rider 10)	Miller Exhibit 4 Line 2						88,302,686
15	<b>Total Residential EE/DSM Revenue Requirement</b>	Line 11 + Line 12						<b>\$ 967,614</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			13,515,376		1		50,009,988
17	Non-Residential EE Earned Utility Incentive	Evans Exhibit 1 pg. 2, Line 25 * NC Alloc. Factor		4,261,607		(353,368)		14,013,960
18	Return on undercollection of Non-residential EE Program Costs	Evans Exhibit 1 pg. 2, Line 25 * NC Alloc. Factor		378,293		1,051,375	731,576	2,161,244
19	Total EE Program Cost and Incentive Components	Miller Exhibit 3 page 7 Line 16 + Line 17 + Line 18		18,155,276		698,008	731,576	66,185,192
20	Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 7		1,001,402		1,001,402	1,001,402	
21	Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 19 * Line 20		18,180,730		698,987	732,602	66,279,848
22	Non-Residential Net Lost Revenues	Evans Exhibit 2 pg. 2	8,309,444	2,524,047	13,375,187	(4,085,026)	6,383,046	31,252,013
23	Total Non-Residential EE Revenue Requirement	Line 21 + Line 22		20,704,776	13,375,187	(3,386,039)	7,115,648	97,531,860
24	Total Collected for Vintage Year 2016 (through estimated Rider 10)	Miller Exhibit 4 Line 8						88,258,782
25	Non-Residential EE Revenue Requirement	Line 23 - Line 24						9,273,079
26	Projected NC Residential Sales (kWh)	Miller Exhibit 6, Line 6						18,126,497,772
27	<b>NC Non-Residential EE billing factor (Cents/kWh)</b>	Line 25/Line 26*100						<b>0.0512</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 (Year 2)	Rider 11 True up (Year 3)	
28	Non-Residential DSM Program Cost			0		11,594,497
29	Non-Residential DSM Earned Utility Incentive	Evans Exhibit 1, pg. 2 Line 26 * NC Alloc. Factor		(167,059)		3,296,886
30	Return on undercollection of Non-residential DSM Program Costs	Evans Exhibit 1, pg. 2 Line 26 * NC Alloc. Factor		1,759	3,420	(908)
31	Total Non-Residential DSM Program Cost and Incentive Components	Miller Exhibit 3 page 8 Line 28 + Line 29 + Line 30		(1,426,713)	(30,262)	(6,087)
32	Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 7		1,001,402	1,001,402	
33	Total Non-Residential DSM Revenue Requirement	Line 31 * Line 32		(30,305)	(6,095)	14,912,007
34	Total Collected for Vintage Year 2016 (through estimated Rider 10)	Miller Exhibit 4 Line 13				14,897,332
35	Non-Residential EE Revenue Requirement True-up Amount	Line 33- Line 34				14,674
36	Projected NC Non-Residential Sales (kWh)	Miller Exhibit 6, Line 7				18,166,831,506
37	<b>NC Non-Residential DSM billing factor</b>	Line 35/Line 36*100				<b>0.0001</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 1192  
 Estimated Year 4 Lost Revenue and True Up of Year 1 and 2 for Vintage Year 2017

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

Line	Reference	Year 2017 Yr 4 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. 7	
11	Total EE/DSM Program Cost and Incentive Revenue Requirement Line 9 * Line 10	
12	Residential Net Lost Revenues Evans Exhibit 2 pg. 2	\$ 1,751,061
13	Total Residential EE/DSM Revenue Requirement Line 11 + Line 12	1,751,061
14	Total Collected for Vintage Year 2017 (through estimated Rider 10) Miller Exhibit 4 Line 3	
15	<b>Total Residential EE/DSM Revenue Requirement</b> Line 11 + Line 12	<b>\$ 1,751,061</b>

E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1164	E-7 Sub 1192	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	
\$ 33,488,974		\$ 13,998,885		\$ -	\$ 47,487,859
4,149,244		4,340,033		(250,931)	8,238,346
		522,611		1,226,138	1,748,749
37,638,218		18,861,529		975,207	57,474,954
10,258,751		(176,455)		-	10,082,296
2,837,134		89,061		-	2,926,195
		15,015		12,882	27,897
13,095,885		(72,379)		12,882	13,036,388
50,734,103		18,789,150		988,088	70,511,342
1,001482		1,001402		1,001402	
50,809,291		18,815,493		989,474	70,614,257
12,699,119	4,202,002	6,456,129	8,904,587	2,572,270	34,834,107
63,508,411	4,202,002	25,271,622	8,904,587	3,561,743	105,448,364
					102,120,490
					\$ 3,327,874

See Miller Exhibit A for rate

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

Line	Reference	Year 2017 Yr 3 LR Estimate
16	Non-Residential EE Program Cost Evans Exhibit 1 pg. 3, Line 25 * NC Alloc. Factor	
17	Non-Residential EE Earned Utility Incentive Evans Exhibit 1 pg. 3, Line 25 * NC Alloc. Factor	
18	Return on undercollection of Non-Residential EE Program Costs Miller Exhibit 3 page 7	
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. 2	5,593,790
23	Total Non-Residential EE Revenue Requirement Line 21 + Line 22	5,593,790
24	Total Collected for Vintage Year 2017 (through estimated Rider 10) Miller Exhibit 4 Line 9	
25	Non-Residential EE Revenue Requirement Line 23 - Line 24	5,593,790
26	Projected NC Residential Sales (kWh) Miller Exhibit 6, pg. 1, Line 8	17,918,240,840
27	<b>NC Non-Residential EE billing factor (Cents/kWh)</b> Line 25/Line 26*100	<b>0.0312</b>

E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1164	E-7 Sub 1192	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	
38,791,601		32,155,814		-	70,947,415
9,347,504		9,073,243		3,304,511	21,725,258
		1,588,185		2,709,383	4,297,568
48,139,105		42,817,242		6,013,893	96,970,240
1,001482		1,001402		1,001402	
48,210,447		42,877,271		6,022,325	97,110,043
6,039,892	9,466,867	2,627,210	14,570,381	7,280,971	39,985,321
54,250,339	9,466,867	45,504,481	14,570,381	13,303,295	137,095,364
					125,544,403
					11,550,961
					17,918,240,840
					0.0645

**DSM Programs**

Line	Reference	Year 2017 Yr 3 LR Estimate
28	Non-Residential DSM Program Cost Evans Exhibit 1, pg. 3 Line 26 * NC Alloc. Factor	
29	Non-Residential DSM Earned Utility Incentive Evans Exhibit 1, pg. 3 Line 26 * NC Alloc. Factor	
30	Return on undercollection of Non-Residential DSM Program Costs Miller Exhibit 3 page 12	
31	Total Non-Residential DSM Program Cost and Incentive Components Line 28 + Line 29 + Line 30	
32	Revenue-related taxes and regulatory fees factor Miller Exhibit 2, pg. 7	
33	Total Non-Residential DSM Revenue Requirement Line 31 * Line 32	
34	Total Collected for Vintage Year 2017 (through estimated Rider 10) Miller Exhibit 4 Line 14	
35	Non-Residential EE Revenue Requirement True-up Amount Line 33- Line 34	
36	Projected NC Non-Residential Sales (kWh) Miller Exhibit 6 pg. 1, Line 9	
37	<b>NC Non-Residential DSM billing factor</b> Line 35/Line 36*100	

E-7 Sub 1105	E-7 Sub 1164	E-7 Sub 1192	Year 2017
Rider 8 Year 1 Estimate	Rider 10 True Up	Rider 11 True Up	
13,389,985	(1,438,646)		11,951,339
3,703,101	(234,452)		3,468,649
-	4,761	4,266	9,027
17,093,086	(1,668,337)	4,266	15,429,016
1,001482	1,001402	1,001402	
17,118,418	(1,670,676)	4,272	15,447,742
			15,446,658
			1,084
			18,135,782,680
			-

\*\* 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 1192  
 Estimated Year 3 Lost Revenue and True Up of Year 1 for Vintage Year 2018

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

Line	Reference	Year 2018 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 13	
4	Total EE Program Cost and Incentive Components Line 1 + Line 2 + line 3	
5	Residential DSM Program Cost Evans Exhibit 1 pg. 3, Line 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 14	
8	Total DSM Program Cost and Incentive Components Line 5 + Line 6 + Line 7	
9	Total EE/DSM Program Cost and Incentive Components Line 4 + Line 8	
10	Revenue-related taxes and regulatory fees factor ** Miller Exhibit 2, pg. 7	
11	Total EE/DSM Program Cost and Incentive Revenue Requirement Line 9 * Line 10	
12	Residential Net Lost Revenues Evans Exhibit 2 pg. 3	\$ 9,715,212
13	Total Residential EE/DSM Revenue Requirement Line 11 + Line 12	9,715,212
14	Total Collected for Vintage Year 2018 (through estimated Rider 10) Miller Exhibit 4 Line 4	
15	<b>Total Residential EE/DSM Revenue Requirement</b> Line 11 + Line 12	<b>\$ 9,715,212</b>

E-7 Sub 1130	E-7 Sub 1164	E-7 Sub 1192	Year 2018
Rider 9 Year 1 Estimate	Year 2018 Yr 2 LR Estimate	Rider 11 True up	Year 2018
\$ 41,623,609		\$ 14,606,717	\$ 56,230,326
5,511,264		4,154,068	9,665,332
		244,540	244,540
47,134,873		19,005,324	66,140,197
9,903,130		(124,235)	9,778,895
2,569,925		17,215	2,587,140
		(28,626)	(28,626)
12,473,055		(135,646)	12,337,409
59,607,928		18,869,679	78,477,607
1,001,402		1,001,402	
59,691,498		18,896,134	78,587,632
19,612,717	6,294,025	894,901	26,801,643
79,304,216	6,294,025	19,791,035	105,389,275
			89,925,876
			\$ 15,463,399

See Miller Exhibit A for rate

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

Line	Reference	Year 2018 Yr 3 LR Estimate
16	Non- Residential EE Program Cost Evans Exhibit 1 pg. 3, Line 25 * NC Alloc. Factor	
17	Non-Residential EE Earned Utility Incentive Evans Exhibit 1 pg. 3, Line 25 * NC Alloc. Factor	
18	Return on undercollection of Non-residential EE Program Costs Miller Exhibit 3 page 15	
19	Total EE Program Cost and Incentive Components Line 16 + Line 17 + Line 18	
20	Revenue-related taxes and regulatory fees factor 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	9,507,185
23	Total Non-Residential EE Revenue Requirement Line 21 + Line 22	9,507,185
24	Total Collected for Vintage Year 2018 (through estimated Rider 10) Miller Exhibit 4 Line 10	
25	Non-Residential EE Revenue Requirement Line 23 - Line 24	9,507,185
26	Projected NC Residential Sales (kWh) Miller Exhibit 6, Line 10	17,320,957,422
27	<b>NC Non-Residential EE billing factor (Cents/kWh)</b> Line 25/Line 26*100	<b>0.0549</b>

E-7 Sub 1105	E-7 Sub 1130	E-7 Sub 1192	Year 2018
Rider 9 Year 1 Estimate	Year 2018 Yr 2 LR Estimate	Rider 11 True up	Year 2018
40,592,949		(3,317,005)	37,275,944
11,623,199		2,818,045	14,441,244
		461,049	461,049
52,216,148		(37,911)	52,178,237
1,001,402		1,001,402	
52,289,355		(37,965)	52,251,390
5,167,253	8,746,000	2,933,863	16,847,117
57,456,608	8,746,000	2,895,899	69,098,507
			64,283,845
			4,814,662
			17,320,957,422
			<b>0.0278</b>

**DSM Programs**

Line	Reference	Year 2018 Yr 3 LR Estimate
28	Non-Residential DSM Program Cost Evans Exhibit 1, pg. 3 Line 26 * NC Alloc. Factor	
29	Non-Residential DSM Earned Utility Incentive Evans Exhibit 1, pg. 3 Line 26 * 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. 7	
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 15	
35	Non-Residential EE Revenue Requirement True-up Amount Line 33- Line 34	
36	Projected NC Non-Residential Sales (kWh) Miller Exhibit 6 Line 11	
37	<b>NC Non-Residential DSM billing factor</b> Line 35/Line 36*100	<b>0.0077</b>

E-7 Sub 1105	E-7 Sub 1192	Year 2018
Rider 9 Year 1 Estimate	Rider 11 True Up	Year 2018
11,959,889	651,281	12,611,170
3,103,667	232,789	3,336,456
-	37,743	37,743
15,063,556	921,812	15,985,368
1,001,402	1,001,402	
15,084,675	923,105	16,007,780
		14,609,687
		1,398,093
		18,056,545,344
		<b>0.0077</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 1192  
 Estimated Year 2 Lost Revenues for Vintage Year 2019

**RESIDENTIAL**

Line	Reference	2019
1 Residential Net Lost Revenues	Evans Exhibit 2 pg. 3 Line 148	5,232,466
2 Projected NC Residential Sales (kWh)	Miller Exhibit 6	\$ 21,487,301,475
3 NC Residential EE Billing Factor (Cents/kWh)	Line 1/Line 2*100	0.0244

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

Line	Reference	2019
4 Non-Residential Net Lost Revenues	Evans Exhibit 2 pg. 3 Line 165	8,746,000
5 Projected NC Non-Residential Sales (kWh)	Miller Exhibit 6	17,184,515,812
6 NC Non-Residential EE billing factor (Cents/kWh)	Line 4/Line 5*100	0.0509

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1192**  
**Estimated Program Costs, Earned Incentive and Lost Revenues for Vintage Year 2020**

**RESIDENTIAL**

Line	Reference	2020
1 Residential EE Program Cost	Evans Exhibit 1, pg. 5 * NC Alloc. Factor	\$ 33,551,578
2 Residential EE Earned Utility Incentive	Evans Exhibit 1, pg. 5 * NC Alloc. Factor	3,173,534
3 Total EE Program Cost and Incentive Components	Line 1 + Line 2, Evans Exhibit 1, Line 10	36,725,112
4 Residential DSM Program Cost	Evans Exhibit 1, pg. 5 * NC Alloc. Factor	12,243,392
5 Residential DSM Earned Utility Incentive	Evans Exhibit 1, pg. 5 * NC Alloc. Factor	3,189,876
6 Total DSM Program Cost and Incentive Components	Line 4 + Line 5, Evans Exhibit 1, Line 12	15,433,268
7 Total EE/DSM Program Cost and Incentive Components	Line 3 + Line 6	52,158,380
8 Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 7	1.001402
9 Total EE/DSM Program Cost and Incentive Revenue Requirement	Line 7 * Line 8	52,231,506
10 Residential Net Lost Revenues	Evans Exhibit 2 pg. 3 Line 177	14,667,095
11 <b>Total Residential EE Revenue Requirement</b>	<b>Line 9 + Line 10</b>	<b>\$ 66,898,601</b>

See Miller Exhibit 1  
for rate

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

Line	Reference	2020
12 Non- Residential EE Program Cost	Evans Exhibit 1, pg. 5 * NC Alloc. Factor	\$ 37,708,077
13 Non-Residential EE Earned Utility Incentive	Evans Exhibit 1, pg. 5 * NC Alloc. Factor	10,010,194
14 Total EE Program Cost and Incentive Components	Line 12 + Line 13, Evans Exhibit 1, Line 27	47,718,271
15 Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 7	1.001402
16 Total Non-Residential EE Program Cost and Incentive Revenue Requirements	Line 14 * Line 15	47,785,172
17 Non-Residential Net Lost Revenues	Evans Exhibit 2 pg. 3 Line 194	5,183,193
18 Total Non-Residential EE Revenue Requirement	Line 16 + Line 17	\$ 52,968,365
19 Projected NC Residential Sales (kWh)	Miller Exhibit 6, pg. 1, Line 14	17,184,515,812
20 <b>NC Non-Residential EE billing factor (Cents/kWh)</b>	<b>Line 18/Line 19*100</b>	<b>0.3082</b>

**DSM Programs**

Line	Reference	2020
21 Non-Residential DSM Program Cost	Evans Exhibit 1, pg. 5 * NC Alloc. Factor	\$ 15,789,462
22 Non-Residential DSM Earned Utility Incentive	Evans Exhibit 1, pg. 5 * NC Alloc. Factor	4,113,764
23 Total Non-Residential DSM Program Cost and Incentive Components	Line 21 + Line 22, Evans Exhibit 1, Line 29	19,903,226
24 Revenue-related taxes and regulatory fees factor	Miller Exhibit 2, pg. 7	1.001402
25 Total Non-Residential DSM Revenue Requirement	Line 23 * Line 24	19,931,130
26 Projected NC Non-Residential Sales (kWh)	Miller Exhibit 6, pg. 1, Line 15	18,099,339,344
27 <b>NC Non-Residential DSM billing factor</b>	<b>Line 25/Line 26*100</b>	<b>0.1101</b>

Duke Energy Carolinas, LLC  
 Docket No. E-7, Sub 1192  
 Gross Receipts Tax Years 2015 through estimated 2020

	<u>Year</u>		<u>Actual GRT Rate In Effect</u>
	2015	Jan - June	1.001352
		July - Dec	1.001482
Rider 6	2015	Weighted Average	1.001417
Rider 7	2016	Jan - June	1.001482
		July - Dec	1.001402
		Weighted Average	1.001442
Rider 8	2017		1.001402
Rider 9	2018		1.001402
Rider 10	2019		1.001402
Rider 11	2020		1.001402

Note: the current rate is used as the estimate for 2019 and 2020. This will be subject to true-up based on actual rates in effect.

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
Estimated Return Calculation - Residential EE Programs Vintage 2015

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
		2018				7.29%			0.766497	
						6.83%			(1-233503)	
<b>Beginning Balance - source</b>	(200,678)			<b>(47,390)</b>						
2018 January	(186,248)	0.236149	3,408	(43,982)	(142,265)	0.006075	(432)	(432)	0.766497	(564)
2018 February	(157,663)	0.236149	6,750	(37,232)	(120,431)	0.006075	(798)	(1,230)	0.766497	(1,605)
2018 March	(136,697)	0.236149	4,951	(32,281)	(104,416)	0.006075	(683)	(1,913)	0.766497	(2,496)
2018 April	(115,580)	0.236149	4,987	(27,294)	(88,286)	0.006075	(585)	(2,498)	0.766497	(3,259)
2018 May	(97,147)	0.236149	4,353	(22,941)	(74,206)	0.006075	(494)	(2,992)	0.766497	(3,903)
2018 June	(70,765)	0.236149	6,230	(16,711)	(54,054)	0.006075	(390)	(3,382)	0.766497	(4,412)
2018 July	(40,447)	0.236149	7,160	(9,551)	(30,895)	0.006075	(258)	(3,640)	0.766497	(4,748)
2018 August	(12,568)	0.236149	6,584	(2,968)	(9,600)	0.005692	(115)	(3,755)	0.766497	(4,899)
2018 September	17,373	0.236149	7,070	4,103	13,270	0.005692	10	(3,744)	0.766497	(4,885)
2018 October	38,455	0.236149	4,979	9,081	29,374	0.005692	121	(3,623)	0.766497	(4,727)
2018 November	57,923	0.236149	4,597	13,679	44,245	0.005692	210	(3,414)	0.766497	(4,453)
2018 December	(536,672)	0.236149	(140,413)	(126,735)	(409,938)	0.005692	(1,041)	(4,454)	0.766497	(5,811)

Note 1: Revenues collected represent amounts actually collected through 2018.

Interest Calculation

2017 - Rider 8	Month	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	Lost Revenues	Revenue Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total Cumulative Under/Over Collected
Beginning Balance		27,959,114	26,837,675	1,121,439	-	-	-	-	-	-	1,121,439
January											1,121,439
February											1,121,439
March											1,121,439
April											1,121,439
May											1,121,439
June											1,121,439
July											1,121,439
August											1,121,439
September											1,121,439
October											1,121,439
November											1,121,439
December											1,121,439
YTD Balance		27,959,114	26,837,675	1,121,439	14,733,024	14,142,082	590,942	4,852,974	4,658,321	194,654	1,907,034

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
Estimated Return Calculation - Residential EE Programs Vintage 2015

Interest Calculation

2018 - Rider9	Month	NC Program Costs Incurred	Revenue Collected	Undercollected Balance	Lost Revenues	Revenue Collected	Undercollected Balance	PPI	Revenue Collected	Undercollected Balance	Total Cumulative Over/Under Collected
Beginning Balance		27,959,114	26,837,675	1,121,439	14,733,024	14,142,082	590,942	4,852,974	4,658,321	194,654	1,907,034
January			-	-		155,318	(155,318)		2,365	(2,365)	1,749,351
February			-	-		390,165	(390,165)		5,942	(5,942)	1,353,244
March			-	-		326,594	(326,594)		4,974	(4,974)	1,021,675
April			-	-		242,852	(242,852)		3,699	(3,699)	775,124
May			-	-		236,501	(236,501)		3,602	(3,602)	535,022
June			-	-		316,267	(316,267)		4,817	(4,817)	213,938
July			-	-		402,008	(402,008)		6,123	(6,123)	(194,192)
August			-	-		420,989	(420,989)		6,412	(6,412)	(621,592)
September			-	-		406,238	(406,238)		6,187	(6,187)	(1,034,017)
October			-	-		267,581	(267,581)		4,075	(4,075)	(1,305,673)
November			-	-		235,865	(235,865)		3,592	(3,592)	(1,545,130)
December			-	-	8,263,187	565,268	7,697,919	126,047	8,609	117,438	6,270,227
YTD Balance		-	-	-	8,263,187	3,965,645	4,297,542	126,047	60,396	65,651	
Cumulative Ending Balance		27,959,114	26,837,675	1,121,439	22,996,211	18,107,728	4,888,483	4,979,022	4,718,717	260,305	6,270,227

Interest Calculation

2019 - Rider10	Month	NC Program Costs Incurred	Revenue Collected	Cumulative Undercollected Balance	Lost Revenues	Revenue Collected	Cumulative Undercollected Balance	PPI	Revenue Collected	Cumulative Undercollected Balance	Total Cumulative Under/(Over) Collected Balance
Beginning Balance		27,959,114	26,837,675	1,121,439	22,996,211	18,107,728	4,888,483	4,979,022	4,718,717	260,305	6,270,227
January			53,450	1,067,989		-	4,888,483		-	260,305	6,216,777
February			105,182	962,808		-	4,888,483		-	260,305	6,111,595
March			96,023	866,784		-	4,888,483		-	260,305	6,015,572
April			91,900	774,884		-	4,888,483		-	260,305	5,923,672
May			85,130	689,755		-	4,888,483		-	260,305	5,838,542
June			108,233	581,522		-	4,888,483		-	260,305	5,730,310
July			134,008	447,514		-	4,888,483		-	260,305	5,596,302
August			132,032	315,482		-	4,888,483		-	260,305	5,464,270
September			114,599	200,883		-	4,888,483		-	260,305	5,349,671
October			89,350	111,533		-	4,888,483		-	260,305	5,260,321
November			87,057	24,476		-	4,888,483		-	260,305	5,173,264
December			225,155	(200,678)	6,753,855	8,269,323	3,373,016		148,603	111,702	3,284,039
YTD Balance		-	1,322,117	-	6,753,855	8,269,323	3,373,016	-	148,603		
Cumulative Ending Balance		27,959,114	28,159,792	(200,678)	29,750,066	26,377,050	3,373,016	4,979,022	4,867,320	111,702	3,284,039

Interest Calculation

2020 - Rider 11	Month	NC Program Costs Incurred	Revenue Collected	Cumulative Undercollected Balance	Lost Revenues	Revenue Collected	Cumulative Undercollected Balance	PPI	Revenue Collected	Cumulative Undercollected Balance	Total Cumulative Under/(Over) Collected Balance
Beginning Balance		27,959,114	28,159,792	(200,678)	29,750,066	26,377,050	3,373,016	4,979,022	4,867,320	111,702	3,284,039
January			(14,431)	(186,248)	900,128	393,209	3,879,934		10,620	101,081	3,794,768
February			(28,585)	(157,663)	797,208	778,892	3,898,250		21,037	80,044	3,820,631
March			(20,966)	(136,697)	708,474	571,275	4,035,448		15,430	64,614	3,963,366
April			(21,117)	(115,580)	625,633	575,405	4,085,676		15,541	49,073	4,019,169
May			(18,433)	(97,147)	543,299	502,268	4,126,708		13,566	35,507	4,065,068
June			(26,381)	(70,765)	450,244	718,851	3,858,100		19,416	16,091	3,803,425
July			(30,319)	(40,447)	365,764	826,133	3,397,731		22,313	(6,222)	3,351,062
August			(27,879)	(12,568)		759,650	2,638,081		20,518	(26,740)	2,598,773
September			(29,941)	17,373		815,838	1,822,243		22,035	(48,775)	1,790,841
October			(21,082)	38,455		574,463	1,247,781		15,869	(64,645)	1,221,592
November			(19,468)	57,923		530,467	717,314		14,328	(78,972)	696,265
December			(45,704)	103,627		1,245,359	(528,045)		33,282	(112,255)	(536,672)
YTD Balance		-	(304,305)	103,627	4,390,750	8,291,811	(528,045)	-	223,956	(112,255)	(536,672)
Cumulative Ending Balance		27,959,114	27,855,487	103,627	34,140,816	34,668,861	(528,045)	4,979,022	5,091,276	(112,255)	(536,672)

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Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
Estimated Return Calculation - Residential DSM Programs Vintage 2015

NC Residential DSM	Total System NC DSM Program Costs Incurred	NC Residential DSM Allocation %	NC Allocated DSM Residential Program Costs	NC Residential Revenue Collected(EEC2)	NC Residential DSM Program Collection %	DSM Program Costs Revenue Collected	(Over)/Under Collection
	Miller Exhibit 5, pg 2 Line 9			See calc. at right			
<b>Beginning Balance - from Ri</b>	<b>31,962,633</b>	<b>32.5218612%</b>	<b>10,394,843</b>	<b>12,983,975</b>		<b>(10,384,396)</b>	<b>10,447</b>
2018 January		32.5218612%	-	1,070	61.5470492%	(659)	(659)
2018 February		32.5218612%	-	2,102	61.5470492%	(1,294)	(1,294)
2018 March		32.5218612%	-	1,547	61.5470492%	(952)	(952)
2018 April		32.5218612%	-	1,558	61.5470492%	(959)	(959)
2018 May		32.5218612%	-	1,362	61.5470492%	(838)	(838)
2018 June		32.5218612%	-	1,942	61.5470492%	(1,195)	(1,195)
2018 July		32.5218612%	-	2,229	61.5470492%	(1,372)	(1,372)
2018 August		32.5218612%	-	2,051	61.5470492%	(1,262)	(1,262)
2018 September		32.5218612%	-	2,201	61.5470492%	(1,355)	(1,355)
2018 October		32.5218612%	-	1,555	61.5470492%	(957)	(957)
2018 November		32.5218612%	-	1,437	61.5470492%	(885)	(885)
2018 December		32.5218612%	-	3,351	61.5470492%	(2,062)	(2,062)
	-		10,394,843	13,006,378		(10,398,185)	(3,341)

Program Costs to be recovered in Rider 11	10,447
Revenue Requirement Requested in Rider 11	16,974
Percent of Revenue to be applied to total collections	62%

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
	2018					7.29%			0.766497	
						6.83%				
<b>Beginning Balance - from Ri</b>	<b>10,447</b>			<b>2,467</b>	<b>7,980</b>					
2018 January	9,789	0.236149	(156)	2,312	7,477	0.006075	47	47	0.766497	61
2018 February	8,495	0.236149	(306)	2,006	6,489	0.006075	42	89	0.766497	117
2018 March	7,543	0.236149	(225)	1,781	5,762	0.006075	37	127	0.766497	165
2018 April	6,584	0.236149	(226)	1,555	5,029	0.006075	33	159	0.766497	208
2018 May	5,746	0.236149	(198)	1,357	4,389	0.006075	29	188	0.766497	245
2018 June	4,551	0.236149	(282)	1,075	3,476	0.006075	24	212	0.766497	276
2018 July	3,179	0.236149	(324)	751	2,429	0.006075	18	230	0.766497	300
2018 August	1,917	0.236149	(298)	453	1,464	0.005692	11	241	0.766497	314
2018 September	563	0.236149	(320)	133	430	0.005692	5	246	0.766497	321
2018 October	(395)	0.236149	(226)	(93)	(301)	0.005692	0	247	0.766497	322
2018 November	(1,279)	0.236149	(209)	(302)	(977)	0.005692	(4)	243	0.766497	317
2018 December	(3,341)	0.236149	(487)	(789)	(2,552)	0.005692	(10)	233	0.766497	304
										233
										304

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

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
Estimated Return Calculation - Non- Residential EE Programs Vintage 2015

NC Non- Residential EE	Non-Residential EE Program Costs		NC Allocated EE Program Costs	NC Residential Revenue Collected(EEC15)	NC Non- Residential EE Program Collection %	Non-Residential EE Program Costs Revenue Collected	(Over)/Under Collection
	Incurred	NC Allocation %					
	Miller Exhibit 5, pg 2, Line 4				See calc. at right		
<b>Beginning Balance - source Rider</b>	<b>40,096,318</b>	<b>72.9564706%</b>	<b>29,252,858</b>	<b>49,895,986</b>		<b>(27,536,038)</b>	<b>1,716,820</b>
2018 January		72.9564706%	-	568,041	20.6964576%	(117,564)	(117,564)
2018 February		72.9564706%	-	602,713	20.6964576%	(124,740)	(124,740)
2018 March		72.9564706%	-	539,207	20.6964576%	(111,597)	(111,597)
2018 April		72.9564706%	-	571,303	20.6964576%	(118,239)	(118,239)
2018 May		72.9564706%	-	583,957	20.6964576%	(120,858)	(120,858)
2018 June		72.9564706%	-	707,348	20.6964576%	(146,396)	(146,396)
2018 July		72.9564706%	-	719,033	20.6964576%	(148,814)	(148,814)
2018 August		72.9564706%	-	715,298	20.6964576%	(148,041)	(148,041)
2018 September		72.9564706%	-	797,739	20.6964576%	(165,104)	(165,104)
2018 October		72.9564706%	-	826,401	20.6964576%	(171,036)	(171,036)
2018 November		72.9564706%	-	568,555	20.6964576%	(117,671)	(117,671)
2018 December		72.9564706%	-	787,159	20.6964576%	(162,914)	(162,914)
			29,252,858	57,882,741		(25,883,063)	63,845

Program Cost Allocation Calculation	
Non-Res EE Program Costs under collected balance	1,716,820
Non-Res EE Revenue Requirement in Rider 9	8,295,238
<b>% Revenue related to Program Costs</b>	<b>21%</b>
Note: Vintage Year 2015 collections in 2018 stem from Rider 9	

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
		2018				7.29%			0.766497	
						6.83%				
<b>Beginning Balance from Rider 9</b>	<b>1,716,820</b>			<b>405,425</b>	<b>1,311,395</b>					
2018 January	1,599,256	0.236149	(27,762.70)	377,663	1,221,593	0.006075	7,694	7,694	0.766497	10,038
2018 February	1,474,516	0.236149	(29,457.30)	348,205	1,126,310	0.006075	7,132	14,826	0.766497	19,342
2018 March	1,362,919	0.236149	(26,353.48)	321,852	1,041,067	0.006075	6,583	21,409	0.766497	27,931
2018 April	1,244,680	0.236149	(27,922.13)	293,930	950,750	0.006075	6,050	27,459	0.766497	35,824
2018 May	1,123,821	0.236149	(28,540.60)	265,389	858,432	0.006075	5,495	32,955	0.766497	42,994
2018 June	977,425	0.236149	(34,571.28)	230,818	746,607	0.006075	4,875	37,830	0.766497	49,354
2018 July	828,611	0.236149	(35,142.37)	195,676	632,935	0.006075	4,190	42,020	0.766497	54,821
2018 August	680,569	0.236149	(34,959.80)	160,716	519,854	0.005692	3,281	45,301	0.766497	59,101
2018 September	515,466	0.236149	(38,989.08)	121,727	393,739	0.005692	2,600	47,901	0.766497	62,493
2018 October	344,430	0.236149	(40,389.92)	81,337	263,093	0.005692	1,869	49,770	0.766497	64,932
2018 November	226,759	0.236149	(27,787.83)	53,549	173,210	0.005692	1,242	51,012	0.766497	66,552
2018 December	63,845	0.236149	(38,471.97)	15,077	48,768	0.005692	632	51,643	0.766497	67,376
										<b>67,376</b>

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

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
Estimated Return Calculation -Non - Residential DSM Programs Vintage 2015

NC Non-Residential DSM	Total System NC DSM Program Costs Incurred	NC Non- Residential DSM Allocation %	NC Allocated DSM Non- Residential Program Costs	Incentives Earned & GRT remitted (Allocated based on WA of Program Costs Incurred)	Total DSM Revenue Requirement	NC Non-Residential DSM Revenue Collected(DS15)	NC Non-Residential DSM Program Collection %	Non-Residential DSM Program Costs Revenue Collected	(Over)/Under Collection
		See Miller Exhibit 5 pg. 2, Line 10							
<b>Beginning Balance - revenue req</b>	<b>31,958,782</b>	<b>42.4483655%</b>	<b>13,565,981</b>	<b>2,960,385</b>	<b>16,526,366</b>	<b>16,946,105</b>	<b>100.000000%</b>	<b>(16,946,105)</b>	<b>(419,739)</b>
2018 January	-	42.4483655%	-	-	-	(53,805)	100.000000%	(53,805)	53,805
2018 February	-	42.4483655%	-	-	-	(37,120)	100.000000%	(37,120)	37,120
2018 March	-	42.4483655%	-	-	-	(32,596)	100.000000%	(32,596)	32,596
2018 April	-	42.4483655%	-	-	-	(35,291)	100.000000%	(35,291)	35,291
2018 May	-	42.4483655%	-	-	-	(35,545)	100.000000%	(35,545)	35,545
2018 June	-	42.4483655%	-	-	-	(42,596)	100.000000%	(42,596)	42,596
2018 July	-	42.4483655%	-	-	-	(44,317)	100.000000%	(44,317)	44,317
2018 August	-	42.4483655%	-	-	-	(43,372)	100.000000%	(43,372)	43,372
2018 September	-	42.4483655%	-	-	-	(48,517)	100.000000%	(48,517)	48,517
2018 October	-	42.4483655%	-	-	-	(50,018)	100.000000%	(50,018)	50,018
2018 November	-	42.4483655%	-	-	-	(35,152)	100.000000%	(35,152)	35,152
2018 December	-	42.4483655%	-	-	-	(56,830)	100.000000%	(56,830)	56,830
	-		-		16,526,366	16,430,948			95,418

  

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
		2018				7.29%			0.766497	
						6.83%				
<b>Beginning Balance - from Rider 5</b>	<b>(419,739)</b>			<b>(99,121)</b>	<b>(320,618)</b>					
2018 January	(365,934)	0.236149	12,706	(86,415)	(279,519)	0.006075	(1,823)	(1,823)	0.766497	(2,378)
2018 February	(328,814)	0.236149	8,766	(77,649)	(251,165)	0.006075	(1,612)	(3,435)	0.766497	(4,481)
2018 March	(296,218)	0.236149	7,697	(69,952)	(226,267)	0.006075	(1,450)	(4,885)	0.766497	(6,373)
2018 April	(260,927)	0.236149	8,334	(61,618)	(199,310)	0.006075	(1,293)	(6,178)	0.766497	(8,060)
2018 May	(225,383)	0.236149	8,394	(53,224)	(172,159)	0.006075	(1,128)	(7,306)	0.766497	(9,532)
2018 June	(182,787)	0.236149	10,059	(43,165)	(139,622)	0.006075	(947)	(8,253)	0.766497	(10,767)
2018 July	(138,470)	0.236149	10,465	(32,700)	(105,771)	0.006075	(745)	(8,999)	0.766497	(11,740)
2018 August	(95,098)	0.236149	10,242	(22,457)	(72,641)	0.005692	(508)	(9,506)	0.766497	(12,402)
2018 September	(46,581)	0.236149	11,457	(11,000)	(35,581)	0.005692	(308)	(9,814)	0.766497	(12,804)
2018 October	3,437	0.236149	11,812	812	2,625	0.005692	(94)	(9,908)	0.766497	(12,926)
2018 November	38,589	0.236149	8,301	9,113	29,476	0.005692	91	(9,817)	0.766497	(12,807)
2018 December	95,418	0.236149	13,420	22,533	72,885	0.005692	291	(9,525)	0.766497	(12,427)

**Program Cost Allocation Methodology**  
No program cost allocation is needed because the vintage was overcollected in total and interest due was calculated on the entire vintage.  
Therefore, 100% of all revenues offset the overcollected balance.

Note 1: Revenues collected represent amounts actually collected through 2018.

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
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		Deferred Income Tax	Deferred Income Tax	After Tax Balance				Return to Pretax Rate	
		2018				7.29%			0.766497	
						6.83%				
<b>Beginning Balance - source</b>	11,777,137			2,781,159	8,995,978					
2018 January	11,187,036	0.236149	(139,352)	2,641,807	8,545,229	0.006075	53,281	53,281	0.766497	69,513
2018 February	9,990,702	0.236149	(282,513)	2,359,294	7,631,407	0.006075	49,137	102,418	0.766497	133,618
2018 March	9,120,709	0.236149	(205,448)	2,153,846	6,966,862	0.006075	44,342	146,760	0.766497	191,469
2018 April	8,244,224	0.236149	(206,981)	1,946,865	6,297,359	0.006075	40,290	187,050	0.766497	244,033
2018 May	7,482,701	0.236149	(179,833)	1,767,032	5,715,668	0.006075	36,490	223,540	0.766497	291,638
2018 June	6,380,741	0.236149	(260,227)	1,506,806	4,873,936	0.006075	32,166	255,706	0.766497	333,603
2018 July	5,110,153	0.236149	(300,048)	1,206,757	3,903,395	0.006075	26,661	282,367	0.766497	368,386
2018 August	3,944,064	0.236149	(275,371)	931,387	3,012,678	0.005692	19,682	302,049	0.766497	394,064
2018 September	2,689,658	0.236149	(296,227)	635,160	2,054,498	0.005692	14,420	316,469	0.766497	412,877
2018 October	1,814,656	0.236149	(206,631)	428,529	1,386,127	0.005692	9,791	326,261	0.766497	425,652
2018 November	1,008,808	0.236149	(190,300)	238,229	770,579	0.005692	6,138	332,398	0.766497	433,659
2018 December	(1,972,320)	0.236149	(703,990)	(465,762)	(1,506,559)	0.005692	(2,094)	330,304	0.766497	430,926
							330,304			430,926

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	
January						-	-				18,689,761	EE Program Costs 40,021,103 0.63
February						-	-				18,689,761	EE PPI & GRT 6,821,368 0.11
March						-	-				18,689,761	EE Lost Revenue 16,669,126 0.26
April						-	-				18,689,761	Total EE Revenue Requirement 63,511,597
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	

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)	(50,792.97)		(50,793)	2,424,300	5,570,022	(3,145,722)	15,493,244
	YTD Balance	(2)	-	(2)	(50,793)	-	(50,793)	2,424,300	5,570,022	(3,145,722)	15,493,244
	Cumulative Ending 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

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
<b>Total Revenue Requirement</b>	<b>25,227,881</b>	

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

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
<b>Beginning Balance - source</b>	(986,784)			(233,028)	(753,756)					
2018 January	(943,803)	0.236149	10,150	(222,878)	(720,925)	0.006075	(4,479)	(4,479)	0.766497	(5,844)
2018 February	(851,272)	0.236149	21,851	(201,027)	(650,245)	0.006075	(4,165)	(8,644)	0.766497	(11,278)
2018 March	(785,414)	0.236149	15,552	(185,475)	(599,939)	0.006075	(3,797)	(12,442)	0.766497	(16,232)
2018 April	(719,025)	0.236149	15,678	(169,797)	(549,228)	0.006075	(3,491)	(15,932)	0.766497	(20,786)
2018 May	(662,033)	0.236149	13,459	(156,338)	(505,694)	0.006075	(3,204)	(19,137)	0.766497	(24,966)
2018 June	(577,215)	0.236149	20,030	(136,309)	(440,906)	0.006075	(2,875)	(22,012)	0.766497	(28,718)
2018 July	(478,615)	0.236149	23,284	(113,024)	(365,590)	0.006075	(2,450)	(24,462)	0.766497	(31,914)
2018 August	(388,556)	0.236149	21,267	(91,757)	(296,799)	0.006075	(2,012)	(26,474)	0.766497	(34,539)
2018 September	(291,278)	0.236149	22,972	(68,785)	(222,493)	0.006075	(1,577)	(28,051)	0.766497	(36,596)
2018 October	(225,011)	0.236149	15,649	(53,136)	(171,875)	0.006075	(1,198)	(29,249)	0.766497	(38,159)
2018 November	(164,396)	0.236149	14,314	(38,822)	(125,574)	0.006075	(904)	(30,152)	0.766497	(39,338)
2018 December	(11,973)	0.236149	35,994	(2,827)	(9,146)	0.006075	(409)	(30,562)	0.766497	(39,872)
							(30,562)			(39,872)

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
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
Total	(986,784)	

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>	68,416,594		50,009,987	45,662,897	69.71121%	(31,832,160)	18,177,827
2018 January		73.0962827%	-	679,787	45.63863%	(310,246)	(310,246)
2018 February		73.0962827%	-	2,902,313	45.63863%	(1,324,576)	(1,324,576)
2018 March		73.0962827%	-	2,586,992	45.63863%	(1,180,668)	(1,180,668)
2018 April		73.0962827%	-	2,741,877	45.63863%	(1,251,355)	(1,251,355)
2018 May		73.0962827%	-	2,801,556	45.63863%	(1,278,592)	(1,278,592)
2018 June		73.0962827%	-	3,405,104	45.63863%	(1,554,043)	(1,554,043)
2018 July		73.0962827%	-	3,471,798	45.63863%	(1,584,481)	(1,584,481)
2018 August		73.0962827%	-	3,444,453	45.63863%	(1,572,001)	(1,572,001)
2018 September		73.0962827%	-	3,831,885	45.63863%	(1,748,820)	(1,748,820)
2018 October		73.0962827%	-	4,000,975	45.63863%	(1,825,990)	(1,825,990)
2018 November		73.0962827%	-	2,724,564	45.63863%	(1,243,454)	(1,243,454)
2018 December		73.0962827%	-	3,701,529	45.63863%	(1,689,327)	(1,689,327)
			50,009,987	81,955,731		(48,395,713)	1,614,274

<b>Program Costs to be Recovered in Rider 9</b>	<b>18,177,827</b>
Revenues to be Collected in Rider 9	39,829,912
% Revenue to be assigned to Program Costs	0.4564

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
			2018				7.29%			0.766497
						6.83%				
<b>Beginning Balance - Source Ride</b>	18,177,827			4,292,676						
2018 January	17,867,582	0.236149	(73,264.18)	4,219,412	13,648,170	0.006075	41,456	41,456	0.766497	54,085
2018 February	16,543,006	0.236149	(312,797.25)	3,906,614	12,636,391	0.006075	79,839	121,296	0.766497	158,247
2018 March	15,362,338	0.236149	(278,813.47)	3,627,801	11,734,537	0.006075	74,027	195,322	0.766497	254,825
2018 April	14,110,983	0.236149	(295,506.26)	3,332,295	10,778,689	0.006075	68,384	263,706	0.766497	344,041
2018 May	12,832,391	0.236149	(301,938.21)	3,030,356	9,802,035	0.006075	62,514	326,220	0.766497	425,599
2018 June	11,278,348	0.236149	(366,985.70)	2,663,371	8,614,977	0.006075	55,942	382,162	0.766497	498,582
2018 July	9,693,867	0.236149	(374,173.59)	2,289,197	7,404,670	0.006075	48,660	430,822	0.766497	562,066
2018 August	8,121,866	0.236149	(371,226.57)	1,917,970	6,203,895	0.006075	41,336	472,158	0.766497	615,994
2018 September	6,373,046	0.236149	(412,982.12)	1,504,988	4,868,057	0.006075	33,631	505,789	0.766497	659,870
2018 October	4,547,055	0.236149	(431,205.81)	1,073,783	3,473,273	0.006075	25,337	531,125	0.766497	692,926
2018 November	3,303,601	0.236149	(293,640.40)	780,142	2,523,459	0.006075	18,215	549,341	0.766497	716,690
2018 December	1,614,274	0.236149	(398,932.93)	381,209	1,233,065	0.006075	11,410	560,751	0.766497	731,576
							560,751			731,576

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

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
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
		2018				7.29%			0.766497	
						6.83%				
<b>Beginning Balance - Source Ride</b>	45,391			10,719	34,672					
2018 January	38,152	0.236149	(1,710)	9,010	29,142	0.006075	194	194	0.766497	253
2018 February	(3,375)	0.236149	(9,807)	(797)	(2,578)	0.006075	81	275	0.766497	358
2018 March	(39,808)	0.236149	(8,604)	(9,401)	(30,407)	0.006075	(100)	174	0.766497	227
2018 April	(17,951)	0.236149	5,161	(4,239)	(13,712)	0.006075	(134)	40	0.766497	53
2018 May	(42,359)	0.236149	(5,764)	(10,003)	(32,356)	0.006075	(140)	(100)	0.766497	(130)
2018 June	(71,615)	0.236149	(6,909)	(16,912)	(54,703)	0.006075	(264)	(364)	0.766497	(475)
2018 July	(102,080)	0.236149	(7,194)	(24,106)	(77,974)	0.006075	(403)	(767)	0.766497	(1,001)
2018 August	(131,902)	0.236149	(7,042)	(31,148)	(100,753)	0.005692	(509)	(1,276)	0.766497	(1,664)
2018 September	(164,952)	0.236149	(7,805)	(38,953)	(125,999)	0.005692	(645)	(1,921)	0.766497	(2,506)
2018 October	(199,743)	0.236149	(8,216)	(47,169)	(152,574)	0.005692	(793)	(2,714)	0.766497	(3,540)
2018 November	(223,833)	0.236149	(5,689)	(52,858)	(170,975)	0.005692	(921)	(3,635)	0.766497	(4,742)
2018 December	(250,377)	0.236149	(6,268)	(59,126)	(191,251)	0.005692	(1,031)	(4,665)	0.766497	(6,087)
							(4,665)			(6,087)

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	(3,375)	(2,780)	(18,850)	31,998	28,623
March			36,433	(39,808)	(2,439)	(16,538)	46,097	6,289
April			39,543	(79,351)	(2,647)	(17,950)	61,400	(17,951)
May			39,817	(119,168)	(2,665)	(18,074)	76,809	(42,359)
June			47,726	(166,894)	(3,195)	(21,665)	95,279	(71,615)
July			49,697	(216,591)	(3,327)	(22,559)	114,511	(102,080)
August			48,648	(265,240)	(3,256)	(22,083)	133,338	(131,902)
September			53,916	(319,155)	(3,609)	(24,474)	154,203	(164,952)
October			56,754	(375,909)	(3,799)	(25,763)	176,167	(199,743)
November			39,300	(415,209)	(2,631)	(17,839)	191,375	(223,833)
December			43,300	(458,509)	(2,898)	(19,655)	208,133	(250,377)
YTD Balance		-	503,901	(458,509)	(33,730)	(228,737)	208,133	(250,377)
Cumulative Ending Balance		11,594,497	12,053,007	(458,509)	3,318,420	3,110,288	208,133	(250,377)

Revenue Requirement:		
Program Costs	45,391	1.83
PPI	(20,605)	(0.83)
Total	24,787	
Revenue Collected:	276,923	
Less Interest collected:	1,759	
Total	275,164	

Reconciliation to Filing - Exhibit 2 page 2 :

Interest not yet paid Rider 10 & 11	(2,667)
Revenue not yet given back	267,721
	14,678
Exhibit 2 page 2 Line 35	14,674
	3

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
Estimated Return Calculation - Residential EE Programs Vintage 2017

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
2018 January	65,222,734	72.8087506%	47,487,858	49,132,586	59.7964%	(29,379,532)	18,108,325
2018 February		72.8087506%	-		0.0000%	-	-
2018 March		72.8087506%	-		0.0000%	-	-
2018 April		72.8087506%	-		0.0000%	-	-
2018 May		72.8087506%	-		0.0000%	-	-
2018 June		72.8087506%	-		0.0000%	-	-
2018 July		72.8087506%	-		0.0000%	-	-
2018 August		72.8087506%	-		0.0000%	-	-
2018 September		72.8087506%	-		0.0000%	-	-
2018 October		72.8087506%	-		0.0000%	-	-
2018 November		72.8087506%	-		0.0000%	-	-
2018 December		72.8087506%	-		0.0000%	-	-
	65,222,734		47,487,858	49,132,586			18,108,325

Note: All revenues collected in Rider 9 were to collect Y2 of lost revenue. Therefore, no revenue received in 2018 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
2018 January	18,108,325	0.236149	4,276,263	4,276,263	13,832,063	0.006075	42,015	42,015	0.766497	54,814
2018 February	18,108,325	0.236149	-	4,276,263	13,832,063	0.006075	84,030	126,045	0.766497	164,442
2018 March	18,108,325	0.236149	-	4,276,263	13,832,063	0.006075	84,030	210,074	0.766497	274,071
2018 April	18,108,325	0.236149	-	4,276,263	13,832,063	0.006075	84,030	294,104	0.766497	383,699
2018 May	18,108,325	0.236149	-	4,276,263	13,832,063	0.006075	84,030	378,134	0.766497	493,327
2018 June	18,108,325	0.236149	-	4,276,263	13,832,063	0.006075	84,030	462,164	0.766497	602,956
2018 July	18,108,325	0.236149	-	4,276,263	13,832,063	0.006075	84,030	546,194	0.766497	712,584
2018 August	18,108,325	0.236149	-	4,276,263	13,832,063	0.005692	78,727	624,921	0.766497	815,295
2018 September	18,108,325	0.236149	-	4,276,263	13,832,063	0.005692	78,727	703,649	0.766497	918,006
2018 October	18,108,325	0.236149	-	4,276,263	13,832,063	0.005692	78,727	782,376	0.766497	1,020,716
2018 November	18,108,325	0.236149	-	4,276,263	13,832,063	0.005692	78,727	861,104	0.766497	1,123,427
2018 December	18,108,325	0.236149	-	4,276,263	13,832,063	0.005692	78,727	939,831	0.766497	1,226,138
							939,831			1,226,138

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

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
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 4 Line 9	See calc. at right				
2018	January	29,822,653	33.8075104%	10,082,297	12,781,955	77.3907656%	(9,892,053)	190,244
2018	February		33.8075104%	-			-	-
2018	March		33.8075104%	-			-	-
2018	April		33.8075104%	-			-	-
2018	May		33.8075104%	-			-	-
2018	June		33.8075104%	-			-	-
2018	July		33.8075104%	-			-	-
2018	August		33.8075104%	-			-	-
2018	September		33.8075104%	-			-	-
2018	October		33.8075104%	-			-	-
2018	November		33.8075104%	-			-	-
2018	December		33.8075104%	-			-	-
		29,822,653		10,082,297	12,781,955		(9,892,053)	190,244

Note: All revenues collected in Rider 9 were to collect Y2 of lost revenue. Therefore, no revenue received in 2018 would offset the under collected balance of program costs and a return would still be earned.

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
		2018					7.29%			0.766497	
							6.83%				
2018	January	190,244	0.236149	44,926	44,926	145,318	0.006075	441	441	0.766497	576
2018	February	190,244	0.236149	-	44,926	145,318	0.006075	883	1,324	0.766497	1,728
2018	March	190,244	0.236149	-	44,926	145,318	0.006075	883	2,207	0.766497	2,879
2018	April	190,244	0.236149	-	44,926	145,318	0.006075	883	3,090	0.766497	4,031
2018	May	190,244	0.236149	-	44,926	145,318	0.006075	883	3,973	0.766497	5,183
2018	June	190,244	0.236149	-	44,926	145,318	0.006075	883	4,855	0.766497	6,335
2018	July	190,244	0.236149	-	44,926	145,318	0.006075	883	5,738	0.766497	7,486
2018	August	190,244	0.236149	-	44,926	145,318	0.005692	827	6,565	0.766497	8,565
2018	September	190,244	0.236149	-	44,926	145,318	0.005692	827	7,392	0.766497	9,644
2018	October	190,244	0.236149	-	44,926	145,318	0.005692	827	8,220	0.766497	10,724
2018	November	190,244	0.236149	-	44,926	145,318	0.005692	827	9,047	0.766497	11,803
2018	December	190,244	0.236149	-	44,926	145,318	0.005692	827	9,874	0.766497	12,882
								9,874			12,882

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

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
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 4, Line 4				See calc. at right		
2018 January	97,443,527	72.8087506%	70,947,415	46,928,129	65.9170989%	(30,933,661)	40,013,754
2018 February			-			-	-
2018 March			-			-	-
2018 April			-			-	-
2018 May			-			-	-
2018 June			-			-	-
2018 July			-			-	-
2018 August			-			-	-
2018 September			-			-	-
2018 October			-			-	-
2018 November			-			-	-
2018 December			-			-	-
	<u>97,443,527</u>		<u>70,947,415</u>	<u>46,928,129</u>		<u>(30,933,661)</u>	<u>40,013,754</u>

Note: All revenues collected in Rider 9 were to collect Y2 of lost revenue. Therefore, no revenue received in 2018 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	
									Pretax Rate	Gross up of Return to Pretax
		2018				7.29%			0.766497	
						6.83%				
2018 January	40,013,754	0.236149	9,449,208.08	9,449,208	30,564,546	0.006075	92,840	92,840	0.766497	121,122
2018 February	40,013,754	0.236149	-	9,449,208	30,564,546	0.006075	185,680	278,519	0.766497	363,367
2018 March	40,013,754	0.236149	-	9,449,208	30,564,546	0.006075	185,680	464,199	0.766497	605,611
2018 April	40,013,754	0.236149	-	9,449,208	30,564,546	0.006075	185,680	649,879	0.766497	847,855
2018 May	40,013,754	0.236149	-	9,449,208	30,564,546	0.006075	185,680	835,558	0.766497	1,090,100
2018 June	40,013,754	0.236149	-	9,449,208	30,564,546	0.006075	185,680	1,021,238	0.766497	1,332,344
2018 July	40,013,754	0.236149	-	9,449,208	30,564,546	0.006075	185,680	1,206,918	0.766497	1,574,589
2018 August	40,013,754	0.236149	-	9,449,208	30,564,546	0.005692	173,963	1,380,881	0.766497	1,801,547
2018 September	40,013,754	0.236149	-	9,449,208	30,564,546	0.005692	173,963	1,554,844	0.766497	2,028,506
2018 October	40,013,754	0.236149	-	9,449,208	30,564,546	0.005692	173,963	1,728,807	0.766497	2,255,465
2018 November	40,013,754	0.236149	-	9,449,208	30,564,546	0.005692	173,963	1,902,770	0.766497	2,482,424
2018 December	40,013,754	0.236149	-	9,449,208	30,564,546	0.005692	173,963	2,076,734	0.766497	2,709,383
							<u>2,076,734</u>			<u>2,709,383</u>

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

Duke Energy Carolinas, LLC  
Docket No. E-7, Sub 1192  
Estimated Return Calculation - Non - Residential DSM Programs Vintage 2017

NC Non- Residential DSM		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. 4, Line 10						
Beginning Balance		29,822,653	40.0747013%	11,951,339	15,361,431	77.3901377%	(11,888,233)	63,106
2018	January	-	-	-	-	77.3901377%	-	-
2018	February	-	-	-	289	77.3901377%	(223)	(223)
2018	March	-	-	-	114	77.3901377%	(88)	(88)
2018	April	-	-	-	(135)	77.3901377%	104	104
2018	May	-	-	-	(109)	77.3901377%	85	85
2018	June	-	-	-	(46)	77.3901377%	36	36
2018	July	-	-	-	71	77.3901377%	(55)	(55)
2018	August	-	-	-	(48)	77.3901377%	37	37
2018	September	-	-	-	(2)	77.3901377%	2	2
2018	October	-	-	-	(2)	77.3901377%	2	2
2018	November	-	-	-	(0)	77.3901377%	0	0
2018	December	-	-	-	(1,215)	77.3901377%	940	940
		29,822,653		11,951,339	15,360,347		(11,887,394)	63,945

No rider was collected in 2018 for Vintage 2017.  
All revenue collected in 2018 represents  
bill corrections. Amounts allocated at same  
% as calculated in Rider 9.

  

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	
		2018										
							7.29%				0.766497	
							6.83%					
2018	January	63,106	0.236149	14,903	14,903	48,204	0.006075	146	146	0.766497	191	
2018	February	62,883	0.236149	(53)	14,850	48,033	0.006075	292	439	0.766497	572	
2018	March	62,795	0.236149	(21)	14,829	47,966	0.006075	292	730	0.766497	953	
2018	April	62,899	0.236149	25	14,854	48,046	0.006075	292	1,022	0.766497	1,333	
2018	May	62,984	0.236149	20	14,874	48,110	0.006075	292	1,314	0.766497	1,714	
2018	June	63,019	0.236149	8	14,882	48,137	0.006075	292	1,606	0.766497	2,096	
2018	July	62,964	0.236149	(13)	14,869	48,095	0.006075	292	1,899	0.766497	2,477	
2018	August	63,002	0.236149	9	14,878	48,124	0.005692	274	2,173	0.766497	2,834	
2018	September	63,003	0.236149	0	14,878	48,125	0.005692	274	2,446	0.766497	3,192	
2018	October	63,005	0.236149	0	14,879	48,126	0.005692	274	2,720	0.766497	3,549	
2018	November	63,005	0.236149	0	14,879	48,126	0.005692	274	2,994	0.766497	3,906	
2018	December	63,945	0.236149	222	15,101	48,845	0.005692	276	3,270	0.766497	4,266	
								3,270			4,266	

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

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1192**  
**Estimated Return Calculation - Residential EE Programs Vintage 2018**

NC Residential EE		Residential EE	NC Allocated EE	NC Residential	NC Residential	EE Program Costs	(Over)/Under
		Program Costs Incurred			Program Costs	Revenue Collected	
		Miller Exhibit 5 pg. 4, Line 4		see calc. at right			
2018	January	6,092,327	72.7130507%	4,429,917	3,364,993	65.0094%	2,242,355
2018	February	4,207,163	72.7130507%	3,059,157	6,611,534	65.0094%	(1,238,963)
2018	March	4,408,777	72.7130507%	3,205,756	4,863,891	65.0094%	43,769
2018	April	4,357,763	72.7130507%	3,168,662	4,898,653	65.0094%	(15,923)
2018	May	1,949,686	72.7130507%	1,417,676	4,283,009	65.0094%	(1,366,683)
2018	June	9,594,979	72.7130507%	6,976,802	6,106,131	65.0094%	3,007,241
2018	July	7,017,359	72.7130507%	5,102,536	7,009,187	65.0094%	545,904
2018	August	8,991,684	72.7130507%	6,538,128	6,449,559	65.0094%	2,345,307
2018	September	4,496,588	72.7130507%	3,269,606	6,922,525	65.0094%	(1,230,687)
2018	October	7,847,725	72.7130507%	5,706,320	4,890,719	65.0094%	2,526,893
2018	November	7,870,683	72.7130507%	5,723,014	4,520,378	65.0094%	2,784,343
2018	December	10,497,084	72.7130507%	7,632,750	10,538,080	65.0094%	782,005
		77,331,818		56,230,324	70,458,658		10,425,561

EE Program Costs	56,230,326
EE Revenue Requirement	86,495,661
<b>% Revenue related to Program Costs</b>	<b>65.0094%</b>

NC Residential EE		Cumulative	Current Income	Monthly	Cumulative	Net Deferred	Monthly A/T	YTD After Tax	Gross up of	Gross up of Return	
		(Over)/Under Recovery	Tax Rate	Deferred Income Tax	Deferred Income Tax	After Tax Balance			Monthly Return		Return on Deferral
		2018						7.29%	0.766497		
								6.83%			
2018	January	2,242,355	0.236149	529,530	529,530	1,712,825	0.006075	5,203	5,203	0.766497	6,788
2018	February	1,003,391	0.236149	(292,580)	236,950	766,441	0.006075	7,531	12,733	0.766497	16,613
2018	March	1,047,161	0.236149	10,336	247,286	799,875	0.006075	4,758	17,491	0.766497	22,820
2018	April	1,031,237	0.236149	(3,760)	243,526	787,712	0.006075	4,822	22,313	0.766497	29,111
2018	May	(335,445)	0.236149	(322,741)	(79,215)	(256,230)	0.006075	1,614	23,928	0.766497	31,217
2018	June	2,671,796	0.236149	710,157	630,942	2,040,854	0.006075	5,421	29,349	0.766497	38,289
2018	July	3,217,700	0.236149	128,915	759,857	2,457,843	0.006075	13,665	43,013	0.766497	56,117
2018	August	5,563,007	0.236149	553,842	1,313,699	4,249,308	0.005692	19,087	62,101	0.766497	81,019
2018	September	4,332,320	0.236149	(290,625)	1,023,073	3,309,247	0.005692	21,510	83,611	0.766497	109,082
2018	October	6,859,213	0.236149	596,723	1,619,796	5,239,417	0.005692	24,328	107,939	0.766497	140,822
2018	November	9,643,555	0.236149	657,520	2,277,316	7,366,239	0.005692	35,874	143,813	0.766497	187,624
2018	December	10,425,561	0.236149	184,670	2,461,986	7,963,575	0.005692	43,626	187,439	0.766497	244,540
								<b>187,439</b>			<b>244,540</b>

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

**Duke Energy Carolinas, LLC**  
**Docket No. E-7, Sub 1192**  
**Estimated Return Calculation - Residential DSM Programs Vintage 2018**

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
						see calc. at right	
2018 January	1,796,566	32.1574721%	577,730	629,131	78.9680%	(496,812)	80,919
2018 February	1,530,759	32.1574721%	492,253	1,236,115	78.9680%	(976,135)	(483,881)
2018 March	1,744,325	32.1574721%	560,931	909,370	78.9680%	(718,111)	(157,180)
2018 April	1,806,257	32.1574721%	580,847	915,869	78.9680%	(723,243)	(142,396)
2018 May	1,425,924	32.1574721%	458,541	800,766	78.9680%	(632,349)	(173,807)
2018 June	3,051,553	32.1574721%	981,302	1,141,623	78.9680%	(901,517)	79,786
2018 July	3,527,230	32.1574721%	1,134,268	1,310,462	78.9680%	(1,034,845)	99,423
2018 August	3,581,196	32.1574721%	1,151,622	1,205,832	78.9680%	(952,221)	199,402
2018 September	4,029,852	32.1574721%	1,295,899	1,294,259	78.9680%	(1,022,050)	273,849
2018 October	3,506,777	32.1574721%	1,127,691	914,386	78.9680%	(722,072)	405,619
2018 November	1,643,444	32.1574721%	528,490	845,145	78.9680%	(667,394)	(138,904)
2018 December	2,765,522	32.1574721%	889,322	1,970,236	78.9680%	(1,555,855)	(666,533)
	30,409,405		9,778,896	13,173,193		(10,402,600)	(623,705)

DSM Program Costs	9,778,895
DSM Revenue Requirement	12,383,372
% Revenue related to Program Costs	78.9680%

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
2018 January	80,919	0.236149	19,109	19,109	61,810	0.006075	188	188	0.766497	245
2018 February	(402,963)	0.236149	(114,268)	(95,159)	(307,803)	0.006075	(747)	(559)	0.766497	(730)
2018 March	(560,143)	0.236149	(37,118)	(132,277)	(427,865)	0.006075	(2,235)	(2,794)	0.766497	(3,645)
2018 April	(702,539)	0.236149	(33,627)	(165,904)	(536,635)	0.006075	(2,930)	(5,724)	0.766497	(7,467)
2018 May	(876,346)	0.236149	(41,044)	(206,948)	(669,398)	0.006075	(3,663)	(9,387)	0.766497	(12,247)
2018 June	(796,561)	0.236149	18,841	(188,107)	(608,454)	0.006075	(3,881)	(13,269)	0.766497	(17,311)
2018 July	(697,137)	0.236149	23,479	(164,628)	(532,509)	0.006075	(3,466)	(16,734)	0.766497	(21,832)
2018 August	(497,736)	0.236149	47,088	(117,540)	(380,196)	0.006075	(2,772)	(19,507)	0.766497	(25,449)
2018 September	(223,887)	0.236149	64,669	(52,871)	(171,016)	0.005692	(1,569)	(21,075)	0.766497	(27,495)
2018 October	181,732	0.236149	95,787	42,916	138,816	0.005692	(92)	(21,167)	0.766497	(27,615)
2018 November	42,828	0.236149	(32,802)	10,114	32,714	0.005692	488	(20,679)	0.766497	(26,978)
2018 December	(623,705)	0.236149	(157,401)	(147,287)	(476,417)	0.005692	(1,263)	(21,941)	0.766497	(28,626)
							(21,941)			(28,626)

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

Duke Energy Carolinas, LLC  
 Docket No. E-7, Sub 1192  
 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 4, Line 4				See calc. at right		
2018	January	4,673,061	72.7130507%	3,397,925	1,957,913	54.3089677%	(1,063,322)	2,334,603
2018	February	7,695,239	72.7130507%	5,595,443	4,028,107	54.3089677%	(2,187,623)	3,407,820
2018	March	3,924,553	72.7130507%	2,853,662	3,609,259	54.3089677%	(1,960,151)	893,511
2018	April	3,329,880	72.7130507%	2,421,257	3,808,504	54.3089677%	(2,068,359)	352,898
2018	May	3,622,228	72.7130507%	2,633,832	3,892,120	54.3089677%	(2,113,770)	520,062
2018	June	3,399,916	72.7130507%	2,472,183	4,770,029	54.3089677%	(2,590,554)	(118,371)
2018	July	4,064,438	72.7130507%	2,955,377	4,861,345	54.3089677%	(2,640,146)	315,231
2018	August	3,790,914	72.7130507%	2,756,489	4,804,248	54.3089677%	(2,609,138)	147,352
2018	September	3,217,141	72.7130507%	2,339,281	5,326,524	54.3089677%	(2,892,780)	(553,499)
2018	October	3,753,904	72.7130507%	2,729,578	5,686,288	54.3089677%	(3,088,164)	(358,586)
2018	November	3,782,445	72.7130507%	2,750,331	3,774,427	54.3089677%	(2,049,852)	700,479
2018	December	6,010,729	72.7130507%	4,370,584	5,480,038	54.3089677%	(2,976,152)	1,394,432
		51,264,448		37,275,944	51,998,801		(28,240,012)	9,035,932

Non-Res EE Program Costs	37,275,944
Non-Res EE Revenue Requirement	68,636,812
% Revenue related to Program Costs	54%

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
2018	January	2,334,603	0.236149	551,314.18	551,314	1,783,289	0.006075	5,417	5,417	0.766497	7,067
2018	February	5,742,423	0.236149	804,753.18	1,356,067	4,386,355	0.006075	18,740	24,157	0.766497	31,516
2018	March	6,635,934	0.236149	211,001.75	1,567,069	5,068,865	0.006075	28,720	52,877	0.766497	68,986
2018	April	6,988,832	0.236149	83,336.56	1,650,406	5,338,426	0.006075	31,612	84,489	0.766497	110,228
2018	May	7,508,894	0.236149	122,812.19	1,773,218	5,735,676	0.006075	33,638	118,127	0.766497	154,113
2018	June	7,390,523	0.236149	(27,953.21)	1,745,265	5,645,258	0.006075	34,570	152,697	0.766497	199,214
2018	July	7,705,754	0.236149	74,441.40	1,819,706	5,886,048	0.006075	35,026	187,723	0.766497	244,910
2018	August	7,853,105	0.236149	34,796.93	1,854,503	5,998,602	0.005692	33,822	221,545	0.766497	289,035
2018	September	7,299,607	0.236149	(130,708.16)	1,723,795	5,575,812	0.005692	32,939	254,484	0.766497	332,008
2018	October	6,941,021	0.236149	(84,679.72)	1,639,115	5,301,906	0.005692	30,956	285,440	0.766497	372,395
2018	November	7,641,499	0.236149	165,417.36	1,804,532	5,836,967	0.005692	31,699	317,139	0.766497	413,751
2018	December	9,035,932	0.236149	329,293.83	2,133,826	6,902,106	0.005692	36,253	353,392	0.766497	461,049
								353,392			461,049

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

Duke Energy Carolinas, LLC  
 Docket No. E-7, Sub 1192  
 Estimated Return Calculation - Non - Residential DSM Programs Vintage 2018

NC Non- Residential DSM		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. 4, Line 10								
2018	January	1,796,566	41.4712829%	745,059	517,085	78.9679563%	(408,332)	336,727
2018	February	1,530,759	41.4712829%	634,825	1,108,919	78.9679563%	(875,690)	(240,865)
2018	March	1,744,325	41.4712829%	723,394	976,678	78.9679563%	(771,263)	(47,869)
2018	April	1,806,257	41.4712829%	749,078	1,056,527	78.9679563%	(834,318)	(85,240)
2018	May	1,425,924	41.4712829%	591,349	1,064,087	78.9679563%	(840,288)	(248,939)
2018	June	3,051,553	41.4712829%	1,265,518	1,275,106	78.9679563%	(1,006,925)	258,593
2018	July	3,527,230	41.4712829%	1,462,788	1,327,182	78.9679563%	(1,048,049)	414,739
2018	August	3,581,196	41.4712829%	1,485,168	1,298,531	78.9679563%	(1,025,424)	459,744
2018	September	4,029,852	41.4712829%	1,671,231	1,432,259	78.9679563%	(1,131,025)	540,206
2018	October	3,506,777	41.4712829%	1,454,305	1,521,526	78.9679563%	(1,201,518)	252,788
2018	November	1,643,444	41.4712829%	681,557	1,048,352	78.9679563%	(827,863)	(146,305)
2018	December	2,765,522	41.4712829%	1,146,897	1,448,672	78.9679563%	(1,143,986)	2,911
		30,409,405		12,611,170	14,074,924		(11,114,680)	1,496,491

DSM Program Costs	12,611,170
DSM Revenue Requirement	15,969,985
% Revenue related to Program Costs	79%

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
		2018					7.29%			0.766497	
							6.83%				
2018	January	336,727	0.236149	79,518	79,518	257,209	0.006075	781	781	0.766497	1,019
2018	February	95,862	0.236149	(56,880)	22,638	73,224	0.006075	1,004	1,785	0.766497	2,329
2018	March	47,993	0.236149	(11,304)	11,334	36,660	0.006075	334	2,119	0.766497	2,764
2018	April	(37,247)	0.236149	(20,129)	(8,796)	(28,451)	0.006075	25	2,144	0.766497	2,797
2018	May	(286,185)	0.236149	(58,787)	(67,582)	(218,603)	0.006075	(750)	1,393	0.766497	1,818
2018	June	(27,592)	0.236149	61,067	(6,516)	(21,076)	0.006075	(728)	665	0.766497	868
2018	July	387,147	0.236149	97,940	91,424	295,722	0.006075	834	1,499	0.766497	1,956
2018	August	846,891	0.236149	108,568	199,993	646,899	0.005692	2,683	4,182	0.766497	5,456
2018	September	1,387,097	0.236149	127,569	327,562	1,059,536	0.005692	4,856	9,038	0.766497	11,792
2018	October	1,639,885	0.236149	59,696	387,257	1,252,628	0.005692	6,580	15,618	0.766497	20,376
2018	November	1,493,580	0.236149	(34,550)	352,707	1,140,872	0.005692	6,812	22,430	0.766497	29,263
2018	December	1,496,491	0.236149	687	353,395	1,143,096	0.005692	6,500	28,930	0.766497	37,743
								28,930			37,743

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

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, 2020, 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 2018-2020 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 2015-2020.

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, 2019 through December 31, 2019 including utility assessments are as follows:

<u>Residential</u>	Vintage 2015 <sup>1</sup> , 2016 <sup>1</sup> , 2017 <sup>1</sup> , 2018 <sup>1</sup>	0.0944¢ per kWh
	Vintage 2017 <sup>2</sup> , 2018 <sup>2</sup> , 2019 <sup>2</sup> , 2020 <sup>2</sup>	<u>0.3891¢ per kWh</u>
	Total Residential Rate	0.4835¢ per kWh
<u>Nonresidential</u>		
	Vintage 2015 <sup>3</sup>	
	Energy Efficiency	0.0064¢ per kWh
	Demand Side Management	0.0001¢ per kWh
	Vintage 2016 <sup>3</sup>	
	Energy Efficiency	0.0512¢ per kWh
	Demand Side Management	0.0001¢ per kWh
	Vintage 2017 <sup>3</sup>	
	Energy Efficiency	0.0957¢ per kWh
	Demand Side Management	0.0000¢ per kWh
	Vintage 2018 <sup>3</sup>	
	Energy Efficiency	0.0827¢ per kWh
	Demand Side Management	0.0077¢ per kWh
	Vintage 2019 <sup>3</sup>	
	Energy Efficiency	0.0509¢ per kWh
	Demand Side Management	0.0000¢ per kWh
	Vintage 2020 <sup>3</sup>	
	Energy Efficiency	0.3082¢ per kWh
	Demand Side Management	0.1101¢ per kWh
	Total Nonresidential	0.7131¢ per kWh

<sup>1</sup> Includes the true-up of program costs, shared savings and lost revenues from Year 1 of Vintage 2018 and Year 2 of Vintage 2017, and Year 3 of 2016 and Year 4 of 2015.

<sup>2</sup> Includes prospective component of Vintage 2017, 2018, 2019 and 2020

<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 2015 Actual for January 1, 2015 to December 31, 2015  
Docket Number E-7, Sub 1192  
Load Impacts and Estimated Revenue Requirements, excluding Lost Revenue by Program

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May 28 2019

	A	B	C	D=B+C	E	NC Residential Revenue Requirement			
	System kW Reduction - Summer Peak	System Energy Reduction (kWh)	System NPV of Avoided Cost	System Cost	Earned Utility Incentive	System Cost Plus Incentive	NC Retail kWh Sales Allocation Factor (Miller Exhibit 5 pg. 1)	D * E	
<b>Residential Programs</b>									
<b>EE Programs</b>									
1 Appliance Recycling Program	748	5,534,546	\$ 1,901,321	\$ 1,537,241	\$ 41,869	\$ 1,579,111	72.9564706%	\$ 1,152,063	
2 Energy Efficiency Education	830	4,417,898	\$ 2,498,417	\$ 2,054,672	\$ 51,031	\$ 2,105,702	72.9564706%	\$ 1,536,246	
3 Energy Efficient Appliances and Devices	14,743	129,350,071	\$ 49,525,402	\$ 12,050,485	\$ 4,309,616	\$ 16,360,100	72.9564706%	\$ 11,935,752	
4 HVAC Energy Efficiency	2,663	4,763,631	\$ 6,816,479	\$ 5,416,833	\$ 160,959	\$ 5,577,792	72.9564706%	\$ 4,069,360	
5 Income Qualified Energy Efficiency and Weatherization Assistance	608	3,125,184	\$ 1,854,068	\$ 2,238,776	\$ -	\$ 2,238,776	72.9564706%	\$ 1,633,332	
6 Multi-Family Energy Efficiency	1,339	13,988,109	\$ 7,431,163	\$ 2,092,935	\$ 613,896	\$ 2,706,831	72.9564706%	\$ 1,974,808	
7 Energy Assessments	1,275	10,293,765	\$ 10,115,222	\$ 3,086,173	\$ 808,341	\$ 3,894,514	72.9564706%	\$ 2,841,300	
8 Subtotal	22,205	171,473,205	\$ 80,142,073	\$ 28,477,114	\$ 5,985,712	\$ 34,462,825		\$ 25,142,861	
9 My Home Energy Report (1)	61,770	228,776,428	\$ 16,583,325	\$ 9,845,895	\$ 774,805	\$ 10,620,699	72.9564706%	\$ 7,748,487	
10 Total for Residential Energy Efficiency Programs	83,975	400,249,633	\$ 96,725,398	\$ 38,323,008	\$ 6,760,516	\$ 45,083,525		\$ 32,891,348	
<b>NC Residential Peak Demand Allocation Factor (Miller Exhibit 5 pg. 1)</b>									
								<b>D11* E11</b>	
11 Total DSM Programs (2)	871,944	18,374	101,113,558	\$ 31,958,782	\$ 7,952,799	\$ 39,911,582	32.5218612%	\$ 12,979,989	
12 Total Residential Revenue Requirement								\$	<b>45,871,337</b>
<b>Non-Residential Programs</b>									
<b>EE Programs</b>									
13 Non Residential Smart Saver Custom Energy Assessments	87	765,303	\$ 321,686	\$ 660,420	\$ (38,954)	\$ 621,465	72.9564706%	\$ 453,399	
14 Non Residential Smart Saver Custom	11,108	76,142,627	\$ 53,882,448	\$ 9,932,877	\$ 5,054,201	\$ 14,987,078	72.9564706%	\$ 10,934,043	
15 Non Residential Smart Saver Energy Efficient Food Service Products	140	1,672,329	\$ 1,099,734	\$ 194,425	\$ 104,111	\$ 298,535	72.9564706%	\$ 217,801	
16 Non Residential Smart Saver Energy Efficient HVAC Products	1,611	5,405,220	\$ 6,221,217	\$ 1,142,522	\$ 584,050	\$ 1,726,572	72.9564706%	\$ 1,259,646	
17 Non Residential Smart Saver Energy Efficient Lighting Products	11,523	67,083,512	\$ 42,227,035	\$ 11,335,798	\$ 3,552,492	\$ 14,888,290	72.9564706%	\$ 10,861,971	
18 Non Residential Smart Saver Energy Efficient Pumps and Drives Products	423	3,354,574	\$ 1,924,058	\$ 466,478	\$ 167,622	\$ 634,100	72.9564706%	\$ 462,617	
19 Non Residential Smart Saver Energy Efficient IT Products	540	5,196,710	\$ 1,130,386	\$ 716,542	\$ 47,592	\$ 764,134	72.9564706%	\$ 557,485	
20 Non Residential Smart Saver Energy Efficient Process Equipment Products	112	630,354	\$ 517,342	\$ 88,823	\$ 49,280	\$ 138,103	72.9564706%	\$ 100,755	
21 Small Business Energy Saver	14,417	77,515,622	\$ 47,989,975	\$ 13,968,790	\$ 3,912,436	\$ 17,881,226	72.9564706%	\$ 13,045,511	
22 Smart Energy in Offices	3,109	14,938,552	\$ 1,666,306	\$ 1,463,240	\$ 23,353	\$ 1,486,592	72.9564706%	\$ 1,084,565	
23 Business Energy Report	-	-	\$ -	\$ 126,404	\$ -	\$ 126,404	72.9564706%	\$ 92,220	
24 Total for Non-Residential Energy Efficiency Programs	43,072	252,704,804	\$ 156,980,188	\$ 40,096,318	\$ 13,456,181	\$ 53,552,499		\$ 39,070,014	
<b>NC Non-Residential Peak Demand Allocation Factor (Miller Exhibit 5 pg. 1)</b>									
								<b>D23* E23</b>	
25 Total DSM Programs(2)	871,944	18,374	101,113,558	\$ 31,958,782	\$ 7,952,799	\$ 39,911,582	42.4483655%	\$ 16,941,814	
26 Total Non-Residential Revenue Requirement								\$	<b>56,011,828</b>
<b>Total DSM Program Breakdown</b>									
27 Power Manager (Residential)	454,663	-	\$ 52,718,688	\$ 14,634,279	\$ 4,379,707	\$ 19,013,986			
28 EnergyWise for Business	6	18,374	\$ 11,248	\$ 1,549,305	\$ (176,876)	\$ 1,372,428			
29 Power Share CallOption (Non-Residential)	-	-	\$ -	\$ -	\$ -	\$ -			
30 Power Share (Non-Residential)	417,276	-	\$ 48,383,622	\$ 15,779,050	\$ 3,749,526	\$ 19,528,576			
31 Disallowed Costs from 2015 Program Costs Audit (Order E-7 Sub 1105, dated 8/25/16)	-	-	\$ (3,851)	\$ (3,851)	\$ 443	\$ (3,408)			
32 Total DSM	871,944	18,374	101,113,558	31,958,782	7,952,799	39,911,582	74.9702266%	\$ 29,921,803	

(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, LLC  
Vintage 2017 Actual for January 1, 2017 to December 31, 2017  
Docket Number E-7, Sub 1192  
Load Impacts and Estimated Revenue Requirements, excluding Lost Revenue by Program

	A	B	C = (A-B) *11.5%	D= B+C	E	NC Residential Revenue Requirement			
	System kW Reduction - Summer Peak	System Energy Reduction (kWh)	System NPV of Avoided Cost	System Cost	Earned Utility Incentive	System Cost Plus Incentive	NC Retail kWh Sales Allocation Factor (Miller Exhibit 5 pg. 3)	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	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	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)	72.8087506%	5,380,552	
5	Income Qualified Energy Efficiency and Weatherization Assistance	771	5,341,624	3,185,867	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	72.8087506%	3,175,272	
7	Energy Assessments	1,040	7,720,549	6,602,773	2,909,098	424,773	72.8087506%	2,427,350	
8	Subtotal	31,715	182,654,868	\$ 139,565,970	\$ 51,410,486	\$ 10,404,695		\$ 45,006,861	
9	My Home Energy Report (1)	79,070	311,368,855	21,728,369	13,812,250	910,354	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		\$ 55,726,205	
<b>NC Residential Peak Demand Allocation Factor (Miller Exhibit 5 pg. 3)</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	\$ 13,008,491	
12	Total DSM Programs							\$ 13,008,491	
13	Total Residential Revenue Requirement							\$ 68,734,696	
<b>NC Non-Residential Revenue Requirement</b>									
	System kW Reduction - Summer Peak	System Energy Reduction (kWh)	System NPV of Avoided Cost	System Cost	Earned Utility Incentive	System Cost Plus Incentive	NC Retail kWh Sales Allocation Factor (Miller Exhibit 5 pg. 3)	D * E	
<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%	597,879
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. 3)</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	\$ 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	\$ 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, LLC  
For the Period January 1, 2018 - December 31, 2018  
Docket Number E-7, Sub 1192  
North Carolina Net Lost Revenue Estimates for Vintages 2015 - 2020

Evans Exhibit 2, page 1  
NO CHANGE

Line	Residential	Vintage 2015					Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019	
1	Residential Energy Assessments	\$ 283,798	\$ 477,738	\$ 473,182	\$ 163,880		\$ 1,398,597
2	My Home Energy Report	10,047,270	-	-	-		10,047,270
3	Energy Efficient Appliances and Devices	3,690,771	6,169,123	6,116,216	2,163,569		18,139,680
4	HVAC Energy Efficiency	132,089	234,967	232,892	91,744		691,692
5	Appliance Recycle Program	150,786	279,840	277,098	115,671		823,394
6	Income Qualified Energy Efficiency and Weatherization Assistance	69,833	152,201	150,742	68,856		441,633
7	Multi-Family Energy Efficiency	336,658	681,177	676,879	285,091		1,979,805
8	Energy Efficiency Education	89,806	220,572	218,470	89,897		618,746
9	Total Lost Revenues	14,801,010	8,215,618	8,145,479	2,978,708		34,140,816
10	Found Residential Revenues *	-	-	-	-		-
11	Net Lost Residential Revenues	\$ 14,801,010	\$ 8,215,618	\$ 8,145,479	\$ 2,978,708		\$ 34,140,816
Line	Non-Residential	Vintage 2015					Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019	
12	Nonresidential Smart Saver Custom Energy Assessments	\$ 5,659	\$ 22,194	\$ 21,744	\$ 12,719		\$ 62,316
13	Non Residential Smart Saver Custom	1,432,898	2,477,128	2,416,373	830,053		7,156,453
14	Energy Management Information Services	-	-	-	-		-
15	Non Residential Smart Saver Energy Efficient Food Service Products	33,714	65,479	64,761	25,584		189,538
16	Non Residential Smart Saver Energy Efficient HVAC Products	109,819	196,207	193,346	73,963		573,335
17	Non Residential Smart Saver Energy Efficient Lighting Products	1,439,011	2,400,931	2,289,093	769,611		6,898,646
18	Non Residential Smart Saver Energy Efficient Pumps and Drives Products	51,265	82,153	80,494	25,843		239,755
19	Non Residential Smart Saver Energy Efficient IT Products	58,585	173,258	170,131	83,735		485,709
20	Non Residential Smart Saver Energy Efficient Process Equipment Products	14,723	25,414	24,674	8,676		73,487
21	Smart Business Energy Saver	1,832,775	3,599,216	3,572,716	1,515,918		10,520,625
22	Smart Energy In Offices	178,960	387,139	-	-		566,099
23	EnergyWise for Business	-	-	-	-		-
24	Total Lost Revenues	5,157,409	9,429,119	8,833,331	3,346,104		26,765,963
25	Found Non-Residential Revenues *	-	-	-	-		-
26	Net Lost Non-Residential Revenues	\$ 5,157,409	\$ 9,429,119	\$ 8,833,331	\$ 3,346,104		\$ 26,765,963

Line	Residential	Vintage 2016						Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019	2020	
27	Residential Energy Assessments		\$ 193,357	\$ 336,600	\$ 194,978		\$	724,934
28	My Home Energy Report		13,052,806	-	-			13,052,806
29	Energy Efficient Appliances and Devices		2,665,348	5,787,926	3,353,196			11,806,469
30	HVAC Energy Efficiency		132,531	334,414	193,675			660,620
31	Appliance Recycle Program		5,096	8,147	4,719			17,961
32	Income Qualified Energy Efficiency and Weatherization Assistance		115,500	242,117	140,230			497,847
33	Multi-Family Energy Efficiency		347,362	698,540	403,459			1,449,361
34	Energy Efficiency Education		142,689	301,026	174,350			618,064
35	Total Lost Revenues	-	16,654,687	7,708,770	4,464,606			28,828,063
36	Found Residential Revenues *		-	-	-			-
37	Net Lost Residential Revenues	\$ -	\$ 16,654,687	\$ 7,708,770	\$ 4,464,606		\$	28,828,063

Line	Non-Residential	Vintage 2016						Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019	2020	
38	Nonresidential Smart Saver Custom Energy Assessments		\$ 199,079	\$ 389,585	\$ 318,658		\$	907,321
39	Non Residential Smart Saver Custom		914,009	1,703,790	1,398,549			4,016,348
40	Energy Management Information Services		-	-	-			-
41	Non Residential Smart Saver Energy Efficient Food Service Products		24,889	66,328	54,035			145,252
42	Non Residential Smart Saver Energy Efficient HVAC Products		46,952	103,028	83,640			233,620
43	Non Residential Smart Saver Energy Efficient Lighting Products		2,925,514	6,589,455	5,321,493			14,836,462
44	Non Residential Smart Saver Energy Efficient Pumps and Drives Products		38,898	66,558	54,453			159,908
45	Non Residential Smart Saver Energy Efficient IT Products		59,904	75,403	61,613			196,920
46	Non Residential Smart Saver Energy Efficient Process Equipment Products		4,731	10,652	8,811			24,194
47	Small Business Energy Saver		2,145,932	4,346,981	3,511,109			10,004,022
48	Smart Energy in Offices		227,062	418,553	-			645,616
49	Business Energy Report		-	-	-			-
75	EnergyWise for Business		15,922	36,788	29,639			82,348
76	Total Lost Revenues		6,602,893	13,807,121	10,841,999			31,252,013
77	Found Non-Residential Revenues *		-	-	-			-
78	Net Lost Non-Residential Revenues	\$ -	\$ 6,602,893	\$ 13,807,121	\$ 10,841,999		\$	31,252,013

Line	Residential	Vintage 2017						Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019	2020	
78	Residential Energy Assessments			\$ 198,264	\$ 274,951	\$ 366,739	\$ 75,609	\$ 915,563
79	My Home Energy Report			14,455,527				14,455,527
80	Energy Efficient Appliances and Devices			3,386,885	5,134,538	6,635,996	1,569,818	16,727,238
81	Residential - Smart Saver Energy Efficiency Program			197,134	264,823	433,059	69,705	964,720
82	Appliance Recycle Program			-	-	-	-	-
83	Income Qualified Energy Efficiency and Weatherization Assistance			141,450	210,612	242,487	63,120	657,669
84	Multi-Family Energy Efficiency			535,154	743,597	946,417	204,745	2,429,913
85	Energy Efficiency Education			165,283	221,302	279,889	57,994	724,468
86	Total Lost Revenues	-	-	19,079,697	6,849,823	8,904,587	2,040,991	36,875,097
87	Lost Revenue Decrement Pending Rate Case Implementation			-	-	-	289,930	289,930
88	Found Residential Revenues *			-	-	-	-	-
89	Net Lost Residential Revenues	\$ -	\$ -	\$ 19,079,697	\$ 6,849,823	\$ 8,904,587	\$ 1,751,061	\$ 36,585,168

Line	Non-Residential	Vintage 2017						Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019	2020	
90	Nonresidential Smart Saver Custom Energy Assessments			\$ 220,191	\$ 358,289	\$ 355,020	\$ 139,226	\$ 1,072,725
91	Non Residential Smart Saver Custom			435,407	871,334	916,764	435,511	2,659,016
92	Energy Management Information Services			-	-	-	-	-
93	Non Residential Smart Saver Energy Efficient Food Service Products			28,410	40,771	69,365	12,596	151,142
94	Non Residential Smart Saver Energy Efficient HVAC Products			61,639	110,255	131,612	48,778	352,284
95	Non Residential Smart Saver Energy Efficient Lighting Products			6,200,869	10,299,304	8,730,546	4,144,248	29,374,967
96	Non Residential Smart Saver Energy Efficient Pumps and Drives Products			58,808	127,509	93,363	68,742	348,421
97	Non Residential Smart Saver Energy Efficient IT Products			82	162	186	81	512
98	Non Residential Smart Saver Energy Efficient Process Equipment Products			8,160	12,172	10,555	4,015	34,902
99	Non Residential Smart Saver Performance Incentive			66	774	818	686	2,344
100	Small Business Energy Saver			2,203,337	3,774,927	4,099,390	1,591,993	11,669,648
101	Smart Energy in Offices			209,310	149,382	-	-	358,692
102	Business Energy Report			-	-	-	-	-
103	EnergyWise for Business			85,268	158,514	162,762	74,100	480,644
104	Total Lost Revenues	-	-	9,511,547	15,903,393	14,570,381	6,519,975	46,505,296
105	Lost Revenue Decrement Pending Rate Case Implementation			-	-	-	926,185	926,185
106	Found Non-Residential Revenues *			-	-	-	-	-
107	Net Lost Non-Residential Revenues	\$ -	\$ -	\$ 9,511,547	\$ 15,903,393	\$ 14,570,381	\$ 5,593,790	\$ 45,579,110

\* 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	Residential	Vintage 2018				2019	2020	Total
		2015	2016	2017 <sup>(a)</sup>	2018			
108	Residential Energy Assessments				\$ 204,104	\$ 353,963	\$ 353,514	\$ 911,581
109	My Home Energy Report				15,088,601	-	-	15,088,601
110	Energy Efficient Appliances and Devices				4,299,478	4,054,825	9,080,869	17,435,172
111	Residential – Smart Saver Energy Efficiency Program				161,446	213,538	318,537	693,520
112	Appliance Recycle Program				-	-	-	-
113	Income Qualified Energy Efficiency and Weatherization Assistance				130,598	246,384	252,956	629,937
114	Multi-Family Energy Efficiency				500,522	1,165,290	1,086,338	2,752,151
115	Energy Efficiency Education				122,869	260,025	231,584	614,478
116	Total Lost Revenues				20,507,618	6,294,025	11,323,797	38,125,440
117	Lost Revenue Decrement Pending Rate Case Implementation				-	-	1,608,585	1,608,585
118	Found Residential Revenues *				-	-	-	-
119	Net Lost Residential Revenues	\$ -	\$ -	\$ -	\$ 20,507,618	\$ 6,294,025	\$ 9,715,212	\$ 36,516,855

Line	Non-Residential	Vintage 2018				2019	2020	Total
		2015	2016	2017 <sup>(a)</sup>	2018			
120	Nonresidential Smart Saver Custom Energy Assessments				\$ 212	\$ 549,855	\$ 849	\$ 550,916
121	Non Residential Smart Saver Custom				461,343	2,688,812	740,662	3,890,816
122	Energy Management Information Services				-	-	-	-
123	Non Residential Smart Saver Energy Efficient Food Service Products				13,485	26,794	21,497	61,776
124	Non Residential Smart Saver Energy Efficient HVAC Products				50,511	134,931	114,693	300,135
125	Non Residential Smart Saver Energy Efficient Lighting Products				4,078,660	2,987,074	6,538,710	13,604,445
126	Non Residential Smart Saver Energy Efficient Pumps and Drives Products				66,649	49,390	84,066	200,106
127	Non Residential Smart Saver Energy Efficient IT Products				185	117,948	859	118,991
128	Non Residential Smart Saver Energy Efficient Process Equipment Products				6,501	11,082	10,246	27,829
129	Non Residential Smart Saver Performance Incentive				20,243	160,962	82,058	263,263
129	Small Business Energy Saver				1,772,873	3,493,883	3,374,219	8,640,976
130	Smart Energy in Offices				39,733	-	-	39,733
131	Business Energy Report				-	-	-	-
132	EnergyWise for Business				64,755	51,234	113,468	229,458
133	Total Lost Revenues				6,575,151	10,271,966	11,081,327	27,928,443
134	Lost Revenue Decrement Pending Rate Case Implementation				-	-	1,574,142	1,574,142
135	Found Non-Residential Revenues *				-	-	-	-
136	Net Lost Non-Residential Revenues	\$ -	\$ -	\$ -	\$ 6,575,151	\$ 10,271,966	\$ 9,507,185	\$ 26,354,302

\* 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.

Supplemental Evans Exhibit 2, page 4

Line	Residential	Vintage 2019					2020	Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019		
137	Residential Energy Assessments					\$ 178,309	\$ 287,735	\$ 466,044
138	My Home Energy Report					15,206,604	-	15,206,604
139	Energy Efficient Appliances and Devices					2,553,378	4,301,203	6,854,581
140	Residential – Smart Saver Energy Efficiency Program					129,065	158,765	287,830
141	Appliance Recycle Program					-	-	-
142	Income Qualified Energy Efficiency and Weatherization Assistance					99,398	185,634	285,032
143	Multi-Family Energy Efficiency					496,951	903,943	1,400,894
144	Energy Efficiency Education					119,499	261,545	381,044
145	Total Lost Revenues	-	-	-	-	18,783,204	6,098,825	24,882,029
146	Lost Revenue Decrement Pending Rate Case Implementation					-	866,360	866,360
147	Found Residential Revenues *					-	-	-
148	Net Lost Residential Revenues	\$ -	\$ -	\$ -	\$ -	\$ 18,783,204	\$ 5,232,466	\$ 24,015,670
Line	Non-Residential	Vintage 2019					2020	Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019		
149	Nonresidential Smart Saver Custom Energy Assessments					\$ 145,699	\$ 300,502	\$ 446,201
150	Non Residential Smart Saver Custom					1,059,600	2,335,850	3,395,450
151	Energy Management Information Services					-	-	-
152	Non Residential Smart Saver Energy Efficient Food Service Products					146,435	153,750	300,185
153	Non Residential Smart Saver Energy Efficient HVAC Products					193,528	322,214	515,742
154	Non Residential Smart Saver Energy Efficient Lighting Products					1,921,414	3,497,532	5,418,946
155	Non Residential Smart Saver Energy Efficient Pumps and Drives Products					77,800	214,313	292,113
156	Non Residential Smart Saver Energy Efficient IT Products					77,654	125,792	203,445
157	Non Residential Smart Saver Energy Efficient Process Equipment Products					18,722	39,115	57,837
158	Non Residential Smart Saver Performance Incentive					375,261	656,829	1,032,089
158	Small Business Energy Saver					1,523,101	2,471,538	3,994,639
159	Smart Energy in Offices					-	-	-
160	Business Energy Report					-	-	-
161	EnergyWise for Business					51,234	76,675	127,908
162	Total Lost Revenues	-	-	-	-	5,590,446	10,194,109	15,784,556
163	Lost Revenue Decrement Pending Rate Case Implementation					-	1,448,109	1,448,109
164	Found Non-Residential Revenues *					-	-	-
165	Net Lost Non-Residential Revenues	\$ -	\$ -	\$ -	\$ -	\$ 5,590,446	\$ 8,746,000	\$ 14,336,447

\* 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	Residential	Vintage 2020					2020	Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019		
166	Residential Energy Assessments						161,966	\$ 161,966
167	My Home Energy Report						14,686,468	14,686,468
168	Energy Efficient Appliances and Devices						1,237,431	1,237,431
169	Residential – Smart Saver Energy Efficiency Program						263,183	263,183
170	Appliance Recycle Program						-	-
171	Income Qualified Energy Efficiency and Weatherization Assistance						103,534	103,534
172	Multi-Family Energy Efficiency						496,249	496,249
173	Energy Efficiency Education						146,751	146,751
174	Total Lost Revenues	-	-	-	-	-	17,095,583	17,095,583
175	Lost Revenue Decrement Pending Rate Case Implementation						2,428,488	2,428,488
176	Found Residential Revenues *						-	-
177	Net Lost Residential Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	14,667,095	\$ 14,667,095

Line	Non-Residential	Vintage 2020					2020	Total
		2015	2016	2017 <sup>(a)</sup>	2018	2019		
178	Nonresidential Smart Saver Custom Energy Assessments						\$ 136,414	\$ 136,414
179	Non Residential Smart Saver Custom						1,201,984	1,201,984
180	Energy Management Information Services						-	-
181	Non Residential Smart Saver Energy Efficient Food Service Products						93,624	93,624
182	Non Residential Smart Saver Energy Efficient HVAC Products						61,819	61,819
183	Non Residential Smart Saver Energy Efficient Lighting Products						3,029,908	3,029,908
184	Non Residential Smart Saver Energy Efficient Pumps and Drives Products						94,651	94,651
185	Non Residential Smart Saver Energy Efficient IT Products						6,639	6,639
186	Non Residential Smart Saver Energy Efficient Process Equipment Products						12,061	12,061
187	Non Residential Smart Saver Performance Incentive						402,902	402,902
188	Small Business Energy Saver						955,245	955,245
189	Smart Energy in Offices						-	-
190	Business Energy Report						-	-
191	EnergyWise for Business						46,148	46,148
192	Total Lost Revenues	-	-	-	-	-	6,041,394	6,041,394
193	Lost Revenue Decrement Pending Rate Case Implementation						858,201	858,201
194	Found Non-Residential Revenues *						-	-
194	Net Lost Non-Residential Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	5,183,193	\$ 5,183,193

\* 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, 2018 - December 31, 2018  
 Docket Number E-7 Sub 1192  
 Actual Program Costs for Vintage Years 2014, 2015, 2016, 2017 and 2018

	Carolinas System - 12 Months Ended 12/31/2014	Carolinas System - 12 months Ended 12/31/2015	Carolinas System - 12 months Ended 12/31/2016	Carolinas System - 12 months Ended 12/31/2017	Carolinas System - 12 months Ended 12/31/2018
1 Residential Energy Assessments	\$ 3,605,737	\$ 3,086,173	2,678,893	2,909,098	2,836,229
2 My Home Energy Report	8,285,066	9,845,895	10,822,444	13,812,250	12,765,286
3 Energy Efficient Appliances and Devices	14,738,129	12,050,485	24,069,774	30,340,728	42,687,244
4 Residential – Smart Saver Energy Efficiency Program	4,786,807	5,416,833	7,839,566	7,403,327	6,955,146
5 Appliance Recycle Program	1,515,867	1,537,241	(97,397)	5,307	-
6 Income Qualified Energy Efficiency and Weatherization Assistance	1,917,192	2,238,776	4,792,436	5,505,992	6,490,735
7 Multi family Energy Efficiency	1,442,533	2,092,935	2,518,988	3,168,422	3,604,921
8 Energy Efficiency Education	1,963,153	2,054,672	2,126,509	2,077,611	1,992,260
9 Nonresidential Smart Saver Custom Energy Assessments	1,458,195	660,420	2,034,308	2,139,875	407,293
10 Energy Management Information Systems	74,855	-	-	-	-
11 Non-Residential Smart Saver Custom	8,136,712	9,932,877	7,356,509	7,304,838	6,068,902
12 Non-Residential Smart Saver Performance Incentive	-	-	35,670	320,559	479,610
13 Non-Residential Energy Efficient Food Service Products	199,350	194,425	324,117	306,488	235,605
14 Non-Residential Smart Saver Energy Efficient HVAC Products	815,339	1,142,522	1,473,991	1,560,769	1,620,748
15 Non-Residential Smart Saver Energy Efficient Lighting Products	6,727,675	11,335,798	39,622,944	66,689,770	25,872,384
16 Nonresidential Energy Efficient Pumps and Drives Products	584,874	466,478	471,930	528,937	277,785
17 Nonresidential Energy Efficient ITEE	25,730	716,542	285,430	61,215	36,875
18 Nonresidential Energy Efficient Process Equipment Products	89,809	88,823	125,947	162,413	67,509
19 Smart Energy In Offices	1,156,497	1,463,240	1,061,729	891,010	219,748
20 Small Business Energy Saver	1,026,607	13,968,790	15,360,852	17,350,972	15,977,993
21 Business Energy Report	-	126,404	263,169	126,680	-
22 Power Manager	15,662,693	14,634,279	13,644,970	14,021,500	14,423,610
23 EnergyWise for Business	-	1,549,305	470,304	2,484,618	3,062,816
24 Power Share	15,520,492	15,779,050	14,291,024	13,316,535	12,922,977
25 Disallowed Costs from 2015 Program Costs Audit (Order E-7 Sub 1105, dated 8/25/16)	-	(3,851)	-	-	-
<b>26 Total Energy Efficiency &amp; Demand Side Program Costs</b>	<b>\$ 89,733,313</b>	<b>\$ 110,378,109</b>	<b>\$ 151,574,107</b>	<b>\$ 192,488,915</b>	<b>\$ 159,005,671</b>

27 NC Allocation Factor for EE programs	72.9600473%	72.9564706%	73.0962827%	72.8087506%	72.7130507%
28 NC Allocation Factor for DSM programs-Residential	34.0209980%	32.5218612%	33.7973480%	33.8075104%	32.1574721%
29 NC Allocation Factor for DSM programs-Non-Residential	41.2108021%	42.4483655%	40.8166437%	40.0747013%	41.4712829%

	NC Allocated - 12 Months Ended 12/31/2014	NC Allocated - 12 Months Ended 12/31/2015	NC Allocated - 12 Months Ended 12/31/2016	NC Allocated - 12 Months Ended 12/31/2017	NC Allocated - 12 Months Ended 12/31/2018
30 Residential Energy Assessments	\$ 2,630,748	\$ 2,251,563	\$ 1,958,171	\$ 2,118,078	\$ 2,065,023
31 My Home Energy Report	6,044,788	7,183,217	7,910,805	10,056,526	9,294,245
32 Energy Efficient Appliances and Devices	10,752,946	8,791,608	17,594,110	22,090,705	31,080,049
33 Residential – Smart Saver Energy Efficiency Program	3,492,457	3,951,930	5,730,431	5,390,270	5,063,955
34 Appliance Recycle Program	1,105,977	1,121,517	(71,194)	3,864	-
35 Income Qualified Energy Efficiency and Weatherization Assistance	1,398,784	1,633,332	3,503,093	4,008,844	4,725,823
36 Multi family Energy Efficiency	1,052,473	1,526,931	1,841,287	2,306,888	2,624,698
37 Energy Efficiency Education	1,432,317	1,499,016	1,554,399	1,512,683	1,450,539
38 Nonresidential Smart Saver Custom Energy Assessments	1,063,900	481,819	1,487,003	1,558,016	296,545
39 Energy Management Information Systems	54,614	-	-	-	-
40 Non-Residential Smart Saver Custom	5,936,549	7,246,677	5,377,335	5,318,561	4,418,691
41 Non-Residential Smart Saver Performance Incentive	-	-	26,073	-	-
42 Non-Residential Energy Efficient Food Service Products	145,446	141,845	236,918	223,150	171,541
43 Non-Residential Smart Saver Energy Efficient HVAC Products	594,872	833,543	1,077,433	1,136,376	1,180,046
44 Non-Residential Smart Saver Energy Efficient Lighting Products	4,908,515	8,270,198	28,962,899	48,555,988	18,837,357
45 Nonresidential Energy Efficient Pumps and Drives Products	426,724	340,326	344,963	385,112	202,252
46 Nonresidential Energy Efficient ITEE	18,773	522,764	208,639	44,570	26,848
47 Nonresidential Energy Efficient Process Equipment Products	65,525	64,802	92,062	118,251	49,153
48 Smart Energy In Offices	843,781	1,067,528	776,084	648,734	159,996
49 Small Business Energy Saver	749,013	10,191,136	11,228,212	12,633,026	11,633,377
50 Business Energy Report	-	92,220	192,366	92,234	-
51 Power Manager	10,608,831	10,394,843	9,600,575	10,082,296	9,778,895
52 EnergyWise for Business	-	1,213,062	369,407	1,879,262	2,416,251
53 Power Share	12,850,841	12,354,553	11,225,091	10,072,077	10,194,918
54 Disallowed Costs from 2015 Program Costs Audit (Order E-7 Sub 1105, dated 8/25/16)	-	(2,887)	-	-	-
<b>55 Total Energy Efficiency &amp; Demand Side Program Costs</b>	<b>\$ 66,177,873</b>	<b>\$ 81,171,544</b>	<b>\$ 111,226,163</b>	<b>\$ 140,235,514</b>	<b>\$ 115,670,203</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 1192, 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 28<sup>th</sup> day of May, 2019.

  
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