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Apr 29 2021

April 29, 2021

VIA ELECTRONIC FILING

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

**RE: Duke Energy Carolinas, LLC's Supplemental Testimony and Exhibits
Docket No. E-7, Sub 1250**

Dear Ms. Campbell:

Please find enclosed Duke Energy Carolinas, LLC's Supplemental Testimony and Exhibits of Bryan L. Sykes, in the above-referenced proceeding.

If you have any questions, please do not hesitate to contact me. Thank you for your assistance with this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Jirak", written in a cursive style.

Jack E. Jirak

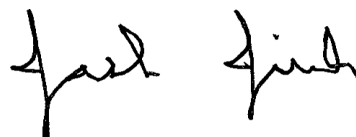
Enclosure

cc: Parties of Record

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's Supplemental Testimony and Exhibits, in Docket No. E-7, Sub 1250, has been served by electronic mail, hand delivery, or by depositing a copy in the United States mail, postage prepaid, properly addressed to parties of record.

This the 29th day of April, 2021.

A handwritten signature in black ink, appearing to read "Jack Jirak", written in a cursive style.

Jack E. Jirak
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STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1250

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
Application of Duke Energy Carolinas, LLC)	SUPPLEMENTAL TESTIMONY
Pursuant to G.S. 62-133.2 and NCUC Rule)	OF BRYAN L. SYKES FOR
R8-55 Relating to Fuel and Fuel-Related)	DUKE ENERGY CAROLINAS, LLC
Charge Adjustments for Electric Utilities)	

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

2 A. My name is Bryan L. Sykes. My business address is 550 South Tryon Street,
3 Charlotte, North Carolina.

4 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS**
5 **PROCEEDING?**

6 A. Yes, on February 23, 2021, I caused to be pre-filed with the Commission
7 my direct testimony and 6 exhibits and 13 supporting workpapers.

8 **Q. YOUR SUPPLEMENTAL TESTIMONY INCLUDES FOUR (4)**
9 **REVISED EXHIBITS AND TWO (2) REVISED SUPPORTING**
10 **WORKPAPERS. WERE THESE SUPPLEMENTAL EXHIBITS AND**
11 **WORKPAPERS PREPARED BY YOU OR AT YOUR DIRECTION**
12 **AND UNDER YOUR SUPERVISION?**

13 A. Yes. These exhibits and workpapers were prepared by me and consist of
14 the following:

15 Sykes Revised Exhibit 1: Summary Comparison of Fuel and Fuel-Related
16 Costs Factors.

17 Sykes Revised Exhibit 2: Calculation of the Proposed Fuel and Fuel-
18 Related Cost Factors.

19 Sykes Revised Exhibit 3: Calculation of the Proposed Experience
20 Modification Factor (“EMF”) rate.

21 Sykes Revised Exhibit 4: Sales, Fuel Revenue, Fuel Expense and System
22 Peak

23

1 Sykes Revised Workpaper 7a: Calculation of Allocation Percentages Based
2 on Normalized Test Period Sales

3 Sykes Revised Workpaper 12: Weather Normalization Adjustment

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

6 A. The purpose of my testimony is to present revised rates reflecting the impacts
7 related to three updates to numbers presented in my direct exhibits.

8 The first update relates to the proposed EMF increment (decrement) for the
9 experienced under-recovery of fuel and fuel-related costs, pursuant to NCUC Rule
10 R8-55(d)(3), which allows the Company to incorporate the fuel and fuel-related
11 cost recovery balance up to thirty (30) days prior to the hearing. The Company
12 elects this option and supplements the direct testimony and exhibits to include the
13 fuel and fuel-related cost recovery balance as of the 11 months ended February
14 28, 2021.

15 The second update corrects the over/under-recovery amounts originally reported
16 in monthly fuel reports and incorporated into the EMF in this proceeding. The
17 Company recently discovered that the cost of power purchased from Duke Energy
18 Progress, LLC under the Joint Dispatch Agreement was inadvertently overstated
19 from September 2020 through March 2021. Regarding the recent discovery of
20 the inadvertent overstatement of power purchased from DEP and the timing of
21 this supplemental filing, the Company and the Public Staff have agreed that it
22 would be difficult for the Public Staff to audit the adjustment prior to the filing
23 of testimony by the Public Staff. Accordingly, the Company proposes that the

1 Public Staff should be entitled to present the results of its audit on this issue in
2 DEC's 2022 fuel adjustment proceeding. An adjustment to correct the
3 over/under-collection amounts for the months included in the EMF period in this
4 proceeding is shown on Revised Exhibit 3.

5 The third update revises one of the fuel rate scenarios presented in my direct filing.
6 The scenario based on the proposed nuclear capacity factor and normalized test
7 period sales is updated to reflect a revision to the weather adjustment related to
8 test period kWh sales for the wholesale jurisdiction. The revised total Company
9 normalized test period sales are shown on Revised Exhibit 4. There are no
10 revisions to proposed rates as a result of this update.

11 **Q. HOW DID THE FUEL AND FUEL-RELATED COST RECOVERY**
12 **BALANCE CHANGE IN THE TWO (2) MONTHS BEING**
13 **INCORPORATED?**

14 A. The Company experienced an under-collection of \$24,376,967 during the months
15 January through February 2021, after considering the second update described
16 above. As shown on Sykes Revised Exhibit 3, the incorporation of the update
17 period under-collection balance resulted in an under-recovered balance of
18 \$20,494,879. Incorporating the under-collections experienced during January and
19 February 2021 will increase the EMF decrement rate charged to residential
20 customers, change the EMF rate from a decrement to an increment charged to
21 general service/lighting customers and increase the EMF increment rate charged
22 to industrial customers.

23 **Q. WHAT IS THE TOTAL RATE IMPACT OF THESE UPDATES?**

1 A. The NC Retail Total Fuel Costs were increased by \$24,056,611 from the amounts
2 filed in my direct Exhibit 2, Schedule 1, page 3. The components of the proposed
3 fuel and fuel-related cost factors by customer class, as shown on Sykes Revised
4 Exhibit 1, are as follows:

	Residential	General	Industrial	Composite
Description	cents/kWh	cents/kWh	cents/kWh	cents/kWh
Total adjusted Fuel and Fuel Related Costs	1.5337	1.6895	1.7243	1.6414
EMF Increment (Decrement)	(0.0282)	0.0476	0.1391	0.0353
EMF Interest (Decrement)	(0.0041)	-	-	-
Net Fuel and Fuel Related Costs Factors	1.5014	1.7371	1.8634	1.6767

6

7 **Q. WHAT IS THE IMPACT TO CUSTOMERS' BILLS IF THE REVISED**
8 **PROPOSED FUEL AND FUEL-RELATED COSTS FACTORS ARE**
9 **APPROVED BY THE COMMISSION?**

10 A. The revised proposed fuel and fuel-related costs factors will result in a 1.34%
11 decrease on customers' bills, as compared to the previously filed decrease of
12 1.89%.

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

15 A. Yes, it does.

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Summary Comparison of Fuel and Fuel Related Cost Factors
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Revised Exhibit 1

Line #	Description	Reference	Residential cents/kWh	General cents/kWh	Industrial cents/kWh	Composite cents/kWh
<u>Current Fuel and Fuel Related Cost Factors (Approved Fuel Rider Docket No. E-7, Sub 1228)</u>						
1	Approved Fuel and Fuel Related Costs Factors	Input	1.6027	1.7583	1.6652	1.6816
2	EMF Increment	Input	0.0364	0.0666	0.2658	0.0975
3	EMF Interest Decrement cents/kWh	Input	0.0000	0.0000	0.0000	0.0000
4	Approved Net Fuel and Fuel Related Costs Factors	Sum	1.6391	1.8249	1.9310	1.7791
<u>Fuel and Fuel Related Cost Factors Required by Rule R8-55</u>						
5	Proposed Nuclear Capacity Factor of 93.21% and Normalized Test Period Sales	Exh 2 Sch 2 pg 2	1.4984	1.7246	1.8541	1.6672
6	NERC 5 Year Average Nuclear Capacity Factor of 91.95% and Projected Period Sales	Exh 2 Sch 3 pg 2	1.5171	1.7471	1.8711	1.6884
<u>Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of 93.21%</u>						
7	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	Exh 2 Sch 1 pg 2	1.4976	1.6638	1.7022	1.6125
8	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Exh 2 Sch 1 pg 2	0.0361	0.0257	0.0221	0.0289
9	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum	1.5337	1.6895	1.7243	1.6414
10	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	(0.0282)	0.0476	0.1391	0.0353
11	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	(0.0041)	-	-	-
12	Net Fuel and Fuel Related Costs Factors cents/kWh	Sum	1.5014	1.7371	1.8634	1.6767

Note: Fuel factors exclude regulatory fee

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 93.21%
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Exhibit 2
Schedule 1
Page 1 of 3

Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Total Nuclear	Workpaper 1	58,622,085	0.6057	355,077,645
2	Coal	Workpaper 3 & 4	18,691,906	2.3444	438,222,003
3	Gas CT and CC	Workpaper 3 & 4	22,065,718	2.2833	503,828,581
4	Reagents and Byproducts	Workpaper 9			25,707,869
5	Total Fossil	Sum	40,757,624		967,758,453
6	Hydro	Workpaper 3	4,030,270		
7	Net Pumped Storage	Workpaper 3	(2,872,983)		
8	Total Hydro	Sum	1,157,287		-
9	Solar Distributed Generation	Workpaper 3	367,302		-
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	100,904,299		1,322,836,098
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(876,000)		(16,986,285)
12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,848,200)		(89,940,492)
13	Fuel expense recovered through reimbursement	Workpaper 4			(6,522,205)
14	Net Generation	Sum Lines 10-13	85,180,099		1,209,387,117
15	Purchased Power	Workpaper 3 & 4	8,109,496	3.0679	248,794,545
16	JDA Savings Shared	Workpaper 5			7,856,711
17	Total Purchased Power		8,109,496		256,651,255
18	Total Generation and Purchased Power	Line 14 + Line 17	93,289,595	1.5715	1,466,038,372
19	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(1,789,852)	1.6030	(28,691,221)
20	Line losses and Company use	Line 22-Line 18-Line 19	(3,809,747)		-
21	System Fuel Expense for Fuel Factor	Lines 18 + 19 + 20			1,437,347,151
22	Projected System MWh Sales for Fuel Factor	Workpaper 7	87,689,996		87,689,996
23	Fuel and Fuel Related Costs cents/kWh	Line 21 / Line 22 / 10			1.6391

Note: Rounding differences may occur

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Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 93.21%
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Revised Exhibit 2
Schedule 1
Page 2 of 3

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7	21,803,077	24,128,419	12,036,241	57,967,737
Calculation of Renewable and Cogeneration Purchased Power Capacity Rate by Class						<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,866,978
3	QF Purchased Power - Capacity	Workpaper 4				11,169,971
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				<u>\$ 25,036,948</u>
5	NC Portion - Jurisdictional % based on Peak Demand Allocator	Input				66.90%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				<u>\$ 16,749,046</u>
7	Peak Demand Allocation Factors	Input	47.00%	37.09%	15.91%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Peak Demand	Line 6 * Line 7	<u>\$ 7,872,063</u>	<u>\$ 6,212,405</u>	<u>\$ 2,664,577</u>	<u>\$ 16,749,046</u>
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0361	0.0257	0.0221	0.0289
Summary of Total Rate by Class						
10	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	1.4976	1.6638	1.7022	1.6125
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0361	0.0257	0.0221	0.0289
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	<u>1.5337</u>	<u>1.6895</u>	<u>1.7243</u>	<u>1.6414</u>
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	(0.0282)	0.0476	0.1391	0.0353
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	(0.0041)	-	-	-
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 1 Page 3	<u>1.5014</u>	<u>1.7371</u>	<u>1.8634</u>	<u>1.6767</u>

Note: Rounding differences may occur

Line #	Rate Class	Projected Billing Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/(Decrease) as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1228	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	D	E	F	G
		Workpaper 7	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Sykes Exhibit 1	E + F = G
1	Residential	21,803,077	\$ 2,235,509,347	\$ (30,024,759)	-1.34%	(0.1377)	1.6391	1.5014
2	General Service/Lighting	24,128,419	1,577,855,414	(21,191,917)	-1.34%	(0.0878)	1.8249	1.7371
3	Industrial	12,036,241	606,238,320	(8,142,287)	-1.34%	(0.0676)	1.9310	1.8634
4	NC Retail	57,967,737	\$ 4,419,603,081	\$ (59,358,963)	-1.34%			

Total Proposed Composite Fuel Rate:

5	Total Fuel Costs for Allocation	Workpaper 7	\$ 1,441,525,237
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 1, Page 2	25,036,948
7	System Other Fuel Costs	Line 5 - Line 6	\$ 1,416,488,289
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7	87,848,058
9	NC Retail Projected Billing Period MWh Sales	Line 4	57,967,737
10	Allocation %	Line 9 / Line 8	65.99%
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$ 934,740,622
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 1, Page 2	16,749,046
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 951,489,668
14	NC Retail Projected Billing Period MWh Sales	Line 4	57,967,737
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	1.6414
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	0.0353
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000
18	Total Proposed Composite Fuel Rate	Sum	1.6767

Total Current Composite Fuel Rate - Docket E-7 Sub 1228:

19	Current composite Fuel Rate cents/kWh	Sykes Exhibit 1	1.6816
20	Current composite EMF Rate cents/kWh	Sykes Exhibit 1	0.0975
21	Current composite EMF Interest Rate cents/kWh	Sykes Exhibit 1	0.0000
22	Total Current Composite Fuel Rate	Sum	1.7791
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22	(0.1024)
24	NC Retail Projected Billing Period MWh Sales	Line 4	57,967,737
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$ (59,358,963)

Note: Rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 93.21% and Normalized Test Period Sales
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Revised Exhibit 2
Schedule 2
Page 1 of 3

Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Total Nuclear	Workpaper 1	58,622,085	0.6057	355,077,645
2	Coal	Calculated	17,563,319	2.3444	411,762,861
3	Gas CT and CC	Workpaper 3 & 4	22,065,718	2.2833	503,828,581
4	Reagents and Byproducts	Workpaper 9	-		25,707,869
5	Total Fossil	Sum	39,629,037		941,299,312
6	Hydro	Workpaper 3	4,030,270		
7	Net Pumped Storage	Workpaper 3	(2,872,983)		
8	Total Hydro	Sum	1,157,287		
9	Solar Distributed Generation		367,302		
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	99,775,711		1,296,376,956
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(876,000)		(16,986,285)
12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,848,200)		(89,940,492)
13	Fuel expense recovered through reimbursement	Workpaper 4			(6,522,205)
14	Net Generation	Sum	84,051,511		1,182,927,975
15	Purchased Power	Workpaper 3 & 4	8,109,496		248,794,545
16	JDA Savings Shared	Workpaper 5	-		7,856,711
17	Total Purchased Power	Sum	8,109,496		256,651,255
18	Total Generation and Purchased Power	Line 14 + Line 17	92,161,008		1,439,579,230
19	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(1,789,852)		(28,691,221)
20	Line losses and Company use	Line 22 - Line 19 - Line 18	(3,809,747)		-
21	System Fuel Expense for Fuel Factor	Lines 18 + 19 + 20			1,410,888,009
22	Normalized Test Period MWh Sales	Exhibit 4	86,561,409		86,561,409
23	Fuel and Fuel Related Costs cents/kWh	Line 21 / Line 22 / 10			1.6299

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Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 93.21% and Normalized Test Period Sales
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Revised Exhibit 2
Schedule 2
Page 2 of 3

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Normalized Test Period MWh Sales	Exhibit 4	23,329,575	23,102,975	11,570,060	58,002,609
Calculation of Renewable Purchased Power Capacity Rate by Class						<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,866,978
3	QF Purchased Power - Capacity	Workpaper 4				11,169,971
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				<u>\$ 25,036,948</u>
5	NC Portion - Jurisdictional % based on Peak Demand Allocator	Input				66.90%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				<u>\$ 16,749,046</u>
7	Peak Demand Allocation Factors	Input	47.00%	37.09%	15.91%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Peak Demand	Line 6 * Line 7	<u>\$ 7,872,063</u>	<u>\$ 6,212,405</u>	<u>\$ 2,664,577</u>	<u>\$ 16,749,046</u>
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0337	0.0269	0.0230	0.0289
Summary of Total Rate by Class						
10	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	1.4970	1.6501	1.6920	1.6030
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0337	0.0269	0.0230	0.0289
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	<u>1.5307</u>	<u>1.6770</u>	<u>1.7150</u>	<u>1.6319</u>
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	(0.0282)	0.0476	0.1391	0.0353
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	<u>(0.0041)</u>	-	-	-
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 2 Page 3	1.4984	1.7246	1.8541	1.6672

Note: Rounding differences may occur

Line #	Rate Class	Normalized Test Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/(Decrease) as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1228	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	D	E	F	G
		Exhibit 4	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Sykes Exhibit 1	E + F = G
1	Residential	23,329,575	\$ 2,235,509,347	\$ (32,829,997)	-1.47%	(0.1407)	1.6391	1.4984
2	General Service/Lighting	23,102,975	\$ 1,577,855,414	(23,171,895)	-1.47%	(0.1003)	1.8249	1.7246
3	Industrial	11,570,060	\$ 606,238,320	(8,903,028)	-1.47%	(0.0769)	1.9310	1.8541
4	NC Retail	58,002,609	\$ 4,419,603,081	\$ (64,904,920)				

Total Proposed Composite Fuel Rate:

5	Total Fuel Costs for Allocation	Workpaper 7a	\$ 1,415,066,095
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 2, Page 2	25,036,948
7	System Other Fuel Costs	Line 5 - Line 6	\$ 1,390,029,147
8	Normalized Test Period System MWh Sales for Fuel Factor	Workpaper 7a	86,719,470
9	NC Retail Normalized Test Period MWh Sales	Exhibit 4	58,002,609
10	Allocation %	Line 9 / Line 8	66.89%
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$ 929,790,496
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 2, Page 2	16,749,046
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 946,539,542
14	NC Retail Normalized Test Period MWh Sales	Line 9	58,002,609
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	1.6319
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	0.0353
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000
18	Total Proposed Composite Fuel Rate	Sum	1.6672

Total Current Composite Fuel Rate - Docket E-7 Sub 1228:

19	Current composite Fuel Rate cents/kWh	Sykes Exhibit 1	1.6816
20	Current composite EMF Rate cents/kWh	Sykes Exhibit 1	0.0975
21	Current composite EMF Interest Rate cents/kWh	Sykes Exhibit 1	0.0000
22	Total Current Composite Fuel Rate	Sum	1.7791
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22	(0.1119)
24	NC Retail Normalized Test Period MWh Sales	Exhibit 4	58,002,609
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$ (64,904,920)

Note: Rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
NERC 5 Year Average Nuclear Capacity Factor of 91.95% and Projected Period Sales
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Exhibit 2
Schedule 3
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Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Total Nuclear	Workpaper 2	57,831,714	0.6057	350,290,320
2	Coal	Calculated	19,282,087	2.3444	452,058,499
3	Gas CT and CC	Workpaper 3 & 4	22,065,718	2.2833	503,828,581
4	Reagents and Byproducts	Workpaper 9	-		25,707,869
5	Total Fossil	Sum	41,347,805		981,594,949
6	Hydro	Workpaper 3	4,030,270		
7	Net Pumped Storage	Workpaper 3	(2,872,983)		
8	Total Hydro	Sum	1,157,287		
9	Solar Distributed Generation	Workpaper 3	367,302		
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	100,704,109		1,331,885,268
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(876,000)		(16,986,285)
12	Less Catawba Joint Owners	Calculated	(14,648,010)		(88,727,875)
13	Fuel expense recovered through reimbursement	Workpaper 4			(6,522,205)
14	Net Generation	Sum	85,180,099		1,219,648,904
15	Purchased Power	Workpaper 3 & 4	8,109,496		248,794,545
16	JDA Savings Shared	Workpaper 5	-		7,856,711
17	Total Purchased Power	Sum	8,109,496		256,651,255
18	Total Generation and Purchased Power	Line 14 + Line 17	93,289,595		1,476,300,159
19	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(1,789,852)		(28,691,221)
20	Line losses and Company use	Line 22 - Line 19 - Line 18	(3,809,747)		-
21	System Fuel Expense for Fuel Factor	Lines 18 + 19 + 20			1,447,608,938
22	Projected System MWh Sales for Fuel Factor	Workpaper 7b	87,689,996		87,689,996
23	Fuel and Fuel Related Costs cents/kWh	Line 21 / Line 22 / 10			1.6508

Note: Rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
NERC 5 Year Average Nuclear Capacity Factor of 91.95% and Projected Period Sales
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Revised Exhibit 2
Schedule 3
Page 2 of 3

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7b	21,803,077	24,128,419	12,036,241	57,967,737
Calculation of Renewable Purchased Power Capacity Rate by Class						<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,866,978
3	QF Purchased Power - Capacity	Workpaper 4				11,169,971
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				\$ 25,036,948
5	NC Portion - Jurisdictional % based on Peak Demand Allocator	Input				66.90%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				\$ 16,749,046
7	Peak Demand Allocation Factors	Input	47.00%	37.09%	15.91%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Peak Demand	Line 6 * Line 7	\$ 7,872,063	\$ 6,212,405	\$ 2,664,577	\$ 16,749,046
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0361	0.0257	0.0221	0.0289
Summary of Total Rate by Class						
10	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	1.5133	1.6738	1.7099	1.6242
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0361	0.0257	0.0221	0.0289
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.5494	1.6995	1.7320	1.6531
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	(0.0282)	0.0476	0.1391	0.0353
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	(0.0041)	-	-	-
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 3 Page 3	1.5171	1.7471	1.8711	1.6884

Note: Rounding differences may occur

Line #	Rate Class	Projected Billing Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/Decrease as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1228	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	C / B = D	E	F	G
		Workpaper 7b	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Sykes Exhibit 1	E + F = G
1	Residential	21,803,077	\$ 2,235,509,347	\$ (26,594,195)	-1.19%	(0.1220)	1.6391	1.5171
2	General Service/Lighting	24,128,419	\$ 1,577,855,414	\$ (18,770,575)	-1.19%	(0.0778)	1.8249	1.7471
3	Industrial	12,036,241	\$ 606,238,320	\$ (7,211,967)	-1.19%	(0.0599)	1.9310	1.8711
4	NC Retail	57,967,737	\$ 4,419,603,081	\$ (52,576,737)				

Total Proposed Composite Fuel Rate:

5	Total Fuel Costs for Allocation	Workpaper 7b	\$ 1,451,787,024
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 3, Page 2	25,036,948
7	System Other Fuel Costs	Line 5 - Line 6	\$ 1,426,750,076
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7b	87,848,058
9	NC Retail Projected Billing Period MWh Sales	Line 4	57,967,737
10	Allocation %	Line 9 / Line 8	65.99%
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$ 941,512,375
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 3, Page 2	16,749,046
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 958,261,421
14	NC Retail Projected Billing Period MWh Sales	Line 4	57,967,737
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	1.6531
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	0.0353
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000
18	Total Proposed Composite Fuel Rate	Sum	1.6884

Total Current Composite Fuel Rate - Docket E-7 Sub 1228:

19	Current composite Fuel Rate cents/kWh	Sykes Exhibit 1	1.6816
20	Current composite EMF Rate cents/kWh	Sykes Exhibit 1	0.0975
21	Current composite EMF Interest Rate cents/kWh	Sykes Exhibit 1	0.0000
22	Total Current Composite Fuel Rate	Sum	1.7791
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22	(0.0907)
24	NC Retail Projected Billing Period MWh Sales	Line 4	57,967,737
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$ (52,576,737)

Note: Rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Proposed Composite
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Revised Exhibit 3
Page 1 of 4

Line No.	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/ Under Recovery (d)	Correction JDA Purchased Power (e)	Revised (Over)/Under Recovery (f)
1	January 2020			4,799,050	\$ (7,772,097)	\$ -	\$ (7,772,097)
2	February			4,852,515	\$ (22,331,610)	\$ -	\$ (22,331,610)
3	March			4,419,005	\$ (22,145,172)	\$ -	\$ (22,145,172)
4	April			4,009,531	\$ (19,263,780)	\$ -	\$ (19,263,780)
5	May			3,737,498	\$ (7,856,726)	\$ -	\$ (7,856,726)
6	June ⁽¹⁾			4,445,349	\$ 3,557,928	\$ -	\$ 3,557,928
7	July			5,381,134	\$ 13,395,789	\$ -	\$ 13,395,789
8	August			5,679,285	\$ 8,998,515	\$ -	\$ 8,998,515
9	September			5,143,265	\$ (11,722,010)	\$ (335,066)	\$ (12,057,076)
10	October			4,161,109	\$ 884,018	\$ (1,339,001)	\$ (454,983)
11	November			4,768,317	\$ (13,335,325)	\$ (277,958)	\$ (13,613,283)
12	December ⁽¹⁾			4,115,807	\$ 23,445,876	\$ (34,344)	\$ 23,411,532
13	Total Test Period			55,511,864	\$ (54,144,594)	\$ (1,986,369)	\$ (56,130,962)
14	Adjustment to remove (Over)/Under Recovery - January-March 2020 ⁽²⁾						\$ (52,248,875)
15	January 2021				\$ 1,309,433	\$ -	\$ 1,309,433
16	February 2021				\$ 24,172,571	\$ (1,105,038)	\$ 23,067,534
17	Total (Over)/Under Recovery - Update Period January - February 2021 ⁽³⁾				\$ 25,482,004	\$ (1,105,038)	\$ 24,376,967
18	Adjusted (Over)/Under Recovery						\$ 20,494,879
19	NC Retail Normalized Test Period MWh Sales				Exhibit 4		58,002,609
20	Experience Modification Increment (Decrement) cents/kWh						0.0353

⁽¹⁾ Prior period corrections not included in rate incurred but are included in over/(under) recovery total

⁽²⁾ January-March 2020 filed in fuel Docket E-7, Sub 1228 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55(d)(3) but deducted from total (Over)/Under on Line 16.

⁽³⁾ January and February 2021 are included for Commission review in accordance with NC Rule R8-55(d)(3). These periods will be subject to review in the next annual fuel and fuel-related costs filing.

Rounding differences may occur

Line #	Month	Fuel Cost Incurred c/kWh (a)	Fuel Cost Billed c/kWh (b)	NC Retail MWH Sales (c)	Reported (Over)/ Under Recovery (d)	Correction JDA Purchased Power (e)	Revised (Over)/Under Recovery (f)
1	January 2020	1.4459	1.8127	2,021,126	\$ (7,413,792)	\$ -	\$ (7,413,792)
2	February	1.2613	1.8127	1,940,656	\$ (10,701,007)	\$ -	\$ (10,701,007)
3	March	1.2791	1.8127	1,693,572	\$ (9,037,706)	\$ -	\$ (9,037,706)
4	April	1.3789	1.8127	1,450,861	\$ (6,293,969)	\$ -	\$ (6,293,969)
5	May	1.6559	1.8127	1,342,790	\$ (2,105,593)	\$ -	\$ (2,105,593)
6	June ⁽¹⁾	1.8232	1.8127	1,700,445	\$ 165,111	\$ -	\$ 165,111
7	July	1.8123	1.8127	2,257,762	\$ (8,998)	\$ -	\$ (8,998)
8	August	1.7591	1.8127	2,353,392	\$ (1,262,025)	\$ -	\$ (1,262,025)
9	September	1.4671	1.7118	1,961,816	\$ (4,800,324)	\$ (120,123)	\$ (4,920,447)
10	October	1.8861	1.6027	1,361,181	\$ 3,858,149	\$ (480,039)	\$ 3,378,110
11	November	1.7168	1.6027	1,406,770	\$ 1,604,755	\$ (99,649)	\$ 1,505,106
12	December ⁽¹⁾	1.7373	1.6027	1,905,668	\$ 2,811,210	\$ (12,313)	\$ 2,798,897
13	Total Test Period			21,396,039	\$ (33,184,189)	\$ (712,124)	\$ (33,896,314)
14	Test Period Wtd Avg. c/kWh	1.6014	1.7576				
15	Adjustment to remove (Over)/Under Recovery - January-March 2020 ⁽²⁾						\$ (27,152,504)
16	January 2021	1.4543	1.6027	2,427,681	\$ (3,602,217)	\$ -	\$ (3,602,217)
17	February 2021	1.8056	1.6027	2,047,050	\$ 4,154,380	\$ (396,162)	\$ 3,758,218
18	Total (Over)/Under Recovery - Update Period January - February 2021 ⁽³⁾				\$ 552,163	\$ (396,162)	\$ 156,001
19	Adjusted (Over)/Under Recovery						\$ (6,587,808)
20	NC Retail Normalized Test Period MWh Sales					Exhibit 4	23,329,575
21	Experience Modification Increment (Decrement) cents/kWh						(0.0282)
22	Adjusted (Over)/Under Recovery						\$ (6,587,808)
23	Adjustment to remove customer credits for purchased power contract terms ⁽⁴⁾						\$ 2,419
24	Amount of refund for interest computation						\$ (6,585,390)
25	Annual Interest Rate						10%
26	Monthly Interest Rate						0.83%
27	Number of Months (September 15, 2020 - February 28, 2022)						17.5
28	Interest						\$ (960,369)
29	Experience Modification Increment (Decrement) cents/kWh						(0.0041)

Notes:

⁽¹⁾ Prior period corrections not included in rate incurred but are included in over/(under) recovery total

⁽²⁾ January-March 2020 filed in fuel Docket E-7, Sub 1228 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55(d)(3) but deducted from total (Over)/Under on Line 17.

⁽³⁾ January and February 2021 are included for Commission review in accordance with NC Rule R8-55(d)(3). These periods will be subject to review in the next annual fuel and fuel-related costs filing.

⁽⁴⁾ Purchased power contract term collections not considered a refund of amounts advanced by customers, therefore have been excluded from the computation of interest.

Rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - GS/Lighting
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Revised Exhibit 3
Page 3 of 4

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/ Under Recovery (d)	Correction JDA Purchased Power (e)	Revised (Over)/Under Recovery (f)
1	January 2020	1.8136	1.9562	1,919,161	\$ (2,736,820)	\$ -	\$ (2,736,820)
2	February	1.5188	1.9562	1,917,354	\$ (8,385,934)	\$ -	\$ (8,385,934)
3	March	1.4558	1.9562	1,771,910	\$ (8,865,883)	\$ -	\$ (8,865,883)
4	April	1.4000	1.9562	1,700,279	\$ (9,457,058)	\$ -	\$ (9,457,058)
5	May	1.6578	1.9562	1,595,041	\$ (4,759,228)	\$ -	\$ (4,759,228)
6	June ⁽¹⁾	1.9960	1.9562	1,845,527	\$ 724,468	\$ -	\$ 724,468
7	July	2.2244	1.9562	2,167,855	\$ 5,814,650	\$ -	\$ 5,814,650
8	August	2.1618	1.9562	2,253,716	\$ 4,633,072	\$ -	\$ 4,633,072
9	September	1.6002	1.8611	2,126,565	\$ (5,550,013)	\$ (143,965)	\$ (5,693,978)
10	October	1.6495	1.7583	1,844,555	\$ (2,007,635)	\$ (575,317)	\$ (2,582,952)
11	November	1.3617	1.7583	2,116,483	\$ (8,394,817)	\$ (119,428)	\$ (8,514,244)
12	December ⁽¹⁾	2.7101	1.7583	1,459,697	\$ 14,225,259	\$ (14,756)	\$ 14,210,503
13	Total Test Period			22,718,144	\$ (24,759,939)	\$ (853,466)	\$ (25,613,404)
14	Test Period Wtd Avg. ¢/kWh	1.7897	1.9001				
15	Adjustment to remove (Over)/Under Recovery - January-March 2020 ⁽²⁾						\$ (19,988,636)
16	January 2021	1.8948	1.7583	2,224,452	\$ 3,036,294	\$ -	\$ 3,036,294
17	February 2021	2.5796	1.7583	1,711,092	\$ 14,053,467	\$ (474,792)	\$ 13,578,675
18	Total (Over)/Under Recovery - Update Period January - February 2021 ⁽³⁾				\$ 17,089,761	\$ (474,792)	\$ 16,614,969
19	Adjusted (Over)/Under Recovery						\$ 10,990,202
20	NC Retail Normalized Test Period MWh Sales				Exhibit 4		23,102,975
21	Experience Modification Increment (Decrement) cents/kWh						0.0476

Notes:

⁽¹⁾ Prior period corrections not included in rate incurred but are included in over/(under) recovery total

⁽²⁾ January-March 2020 filed in fuel Docket E-7, Sub 1228 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55(d)(3) but deducted from total (Over)/Under on Line 17.

⁽³⁾ January and February 2021 are included for Commission review in accordance with NC Rule R8-55(d)(3). These periods will be subject to review in the next annual fuel and fuel-related costs filing.

Rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Industrial
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Revised Exhibit 3
Page 4 of 4

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/ Under Recovery (d)	Correction JDA Purchased Power (e)	Revised (Over)/Under Recovery (f)
1	January 2020	2.1705	1.8935	858,763	\$ 2,378,515	\$ -	\$ 2,378,515
2	February	1.5672	1.8935	994,505	\$ (3,244,669)	\$ -	\$ (3,244,669)
3	March	1.4487	1.8935	953,523	\$ (4,241,584)	\$ -	\$ (4,241,584)
4	April	1.4843	1.8935	858,390	\$ (3,512,753)	\$ -	\$ (3,512,753)
5	May	1.7695	1.8935	799,666	\$ (991,906)	\$ -	\$ (991,906)
6	June (1)	2.1907	1.8935	899,377	\$ 2,668,350	\$ -	\$ 2,668,350
7	July	2.6878	1.8935	955,517	\$ 7,590,138	\$ -	\$ 7,590,138
8	August	2.4184	1.8935	1,072,177	\$ 5,627,469	\$ -	\$ 5,627,469
9	September	1.6538	1.7838	1,054,884	\$ (1,371,673)	\$ (70,978)	\$ (1,442,651)
10	October	1.5640	1.6652	955,373	\$ (966,497)	\$ (283,645)	\$ (1,250,142)
11	November	1.1395	1.6652	1,245,063	\$ (6,545,263)	\$ (58,881)	\$ (6,604,143)
12	December (1)	2.5964	1.6652	750,442	\$ 6,409,407	\$ (7,275)	\$ 6,402,132
13	Total Test Period			11,397,681	\$ 3,799,534	\$ (420,779)	\$ 3,378,757
14	Test Period Wtd Avg. ¢/kWh	1.8627	1.8242				
15	Adjustment to remove (Over)/Under Recovery - January-March 2020 ⁽²⁾						\$ (5,107,737)
16	January 2021	1.8306	1.6652	1,133,633	\$ 1,875,356	\$ -	\$ 1,875,356
17	February 2021	2.2950	1.6652	947,056	\$ 5,964,724	\$ (234,084)	\$ 5,730,641
18	Total (Over)/Under Recovery - Update Period January - February 2021⁽³⁾				\$ 7,840,080	\$ (234,084)	\$ 7,605,996
19	Adjusted (Over)/Under Recovery						\$ 16,092,490
20	NC Retail Normalized Test Period MWh Sales				Exhibit 4		11,570,060
21	Experience Modification Increment (Decrement) cents/KWh						0.1391

Notes:

⁽¹⁾ Prior period corrections not included in rate incurred but are included in over/(under) recovery total

⁽²⁾ January-March 2020 filed in fuel Docket E-7, Sub 1228 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55(d)(3) but deducted from total (Over)/Under on Line 16.

⁽³⁾ January and February 2021 are included for Commission review in accordance with NC Rule R8-55(d)(3). These periods will be subject to review in the next annual fuel and fuel-related costs filing.

Rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Sales, Fuel Revenue, Fuel Expense and System Peak
Test Period Ended December 31, 2020
Billing Period September 2021 - August 2022
Docket E-7, Sub 1250

Sykes Revised Exhibit 4

Line #	Description	Reference	Total Company	North Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
1	Test Period MWh Sales (excluding inter system sales)	Exhibit 6 Schedule 1 (Line 4) and Workpaper 11 (NC Retail)	82,983,046	55,511,864	21,396,039	22,718,144	11,397,681
2	Customer Growth MWh Adjustment	Workpaper 13 Pg 1	494,727	322,769	225,676	89,954	7,139
3	Weather MWh Adjustment	Workpaper 12	3,083,635	2,167,977	1,707,860	294,877	165,240
4	Total Normalized MWh Sales	Sum	86,561,409	58,002,609	23,329,575	23,102,975	11,570,060
5	Test Period Fuel and Fuel Related Revenue *		\$ 1,571,170,278	\$ 1,015,637,375			
6	Test Period Fuel and Fuel Related Expense *		\$ 1,435,008,103	\$ 961,492,783			
7	Test Period Unadjusted (Over)/Under Recovery		\$ (136,162,175)	\$ (54,144,594)			
			Summer Coincidental Peak (CP) kW				
8	Total System Peak		17,438,327				
9	NC Retail Peak		11,665,772				
10	NC Residential Peak		5,482,921				
11	NC General Service/Lighting Peak		4,326,963				
12	NC Industrial Peak		1,855,888				

* Total Company Fuel and Fuel-Related Revenue and Fuel and Fuel-Related Expense are determined based upon the fuel and fuel-related cost recovery mechanism in each of the company's jurisdictions.

Duke Energy Carolinas, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Nuclear Capacity Ratings
 Test Period Ended December 31, 2020
 Billing Period September 2021 - August 2022
 Docket E-7, Sub 1250

Sykes Exhibit 5

Unit	Rate Case		Proposed Capacity Rating MW
	Docket E-7, Sub 1146	Fuel Docket E-7, Sub 1228	
Oconee Unit 1	847.0	847.0	847.0
Oconee Unit 2	848.0	848.0	848.0
Oconee Unit 3	859.0	859.0	859.0
McGuire Unit 1	1,158.0	1,158.0	1,158.0
McGuire Unit 2	1,157.6	1,157.6	1,157.6
Catawba Unit 1	1,160.1	1,160.1	1,160.1
Catawba Unit 2	1,150.1	1,150.1	1,150.1
Total Company	7,179.8	7,179.8	7,179.8

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Apr 29 2021

DECEMBER 2020 MONTHLY FUEL FILING

DUKE ENERGY CAROLINAS
SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-7, Sub 1234

Line No.	December 2020	12 Months Ended December 2020
1 Fuel and fuel-related costs	\$ 139,993,351	\$ 1,435,984,896
MWH sales:		
2 Total system sales	6,362,066	84,193,171
3 Less intersystem sales	89,096	1,210,125
4 Total sales less intersystem sales	6,272,970	82,983,046
5 Total fuel and fuel-related costs (¢/KWH) (line 1/line 4)	2.2317	1.7305
6 Current fuel and fuel-related cost component (¢/KWH) (per Schedule 4, Line 7a Total)	1.6693	
Generation Mix (MWH):		
Fossil (by primary fuel type):		
7 Coal	1,371,448	14,738,937
8 Fuel Oil	8,702	64,807
9 Natural Gas - Combined Cycle	1,016,660	14,333,589
10 Natural Gas - Combined Heat and Power	39	5,300
11 Natural Gas - Combustion Turbine	97,325	775,879
12 Natural Gas - Steam	172,344	2,406,276
13 Biogas	2,622	25,709
14 Total fossil	2,669,140	32,350,497
15 Nuclear 100%	5,476,820	59,945,886
16 Hydro - Conventional	252,107	3,016,593
17 Hydro - Pumped storage	(48,524)	(505,461)
18 Total hydro	203,583	2,511,132
19 Solar Distributed Generation	10,105	148,719
20 Total MWH generation	8,359,648	94,956,234
21 Less joint owners' portion - Nuclear	1,413,968	15,631,285
22 Less joint owners' portion - Combined Cycle	82,982	1,319,907
23 Adjusted total MWH generation	6,862,698	78,005,042

Note: Detail amounts may not add to totals shown due to rounding.

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Apr 29 2021

DUKE ENERGY CAROLINAS
DETAILS OF FUEL AND FUEL-RELATED COSTS

Docket No. E-7, Sub 1234

	December 2020	12 Months Ended December 2020
Fuel and fuel-related costs:		
0501110 coal consumed - steam	\$ 42,109,238	\$ 509,419,250
0501310 fuel oil consumed - steam	181,852	3,355,663
0501330 fuel oil light-off - steam	305,196	3,287,490
Total Steam Generation - Account 501	<u>42,596,286</u>	<u>516,062,403</u>
Nuclear Generation - Account 518		
0518100 burnup of owned fuel	22,919,977	256,442,658
Other Generation - Account 547		
0547100, 0547124 - natural gas consumed - Combustion Turbine	3,854,899	26,580,246
0547100 - Combustion Turbine - credit for inefficient fuel cost	(45,980)	(100,388)
0547100 natural gas consumed - Steam	6,405,649	73,118,890
0547101 natural gas consumed - Combined Cycle	24,719,752	281,739,819
0547101 natural gas consumed - Combined Heat and Power	25,323	566,869
0547106 biogas consumed - Combined Cycle	141,294	1,388,864
0547200 fuel oil consumed - Combustion Turbine	876,617	2,063,581
Total Other Generation - Account 547	<u>35,977,554</u>	<u>385,357,881</u>
Reagents		
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	1,608,993	17,555,512
Total Reagents	<u>1,608,993</u>	<u>17,555,512</u>
By-products		
Net proceeds from sale of by-products	1,169,523	7,934,796
Total By-products	<u>1,169,523</u>	<u>7,934,796</u>
Total Fossil and Nuclear Fuel Expenses		
Included in Base Fuel Component	104,272,333	1,183,353,250
Purchased Power and Net Interchange - Account 555		
Capacity component of purchased power (economic)	215,310	10,765,481
Capacity component of purchased power (renewables)	615,486	14,501,806
Capacity component of purchased power (PURPA)	256,193	6,762,310
Fuel and fuel-related component of purchased power	37,895,970	248,287,490
Total Purchased Power and Net Interchange - Account 555	<u>38,982,959</u>	<u>280,317,087</u>
Less:		
Fuel and fuel-related costs recovered through intersystem sales	3,152,653	26,840,359
Fuel in loss compensation	85,032	755,898
Solar Integration Charge	-	3,864
Lincoln CT marginal fuel revenue	13,953	75,020
Miscellaneous Fees Collected	10,300	10,300
Total Fuel Credits - Accounts 447 /456	<u>3,261,938</u>	<u>27,685,441</u>
Total Fuel and Fuel-related Costs	<u>\$ 139,993,351</u>	<u>\$ 1,435,984,896</u>

Notes: Detail amounts may not add to totals shown due to rounding.
Report reflects net ownership costs of jointly owned facilities.

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Apr 29 2021

DUKE ENERGY CAROLINAS
PURCHASED POWER AND INTERCHANGE
SYSTEM REPORT - NORTH CAROLINA VIEW

DECEMBER 2020

Purchased Power	Total	Capacity		Non-capacity			Not Fuel \$
		\$	mWh	Fuel \$	Fuel-related \$	Not Fuel-related \$	
Economic							
Carolina Power Partners, LLC	\$ 978,100	-	33,440	\$ 596,641	\$ 381,459		
Cherokee County Cogeneration Partners	1,521,127	-	39,774	1,122,180	183,637		
Cube Yackin Generation LLC	123,723	-	7,709	75,471	48,252		
DE Progress - Native Load Transfer	19,491,334	-	738,327	17,470,858	2,027,149		(6,673)
DE Progress - Native Load Transfer (Prior Period Adjust)	734	-	-	-	734		
DE Progress - Native Load Transfer Benefit	2,139,555	-	-	2,139,555	-		
Haywood Electric - Economic	24,989	20,230	109	2,903	1,856		
Macquarie Energy, LLC	3,675,222	-	86,739	2,241,885	1,433,337		
NCEMC - Economic	42,120	-	810	25,693	16,427		
NCMPA Instantaneous - Economic	838,428	-	34,370	484,444	353,984		
Piedmont Municipal Power Agency	285,149	-	12,007	164,759	120,390		
PJM Interconnection, LLC	230,674	-	6,200	140,711	89,963		
Southern Company Services, Inc.	63,004	-	2,688	38,432	24,572		
Tennessee Valley Authority	237,512	-	7,094	144,882	92,630		
Town of Dallas	584	-	-	-	-		
Town of Forest City	19,856	-	-	-	-		
	\$ 29,672,111	\$ 255,980	969,267	\$ 24,648,415	\$ 4,774,389	\$ (6,673)	
Renewable Energy							
REPS	\$ 4,701,460	610,344	84,946	\$ -	\$ 4,091,116	\$ -	
DERP - Purchased Power	54,261	5,142	910	-	37,283	11,836	
	\$ 4,755,721	\$ 615,486	85,856	\$ -	\$ 4,128,399	\$ 11,836	
HB569 PURPA Purchases							
CPRE - Purchased Power	(10,000)	-	-	-	-	(10,000)	
Qualifying Facilities	2,895,926	256,193	57,308	2,568,618	71,115		
	\$ 2,885,926	\$ 256,193	57,308	\$ -	\$ 2,568,618	\$ 61,115	
Non-dispatchable / Other							
Blue Ridge Electric Membership Corp.	\$ 1,020,170	619,257	25,417	\$ 244,557	\$ -	156,356	
Carolina Power Partners, LLC	597,600	-	18,000	364,536	233,064	-	
DE Progress - As Available Capacity	3,826	3,826	-	-	-	-	
Exelon Generation Company, LLC	38,430	-	1,098	23,442	14,988		
Haywood Electric	227,559	116,898	5,409	67,503	43,158		
Macquarie Energy, LLC	1,260,096	-	32,084	768,659	491,437		
Morgan Stanley Capital Group	36,138	-	1,277	22,044	14,094		
NCEMC - Other	4,021	-	-	-	-	-	
Piedmont Electric Membership Corp.	46,103	267,253	11,904	118,193	75,566		
Southern Company Services, Inc.	56,000	-	2,000	34,160	21,840		
Generation Imbalance	141,567	-	3,780	55,654	85,913		
Energy Imbalance - Purchases	12,166	-	(8,729)	10,443	1,723		
Energy Imbalance - Sales	(288,704)	-	-	(278,165)	(10,539)		
Other Purchases	356	-	14	-	356		
	\$ 3,570,237	\$ 1,011,255	92,264	\$ 1,431,026	\$ -	\$ 1,127,956	
Total Purchased Power	\$ 40,883,995	\$ 2,138,914	1,204,685	\$ 26,079,441	\$ 11,471,406	\$ 1,194,234	
Interchanges In							
Other Catawba Joint Owners	7,508,569	-	711,873	4,285,824	3,222,745		
WS Lee Joint Owner	1,210,914	-	42,903	1,034,072	176,842		
Total Interchanges In	8,719,483	-	754,776	5,319,897	3,399,586		
Interchanges Out							
Other Catawba Joint Owners	(7,361,777)	(134,209)	(693,224)	(4,174,593)	(3,052,975)		
Catawba- Net Negative Generation	-	-	-	-	-		
WS Lee Joint Owner	(957,875)	-	(33,340)	(800,181)	(157,694)		
Total Interchanges Out	(8,319,652)	(134,209)	(726,564)	(4,974,774)	(3,210,669)		
Net Purchases and Interchange Power	\$ 41,283,826	\$ 2,004,705	1,232,897	\$ 26,424,564	\$ 11,471,406	\$ 1,383,151	

NOTE: Detail amounts may not add to totals shown due to rounding.
CPRE purchased power amounts are recovered through the CPRE Rider.

DUKE ENERGY CAROLINAS
INTERSYSTEM SALES*
SYSTEM REPORT - NORTH CAROLINA VIEW

DECEMBER 2020

Sales	Total	Capacity		Non-capacity		
	\$	\$	mWh	Fuel \$	Non-fuel \$	
Utilities:						
DE Progress - Emergency	\$ 100,774	\$ -	1,180	\$ 92,137	\$ 8,638	
Market Based:						
Macquarie Energy, LLC	-	-	-	2,699	(2,699)	
NCMPA	106,134	87,500	270	20,014	(1,381)	
PJM Interconnection, LLC.	(3)	-	-	-	(3)	
Other:						
DE Progress - Native Load Transfer Benefit	297,225	-	-	297,225	-	
DE Progress - Native Load Transfer	2,809,592	-	85,741	2,691,167	118,425	
Generation Imbalance	61,927	-	1,905	49,411	12,516	
BPM Transmission	3,092	-	-	-	3,092	
Total Intersystem Sales	\$ 3,378,741	\$ 87,500	89,096	\$ 3,152,653	\$ 138,588	

* Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY CAROLINAS
PURCHASED POWER AND INTERCHANGE
SYSTEM REPORT - NORTH CAROLINA VIEW

Twelve Months Ended
DECEMBER 2020

Purchased Power	Total	Capacity		Non-capacity		Not Fuel-related \$	
		\$	mWh	Fuel \$	Fuel-related \$	Fuel \$	Not Fuel-related \$
Economic							
Carolina Power Partners, LLC	\$ 2,224,380	-	86,400	\$ 1,356,872	\$ 867,508	-	-
Cherokee County Cogeneration Partners	20,600,437	\$ 10,765,481	351,406	8,109,001	1,725,955	-	-
Cube Yadkin Generation LLC	123,723	-	7,709	75,471	48,252	-	-
DE Progress - Native Load Transfer	100,976,135	-	5,911,217	92,233,427	8,497,582	\$ 734	245,126
DE Progress - Native Load Transfer (Prior Period Adjust)	734	-	-	-	-	-	-
DE Progress - Native Load Transfer Benefit	12,958,040	-	-	12,958,040	-	-	-
DE Progress - Fees	6,036	-	-	-	6,036	-	-
EDF Trading North America, LLC	3,120	-	240	1,903	1,217	-	-
Exelon Generation Company, LLC	76,305	-	2,685	46,546	29,759	-	-
Haywood Electric - Economic	274,796	258,136	607	11,383	7,277	-	-
Macquarie Energy, LLC	6,590,882	-	196,775	4,020,444	2,570,448	-	-
NCMPA	42,120	-	810	25,693	16,427	-	-
NCMPA Load Following Economic	7,491,216	-	459,359	4,377,196	3,114,020	-	-
NTE Carolinas LLC	820,801	-	37,325	500,688	320,113	-	-
Piedmont Municipal Power Agency	2,978,297	-	193,184	1,751,386	1,226,911	-	-
PJM Interconnection, LLC	422,946	-	13,872	257,988	164,948	-	-
Rainbow Energy Marketing Corporation	7,548	-	300	4,604	2,944	-	-
South Carolina Electric & Gas Company / Dominion Energy	13,450	-	400	7,930	5,520	-	-
Tennessee Valley Services, Inc.	427,836	-	25,491	280,980	166,856	-	-
Tennessee Valley Authority	559,698	-	23,066	341,416	218,281	-	-
The Energy Authority	8,244	-	229	5,029	3,215	-	-
Town of Dallas	7,008	-	-	-	-	-	-
Town of Forest City	238,272	-	-	-	-	-	-
	\$ 156,852,034	\$ 11,266,887	7,311,075	\$ 126,346,007	\$ 18,984,003	\$ 245,126	
Renewable Energy							
REPS	\$ 70,245,371	\$ 14,411,272	1,145,873	-	\$ 55,834,100	\$ 196,370	-
DERP - Purchased Power	966,899	90,534	16,567	-	679,995	45,769	-
DERP - Net Metered Generation	56,012	10,243	1,297	-	-	-	-
	\$ 71,268,282	\$ 14,512,049	1,163,736	\$ -	\$ 56,514,095	\$ 242,139	
HB589 PURPA Purchases							
CPRE - Purchased Power	\$ (2,244,000)	\$ -	-	-	\$ -	\$ (2,244,000)	
Qualifying Facilities	38,695,060	\$ 6,762,310	681,954	-	\$ 30,908,248	\$ 1,024,502	
	\$ 36,451,060	\$ 6,762,310	681,954	\$ -	\$ 30,908,248	\$ (1,219,498)	
Non-dispatchable / Other							
Carolina Power & Light (DE Progress) - Emergency	\$ 49,412	\$ -	569	\$ 30,141	\$ -	\$ 19,271	
Blue Ridge Electric Membership Corp.	13,522,047	7,488,673	305,808	3,680,359	2,353,015	588,604	
Carolina Power Partners, LLC	1,509,240	-	46,800	920,636	-	-	
DE Progress - As Available Capacity	149,077	149,077	-	-	-	-	
Exelon Generation Company, LLC	38,430	-	1,098	23,442	14,988	-	
Haywood Electric	2,872,965	1,494,026	63,271	841,155	537,784	-	
Macquarie Energy, LLC	5,754,063	-	146,648	3,509,979	2,244,084	-	
Morgan Stanley Capital Group	36,138	-	1,277	22,044	14,094	-	
NCMPA - Other	364,189	51,816	6,049	190,548	121,825	-	
NCMPA - Reliability	57,240	-	1,080	34,916	22,324	-	
Piedmont Electric Membership Corp.	6,391,828	3,524,179	140,544	1,749,265	1,118,383	-	
PJM Interconnection, LLC - Other	3,744	-	175	2,284	1,460	-	
Southern Company Services, Inc.	364,619	-	7,011	222,418	142,201	-	
Generation Imbalance	1,307,904	-	56,424	565,036	742,868	-	
Energy Imbalance - Purchases	688,581	-	(1,430)	518,790	149,791	-	
Energy Imbalance - Sales	(1,008,321)	-	-	(948,806)	(59,515)	-	
Other Purchases	8,268	-	258	8,268	-	-	
	\$ 32,089,423	\$ 12,707,771	775,582	\$ 11,382,207	\$ -	\$ 8,019,445	
Total Purchased Power	\$ 296,680,799	\$ 45,249,027	9,932,347	\$ 137,708,214	\$ 106,416,346	\$ 7,287,211	
Interchanges In							
Other Catawba Joint Owners	74,988,623	-	7,867,637	43,384,153	31,614,472	-	-
WS Lee Joint Owner	11,295,227	-	500,924	9,242,716	2,052,512	-	-
Total Interchanges In	86,283,850	-	8,368,561	52,626,868	33,666,984	-	-
Interchanges Out							
Other Catawba Joint Owners	(71,597,673)	(1,584,537)	(7,454,361)	(41,125,471)	(28,887,665)	-	-
Catawba - Net Negative Generation	(188,590)	-	(9,707)	(9,707)	(59,011)	-	-
WS Lee Joint Owner	(9,029,429)	-	(395,030)	(7,208,892)	(1,820,537)	-	-
Total Interchanges Out	(80,815,692)	(1,584,537)	(7,859,098)	(48,463,942)	(30,767,213)	-	-
Net Purchases and Interchange Power	\$ 302,138,957	\$ 43,664,490	10,441,810	\$ 141,871,140	\$ 106,416,346	\$ 10,186,982	

NOTES: Detail amounts may not add to totals shown due to rounding.
CPRE purchased power amounts are recovered through the CPRE Rider.

Apr 29 2021

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DUKE ENERGY CAROLINAS
INTERSYSTEM SALES*
SYSTEM REPORT - NORTH CAROLINA VIEW

Twelve Months Ended
DECEMBER 2020

	Sales	Total	Capacity		Non-capacity		
			\$	mWh	Fuel \$	Non-fuel \$	
Utilities:							
DE Progress - Emergency	\$	125,188	-	2,322	\$ 113,626	\$	11,563
SC Public Service Authority - Emergency		11,678	-	456	9,389		2,289
SC Electric & Gas / Dominion Energy - Emergency		16,079	-	653	29,063		(12,984)
Market Based:							
Central Electric Power Cooperative, Inc.		5,546,611	\$ 4,809,000	23,372	694,954		42,657
EDF Trading Company		64,800	-	2,050	40,370		24,430
Energy Kansas Central (BPM)		83,610	-	2,664	49,921		33,689
Exelon Generation Company, LLC.		29,085	-	1,680	27,783		1,302
Macquarie Energy, LLC		1,479,310	-	51,940	1,030,403		448,907
NCMPA		1,201,597	1,050,003	5,572	170,190		(18,597)
PJM Interconnection, LLC.		181,650	-	8,552	182,675		(1,025)
SC Electric & Gas / Dominion Energy		391,427	-	12,300	235,047		156,380
Southern Company		54,834	-	6,730	95,407		(40,573)
Tennessee Valley Authority		22,500	-	450	15,720		6,780
The Energy Authority		260,242	-	10,148	161,253		98,989
Other:							
DE Progress - Native Load Transfer Benefit		3,387,778	-	-	3,387,778		-
DE Progress - Native Load Transfer		21,570,376	-	1,062,405	20,142,840		1,427,536
Generation Imbalance		411,383	-	18,831	453,940		(42,557)
BPM Transmission		(195,265)	-	-	-		(195,265)
Total Intersystem Sales	\$	34,642,883	\$ 5,859,003	1,210,125	\$ 26,840,359	\$	1,943,521

* Sales for resale other than native load priority.

NOTES: Detail amounts may not add to totals shown due to rounding.

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
December 2020

Line No.		Residential	Commercial	Industrial	Total
1	Actual System kWh sales				6,272,969,895
2	DERP Net Metered kWh generation				10,483,803
3	Adjusted System kWh sales				6,283,453,698
4	N.C. Retail kWh sales	1,905,668,087	1,459,697,098	750,442,212	4,115,807,397
5	NC kWh sales % of actual system kWh sales				65.61%
6	NC kWh sales % of adjusted system kWh sales				65.50%
7	Approved fuel and fuel-related rates (¢/kWh)				
7a	Billed rates by class (¢/kWh)	1.6027	1.7583	1.6652	1.6693
7b	Billed fuel expense	\$30,542,142	\$25,665,854	\$12,496,364	\$68,704,360
8	Incurred base fuel and fuel-related (less renewable purchased power capacity) rates by class (¢/kWh)				
8a	Docket E-7, Sub 1228 allocation factor				
8b	System incurred expense	Input 35.85%	42.97%	21.18%	\$139,569,050
8c	Incurred base fuel and fuel-related expense	Input L8b * L6 * 8a	\$39,280,050	\$19,366,012	\$91,420,954
8d	Incurred base fuel rates by class (¢/kWh)	Input L8c / L4 * 100	2.6910	2.5806	2.2212
9	Incurred renewable purchased power capacity rates by class (¢/kWh)				
9a	NC retail production plant %	Input 45.45%	38.36%	16.20%	67.09%
9b	Production plant allocation factors	Input			100.00%
9c	System incurred expense	Input L9a * L9b * 9c	\$279,724	\$118,135	\$1,086,989
9d	Incurred renewable capacity expense	Input L9a * L9c * L9b / L4 * 100	0.0174	0.0192	\$729,282
9e	Incurred renewable capacity rates by class (¢/kWh)	Input L8d + L9e L7a - L10 (L4 * L11) / 100	2.7101 0.9518	0.0157	0.0177
10	Total incurred rates by class (¢/kWh)				2.2389
11	Difference in ¢/kWh (incurred - billed)				0.5697
12	(Over) / under recovery [See footnote]	\$2,564,173	\$13,893,920	\$6,987,783	\$23,445,876
13	Prior period adjustments	Input 247,037	331,339	(578,376)	0
14	Total (over) / under recovery [See footnote]	\$2,811,210	\$14,225,259	\$6,409,407	\$23,445,876
15	Total system incurred expense				\$140,656,039
16	Less: Jurisdictional allocation adjustment(s)				662,688
17	Total Fuel and Fuel-related Costs per Schedule 2				\$139,993,351

Duke Energy Carolinas
(Over) / Under Recovery of Fuel Costs
December 2020

Line

No.

(Over) / under recovery for each month of the current calendar year

18 [See footnote]

		(Over) / Under Recovery			
		Total To Date	Residential	Commercial	Industrial
Year 2020					Total Company
	January	(\$7,772,097)	(\$7,413,792)	(\$2,736,820)	\$2,378,515
	February	(30,103,707)	(\$10,701,007)	(\$8,385,934)	(\$3,244,669)
	March	(52,248,879)	(\$9,037,706)	(\$8,865,883)	(\$4,241,584)
	April	(71,512,659)	(\$6,293,969)	(\$9,457,058)	(\$3,512,753)
	May	(79,369,385)	(\$2,105,593)	(\$4,759,228)	(\$991,906)
	June	(75,811,457)	\$165,111	\$724,468	\$2,668,350
	July	(62,415,668)	(\$8,998)	\$5,814,650	\$7,590,138
	August	(53,417,153)	(\$1,262,025)	\$4,633,072	\$5,627,469
	September	(65,139,163)	(\$4,800,324)	(\$5,550,013)	(\$1,371,673)
	October	(64,255,145)	\$3,858,149	(\$2,007,635)	(\$966,497)
	November	(\$77,590,470)	\$1,604,755	(\$8,394,817)	(\$6,545,263)
	December	(\$54,144,594)	\$2,811,210	\$14,225,259	\$6,409,407
			(\$33,184,189)	(\$24,759,939)	\$3,799,534
					(\$54,144,594)

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of over or under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts.

Under collections, or regulatory assets, are shown as positive amounts.

Includes prior period adjustments.

Reflects a prorated rate and prorated allocation factor for periods in which the approved rates changed.

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DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED COST REPORT
DECEMBER 2020

Exhibit 6
Schedule 5
Page 1 of 2

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Apr 29 2021

Description	Buck CC	Dan River CC	Lee CC	Clemson CHP	Lee Steam/CT	Lincoln CT	(A) Lincoln (Unit17) CT	Mill Creek CT	Rockingham CT
Cost of Fuel Purchased (\$)									
Coal	-	-	-		-	-	-	-	-
Oil	-	-	-		-	-	-	-	-
Gas - CC	\$10,899,040	\$4,337,175	\$10,892,051						
Gas - CHP				\$25,323					
Gas - CT					\$33,260	\$178,930	\$373,904	\$379,803	\$2,843,021
Gas - Steam					264				
Biogas	395,748	(263)	-						
Total	\$11,294,788	\$4,336,912	\$10,892,051	\$25,323	\$33,524	\$178,930	\$373,904	\$379,803	\$2,843,021
Average Cost of Fuel Purchased (¢/MBTU)									
Coal	-	-	-		-	-	-	-	-
Oil	-	-	-		-	-	-	-	-
Gas - CC	359.39	363.23	364.04						
Gas - CHP				4,841.94					
Gas - CT					638.06	370.11	319.96	361.44	361.68
Gas - Steam					332.60				
Biogas	2,174.44	-	-						
Weighted Average	370.22	363.21	364.04	4,841.94	638.06	370.11	319.96	361.44	361.68
Cost of Fuel Burned (\$)									
Coal	-	-	-		-				
Oil - CC	-	-	-						
Oil - Steam/CT					\$0	4,736	-	694,987	176,893
Gas - CC	\$10,899,040	\$4,337,175	\$10,892,051						
Gas - CHP				\$25,323					
Gas - CT					33,260	\$178,930	\$373,904	\$379,803	\$2,843,021
Gas - Steam					264				
Biogas	395,748	(263)	-						
Nuclear									
Total	\$11,294,788	\$4,336,912	\$10,892,051	\$25,323	\$33,524	\$183,667	\$373,904	\$1,074,791	\$3,019,914
Average Cost of Fuel Burned (¢/MBTU)									
Coal	-	-	-		-				
Oil - CC	-	-	-						
Oil - Steam/CT					-	1,518.09	-	1,794.07	1,552.24
Gas - CC	359.39	363.23	364.04						
Gas - CHP				4,841.94					
Gas - CT					638.06	370.11	319.96	361.44	361.68
Gas - Steam					332.60				
Biogas	2,174.44	-	-						
Nuclear									
Weighted Average	370.22	363.21	364.04	4,841.94	638.06	377.48	319.96	747.32	378.70
Average Cost of Generation (¢/kWh)									
Coal	-	-	-		-	-	-		
Oil - CC	-	-	-						
Oil - Steam/CT					-	16.67	-	23.46	16.67
Gas - CC	2.49	2.60	2.64						
Gas - CHP				65.60					
Gas - CT					8.34	5.90	3.41	4.63	3.81
Gas - Steam					-	-	-		
Biogas	15.10	-	-						
Nuclear									
Weighted Average	2.57	2.60	2.64	65.60	209.52	6.00	3.41	9.62	3.99
Burned MBTU's									
Coal	-	-	-		-				
Oil - CC	-	-	-						
Oil - Steam/CT					-	312	-	38,738	11,396
Gas - CC	3,032,651	1,194,065	2,991,957						
Gas - CHP				523					
Gas - CT					5,213	48,345	116,859	105,081	786,050
Gas - Steam					41				
Biogas	18,200	-	-						
Nuclear									
Total	3,050,851	1,194,065	2,991,957	523	5,254	48,657	116,859	143,819	797,446
Net Generation (mWh)									
Coal	-	-	-		-				
Oil - CC	-	-	-						
Oil - Steam/CT					-	28	-	2,963	1,061
Gas - CC	436,836	167,022	412,802						
Gas - CHP				39					
Gas - CT					399	3,031	10,971	8,208	74,717
Gas - Steam					(383)				
Biogas	2,622	-	-						
Nuclear 100%									
Hydro (Total System)									
Solar (Total System)									
Total	439,458	167,022	412,802	39	16	3,059	10,971	11,171	75,778
Cost of Reagents Consumed (\$)									
Ammonia	\$18,886	\$5,818	\$0						
Limestone									
Sorbents									
Urea									
Re-emission Chemical									
Dibasic Acid									
Activated Carbon									
Lime (water emissions)									
Total	\$18,886	\$5,818	\$0						

Notes:

(A) Lincoln (Unit 17) fuel and fuel related costs represents pre-commercial generation during an extended testing and validation period.

(B) Solar Net Generation (mWh) for the month of December includes pre-commercial 225 mWh for Gaston Solar and 621 mWh for Maiden Creek Solar.

Detail amounts may not add to totals shown due to rounding.

Data is reflected at 100% ownership.

Schedule excludes in-transit and terminal activity.

Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.

Re-emission chemical reagent expense is not recoverable in NC.

Lime (water emissions) expense is not recoverable in SC fuel clause.

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED COST REPORT
DECEMBER 2020

Exhibit 6
Schedule 5
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Description	Allen Steam	Marshall Steam - Dual Fuel	Belews Creek Steam - Dual Fuel	Cliffside Steam - Dual Fuel	Catawba Nuclear	McGuire Nuclear	Oconee Nuclear	Current Month	Total 12 ME December 2020
Cost of Fuel Purchased (\$)									
Coal	\$1,577,477	\$1,754,302	\$11,470,966	\$10,418,928				\$25,221,674	\$524,924,279
Oil	185,282	184,358	-	128,100				497,740	7,111,516
Gas - CC								26,128,266	296,014,769
Gas - CHP								25,323	566,869
Gas - CT								3,808,918	26,479,858
Gas - Steam		658,574	920,601	4,826,210				6,405,649	73,118,890
Biogas								395,485	3,886,168
Total	\$1,762,760	\$2,597,234	\$12,391,568	\$15,373,238				\$62,483,056	\$932,102,349
Average Cost of Fuel Purchased (¢/MBTU)									
Coal	146.33	120.66	387.31	248.05				260.18	363.32
Oil	1,111.33	1,114.19	-	1,123.87				1,115.60	964.95
Gas - CC								360.47	291.63
Gas - CHP								4,841.94	900.44
Gas - CT								363.61	293.34
Gas - Steam		361.83	356.40	366.63				364.63	296.70
Biogas								2,173.00	2,121.55
Weighted Average	161.03	157.17	384.83	278.09				315.66	332.14
Cost of Fuel Burned (\$)									
Coal	3,571,288	\$22,581,995	\$1,720,310	\$14,235,645				\$42,109,238	\$509,419,250
Oil - CC								-	-
Oil - Steam/CT	169,845	214,154	-	103,049				1,363,664	8,706,734
Gas - CC								26,128,266	296,014,769
Gas - CHP								25,323	566,869
Gas - CT								3,808,918	26,479,858
Gas - Steam		658,574	920,601	4,826,210				6,405,649	73,118,890
Biogas								395,485	3,886,168
Nuclear					\$10,059,697	\$9,693,332	\$11,290,556	31,043,585	348,551,598
Total	\$3,741,133	\$23,454,723	\$2,640,912	\$19,164,904	\$10,059,697	\$9,693,332	\$11,290,556	\$111,280,130	\$1,266,744,136
Average Cost of Fuel Burned (¢/MBTU)									
Coal	275.63	321.64	397.94	293.77				309.75	351.15
Oil - CC								-	-
Oil - Steam/CT	1,025.94	1,080.66	-	999.12				1,403.93	1,155.30
Gas - CC								360.47	291.63
Gas - CHP								4,841.94	900.44
Gas - CT								363.61	293.34
Gas - Steam		361.83	356.40	366.63				364.63	296.70
Biogas								2,173.00	2,121.55
Nuclear					57.67	55.09	57.72	56.86	57.73
Weighted Average	285.09	324.73	382.41	310.49	57.67	55.09	57.72	142.03	143.14
Average Cost of Generation (¢/kWh)									
Coal	3.00	3.21	7.14	2.72				3.07	3.46
Oil - CC								-	-
Oil - Steam/CT	11.13	10.78	-	9.05				15.67	13.43
Gas - CC								2.57	2.07
Gas - CHP								3.72	3.04
Gas - CT								3.91	3.41
Gas - Steam		3.36	3.44	3.82				3.72	3.04
Biogas								15.09	15.12
Nuclear					0.57	0.55	0.58	0.57	0.58
Weighted Average	3.11	3.23	5.19	2.94	0.57	0.55	0.58	1.33	1.33
Burned MBTU's									
Coal	1,295,699	7,020,964	432,300	4,845,845				13,594,808	145,073,739
Oil - CC								-	-
Oil - Steam/CT	16,555	19,817	-	10,314				97,132	753,636
Gas - CC								7,218,673	101,505,115
Gas - CHP								523	62,955
Gas - CT								1,061,547	9,026,942
Gas - Steam		182,011	258,305	1,316,385				1,756,742	24,644,417
Biogas								18,200	183,176
Nuclear					17,442,554	17,596,486	19,560,447	54,599,487	603,725,817
Total	1,312,254	7,222,792	690,605	6,172,544	17,442,554	17,596,486	19,560,447	78,347,113	884,975,797
Net Generation (mWh)									
Coal	118,909	704,337	24,083	524,119				1,371,448	14,738,937
Oil - CC								-	-
Oil - Steam/CT	1,526	1,986	-	1,138				8,702	64,807
Gas - CC								1,016,660	14,333,589
Gas - CHP								39	5,300
Gas - CT								97,325	775,879
Gas - Steam		19,579	26,799	126,349				172,344	2,406,276
Biogas								2,622	25,709
Nuclear 100%					1,750,957	1,771,352	1,954,511	5,476,820	59,945,886
Hydro (Total System)								203,583	2,511,132
Solar (Total System)								10,105 (B)	148,719 (B)
Total	120,435	725,902	50,882	651,606	1,750,957	1,771,352	1,954,511	8,359,648	94,956,234
Cost of Reagents Consumed (\$)									
Ammonia			\$12,439	\$94,070				\$131,214	\$2,132,769
Limestone	\$80,787	\$492,369	23,042	645,650				1,241,849	13,486,306
Sorbents	-	182,384	-					182,384	1,346,201
Urea	(1)	50,675						50,674	492,740
Re-emission Chemical		-	-	-				-	345,138
Dibasic Acid	-	-						-	-
Activated Carbon	-	-						-	25,493
Lime (water emissions)	-	3,613	-					3,613	91,162
Total	80,785	729,042	\$35,481	\$739,721				\$1,609,734	\$17,919,809

Notes:

(A) Lincoln (Unit 17) fuel and fuel related costs represents pre-commercial generation during an extended testing and validation period.
 (B) Solar Net Generation (mWh) for the month of December includes pre-commercial 225 mWh for Gaston Solar and 621 mWh for Maiden Creek Solar.
 Detail amounts may not add to totals shown due to rounding.
 Data is reflected at 100% ownership.
 Schedule excludes in-transit and terminal activity.
 Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.
 Re-emission chemical reagent expense is not recoverable in NC.
 Lime (water emissions) expense is not recoverable in SC fuel clause.

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT
DECEMBER 2020

Description	Buck CC	Dan River CC	Lee CC	Clemson CHP	Lee Steam/CT	Lincoln CT	(A) Lincoln (Unit17) CT	Mill Creek CT	Rockingham CT	Allen Steam	Marshall		Bellevue Creek		Cliffside Steam - Dual Fuel	Current Month	Total 12 ME December 2020
											Steam - Dual Fuel	Marshall	Steam - Dual Fuel	Creek			
Coal Data:																	
Beginning balance	-	-	-	-	-	-	-	-	-	-	186,382	960,652	674,515	423,558	2,245,107	2,127,823	
Tons received during period	-	-	-	-	-	-	-	-	-	-	24,160	13,819	165,159	175,477	378,615	5,798,126	
Inventory adjustments	-	-	-	-	-	-	-	-	0	-	25,626	47,206	(46,502)	(6,803)	19,527	18,845	
Tons burned during period	-	-	-	-	-	-	-	-	81,500	-	54,063	281,367	17,310	201,962	554,702	5,856,247	
Ending balance	-	-	-	-	-	-	-	-	281,445	-	182,105	740,309	775,862	390,270	2,088,547	2,088,547	
MBTUs per ton burned	-	-	-	-	-	-	-	-	3,918,573	-	23,97	24,95	23,99	23,99	24,51	24,77	
Cost of ending inventory (\$/ton)	-	-	-	-	-	-	-	-	2,17	-	73.92	80.26	99.38	70.49	84.98	84.98	
Oil Data:																	
Beginning balance	-	-	-	-	725,202	9,685,581	401,963	4,200,018	2,936,025	100,642	234,223	92,835	164,992	323,308	18,541,481	18,531,066	
Gallons received during period	-	-	-	-	-	-	-	-	-	120,812	119,901	-	82,595	(16,647)	5,340,477	5,340,477	
Miscellaneous adjustments	-	-	-	-	-	-	-	-	0	489	-	-	(9,364)	(8,443)	(261,532)	(261,532)	
Gallons burned during period	-	-	-	-	-	2,260	-	281,445	81,500	120,205	144,160	-	75,144	705,385	5,487,254	5,487,254	
Ending balance	-	-	-	-	725,202	9,683,321	401,963	3,918,573	2,854,525	101,738	209,964	83,471	164,000	18,142,757	18,142,757	18,142,757	
Cost of ending inventory (\$/gal)	-	-	-	-	1.87	2.10	1.21	2.47	2.17	1.42	1.49	1.28	1.37	2.14	2.14	2.14	
Natural Gas Data:																	
Beginning balance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MCF received during period	2,929,844	1,153,862	2,900,531	508	5,107	47,415	112,706	101,805	759,266	176,538	249,500	1,273,001	9,710,083	131,051,615	131,051,615	131,051,615	
MCF burned during period	2,929,844	1,153,862	2,900,531	508	5,107	47,415	112,706	101,805	759,266	176,538	249,500	1,273,001	9,710,083	131,051,615	131,051,615	131,051,615	
Ending balance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Biogas Data:																	
Beginning balance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MCF received during period	17,583	-	-	-	-	-	-	-	-	-	-	-	-	-	17,583	177,457	
MCF burned during period	17,583	-	-	-	-	-	-	-	-	-	-	-	-	-	17,583	177,457	
Ending balance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Limestone Data:																	
Beginning balance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tons received during period	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Inventory adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tons consumed during period	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ending balance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cost of ending inventory (\$/ton)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Qtr Ending																	
December 2020																	

DUKE ENERGY CAROLINAS
ANALYSIS OF COAL PURCHASED
DECEMBER 2020

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ALLEN	SPOT	-	\$ -	\$ -
	CONTRACT	24,160	1,516,810	62.78
	FIXED TRANSPORTATION / ADJUSTMENTS	-	0	-
	TOTAL	24,160	1,516,810	62.78
BELEWS CREEK	SPOT	38,357	2,540,568	66.23
	CONTRACT	126,802	8,274,865	65.26
	FIXED TRANSPORTATION / ADJUSTMENTS	-	2,209	-
	TOTAL	165,159	10,817,642	65.50
CLIFFSIDE	SPOT	-	24,564	-
	CONTRACT	175,477	9,973,775	56.84
	FIXED TRANSPORTATION / ADJUSTMENTS	-	0	-
	TOTAL	175,477	9,998,339	56.98
MARSHALL	SPOT	13,819	853,067	61.73
	CONTRACT	-	27,580	-
	FIXED TRANSPORTATION / ADJUSTMENTS	-	49,600	-
	TOTAL	13,819	930,247	67.32
ALL PLANTS	SPOT	52,176	3,418,199	65.51
	CONTRACT	326,439	19,793,030	60.63
	FIXED TRANSPORTATION / ADJUSTMENTS	-	51,809	-
	TOTAL	378,615	23,263,038	\$ 61.44

DUKE ENERGY CAROLINAS
ANALYSIS OF COAL QUALITY RECEIVED
DECEMBER 2020

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ALLEN	6.26	12.74	12,212	0.91
BELEWS CREEK	7.13	9.90	12,480	1.26
CLIFFSIDE	9.20	7.48	12,451	1.78
MARSHALL	7.05	13.03	11,913	0.72

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**DUKE ENERGY CAROLINAS
ANALYSIS OF OIL PURCHASED
DECEMBER 2020**

	ALLEN	CLIFFSIDE	MARSHALL
VENDOR	HighTowers	HighTowers	HighTowers
SPOT/CONTRACT	Contract	Contract	Contract
SULFUR CONTENT %	0	0	0
GALLONS RECEIVED	120,812	82,595	119,901
TOTAL DELIVERED COST	\$ 185,282	\$ 128,100	\$ 184,358
DELIVERED COST/GALLON	\$ 1.53	\$ 1.55	\$ 1.54
BTU/GALLON	138,000	138,000	138,000

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Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2020 - December, 2020
Nuclear Units

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<u>Unit Name</u>	<u>Net Generation (mWh)</u>	<u>Capacity Rating (mW)</u>	<u>Capacity Factor (%)</u>	<u>Equivalent Availability (%)</u>
Oconee 1	6,859,973	847	92.20	90.88
Oconee 2	7,670,158	848	102.97	99.99
Oconee 3	7,012,136	859	92.93	91.89
McGuire 1	9,434,118	1,158	92.75	90.65
McGuire 2	9,612,830	1,158	94.50	93.32
Catawba 1	9,235,519	1,160	90.64	89.94
Catawba 2	10,121,151	1,150	100.19	99.78

**Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2020 through December, 2020
Combined Cycle Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Buck CC	11	1,134,065	206	62.67	75.42
Buck CC	12	1,134,559	206	62.70	75.10
Buck CC	ST10	1,598,203	312	58.32	80.85
Buck CC	Block Total	3,866,827	724	60.80	77.67
Dan River CC	8	1,311,548	199	75.03	83.79
Dan River CC	9	1,297,690	199	74.24	83.04
Dan River CC	ST7	1,847,499	320	65.73	91.85
Dan River CC	Block Total	4,456,737	718	70.66	87.17
WS Lee CC	11	1,739,314	240	82.50	88.86
WS Lee CC	12	1,853,394	240	87.92	93.53
WS Lee CC	ST10	2,443,026	313	88.86	94.57
WS Lee CC	Block Total	6,035,734	793	86.65	92.53

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

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**Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2020 through December, 2020**

Baseload Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Belews Creek 1	2,691,806	1,110	27.61	58.99
Belews Creek 2	2,649,126	1,110	27.17	64.73
Marshall 3	2,074,332	658	35.89	61.51
Marshall 4	2,202,419	660	37.99	65.19

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

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**Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2020 through December, 2020**

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Cliffside 6	4,194,682	849	56.25	79.37
Marshall 1	852,998	380	25.55	89.00
Marshall 2	956,682	380	28.66	89.62

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

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**Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2020 through December, 2020
Other Cycling Steam Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Allen	1	7,133	167	0.49	81.63
Allen	2	11,024	167	0.75	94.17
Allen	3	57,542	270	2.43	95.94
Allen	4	238,290	267	10.16	95.80
Allen	5	205,583	259	9.04	88.47
Cliffside	5	1,064,746	546	22.20	69.22
Lee	3	-4,725	173	0.00	100.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

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**Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2020 through December, 2020
Combustion Turbine Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Clemson CHP	5,300	16	39.33
Lee CT	1,711	96	95.49
Lincoln CT	15,767	1,565	95.96
Mill Creek CT	70,332	756	99.68
Rockingham CT	656,571	895	88.88

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

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**Duke Energy Carolinas
Power Plant Performance Data**

Exhibit 6
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**Twelve Month Summary
January, 2020 through December, 2020
Hydroelectric Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Conventional Hydroelectric Stations:			
Bear Creek	33,970	9.5	72.33
Bridgewater	101,362	31.5	98.91
Cedar Cliff	14,360	6.8	64.07
Cedar Creek	195,060	45.0	66.54
Cowans Ford	345,561	324.0	95.00
Dearborn	167,286	42.0	86.33
Fishing Creek	236,761	50.0	86.00
Great Falls	-71	12.0	0.00
Keowee	111,177	152.0	96.63
Lookout Shoals	174,141	27.0	98.63
Mountain Island	227,649	62.0	64.49
Nantahala	281,167	50.0	91.68
Ninety-Nine Islands	80,306	15.2	76.52
Oxford	183,279	40.0	86.37
Queens Creek	6,292	1.4	93.68
Rhodhiss	119,034	33.4	98.18
Tennessee Creek	-12	9.8	0.00
Thorpe	118,015	19.7	99.49
Tuckasegee	5,018	2.5	66.71
Wateree	401,240	85.0	81.19
Wylie	214,998	72.0	69.12
Total Conventional Hydroelectric Stations:	3,016,593		
Pumped Storage Hydroelectric Stations:			
Gross Generation			
Bad Creek	1,602,907	1,360.0	67.95
Jocassee	1,138,239	780.0	81.85
Energy for Pumping			
Bad Creek	-2,004,346		
Jocassee	-1,242,261		
Net Generation			
Bad Creek	-401,439		
Jocassee	-104,022		

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

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Duke Energy Carolinas
Power Plant Performance Data
Twelve Month Summary
January, 2020 through December, 2020
Pre-commercial Combustion Turbine Stations

Note: The Power Plant Performance Data reports are limited to capturing data beginning the first full month a station is in commercial operation. During the months identified, Lincoln Unit 17 produced pre-commercial generation.

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
December 2020			
Lincoln Unit 17	10,971	n/a	n/a
November 2020			
Lincoln Unit 17	8,337	n/a	n/a
October 2020			
Lincoln Unit 17	11,198	n/a	n/a
September 2020			
Lincoln Unit 17	8,471	n/a	n/a
August 2020			
Lincoln Unit 17	-221	n/a	n/a
July 2020			
Lincoln Unit 17	-24	n/a	n/a
June 2020			
Lincoln Unit 17	1,805	n/a	n/a
May 2020			
Lincoln Unit 17	-657	n/a	n/a
Total	39,880		

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

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Apr 29 2021

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Proposed Nuclear Capacity Factor
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Sykes Workpaper 1

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs	9,330,730	9,921,566	9,278,272	9,189,043	7,233,820	6,758,803	6,909,851	58,622,085
Cost (Gross of Joint Owners)	\$ 56,313,089	\$ 62,379,795	\$ 53,463,594	\$ 53,190,353	\$ 48,378,152	\$ 40,167,441	\$ 41,185,222	\$ 355,077,645
\$/MWh	6.0352	6.2873	5.7622	5.7885	6.6878	5.9430	5.9604	
Avg \$/MWh		6.0571						
Cents per kWh		0.6057						

**Sept 2021 -
August 2022**

MDC

CATA_UN01	Catawba	MW	1,160.0
CATA_UN02	Catawba	MW	1,150.1
MCGU_UN01	McGuire	MW	1,158.0
MCGU_UN02	McGuire	MW	1,157.6
OCON_UN01	Oconee	MW	847.0
OCON_UN02	Oconee	MW	848.0
OCON_UN03	Oconee	MW	859.0
			<u>7,179.7</u>

Hours In Year

8,760

Generation GWhs

CATA_UN01	Catawba	GWh	9,331
CATA_UN02	Catawba	GWh	9,922
MCGU_UN01	McGuire	GWh	9,278
MCGU_UN02	McGuire	GWh	9,189
OCON_UN01	Oconee	GWh	7,234
OCON_UN02	Oconee	GWh	6,759
OCON_UN03	Oconee	GWh	6,910
			<u>58,622</u>

Proposed Nuclear Capacity Factor 93.21%

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
NERC 5 Year Average Nuclear Capacity Factor
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Sykes Workpaper 2

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs with NERC applied	9,296,633	9,216,497	9,279,804	9,276,599	6,885,500	6,893,629	6,983,052	57,831,714
Hours	8760	8760	8760	8760	8760	8760	8760	8760
MDC	1160.1	1150.1	1158.0	1157.6	847.0	848.0	859.0	7179.8
Capacity factor	91.48%	91.48%	91.48%	91.48%	92.80%	92.80%	92.80%	91.95%
Cost	\$ 56,310,290	\$ 55,824,898	\$ 56,208,357	\$ 56,188,942	\$ 41,705,906	\$ 41,755,146	\$ 42,296,781	\$ 350,290,320

Avg \$/MWh 6.0571
Cents per kWh 0.6057

2015-2019	Capacity Rating	NCF Rating	Weighted Average
Oconee 1	847.0	92.80	10.95%
Oconee 2	848.0	92.80	10.96%
Oconee 3	859.0	92.80	11.10%
McGuire 1	1158.0	91.48	14.75%
McGuire 2	1157.6	91.48	14.75%
Catawba 1	1160.1	91.48	14.78%
Catawba 2	1150.1	91.48	14.65%
	7179.8		91.95%

Wtd Avg on Capacity Rating

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
North Carolina Generation and Purchased Power in MWhs
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Sykes Workpaper 3

Resource Type	Sept 2021 - August 2022	
NUC Total (Gross)	58,622,085	
COAL Total	18,691,906	
Gas CT and CC total (Gross)	22,065,718	
Run of River	4,030,270	
Net pumped Storage	(2,872,983)	
Total Hydro	1,157,287	
Catawba Joint Owners	(14,848,200)	
Lee CC Joint Owners	(876,000)	
DEC owned solar	367,302	
Total Generation		85,180,099
Purchases for REPS Compliance	1,259,059	
Qualifying Facility Purchases - Non-REPS compliance	2,257,343	
Other Purchases	36,100	
Allocated Economic Purchases	371,115	
Joint Dispatch Purchases	4,185,880	
	8,109,496	
Total Generation and Purchased Power		93,289,595
Fuel Recovered Through Intersystem Sales	(1,789,852)	

rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Projected Fuel and Fuel Related Costs
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Sykes Workpaper 4

Resource Type	Sept 2021 - August 2022	
Nuclear Total (Gross)	\$ 355,077,645	
COAL Total	438,222,003	
Gas CT and CC total (Gross)	503,828,581	
Catawba Joint Owner costs	(89,940,492)	
CC Joint Owner costs	(16,986,285)	
Non-Economic Fuel Expense Recovered through Reimbursement	(6,522,205)	
Reagents and gain/loss on sale of By-Products	25,707,869	Workpaper 9
Purchases for REPS Compliance - Energy	62,808,851	
Purchases for REPS Compliance - Capacity	13,866,978	
Purchases of Qualifying Facilities - Energy	53,822,291	
Purchases of Qualifying Facilities - Capacity	11,169,971	
Other Purchases	2,586,674	
JDA Savings Shared	7,856,711	Workpaper 5
Allocated Economic Purchase cost	11,091,651	Workpaper 5
Joint Dispatch purchases	93,448,130	Workpaper 6
Total Purchases	256,651,255	
Fuel Expense recovered through intersystem sales	(28,691,221)	Workpaper 5
Total System Fuel and Fuel Related Costs	\$ 1,437,347,151	

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Projected Merger Payments
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Sykes Workpaper 6

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Apr 29 2021

	Transfer Projection		Purchase Allocation Delta		Adjusted Transfer		Fossil Gen Cost		Pre-Net Payments	
	PECtoDEC	DECtoPEC	PEC	DEC	PECtoDEC	DECtoPEC	PEC	DEC	PECtoDEC	DECtoPEC
9/1/2021	251,617	116,444	(16,971)	16,971	251,617	133,415	\$ 23.22	\$ 15.60	\$ 2,081,261	\$ 5,843,573
10/1/2021	376,590	63,669	(3,893)	3,893	376,590	67,563	\$ 22.20	\$ 14.58	\$ 984,937	\$ 8,361,626
11/1/2021	600,895	7,749	18,605	(18,605)	619,500	7,749	\$ 23.00	\$ 12.20	\$ 94,541	\$ 14,249,585
12/1/2021	415,829	156,683	14,190	(14,190)	430,020	156,683	\$ 25.97	\$ 12.79	\$ 2,003,858	\$ 11,167,572
1/1/2022	150,297	279,321	(23,059)	23,059	150,297	302,380	\$ 27.95	\$ 14.12	\$ 4,268,785	\$ 4,200,524
2/1/2022	147,663	241,402	(22,785)	22,785	147,663	264,187	\$ 26.96	\$ 13.18	\$ 3,481,557	\$ 3,980,853
3/1/2022	335,731	129,422	(1,475)	1,475	335,731	130,897	\$ 21.25	\$ 14.28	\$ 1,868,782	\$ 7,133,007
4/1/2022	515,174	84,533	(4,391)	4,391	515,174	88,924	\$ 19.71	\$ 15.96	\$ 1,419,191	\$ 10,154,604
5/1/2022	402,086	90,810	(9,503)	9,503	402,086	100,312	\$ 19.77	\$ 15.31	\$ 1,535,300	\$ 7,948,612
6/1/2022	327,890	81,463	13,381	(13,381)	341,270	81,463	\$ 20.42	\$ 15.73	\$ 1,281,202	\$ 6,968,052
7/1/2022	352,486	138,198	(4,362)	4,362	352,486	142,559	\$ 22.01	\$ 16.50	\$ 2,352,080	\$ 7,759,524
8/1/2022	263,445	162,770	(18,986)	18,986	263,445	181,756	\$ 21.56	\$ 16.67	\$ 3,030,764	\$ 5,680,597
Sept 21 - Aug 22	4,139,703	1,552,465	(59,249)	59,249	4,185,880	1,657,890			\$ 24,402,258	\$ 93,448,130
									Net Pre-Net Payments	\$ 69,045,871

rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
Proposed Nuclear Capacity Factor of 93.21%
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Sykes Workpaper 7

Fall 2020 Forecast
Billed Sales Forecast
Sales Forecast - MWhs (000)

		Projected sales for the Billing Period	Remove impact of SC DERP Net Metered Generation	Adjusted Sales
North Carolina:	Residential	21,803,077		21,803,077
	General	23,889,192		23,889,192
	Industrial	12,036,241		12,036,241
	Lighting	239,227		239,227
	NC RETAIL	57,967,737	-	57,967,737
South Carolina:	Residential	6,549,429	102,353	6,651,782
	General	5,992,271	55,281	6,047,552
	Industrial	8,837,609	428	8,838,037
	Lighting	39,918	-	39,918
	SC RETAIL	21,419,227	158,062	21,577,289
Total Retail Sales	Residential	28,352,506	102,353	28,454,859
	General	29,881,464	55,281	29,936,744
	Industrial	20,873,850	428	20,874,278
	Lighting	279,145	-	279,145
	Retail Sales	79,386,965	158,062	79,545,026
	Wholesale	8,303,032	-	8,303,032
	Projected System MWH Sales for Fuel Factor	87,689,996	158,062	87,848,058
	NC as a percentage of total	66.11%		65.99%
	SC as a percentage of total	24.43%		24.56%
	Wholesale as a percentage of total	9.47%		9.45%
		100.00%		100.00%
SC Net Metering allocation adjustment				
Total projected SC NEM MWhs			158,062	
Marginal fuel rate per MWh for SC NEM		\$	26.43	
Fuel benefit to be directly assigned to SC Retail		\$	4,178,086	
System Fuel Expense		\$	1,437,347,151	Sykes Exhibit 2 Schedule 1 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail		\$	4,178,086	
Total Fuel Costs for Allocation		\$	1,441,525,237	Sykes Exhibit 2 Schedule 1 Page 3 of 3, L5

Reconciliation	System	NC Retail Customers	Wholesale	South Carolina Retail	
Total system fuel expense from Sykes Exhibit 2 Schedule 1 Page 1	\$ 1,437,347,151				
QF and REPS Compliance Purchased Power - Capacity	\$ 25,036,948				
Other fuel costs	\$ 1,412,310,202				
SC Net Metering Fuel Allocation adjustment	\$ 4,178,086				
Jurisdictional fuel costs after adj.	\$ 1,416,488,289				
Allocation to states/classes		65.99%	9.45%	24.56%	
Jurisdictional fuel costs	\$ 1,416,488,289	\$ 934,740,622	\$ 133,858,143	\$ 347,889,524	66.90%
Direct Assignment of Fuel benefit to SC Retail	\$ (4,178,086)		\$ -	\$ (4,178,086)	
Total system actual fuel costs	\$ 1,412,310,202	\$ 934,740,622	\$ 133,858,143	\$ 343,711,437	
QF and REPS Compliance Purchased Power - Capacity	25,036,948	16,749,046			
Total system fuel expense from Sykes Exhibit 2 Schedule 1 Page 1	\$ 1,437,347,151	\$ 951,489,668			

Exh.2, Sch. 1 page 3, Line 13

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
Proposed Nuclear Capacity Factor of 93.21% and Normalized Test Period Sales
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Sykes Revised Workpaper 7a

Fall 2020 Forecast
Billed Sales Forecast - Normalized Test Period Sales
Sales Forecast - MWhs (000)

	Test Period Sales	Customer Growth Adjustment	Weather Adjustment	Remove impact of SC DERP Net Metered generation	Normalized Test Period Sales
NC RETAIL	55,511,864	322,769	2,167,977	-	58,002,610
SC RETAIL	19,994,535	92,599	710,925	158,062	20,956,121
Wholesale	7,476,647	79,360	204,733	-	7,760,740
Normalized System MWH Sales for Fuel Factor	82,983,046	494,727	3,083,635	158,062	86,719,470
NC as a percentage of total	66.90%				66.89%
SC as a percentage of total	24.09%				24.17%
Wholesale as a percentage of total	9.01%				8.95%
	100.00%				100.00%
SC Net Metering allocation adjustment					
Total projected SC NEM MWhs		158,062			
Marginal fuel rate per MWh for SC NEM		\$ 26.43			
Fuel benefit to be directly assigned to SC Retail		\$ 4,178,086			

System Fuel Expense	\$ 1,410,888,009	Sykes Exhibit 2 Schedule 2 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	\$ 4,178,086	
Total Fuel Costs for Allocation	\$ 1,415,066,095	Sykes Exhibit 2 Schedule 2 Page 3 of 3, L5

Reconciliation	System	NC Retail Customers	Wholesale	South Carolina Retail
Total system fuel expense from Sykes Exhibit 2 Schedule 2 Page 1	\$ 1,410,888,009			
QF and REPS Compliance Purchased Power - Capacity	\$ 25,036,948			
Other fuel costs	\$ 1,385,851,061			
SC Net Metering Fuel Allocation adjustment	\$ 4,178,086			
Jurisdictional fuel costs after adj.	\$ 1,390,029,147			
Allocation to states/classes		66.89%	8.95%	24.17%
Jurisdictional fuel costs	\$ 1,390,029,147	\$ 929,790,496	\$ 124,407,609	\$ 335,970,045
Direct Assignment of Fuel benefit to SC Retail	\$ (4,178,086)		\$ -	\$ (4,178,086)
Total system actual fuel costs	\$ 1,385,851,061	\$ 929,790,496	\$ 124,407,609	\$ 331,791,958
QF and REPS Compliance Purchased Power - Capacity	25,036,948	16,749,046		
Total system fuel expense from Sykes Exhibit 2 Schedule 2 Page 1	\$ 1,410,888,009	\$ 946,539,542		

Exh. 2, Sch 2 page 3, Line 13

rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
NERC 5 Year Average Nuclear Capacity Factor of 91.95%
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Fall 2020 Forecast
Billed Sales Forecast
Sales Forecast - MWhs (000)

Sykes Workpaper 7b

		Remove impact of	
		Projected sales for the Billing Period	SC DERP Net Metered generation
		Adjusted Sales	
North Carolina:	Residential	21,803,077	21,803,077
	General	23,889,192	23,889,192
	Industrial	12,036,241	12,036,241
	Lighting	239,227	239,227
	NC RETAIL	57,967,737	-
South Carolina:	Residential	6,549,429	102,353
	General	5,992,271	55,281
	Industrial	8,837,609	428
	Lighting	39,918	0
	SC RETAIL	21,419,227	158,062
Total Retail Sales	Residential	28,352,506	102,353
	General	29,881,464	55,281
	Industrial	20,873,850	428
	Lighting	279,145	-
	Retail Sales	79,386,964	158,062
Wholesale		8,303,032	-
Projected System MWh Sales for Fuel Factor		87,689,996	158,062
NC as a percentage of total		66.11%	65.99%
SC as a percentage of total		24.43%	24.56%
Wholesale as a percentage of total		9.47%	9.45%
		100.01%	100.00%

SC Net Metering allocation adjustment

Total projected SC NEM MWhs
Marginal fuel rate per MWh for SC NEM
Fuel benefit to be directly assigned to SC Retail

158,062
\$ 26.43
\$ 4,178,086

System Fuel Expense
Fuel benefit to be directly assigned to SC Retail
Total Fuel Costs for Allocation

\$ 1,447,608,938
\$ 4,178,086
\$ 1,451,787,024

Sykes Exhibit 2 Schedule 3 Page 1 of 3
Sykes Exhibit 2 Schedule 3 Page 3 of 3, Line 5

Reconciliation

Total system fuel expense from Sykes Exhibit 2 Schedule 3 Page 1
QF and REPS Compliance Purchased Power - Capacity
Other fuel costs
SC Net Metering Fuel Allocation adjustment
Jurisdictional fuel costs after adj.
Allocation to states/classes
Jurisdictional fuel costs
Direct Assignment of Fuel benefit to SC Retail
Total system actual fuel costs
QF and REPS Compliance Purchased Power - Capacity
Total system fuel expense from Sykes Exhibit 2 Schedule 3 Page 1

System	NC Retail Customers	Wholesale	South Carolina Retail
\$ 1,447,608,938			
\$ 25,036,948			
\$ 1,422,571,989			
\$ 4,178,086			
\$ 1,426,750,076			
	65.99%	9.45%	24.56%
\$ 1,426,750,076	\$ 941,512,375	\$ 134,827,882	\$ 350,409,819
\$ (4,178,086)	\$ -	\$ -	\$ (4,178,086)
\$ 1,422,571,989	\$ 941,512,375	\$ 134,827,882	\$ 346,231,732
25,036,948	16,749,046		
\$ 1,447,608,938	\$ 958,261,421		

Exh. 2, Sch.3 page 3, Line 13

rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Annualized Revenue
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Sykes Workpaper 8

	January 2021 Actuals			Normalized Sales	Total Annualized Revenues
	Revenue	kWh Sales	Cents/ kWh	Sykes Exhibit 4	
	(a)	(b)	(a)/(b) *100 = (c)	(d)	(c) * (d) * 10
Residential	\$ 232,627,628.37	2,427,681,062	9.5823	23,329,575	\$ 2,235,509,347
General	\$ 151,922,584.38	2,224,452,001	6.8297	23,102,975	\$ 1,577,855,414
Industrial	\$ 59,399,180.48	1,133,633,489	5.2397	11,570,060	\$ 606,238,320
Total	\$ 443,949,393.23	5,785,766,552		58,002,609	\$ 4,419,603,081

rounding differences may occur

Reagent and ByProduct projections

Date	Ammonia	Urea	Limestone	Magnesium		Calcium Carbonate		Lime	Gypsum (Gain)/		Ash (Gain)/Loss		Steam (Gain)/Loss		Sale of By-Products	
				Hydroxide					Reagent Cost	Loss					(Gain)/Loss	
9/1/2021	\$ 254,001	\$ 58,683	\$ 1,606,144	\$ 153,447	\$ 92,068	\$ 71,486	\$ 2,235,829	\$ 439,597	\$ (39,130)	\$ (180,111)	\$ 220,355					
10/1/2021	\$ 175,836	\$ 40,624	\$ 1,111,877	\$ 111,351	\$ 66,811	\$ 71,486	\$ 1,577,984	\$ 290,188	\$ (5,710)	\$ (177,793)	\$ 106,685					
11/1/2021	\$ 221,414	\$ 51,154	\$ 1,400,085	\$ 126,904	\$ 76,142	\$ 71,486	\$ 1,947,185	\$ 406,119	\$ (79,173)	\$ (175,470)	\$ 151,477					
12/1/2021	\$ 280,366	\$ 64,774	\$ 1,772,861	\$ 151,011	\$ 90,607	\$ 71,486	\$ 2,431,105	\$ 523,636	\$ (101,577)	\$ (173,288)	\$ 248,772					
1/1/2022	\$ 401,963	\$ 92,867	\$ 2,541,766	\$ 202,788	\$ 121,673	\$ 71,486	\$ 3,432,543	\$ 770,470	\$ (161,638)	\$ (171,363)	\$ 437,470					
2/1/2022	\$ 383,066	\$ 88,501	\$ 2,422,272	\$ 193,244	\$ 115,947	\$ 71,486	\$ 3,274,516	\$ 746,552	\$ (176,072)	\$ (169,522)	\$ 400,957					
3/1/2022	\$ 188,873	\$ 43,636	\$ 1,194,314	\$ 112,076	\$ 67,246	\$ 71,486	\$ 1,677,631	\$ 358,963	\$ (71,356)	\$ (167,765)	\$ 119,842					
4/1/2022	\$ 107,105	\$ 24,745	\$ 677,266	\$ 36,643	\$ 21,986	\$ 71,486	\$ 939,231	\$ 202,655	\$ (10,545)	\$ (166,307)	\$ 25,802					
5/1/2022	\$ 102,555	\$ 23,694	\$ 648,496	\$ 36,188	\$ 21,713	\$ 71,486	\$ 904,131	\$ 193,396	\$ (11,011)	\$ (165,442)	\$ 16,943					
6/1/2022	\$ 159,812	\$ 36,922	\$ 1,010,553	\$ 63,671	\$ 38,203	\$ 71,486	\$ 1,380,647	\$ 303,841	\$ (29,602)	\$ (164,681)	\$ 109,558					
7/1/2022	\$ 218,501	\$ 50,481	\$ 1,381,667	\$ 90,984	\$ 54,590	\$ 71,486	\$ 1,867,709	\$ 431,038	\$ (63,783)	\$ (163,942)	\$ 203,314					
8/1/2022	\$ 211,283	\$ 48,813	\$ 1,336,022	\$ 84,644	\$ 50,786	\$ 71,486	\$ 1,803,034	\$ 415,929	\$ (57,573)	\$ (163,207)	\$ 195,149					
	\$ 2,704,776	\$ 624,892	\$ 17,103,321	\$ 1,362,953	\$ 817,772	\$ 857,831	\$ 23,471,545	\$ 5,082,384	\$ (807,169)	\$ (2,038,892)	\$ 2,236,324					
Total Reagent cost and Sale of By-products														\$ 25,707,869		

rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
2.5% Calculation Test
Twelve Months Ended December 31, 2020
Billing Period September 2021 through August 2022
Docket E-7, Sub 1250

Sykes Workpaper 10

Line No.	Description	Forecast \$	(over)/under Collection \$	Total \$
1	Amount in current docket	102,740,263	(4,999,624)	97,740,638
2	Amount in Sub 1228, prior year docket	101,750,258	1,617,020	103,367,278
3	Increase/(Decrease)	990,005	(6,616,645)	(5,626,640)
4	2.5% of 2020 NC retail revenue of \$4,632,028,605			115,800,715
	Excess of purchased power growth over 2.5% of revenue			0
E-7 Sub 1250				
WP 4	Purchases for REPS Compliance - Energy	62,808,851	65.99%	41,447,561
WP 4	Purchases for REPS Compliance - Capacity	13,866,978	66.90%	9,276,635
WP 4	Purchases	2,586,674	65.99%	1,706,946
WP 4	QF Energy	53,822,291	65.99%	35,517,330
WP 4	QF Capacity	11,169,971	66.90%	7,472,410
WP 4	Allocated Economic Purchase cost	11,091,651	65.99%	7,319,380
		155,346,415		102,740,263
E-7 Sub 1228				
	Purchases for REPS Compliance	63,001,495	66.02%	41,593,587
	Purchases for REPS Compliance Capacity	13,122,631	67.55%	8,863,980
	Purchases	1,628,569	66.02%	1,075,181
	QF Energy	56,445,045	66.02%	37,265,019
	QF Capacity	12,285,396	67.55%	8,298,450
	Allocated Economic Purchase cost	7,049,441	66.02%	4,654,041
		153,532,577		101,750,258

2020	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	12 ME
System KWH Sales - Sch 4, Adjusted	7,193,812,943	7,229,160,762	6,557,632,220	5,948,571,625	5,649,816,171	6,745,745,153	8,113,658,335	8,454,195,025	7,632,668,505	6,227,418,819	7,077,137,814	6,283,453,698	83,113,271,070
NC Retail KWH Sales - Sch 4	4,799,050,153	4,852,514,770	4,419,004,658	4,009,530,882	3,737,497,506	4,445,349,080	5,381,133,760	5,679,285,065	5,143,265,080	4,161,108,724	4,768,316,561	4,115,807,397	55,511,863,636
NC Retail % of Sales, Adjusted (Calc)	66.71%	67.12%	67.39%	67.40%	66.15%	65.90%	66.32%	67.18%	67.38%	66.82%	67.38%	65.50%	66.79%
NC retail production plant %	67.55%	67.55%	67.55%	67.55%	67.55%	67.75%	67.75%	67.75%	67.75%	67.75%	67.75%	67.75%	67.71%
Fuel and Fuel related component of purchased power													
System Actual \$ - Sch 3 Fuel\$:	\$ 11,218,315	\$ 12,607,762	\$ 5,300,111	\$ 6,352,200	\$ 8,395,303	\$ 6,771,661	\$ 12,440,459	\$ 7,247,711	\$ 9,073,495	\$ 15,331,837	\$ 6,958,738	\$ 24,648,415	\$ 126,346,007
System Actual \$ - Sch 3 Fuel-related\$; Economic Purchases	1,491,771	1,826,422	990,649	729,743	909,315	1,057,292	2,012,867	1,346,379	1,036,893	1,743,448	1,074,835	4,774,389	\$ 18,994,003
System Actual \$ - Sch 3 Fuel-related\$; Purchased Power for REPS Compliance	3,745,116	4,068,302	3,681,838	4,276,231	5,491,472	4,795,757	5,305,337	6,084,262	5,064,982	4,676,649	4,553,039	4,091,116	\$ 55,834,101
System Actual\$ - Sch 3 Fuel-related\$; SC DERP	13,291	13,282	28,563	39,932	44,069	110,923	38,018	129,601	69,181	87,074	68,782	37,283	\$ 679,999
System Acutal \$ - Sch 3 Fuel-related\$; HB589 purpa Purchases	2,051,485	2,097,916	2,123,359	2,681,961	3,213,134	2,547,168	2,552,543	2,889,199	2,519,264	2,799,837	2,863,763	2,568,618	\$ 30,908,248
Total System Economic & QF\$	18,519,978	20,613,684	12,124,520	14,080,067	18,053,293	15,282,801	22,349,224	17,697,152	17,763,815	24,638,845	15,519,157	36,119,821	232,762,358
<u>Less:</u>													
Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	\$ 9,403,952	\$ 10,746,417	\$ 3,681,146	\$ 5,959,074	\$ 8,211,008	\$ 5,694,556	\$ 12,728,156	\$ 6,086,984	\$ 8,789,272	\$ 15,071,913	\$ 5,685,045	\$ 21,638,297	\$ 113,695,820
Total System Economic \$ without Native Load Transfers	\$ 9,116,026	\$ 9,867,267	\$ 8,443,374	\$ 8,120,993	\$ 9,842,285	\$ 9,588,245	\$ 9,621,068	\$ 11,610,168	\$ 8,974,543	\$ 9,566,932	\$ 9,834,112	\$ 14,481,524	\$ 119,066,539
NC Actual \$ (Calc)	\$ 6,081,374	\$ 6,623,322	\$ 5,689,753	\$ 5,473,813	\$ 6,510,923	\$ 6,318,516	\$ 6,380,877	\$ 7,799,377	\$ 6,047,486	\$ 6,392,544	\$ 6,625,865	\$ 9,485,733	\$ 79,429,582
Billed rate (c/kWh):	0.1533	0.1533	0.1533	0.1533	0.1533	0.1533	0.1533	0.1533	0.1689	0.1689	0.1689	0.1689	
Billed \$:	\$ 7,356,944	\$ 7,438,905	\$ 6,774,334	\$ 6,146,611	\$ 5,729,584	\$ 6,814,720	\$ 8,249,278	\$ 8,706,344	\$ 8,689,317	\$ 7,030,008	\$ 8,055,859	\$ 6,953,473	\$ 87,945,377
(Over)/ Under \$:	\$ (1,275,570)	\$ (815,583)	\$ (1,084,581)	\$ (672,798)	\$ 781,339	\$ (496,204)	\$ (1,868,401)	\$ (906,967)	\$ (2,641,831)	\$ (637,464)	\$ (1,429,993)	\$ 2,532,260	\$ (8,515,795)
Capacity component of purchased power													
System Actual \$ - Capacity component of Cherokee County Cogen Purchases	\$ 430,619	\$ 430,619	\$ 215,310	\$ 215,310	\$ 322,964	\$ 1,399,512	\$ 3,229,644	\$ 3,229,644	\$ 645,929	\$ 215,310	\$ 215,310	\$ 215,310	\$ 10,765,481
System Actual \$ - Capacity component of Purchased Power for REPS Compliance	645,345	680,159	573,260	641,154	778,381	625,715	2,302,254	2,743,308	2,223,872	1,950,062	637,418	610,344	\$ 14,411,272
System Actual \$ - Capacity component of HB589 Purpa QF purchases	264,275	306,973	236,219	277,976	283,502	204,320	1,125,235	1,384,219	1,116,138	1,010,084	297,176	256,193	\$ 6,762,310
System Actual \$ - Capacity component of SC DERP	1,869	1,868	12,351	6,569	4,675	15,765	4,866	18,466	9,471	10,816	8,919	5,142	\$ 100,777
System Actual \$ - Sch 2 pg 1 ANNUAL VIEW	\$ 1,342,109	\$ 1,419,619	\$ 1,037,140	\$ 1,141,008	\$ 1,389,523	\$ 2,245,312	\$ 6,661,999	\$ 7,375,637	\$ 3,995,410	\$ 3,186,272	\$ 1,158,823	\$ 1,086,989	\$ 32,039,840
NC Actual \$ (Calc) (1)	\$ 906,558	\$ 958,914	\$ 700,560	\$ 770,720	\$ 938,585	\$ 1,521,128	\$ 4,513,293	\$ 4,996,760	\$ 2,706,763	\$ 2,158,598	\$ 785,065	\$ 736,399	\$ 21,693,343
Billed rate (c/kWh):	0.0327	0.0327	0.0327	0.0327	0.0327	0.0327	0.0327	0.0327	0.0328	0.0328	0.0328	0.0328	
Billed \$:	\$ 1,570,139	\$ 1,587,631	\$ 1,445,797	\$ 1,311,826	\$ 1,222,823	\$ 1,454,416	\$ 1,760,583	\$ 1,858,131	\$ 1,686,991	\$ 1,364,844	\$ 1,564,008	\$ 1,349,985	\$ 18,177,174
(Over)/Under \$:	\$ (663,581)	\$ (628,718)	\$ (745,237)	\$ (541,106)	\$ (284,239)	\$ 66,712	\$ 2,752,710	\$ 3,138,628	\$ 1,019,773	\$ 793,755	\$ (778,942)	\$ (613,586)	\$ 3,516,169
TOTAL (Over)/ Under \$:	\$ (1,939,151)	\$ (1,444,300)	\$ (1,829,818)	\$ (1,213,904)	\$ 497,100	\$ (429,492)	\$ 884,309	\$ 2,231,661	\$ (1,622,059)	\$ 156,290	\$ (2,208,936)	\$ 1,918,674	\$ (4,999,624)

Note: The billed rate for September and October are pro-rated based on number of billing days in cycle on new rate schedules.
(1) January - May NC actual capacity shown herein is adjusted to reflect use of 2019 production plant allocation factor. Actual true-up related to allocator was made as prior period adjustment in June 2020 of Schedule 4.

rounding differences may occur

2019	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	12 ME
System KWH Sales - Sch 4, Adjusted	7,570,888,821	7,430,788,664	6,521,808,145	6,367,436,322	6,726,545,218	7,552,455,357	8,316,260,504	8,548,800,472	8,292,133,918	7,019,132,212	6,533,297,016	7,161,497,356	88,041,044,005
NC Retail KWH Sales - Sch 4	5,021,049,922	5,026,972,376	4,366,363,694	4,263,829,687	4,421,389,704	5,029,188,554	5,524,188,997	5,710,820,956	5,512,226,874	4,692,561,973	4,299,808,753	4,774,119,609	58,642,521,099
NC Retail % of Sales, Adjusted (Calc)	66.32%	67.65%	66.95%	66.96%	65.73%	66.59%	66.43%	66.80%	66.48%	66.85%	65.81%	66.66%	66.61%
NC retail production plant %	67.56%	67.56%	67.56%	67.56%	67.75%	67.75%	67.75%	67.75%	67.75%	67.75%	67.75%	67.75%	67.72%
Fuel and Fuel related component of purchased power													
System Actual \$ - Sch 3 Fuel\$:	\$ 23,687,311	\$ 57,492,154	\$ 14,514,026	\$ 14,125,368	\$ 6,227,781	\$ 7,986,019	\$ 9,392,534	\$ 7,209,102	\$ 18,620,321	\$ 13,793,051	\$ 15,085,734	\$ 17,891,442	\$ 206,024,843
System Actual \$ - Sch 3 Fuel-related\$; Economic Purchases	10,050,079	26,532,896	2,706,430	4,264,779	908,542	640,701	1,230,088	1,129,642	1,974,692	1,539,252	2,340,043	2,634,380	\$ 55,951,524
System Actual \$ - Sch 3 Fuel-related\$; Purchased Power for REPS Compliance	3,283,437	4,116,642	3,779,240	5,137,202	5,251,425	5,598,653	5,193,633	5,586,738	5,216,879	4,899,454	4,069,122	3,963,969	\$ 56,096,394
System Actual\$ - Sch 3 Fuel-related\$; SC DERP	102	14,377	8,659	21,097	25,363	30,158	22,270	26,481	26,351	26,014	17,072	15,590	\$ 233,534
System Acutal \$ - Sch 3 Fuel-related\$; HB589 purpa Purchases	1,367,422	1,711,969	1,557,910	2,135,075	2,259,422	2,837,912	2,660,982	2,749,375	2,583,768	2,605,902	2,204,650	2,090,407	\$ 26,764,794
Total System Economic & QF\$	38,388,351	89,868,038	22,566,265	25,683,521	14,672,533	17,093,443	18,499,507	16,701,338	28,422,011	22,863,673	23,716,621	26,595,788	345,071,089
Less:													
Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	\$ 11,884,171	\$ 71,766,352	\$ 8,909,559	\$ 10,043,093	\$ 3,969,493	\$ 6,657,925	\$ 7,676,184	\$ 5,446,589	\$ 17,997,075	\$ 13,185,756	\$ 12,864,226	\$ 15,502,723	\$ 185,903,146
Total System Economic \$ without Native Load Transfers	\$ 26,504,180	\$ 18,101,686	\$ 13,656,706	\$ 15,640,428	\$ 10,703,040	\$ 10,435,518	\$ 10,823,323	\$ 11,254,749	\$ 10,424,936	\$ 9,677,917	\$ 10,852,395	\$ 11,093,065	\$ 159,167,943
NC Actual \$ (Calc)	\$ 17,577,699	\$ 12,245,897	\$ 9,143,192	\$ 10,473,308	\$ 7,035,158	\$ 6,949,023	\$ 7,189,539	\$ 7,518,465	\$ 6,930,015	\$ 6,470,063	\$ 7,142,370	\$ 7,395,049	\$ 106,069,779
Billed rate (c/kWh):	0.1922	0.1922	0.1922	0.1922	0.1922	0.1922	0.1922	0.1922	0.1759	0.1535	0.1533	0.1533	
Billed \$:	\$ 9,650,458	\$ 9,661,841	\$ 8,392,151	\$ 8,195,081	\$ 8,497,911	\$ 9,666,100	\$ 10,617,491	\$ 10,976,198	\$ 9,696,007	\$ 7,203,083	\$ 6,591,607	\$ 7,318,725	\$ 106,466,653
(Over)/ Under \$:	\$ 7,927,242	\$ 2,584,056	\$ 751,041	\$ 2,278,227	\$ (1,462,753)	\$ (2,717,077)	\$ (3,427,952)	\$ (3,457,733)	\$ (2,765,992)	\$ (733,020)	\$ 550,763	\$ 76,323	\$ (396,874)
Capacity component of purchased power													
System Actual \$ - Capacity component of Cherokee County Cogen Purchases	\$ 426,732	\$ 426,732	\$ 213,366	\$ 213,366	\$ 320,050	\$ 1,386,879	\$ 3,200,490	\$ 3,200,490	\$ 640,098	\$ 213,366	\$ 213,366	\$ 213,366	\$ 10,668,301
System Actual \$ - Capacity component of Purchased Power for REPS Compliance	608,844	738,655	747,764	827,415	781,129	817,587	2,308,343	2,605,889	2,449,375	2,179,103	611,944	591,922	\$ 15,267,970
System Actual \$ - Capacity component of HB589 Purpa QF purchases	240,541	314,914	229,175	301,405	216,488	298,037	1,151,852	1,312,758	1,272,900	1,184,456	259,220	187,603	\$ 6,969,349
System Actual \$ - Capacity component of SC DERP	32	4,343	4,209	5,850	3,530	4,199	3,177	3,738	3,716	3,670	2,375	2,168	\$ 41,006
System Actual \$ - Sch 2 pg 1 ANNUAL VIEW	\$ 1,276,149	\$ 1,484,644	\$ 1,194,514	\$ 1,348,036	\$ 1,321,197	\$ 2,506,702	\$ 6,663,862	\$ 7,122,875	\$ 4,366,089	\$ 3,580,594	\$ 1,086,905	\$ 995,058	\$ 32,946,626
NC Actual \$ (Calc) (1)	\$ 862,169	\$ 1,003,029	\$ 807,016	\$ 910,736	\$ 895,069	\$ 1,698,211	\$ 4,514,555	\$ 4,825,522	\$ 2,957,887	\$ 2,425,739	\$ 736,343	\$ 674,120	\$ 22,310,397
Billed rate (c/kWh):	0.0353	0.0353	0.0353	0.0353	0.0353	0.0353	0.0353	0.0353	0.0342	0.0327	0.0327	0.0327	
Billed \$:	\$ 1,773,631	\$ 1,775,723	\$ 1,542,370	\$ 1,506,151	\$ 1,561,807	\$ 1,776,506	\$ 1,951,359	\$ 2,017,285	\$ 1,886,955	\$ 1,535,934	\$ 1,406,799	\$ 1,561,982	\$ 20,296,502
(Over)/Under \$:	\$ (911,461)	\$ (772,694)	\$ (735,354)	\$ (595,415)	\$ (666,739)	\$ (78,295)	\$ 2,563,196	\$ 2,808,237	\$ 1,070,932	\$ 889,805	\$ (670,455)	\$ (887,863)	\$ 2,013,895
TOTAL (Over)/ Under \$:	\$ 7,015,780	\$ 1,811,363	\$ 15,688	\$ 1,682,813	\$ (2,129,491)	\$ (2,795,372)	\$ (864,756)	\$ (649,496)	\$ (1,695,060)	\$ 156,785	\$ (119,692)	\$ (811,539)	\$ 1,617,020

Note: The billed rate for September and October are pro-rated based on number of billing days in cycle on new rate schedules.
(1) January - May NC actual capacity shown herein is adjusted to reflect use of 2018 production plant allocation factor. Actual true-up related to allocator was made as prior period adjustment in May 2019 of Schedule 4.

rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Actual Sales by Jurisdiction - Subject to Weather
Twelve Months Ended December 31, 2020
Docket E-7, Sub 1250

Sykes Workpaper 11

Line #	Description	Reference	MWhs		TOTAL COMPANY	% NC	% SC
			NORTH CAROLINA	SOUTH CAROLINA			
1	Residential	Company Records	21,396,039	6,566,946	27,962,984	76.52	23.48
2	Total General Service	Company Records	22,718,144	5,231,956	27,950,100		
3	less Lighting and Traffic Signals		262,966	50,594	313,560		
4	General Service subject to weather		22,455,178	5,181,362	27,636,541	81.25	18.75
5	Industrial	Company Records	11,397,681	8,195,633	19,593,314	58.17	41.83
6	Total Retail Sales	1+2+5	55,511,864	19,994,535	75,506,399		
7	Total Retail Sales subject to weather	1+4+5	55,248,898	19,943,941	75,192,839	73.48	26.52

This does not exclude Greenwood and includes the impact of SC DERP net metering generation

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Weather Normalization Adjustment
Twelve Months Ended December 31, 2020
Docket E-7, Sub 1250

Sykes Revised Workpaper 12
Page 1

Line #	Description	REFERENCE	Total Company MWh	NC RETAIL		SC RETAIL	
				% To Total	MWh	% To Total	MWh
	<u>Residential</u>						
1	Total Residential		2,231,913	76.52	1,707,860	23.48	524,053
	<u>General Service</u>						
2	Total General Service		362,925	81.25	294,877	18.75	68,048
	<u>Industrial</u>						
3	Total Industrial		284,064	58.17	165,240	41.83	118,824
4	Total Retail	L1+ L2+ L3	2,878,902		2,167,977		710,925
5	Wholesale		204,733				
6	Total Company	L4 + L5	<u>3,083,635</u>		<u>2,167,977</u>		<u>710,925</u>

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Weather Normalization Adjustment by Class by Month
Twelve Months Ended December 31, 2020
Docket E-7, Sub 1250

Sykes Revised Workpaper 12
Page 2

	Residential	Commercial	Industrial	
	TOTAL MWH	TOTAL MWH	TOTAL MWH	
2020	ADJUSTMENT	ADJUSTMENT	ADJUSTMENT	
JAN	372,371	57,492	-	
FEB	481,279	42,012	32,140	
MAR	50,667	-	-	
APR	58,532	-	-	
MAY	182,541	35,968	51,277	
JUN	352,469	129,088	70,502	
JUL	241,887	90,967	28,531	
AUG	(64,182)	(25,605)	(12,663)	
SEP	(101,503)	(50,296)	(24,943)	
OCT	40,044	16,706	10,880	
NOV	299,438	50,431	128,339	
DEC	318,368	16,162	-	
Total	2,231,913	362,925	284,064	2,878,902

Wholesale			
2020	TOTAL MWH ADJUSTMENT	Note:	The Resale customers include:
JAN	34,960	1	Concord ¹
FEB	25,697	2	Dallas
MAR	3,305	3	Forest City
APR	10,669	4	Kings Mountain ¹
MAY	14,866	5	Due West
JUN	18,097	6	Prosperity ²
JUL	15,510	7	Lockhart
AUG	5,389	8	Western Carolina University
SEP	(2,542)	9	City of Highlands
OCT	(748)	10	Haywood
NOV	49,006	11	Piedmont
DEC	30,524	12	Rutherford
		13	Blue Ridge
Total	204,733	14	Greenwood ¹

Line	Estimation Method ¹	Rate Schedule	NC	SC	Wholesale	Total Company
			Proposed KWH ¹ Adjustment	Proposed KWH Adjustment	Proposed KWH Adjustment	
1	Regression	Residential	225,676,100	64,516,912		
2						
3		General Service (excluding lighting):				
4	Customer	General Service Small and Large	86,782,288	12,388,860		
5	Regression	Miscellaneous	535,920	517,444		
6		Total General	87,318,208	12,906,304		
7						
8		Lighting:				
9	Regression	T & T2 (GL/FL/PL/OL)2	2,624,981	1,258,859		
10	Regression	TS	10,497	(100,713)		
11		Total Lighting	2,635,478	1,158,146		
12						
13		Industrial:				
14	Customer	I - Textile	3,467,746	-		
15	Customer	I - Nontextile	3,671,273	14,017,455		
16		Total Industrial	7,139,019	14,017,455		
17						
18						
19		Total	322,768,805	92,598,817	79,359,686	494,727,308
					WP 13-2	

Notes:

¹ Two approved methods are used for estimating the growth adjustment depending on the class/schedule:

"Regression" refers to the use of Ordinary Least Squares Regression

"Customer" refers to the use of the Customer by Customer approach.

² T and T2 were combined due to North Carolina's FL & GL schedules being merged into OL & PL during the 12 month period.

rounding differences may occur

Calculation of Customer Growth Adjustment to kWh Sales - Wholesale

Line No.	Reference	
1	Total System Resale (kWh Sales)	Company Records 8,857,220,265
2	Less Intersystem Sales	Schedule 1 <u>1,210,124,770</u>
3	Total kWh Sales Excluding Intersystem Sales	L1 - L2 7,647,095,495
4	Residential Growth Factor	Line 8 <u>1.0378</u>
5	Adjustment to kWhs - Wholesale	L3 * L4 / 100 <u><u>79,359,686</u></u>
6	Total System Retail Residential kWh Sales	Company Records 27,962,984,454
7	2020 Proposed Adjustment kWh - Residential (NC+SC)	WP 13 1 290,193,012
8	Percent Adjustment	L7 / L6 * 100 1.0378

"RAC001": CarolinasOperating Revenue Report