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May 7, 2020

VIA ELECTRONIC FILING

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

RE: Duke Energy Carolinas, LLC's Supplemental Testimony

Docket No. E-7, Sub 1228

Dear Ms. Campbell:

Enclosed for filing please find Duke Energy Carolinas, LLC's Supplemental Testimony, Revised Exhibits and Revised Supporting Workpapers of Kimberly D. McGee.

Please contact me if you have any questions.

Sincerely,

Jack E. Jirak

Enclosures

cc: Parties of Record

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's Supplemental Testimony in Docket No. E-7, Sub 1228, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid to parties of record.

This the 7th day of May, 2020.

Jack E. Jirak

Associate General Counsel Duke Energy Corporation P.O. Box 1551/NCRH 20 Raleigh, North Carolina 27602 (919) 546-3257

Jack.jirak@duke-energy.com

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1228

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

1 O.	PLEASE STATE	YOUR NAME AND	BUSINESS	ADDRESS.
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- 2 A. My name is Kimberly D. McGee. My business address is 550 South Tryon
- 3 Street, Charlotte, North Carolina.
- 4 Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS
- 5 **PROCEEDING?**
- 6 A. Yes, on February 25, 2020, I caused to be pre-filed with the Commission
- 7 my direct testimony and 6 exhibits and 14 supporting workpapers.
- 8 Q. YOUR SUPPLEMENTAL TESTIMONY INCLUDES THREE (3)
- 9 REVISED EXHIBITS AND FIVE (5) REVISED SUPPORTING
- 10 WORKPAPERS. WERE THESE SUPPLEMENTAL EXHIBITS AND
- 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
- the following:
- McGee Revised Exhibit 1: Summary Comparison of Fuel and Fuel-Related
- 16 Costs Factors.
- 17 McGee Revised Exhibit 2: Calculation of the Proposed Fuel and Fuel-
- 18 Related Cost Factors.
- McGee Revised Exhibit 3: Calculation of the Proposed Experience
- 20 Modification Factor ("EMF") rate.
- 21 McGee Revised Workpaper 4: Projected fuel and fuel related costs
- 22 McGee Revised Workpaper 7: Calculation of Allocation percentages based
- 23 on Projected Test Period Sales

1	McGee Revised Workpaper 7a: Calculation of Allocation percentages based on
2	Normalized Test Period Sales
3	McGee Revised Workpaper 7b: Calculation of Allocation percentages based on

Projected Test Period Sales and NERC 5 year average
 McGee Revised Workpaper 9: Calculation of total projected reagent and (gain)/loss

6 on sale of by-products

A.

Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY

IN THIS PROCEEDING?

The purpose of my testimony is to present revised rates reflecting the impacts related to two updates to numbers presented in my direct exhibits. The first update relates to the proposed EMF increment for the experienced under-recovery of fuel and fuel related costs, pursuant to NCUC Rule R8-55(d)(3), which allows the Company to incorporate the fuel and fuel-related cost recovery balance up to thirty (30) days prior to the hearing. The Company elects this option and supplements the direct testimony and exhibits to include the fuel and fuel-related cost recovery balance as of the 15 months ended March 31, 2020. The second update revises the projected net (gain)/loss on the sale of steam which is included in estimated system fuel and fuel-related costs for the billing period. Based on discussions with the North Carolina Public Staff, the Company discovered that certain assumptions used in the calculation of estimated revenue from the sale of steam from its combined heat and power generating facility were out of date. The Company is increasing the estimated steam revenues included in net gain/loss on the sale of

- by-products for the billing period as a result of updating the underlying assumptions in its calculations.
- 3 Q. HOW DID THE FUEL AND FUEL-RELATED COST RECOVERY
- 4 BALANCE CHANGE IN THE THREE (3) MONTHS BEING
- 5 **INCORPORATED?**
- A. The Company experienced an over-collection of \$52,248,875 during the months

 January through March 2020. As shown on McGee Revised Exhibit 3, the

 incorporation of the update period over-collection balance resulted in a lower

 under-recovered balance at March 31, 2020 of \$57,087,941. Incorporating the

 over-collections experienced during January March 2020 will reduce the EMF

 rates charged to customers.
- Q. WHAT WAS THE CHANGE IN FUEL COSTS DUE TO THE UPDATE IN

 STEAM REVENUE PROJECTIONS FOR THE BILLING PERIOD?
- 14 A. These revenues reduce total fuel and fuel-related costs by \$928,459.
- 15 Q. WHAT IS THE TOTAL RATE IMPACT OF THESE UPDATES?
- A. The NC Retail Total Fuel Costs were decreased by \$ 52,731,001 from the amounts filed in my direct Exhibit 2, Schedule 1, page 3. The components of the proposed fuel and fuel-related cost factors by customer class, as shown on McGee Revised 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	1.6027	1.7583	1.6652	1.6816
EMF Increment (Decrement)	0.0364	0.0666	0.2658	0.0975
Net Fuel and Fuel Related Costs Factors	1.6391	1.8249	1.9310	1.7791

- 1 Q. WHAT IS THE IMPACT TO CUSTOMERS' BILLS IF THE REVISED
- 2 PROPOSED FUEL AND FUEL-RELATED COSTS FACTORS ARE
- 3 **APPROVED BY THE COMMISSION?**
- 4 A. The revised proposed fuel and fuel-related costs factors will result in a 3.01%
- 5 decrease on customers' bills, as compared to the previously filed decrease of
- 6 1.90%.
- 7 Q. DOES THIS CONCLUDE YOUR PRE-FILED SUPPLEMENTAL
- 8 TESTIMONY?
- 9 A. Yes, it does.

North Carolina Annual Fuel and Fuel Related Expense
Summary Comparison of Fuel and Fuel Related Cost Factors
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Line #	Description	Reference	Residential cents/kWh	General cents/kWh	Industrial cents/kWh	Composite cents/kWh
	Current Fuel and Fuel Related Cost Factors (Approved Fuel Rider Docket No. E-7, Sub 1190)					
1	Approved Fuel and Fuel Related Costs Factors	Input	1.8126	1.9561	1.8934	1.8901
2	EMF Increment	Input	0.1375	0.0927	0.2089	0.1346
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	1.9501	2.0488	2.1023	2.0247
	Fuel and Fuel Related Cost Factors Required by Rule R8-55					
5	Proposed Nuclear Capacity Factor of 94.39% and Normalized Test Period Sales	Exh 2 Sch 2 pg 2	1.6398	1.8191	1.9292	1.7762
6	NERC 5 Year Average Nuclear Capacity Factor of 91.60% and Projected Period Sales	Exh 2 Sch 3 pg 2	1.6790	1.8536	1.9530	1.8106
	Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of 94.39%					
7	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	Exh 2 Sch 1 pg 2	1.5674	1.7308	1.6428	1.6522
8	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Exh 2 Sch 1 pg 2	0.0353	0.0275	0.0224	0.0294
9	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum	1.6027	1.7583	1.6652	1.6816
10	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.0364	0.0666	0.2658	0.0975
11	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.0000	0.0000	0.0000	0.0000
12	Net Fuel and Fuel Related Costs Factors cents/kWh	Sum	1.6391	1.8249	1.9310	1.7791

Note: Fuel factors exclude regulatory fee

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 94.39%
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

McGee 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	59,363,957	0.6041	358,597,316
2	Coal	Workpaper 3 & 4	14,450,043	2.7303	394,529,148
3	Gas CT and CC	Workpaper 3 & 4	25,505,409	2.2867	583,236,234
4	Reagents and Byproducts	Workpaper 9			21,603,715
5	Total Fossil	Sum	39,955,452		999,369,097
6	Hydro	Workpaper 3	4,305,885		
7	Net Pumped Storage	Workpaper 3	(3,219,894)		
8	Total Hydro	Sum	1,085,991		-
9	Solar Distributed Generation	Workpaper 3	385,094		-
		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Line 9	100,790,494		1,357,966,413
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(876,000)		(16,315,588)
12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,848,200)		(89,710,135)
13	Fuel expense recovered through reimbursement	Workpaper 4			(20,370,677)
14	Net Generation	Sum Lines 10-13	85,066,294		1,231,570,013
15	Purchased Power	Workpaper 3 & 4	8,286,802	3.1208	258,610,852
16	JDA Savings Shared	Workpaper 5		_	14,281,717
17	Total Purchased Power		8,286,802		272,892,569
18	Total Generation and Purchased Power	Line 14 + Line 17	93,353,096	1.6116	1,504,462,582
19	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(1,024,819)	2.0734	(21,248,787)
20	Line losses and Company use	Line 22-Line 18-Line 19	(3,945,038)		-
21	System Fuel Expense for Fuel Factor	Lines 18 + 19 + 20			1,483,213,795
22	Projected System MWh Sales for Fuel Factor	Workpaper 7	88,383,239		88,383,239
23	Fuel and Fuel Related Costs cents/kWh	Line 21 / Line 22 / 10			1.6782

Note: Rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 94.39%
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Revised McGee 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	22,067,	951	23,951,115	12,441,023	58,460,089
Calcula	tion of Renewable and Cogeneration Purchased Power Capacity Rate by Class						<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4					\$ 13,122,631
3	QF Purchased Power - Capacity	Workpaper 4					12,285,396
4 5	Total of Renewable and QF Purchased Power Capacity NC Portion - Jursidicational % based on Production Plant Allocator	Line 2 + Line 3 Input					\$ 25,408,027 67.55%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5					\$ 17,162,430
7	Production Plant Allocation Factors	Input	45.	44%	38.35%	16.21%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 7,799,	064 \$	6,581,827 \$	2,781,540	\$ 17,162,430
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0	353	0.0275	0.0224	0.0294
Summa	ary 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	1.5	674	1.7308	1.6428	1.6522
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0	353	0.0275	0.0224	0.0294
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.6	027	1.7583	1.6652	1.6816
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.0	364	0.0666	0.2658	0.0975
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4		-	-	-	-
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 1 Page 3	1.6	391	1.8249	1.9310	1.7791

Note: Rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
Proposed Nuclear Capacity Factor of 94.39%
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Note: Rounding differences may occur

Revised McGee Exhibit 2
Schedule 1
Page 3 of 3

Line #	Rate Class	Projected Billing Period MWh Sales		ual Revenue at urrent 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 1190	Proposed Total Fuel Rate (including Capacity and EMF)
		Α		В	С	D	E If D=0 then 0 if not then	F	G
		Workpaper 7	١	Workpaper 8	Line 25 as a % of Column B	C / B	(C*100)/(A*1000)	McGee Exhibit 1	E + F = G
1	Residential	22,067,951		2,282,179,536		-3.01%	(0.3110)		1.6391
2	General Service/Lighting	23,951,115		1,783,527,535	(53,636,460)	-3.01%	(0.2239)		1.8249
3	Industrial	12,441,023		708,569,199	(21,308,975)	-3.01%	(0.1713)	2.1023	1.9310
4	NC Retail	58,460,089	\$	4,774,276,270	\$ (143,577,979)	-3.01%			
	Total Proposed Composite Fuel Rate:								
5	Total Fuel Costs for Allocation	Workpaper 7	\$	1,488,487,786					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 1, Page 2		25,408,027					
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,463,079,759					
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7		88,545,366					
9	NC Retail Projected Billing Period MWh Sales	Line 4		58,460,089					
10	Allocation %	Line 9 / Line 8		66.02%					
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	965,925,257					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 1, Page 2		17,162,430					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	983,087,687					
14	NC Retail Projected Billing Period MWh Sales	Line 4		58,460,089					
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.6816					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.0975					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000					
18	Total Proposed Composite Fuel Rate	Sum		1.7791					
	Total Current Composite Fuel Rate - Docket E-7 Sub 1190:								
19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.8901					
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1346					
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000					
22	Total Current Composite Fuel Rate	Sum		2.0247					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		(0.2456)					
24	NC Retail Projected Billing Period MWh Sales	Line 4		58,460,089					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	(143,577,979)					

North Carolina Annual Fuel and Fuel Related Expense

Calculation of Fuel and Fuel Related Cost Factors Using:

Note: Rounding differences may occur

Proposed Nuclear Capacity Factor of 94.39% and Normalized Test Period Sales

Test Period Ended December 31, 2019

Billing Period September 2020 - August 2021

Docket E-7, Sub 1228

Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Total Nuclear	Workpaper 1	59,363,957	0.6041	358,597,316
2	Coal	Calculated	14,197,575	2.7303	387,636,026
3	Gas CT and CC	Workpaper 3 & 4	25,505,409	2.2867	583,236,234
4	Reagents and Byproducts	Workpaper 9			21,603,715
5	Total Fossil	Sum	39,702,984		992,475,975
6	Hydro	Workpaper 3	4,305,885		
7	Net Pumped Storage	Workpaper 3	(3,219,894)		
8	Total Hydro	Sum	1,085,991		
9	Solar Distributed Generation		385,094		
		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Line 9	100,538,026		1,351,073,291
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(876,000)		(16,315,588)
12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,848,200)		(89,710,135)
13	Fuel expense recovered through reimbursement	Workpaper 4		_	(20,370,677)
14	Net Generation	Sum	84,813,826		1,224,676,891
15	Purchased Power	Workpaper 3 & 4	8,286,802		258,610,852
16	JDA Savings Shared	Workpaper 5		_	14,281,717
17	Total Purchased Power	Sum	8,286,802		272,892,569
18	Total Generation and Purchased Power	Line 14 + Line 17	93,100,628		1,497,569,460
19	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(1,024,819)		(21,248,787)
20	Line losses and Company use	Line 22 - Line 19 - Line 18	(3,945,038)		-
21	System Fuel Expense for Fuel Factor	Lines 18 + 19 + 20			1,476,320,673
22	Normalized Test Period MWh Sales	Exhibit 4	88,130,771		88,130,771
23	Fuel and Fuel Related Costs cents/kWh	Line 21 / Line 22 / 10			1.6751

McGee Exhibit 2

Page 1 of 3

Schedule 2

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 94.39% and Normalized Test Period Sales
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Revised McGee 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	22,444,481	23,688,550	12,489,508	58,622,539
<u>Calcula</u>	tion of Renewable Purchased Power Capacity Rate by Class					<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,122,631
3	QF Purchased Power - Capacity	Workpaper 4				12,285,396
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				\$ 25,408,027
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				67.55%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				\$ 17,162,430
7	Production Plant Allocation Factors	Input	45.44%	38.35%	16.21%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 7,799,064 \$	6,581,827 \$	2,781,540	\$ 17,162,430
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0347	0.0278	0.0223	0.0293
Summa	ary 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	1.5687	1.7247	1.6411	1.6494
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0347	0.0278	0.0223	0.0293
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.6034	1.7525	1.6634	1.6787
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.0364	0.0666	0.2658	0.0975
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	-	-	-	-
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 2 Page 3	1.6398	1.8191	1.9292	1.7762

Note: Rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
Proposed Nuclear Capacity Factor of 94.39% and Normalized Test Period Sales
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Revised McGee Exhibit 2 Schedule 2 Page 3 of 3

Line #	Rate Class	Normalized Test Period MWh Sales		nual Revenue at Current rates	Incr	ocate Fuel Costs ease/(Decrease) Customer Class		ncrease/(Decrease) as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1190	Proposed Total Fuel Rate (including Capacity and EMF)
		Α		В		С		D	Е	F	G
					Line	25 as a % of Column	1		If D=0 then 0 if not then		
		Exhibit 4		Workpaper 8		В		C / B	(C*100)/(A*1000)	McGee Exhibit 1	E + F = G
1	Residential	22,444,481	\$	2,282,179,536	\$	(69,635,913)	3)	-3.05%	(0.3103)	1.9501	1.6398
2	General Service/Lighting	23,688,550		1,783,527,535	·	(54,420,595)		-3.05%	(0.2297)	2.0488	
3	Industrial	12,489,508	-	708,569,199		(21,620,500)		-3.05%	(0.1731)	2.1023	
4	NC Retail	58,622,539		4,774,276,270	\$	(145,677,008)	_		,		
	Total Proposed Composite Fuel Rate:										
5	Total Fuel Costs for Allocation	Workpaper 7a	\$	1,481,594,665							
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 2, Page 2	·	25,408,027							
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,456,186,638	_						
8	Normalized Test Period System MWh Sales for Fuel Factor	Workpaper 7a		88,292,898							
9	NC Retail Normalized Test Period MWh Sales	Exhibit 4		58,622,539							
10	Allocation %	Line 9 / Line 8		66.40%	-						
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	966,907,927							
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 2, Page 2		17,162,430	_						
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	984,070,357	_						
14	NC Retail Normalized Test Period MWh Sales	Line 9		58,622,539							
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.6787							
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.0975							
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000	_						
18	Total Proposed Composite Fuel Rate	Sum		1.7762							
	Total Current Composite Fuel Rate - Docket E-7 Sub 1190:										
19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.8901							
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1346							
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000	_						
22	Total Current Composite Fuel Rate	Sum		2.0247							
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		(0.2485)							
24	NC Retail Normalized Test Period MWh Sales	Exhibit 4		58,622,539							
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	(145,677,009))						
	Note: Rounding differences may occur										

North Carolina Annual Fuel and Fuel Related Expense
NERC 5 Year Average Nuclear Capacity Factor of 91.60% and Projected Period Sales
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

McGee Exhibit 2 Schedule 3 Page 1 of 3

Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Total Nuclear	Workpaper 2	57,614,320	0.6041	348,028,357
2	Coal	Calculated	15,762,058	2.7303	430,351,081
3	Gas CT and CC	Workpaper 3 & 4	25,505,409	2.2867	583,236,234
4	Reagents and Byproducts	Workpaper 9	-	_	21,603,715
5	Total Fossil	Sum	41,267,467		1,035,191,030
6	Hydro	Workpaper 3	4,305,885		
7	Net Pumped Storage	Workpaper 3	(3,219,894)		
8	Total Hydro	Sum	1,085,991		
9	Solar Distributed Generation	Workpaper 3	385,094		
		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Line 9	100,352,872		1,383,219,387
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(876,000)		(16,315,588)
12	Less Catawba Joint Owners	Calculated	(14,410,578)		(87,066,102)
13	Fuel expense recovered through reimbursement	Workpaper 4			(20,370,677)
14	Net Generation	Sum	85,066,294		1,259,467,020
15	Purchased Power	Workpaper 3 & 4	8,286,802		258,610,852
16	JDA Savings Shared	Workpaper 5	-	_	14,281,717
17	Total Purchased Power	Sum	8,286,802		272,892,569
18	Total Generation and Purchased Power	Line 14 + Line 17	93,353,096		1,532,359,589
19	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(1,024,819)		(21,248,787)
20	Line losses and Company use	Line 22 - Line 19 - Line 18	(3,945,038)		-
21	System Fuel Expense for Fuel Factor	Lines 18 + 19 + 20			1,511,110,802
22	Projected System MWh Sales for Fuel Factor	Workpaper 7b	88,383,239		88,383,239
23	Fuel and Fuel Related Costs cents/kWh	Line 21 / Line 22 / 10			1.7097

Note: Rounding differences may occur

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 91.60% and Projected Period Sales
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Revised McGee 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	22,067,951	23,951,115	12,441,023	58,460,089
<u>Calcula</u>	tion of Renewable Purchased Power Capacity Rate by Class					<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,122,631
3	QF Purchased Power - Capacity	Workpaper 4			<u>-</u>	12,285,396
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				\$ 25,408,027
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input			-	67.55%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5			-	\$ 17,162,430
7	Production Plant Allocation Factors	Input	45.44%	38.35%	16.21%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 7,799,064 \$	6,581,827 \$	2,781,540	\$ 17,162,430
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0353	0.0275	0.0224	0.0294
Summa	ary 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	1.6073	1.7595	1.6648	1.6837
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0353	0.0275	0.0224	0.0294
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.6426	1.7870	1.6872	1.7131
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.0364	0.0666	0.2658	0.0975
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	-	-	-	-
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 3 Page 3	1.6790	1.8536	1.9530	1.8106

Note: Rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
NERC 5 Year Average Nuclear Capacity Factor of 91.60% and Projected Period Sales
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Note: Rounding differences may occur

Revised McGee Exhibit 2
Schedule 3
Page 3 of 3

Line #	Rate Class	Projected Billing Period MWh Sales		inual Revenue at Current rates	Incr	ocate Fuel Costs rease/(Decrease) 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 1190	Proposed Total Fuel Rate (including Capacity and EMF)
		A		В		С	C / B = D	E	F	G
					Line	25 as a % of Column		If D=0 then 0 if not then		
		Workpaper 7b		Workpaper 8		В	C / B	(C*100)/(A*1000)	McGee Exhibit 1	E + F = G
1	Residential	22,067,951	L\$	2,282,179,536	\$	(59,829,917)	-2.62%	(0.2711)	1.9501	1.6790
2	General Service/Lighting	23,951,115		1,783,527,535		(46,757,191)		(0.1952)	2.0488	1.8536
3	Industrial	12,441,023		708,569,199		(18,575,943)		(0.1493)	2.1023	1.9530
4	NC Retail	58,460,089		4,774,276,270		(125,163,051)				
	<u>Total Proposed Composite Fuel Rate:</u>									
5	Total Fuel Costs for Allocation	Workpaper 7b	\$	1,516,384,800						
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 3, Page 2		25,408,027						
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,490,976,773						
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7b		88,545,366						
9	NC Retail Projected Billing Period MWh Sales	Line 4		58,460,089	_					
10	Allocation %	Line 9 / Line 8		66.02%						
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	984,342,865						
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 3, Page 2		17,162,430	-					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	1,001,505,295						
14	NC Retail Projected Billing Period MWh Sales	Line 4		58,460,089						
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.7131						
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.0975						
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000	-					
18	Total Proposed Composite Fuel Rate	Sum		1.8106						
	Total Current Composite Fuel Rate - Docket E-7 Sub 1190:									
19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.8901						
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1346						
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000	_					
22	Total Current Composite Fuel Rate	Sum		2.0247						
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		(0.2141)						
24	NC Retail Projected Billing Period MWh Sales	Line 4		58,460,089						
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	(125,163,051)						

DUKE ENERGY CAROLINAS

Revised McGee Exhibit 3

North Carolina Annual Fuel and Fuel Related Expense

Page 1 of 4

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Proposed Composite
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Line No.	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Reta MWh Sal (c)		(0	Reported Over)/ Under Recovery (d)
1	January 2019 (1)				5,021,050	\$	14,748,999
2	February				5,026,972	\$	26,351,993
3	March(1)				4,366,364	\$	6,488,079
4	April				4,263,830	\$	846,148
5	May(1)				4,421,390	\$	13,794,537
6	June				5,029,189	\$	4,512,864
7	July				5,524,189	\$	25,226,650
8	August				5,710,821	\$	15,596,501
9	September				5,512,227	\$	9,336,491
10	October(1)				4,692,562	\$	(6,369,305)
11	November				4,299,809	\$	6,118,779
12	December(1)				4,774,120	\$	(7,262,312)
13	Total Test Period				58,642,521	\$	109,389,423
14	January 2020					\$	(7,772,097)
15	February 2020					\$	(22,331,606)
16	March 2020					\$	(22,145,172)
17	Total (Over)/Under Recovery - Update	Period January	-March 2020			\$	(52,248,875)
18	Total (Over)/Under Recovery - Test Per	iod and Update	Period			\$	57,140,548
19	NC Retail Normalized Test Period MWh S	Sales		Exhibit 4			58,622,539
20	Experience Modification Increment (De	crement) cents	/kWh				0.0975

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

Revised McGee Exhibit 3
Page 2 of 4

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Residential
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWH Sales (c)	(C	Reported Over)/ Under Recovery (d)					
1	January 2019 (1)	1.6843	1.7003	2,194,231	\$	(326,600)					
2	February	1.9667	1.7003	2,094,914	\$	5,580,727					
3	March(1)	1.7655	1.7062	1,704,915	\$	946,440					
4	April	1.9025	1.7062	1,446,157	\$	2,839,260					
5	May(1)	2.3061	1.7062	1,438,256	\$	8,673,370					
6	June	1.8414	1.7062	1,831,778	\$	2,477,447					
7	July	2.0729	1.7062	2,144,971	\$	7,865,439					
8	August	1.9124	1.7062	2,209,124	\$	4,555,238					
9	September	1.9306	1.7648	2,048,666	\$	3,397,342					
10	October(1)	1.7998	1.8179	1,627,070	\$	(176,470)					
11	November	2.1806	1.8185	1,422,163	\$	5,149,854					
12	December(1)	1.5029	1.8127	1,929,578	\$	(5,657,382)					
13	Total Test Period		_	22,091,823	\$	35,324,665					
14	Test Period Wtd Avg. ¢/kWh	1.8931	1.7352								
15	January 2020	1.4459	1.8127	2,021,126	\$	(7,413,792)					
16	February 2020	1.2613	1.8127	1,940,656	\$	(10,701,006)					
17	March 2020	1.2791	1.8127	1,693,572	\$	(9,037,706)					
18	Total (Over)/Under Recovery - Update	Period January	/ -March 2020		\$	(27,152,504)					
19	Total (Over)/Under Recovery - Test Per	riod and Updat	e Period		\$	8,172,161					
20	NC Retail Normalized Test Period MWh	Sales	E	xhibit 4		22,444,481					
21	Experience Modification Increment (Decrement) cents/kWh 0.0364										

Notes:

Rounding differences may occur

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

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - GS/Lighting
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Line		Fuel Cost Incurred ¢/kWh	Fuel Cost Billed ¢/kWh	NC Retail MWh Sales	(0	Reported Over)/ Under Recovery
une #	Month	(a)	(b)	(c)		(d)
1	January 2019 (1)	2.2307	1.8314	1,936,499	\$	7,761,641
2	February	2.5196	1.8314	1,911,117	\$	13,151,612
3	March(1)	2.0159	1.8373	1,744,567	\$	3,110,115
4	April	1.7881	1.8373	1,796,520	\$	(884,254)
5	May(1)	1.9920	1.8373	1,944,912	\$	3,019,902
6	June	1.8353	1.8373	2,140,511	\$	(43,029)
7	July	2.2590	1.8373	2,277,488	\$	9,604,973
8	August	2.0663	1.8373	2,362,000	\$	5,409,863
9	September	1.9981	1.9024	2,322,021	\$	2,224,259
10	October(1)	1.6777	1.9614	2,064,595	\$	(5,747,964)
11	November	1.9803	1.9620	1,867,139	\$	340,996
12	December(1)	1.8270	1.9562	1,892,532	\$	(2,189,448)
13	Total Test Period		_	24,259,901	\$	35,758,666
14	Test Period Wtd Avg. ¢/kWh	2.0178	1.8720			
15	January 2020	1.8136	1.9562	1,919,161	\$	(2,736,820)
16	February 2020	1.5188	1.9562	1,917,354	\$	(8,385,933)
17	March 2020	1.4558	1.9562	1,771,910	\$	(8,865,883)
18	Total (Over)/Under Recovery - Update	Period January -March	2020		\$	(19,988,636)
19	Total (Over)/Under Recovery - Test Pe	riod and Update Period	I		\$	15,770,030
20	NC Retail Normalized Test Period MWh	n Sales	E	Exhibit 4		23,688,550
21	Experience Modification Increment (D	ecrement) cents/kWh				0.0666

Notes:

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

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Industrial
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

Line		Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	(0	Reported Over)/ Under Recovery (d)
#	Month					
1	January 2019 (1)	2.6216	1.8020	890,321	\$	7,313,957
2	February	2.5483	1.8020	1,020,942	\$	7,619,655
3	March(1)	2.0724	1.8079	916,881	\$	2,431,522
4	April	1.6993	1.8079	1,021,153	\$	(1,108,857)
5	May(1)	2.0148	1.8079	1,038,221	\$	2,101,265
6	June	2.0046	1.8079	1,056,900	\$	2,078,447
7	July	2.5119	1.8079	1,101,729	\$	7,756,238
8	August	2.3020	1.8079	1,139,697	\$	5,631,400
9	September	2.1810	1.8556	1,141,540	\$	3,714,890
10	October(1)	1.8500	1.8988	1,000,897	\$	(444,872)
11	November	1.9614	1.8993	1,010,506	\$	627,928
12	December(1)	1.9470	1.8935	952,010	\$	584,518
13	Total Test Period		_	12,290,797	\$	38,306,091
14	Test Period Wtd Avg. ¢/kWh	2.1439	1.8330			
15	January 2020	2.1705	1.8935	858,763	\$	2,378,515
16	February 2020	1.5672	1.8935	994,505	\$	(3,244,668)
17	March 2020	1.4487	1.8935	953,523	\$	(4,241,584)
18	Total (Over)/Under Recovery - Updat	te Period January -I	March 2020		\$	(5,107,737)
19	Total (Over)/Under Recovery - Test P	eriod and Update F	Period		\$	33,198,354
20	NC Retail Normalized Test Period MW	/h Sales		Exhibit 4		12,489,508
21	Experience Modification Increment (Decrement) cents/l	kWh			0.2658

Notes:

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

DUKE ENERGY CAROLINAS McGee Exhibit 4

North Carolina Annual Fuel and Fuel Related Expense Sales, Fuel Revenue, Fuel Expense and System Peak Test Period Ended December 31, 2019 Billing Period September 2020 - August 2021 Docket E-7, Sub 1228

Line #	Description	Reference	т	otal Company	ı	North Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
		Exhibit 6 Schedule 1 (Line 4)							
1	Test Period MWh Sales (excluding inter system sales)	and Workpaper 11 (NC retail)		87,911,333		58,642,521	22,091,823	24,259,901	12,290,797
2	Customer Growth MWh Adjustment	Workpaper 13 Pg 1		455,048		296,714	185,000	48,348	63,366
3	Weather MWh Adjustment	Workpaper 12		(235,610)		(316,696)	167,658	(619,699)	135,345
4	Total Normalized MWh Sales	Sum		88,130,771		58,622,539	22,444,481	23,688,550	12,489,508
5	Test Period Fuel and Fuel Related Revenue *		\$	1,669,292,496	\$	1,062,783,555			
6	Test Period Fuel and Fuel Related Expense *		\$	1,749,171,043	\$	1,172,172,978			
7	Test Period Unadjusted (Over)/Under Recovery		\$	79,878,546	\$	109,389,423			
			Sum	mer Coincidental					
				Peak (CP) kW					
8	Total System Peak			17,626,362	•				
9	NC Retail Peak			11,906,127					
10	NC Residential Peak			5,410,460					
11	NC General Service/Lighting Peak			4,566,024					
12	NC Industrial Peak			1,929,643					

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

McGee Exhibit 5

North Carolina Annual Fuel and Fuel Related Expense
Nuclear Capacity Ratings
Test Period Ended December 31, 2019
Billing Period September 2020 - August 2021
Docket E-7, Sub 1228

	Rate Case		
	Docket E-7,	Fuel Docket E-7,	Proposed Capacity
Unit	Sub 1146	Sub 1190	Rating MW
Oconee Unit 1	847	847.0	847.0
Oconee Unit 2	848	848.0	848.0
Oconee Unit 3	859	859.0	859.0
McGuire Unit 1	1,158	1158.0	1158.0
McGuire Unit 2	1,158	1157.6	1157.6
Catawba Unit 1	1,160	1160.1	1160.1
Catawba Unit 2	1,150	1150.1	1150.1
Total Company	7,180	7,179.8	7,179.8

DECEMBER 2019 MONTHLY FUEL FILING

DUKE ENERGY CAROLINAS SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-7, Sub 1198

Line <u>No.</u>		December 2019	12 Months Ended December 2019
1	Fuel and fuel-related costs	\$ 122,817,184	\$ 1,750,175,434
2	MWH sales: Total system sales	7,221,215	89,956,771
3	Less intersystem sales	70,226	2,045,438
4	Total sales less intersystem sales	7,150,989	87,911,333
5	Total fuel and fuel-related costs (¢/KWH) (line 1/line 4)	1.7175	1.9908
6	Current fuel and fuel-related cost component (¢/KWH) (per Schedule 4, Line 7a Total)	1.8856	
7 8 9 10 11 12 13 14	Generation Mix (MWH): Fossil (by primary fuel type): Coal Fuel Oil Natural Gas - Combined Cycle Natural Gas - Combined Heat and Power Natural Gas - Combustion Turbine Natural Gas - Steam Biogas Total fossil	1,208,156 7,779 1,310,358 (243) 56,622 25,471 2,160 2,610,303	20,916,177 97,907 14,049,112 (243) 1,062,059 1,157,313 17,335 37,299,660
15	Nuclear 100%	5,203,803	61,066,543
16 17 18	Hydro - Conventional Hydro - Pumped storage Total hydro	219,651 (48,643) 171,008	2,427,405 (713,520) 1,713,885
19	Solar Distributed Generation	8,911	142,127
20	Total MWH generation	7,994,025	100,222,215
21 22	Less joint owners' portion - Nuclear Less joint owners' portion - Combined Cycle	1,409,284 297,823	15,822,621 893,946
23	Adjusted total MWH generation	6,286,918	83,505,648

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

DUKE ENERGY CAROLINAS DETAILS OF FUEL AND FUEL-RELATED COSTS

Docket No. E-7, Sub 1198

Fuel and fuel-related costs:	December 2019	12 Months Ended December 2019	
0501110 coal consumed - steam	\$ 35,851,930	\$ 688,831,904	
0501310 fuel oil consumed - steam	262,693	7,285,496	
0501330 fuel oil light-off - steam	740,317	6,451,433	
Total Steam Generation - Account 501	36,854,940	702,568,833	
Nuclear Generation - Account 518			
0518100 burnup of owned fuel	22,398,036	270,484,487	
Other Generation - Account 547			
0547100, 0547124 - natural gas consumed - Combustion Turbine	2,310,732	40,328,338	
0547100 natural gas consumed - Steam	1,596,367	42,380,517	
0547101 natural gas consumed - Combined Cycle	30,560,920	322,366,652	
0547101 natural gas consumed - Combined Heat and Power	54,658	54,658	
0547106 biogas consumed - Combined Cycle	116,664	936,054	
0547200 fuel oil consumed - Combustion Turbine	255,506	949,755	
Total Other Generation - Account 547	34,894,847	407,015,974	
Total Other Generation - Account 347	34,034,041	401,013,314	
Reagents			
Catalyst Depreciation Expense		A	4
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	1,165,420	24,629,578	
Total Reagents	1,165,420	24,629,578	
By-products			
Net proceeds from sale of by-products	1,314,235	8,920,508	
Total By-products	1,314,235	8,920,508	
rotal by producto	1,014,200	0,020,000	
Total Fossil and Nuclear Fuel Expenses			
Included in Base Fuel Component	96,627,478	1,413,619,380	
Purchased Power and Net Interchange - Account 555			
<u> </u>	213,366	10 660 201	
Capacity component of purchased power (economic)	•	10,668,301	
Capacity component of purchased power (renewables)	594,090	15,300,779	
Capacity component of purchased power (PURPA)	187,603	6,969,349	
Fuel and fuel-related component of purchased power	27,443,813	365,056,791	
Total Purchased Power and Net Interchange - Account 555	28,438,872	397,995,220	
Less:			
Fuel and fuel-related costs recovered through intersystem sales	2,169,260	60,148,973	
Fuel in loss compensation	79,276	1,279,432	
Solar Integration Charge	628	10,761	
Total Fuel Credits - Accounts 447 /456	2,249,164	61,439,166	
Total Fuel and Fuel-related Costs	\$ 122,817,184	\$ 1,750,175,434	

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

A Reflects removal of catalyst depreciation expense from fuel costs. Associated prior period adjustment to over/under collection included on Schedule 4.

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

December 2019

Exhibit 6 Schedule 3 - Purchases Page 1 of 4

Personant	Purchased Power	Total		Capacity				Non-c	apaci	ty	Not Fuel \$	
De Progress- National Load Transfer Fenetis 2,281 502	Economic	_	\$		\$	mWh		Fuel\$	Fu	uel-related \$		
De Prograsse-National Transfer Banel 1,804 1,804 1,706	Cherokee County Cogeneration Partners	\$	1.679,149	\$	213,366	44,941	\$	1,262,453	\$	203,330		
De Progress- Native Load Transfer Benefit 2,681,632		•		•	-				Ť		\$	(425)
De Prograss - Feare	_		·		_	-		· · ·		-	*	(== -)
Electon Company, LLC 139,449 3,733 8,5180 54,400 149,400 149,400 16,200	_		·		-	_		_,,,,,,,		(336)		
Haywood Electric - Sconomic 20,198 20,030 5 101 68 108 1	· ·		` '		-	3,738		85,180				
Montgriate Energy, LLC 1,177,136 39,832 687,553 439,838 NCMPA Enotomic 16,800 40,102 50,9373 349,748 NCMPA Enotomic 859,121 41,102 50,9373 349,748 NCMPA Enotomic 284,937 41,102 16,447 16,447 16,447 115,530 115,53					20.030			·		•		
NOMPA Section 16,800	-				-							
NAMP A Instantaneous					_			•				
NE Carolinas LLC 689,000 . 249,001 371,401 275,101 71,600 7					_							
Pedmont Municipal Power Agency 284,034					-	·		·		•		
Publisher compenent, LLC 19.08 1.124 11.839 7.441 1.625 1.0224 1.022			·		-			·		•		
South Carolina Electric & Gas Company / Dominion Energy 26,216 9.00 15,981 10,224 106,115 10			·		_			•		•		
Southern Company Services, Inc.	·				_			•		•		
Tenness valley Authority					_					•		
The Energy Authority	·		·		_			•		•		
Tom of Dallas Tow of Dallas Tow of Dallas Tow of Forest City 584 5 19,866			·		_							
Temper 19,856 19,856 19,856 19,101 1					581	500		11,501		7,204		
Renewable Energy Renewable E										_		
REPS	Town of Forest City	-\$		\$		872,300	\$	17,891,442	\$	2,634,380	\$	(425)
REPS \$4,555,861 \$2,1656 \$2,065 \$2,065,065 \$2,			<u> </u>									, ,
PRPP - Purchased Power Pur		_ _©	A 555 801	Ф	501 022	81 362	¢	_	Φ	3 063 060	Ф	
HB589 PURPA Purchases		Ψ		Ψ			Ψ	_	Ψ		Ψ	6 033
Non-dispatchable Pubme P	DEITE - Fulcilased Fowel	•		\$			•	<u>_</u>	•		•	6,933
Non-dispatchable / Other Variable Vari		Ψ	4,300,302	Ψ	394,090	01,732	Ψ		Ψ	3,373,333	Ψ	0,333
Non-dispatchable / Other Samuel S												
Non-dispatchable / Other Standard Stan	Qualifying Facilities		2,350,054		187,603	46,154						72,044
Blue Ridge Electric Membership Corp. \$ 1,330,476 \$ 743,419 24,753 358,105 \$ 228,95 DE Progress - As Available Capacity 14,515 1		\$	2,350,054	\$	187,603	46,154	\$	-	\$	2,090,407	\$	72,044
DE Progress - As Available Capacity 14,515 14,515 14,515 14,515 14,515 14,515 14,515 14,515 14,515 14,515 14,515 14,515 14,515 15,2148 6,891 110,102 70,30 32,643 32,488	Non-dispatchable / Other	_										
DE Progress - As Available Capacity	Blue Ridge Electric Membership Corp	\$	1 330 476	\$	743 419	24 753	\$	358 105			\$	228 952
Haywood Electric 332,643 152,148 6,891 110,102 70,35 Macquarie Energy, LLC 63,800 - 1,595 38,918 24,88 Macquarie Energy (Membership Corp. 645,228 360,960 11,904 173,403 110,88 110,88 Macquarie Energy (Membership Corp. 645,228 360,960 - 1,904 173,403 - 110,88 Macquarie Energy (Membalance - Purchases 39,310 - 1,055,405 - 1,054 -		Ψ		Ψ		21,700	Ψ	-			Ψ	220,002
Macquarie Energy, LLC	·		·			6 891		110 102				70 393
NCEMC - Other 267,337 4,657 3,980 160,235 102,44 Pledmont Electric Membership Corp. 645,228 360,960 11,904 173,403 110,84 Energy Imbalance - Purchases 39,310 - 4,699 70,161 175,96 Energy Imbalance - Purchases 39,310 - 1,594 31,084 8,22 Energy Imbalance - Sales (17,924) - 1,594 31,084 8,22 Energy Imbalance - Sales (17,924) - 1,594 15 - 5,524 Other Purchases 39,310 - 1,594 1,275,700 1,055,637 1,275,100 1,055,637 1,275,100 1,055,637 1,275,100 1,055,637 1,275,100 1,055,637 1,275,100 1,055,637 1,275,00 1,055,637 1,275,00 1,055,637 1,275,00 1,055,637 1,275,00 1,055,637 1,275,00 1,055,637 1,275,00 1,055,637 1,275,00 1,055,637 1,275,00 1,055,637 1,275,00 1,055,637 1,275,00 1,055,637 1,275,00 1,27					102,140							
Piedmont Electric Membership Corp.	,				4 657							
Ceneration Imbalance 246,069 - 4,699 70,161 175,90												
Energy Imbalance - Purchases 39,310 - 1,594 31,084 6,22	·				300,900			•				•
Cher Purchases Cher Ch					_							
Other Purchases 524 - 15 - 524 \$ 2,921,979 \$ 1,275,700 55,431 \$ 924,510 \$ - \$ 721,767 Total Purchased Power \$ 30,631,847 \$ 2,311,229 1,055,637 \$ 18,815,952 \$ 8,704,346 \$ 800,32 Interchanges In Other Catawba Joint Owners 7,605,405 - 711,849 4,584,919 3,020,48 WS Lee Joint Owner 394,081 - 711,162 305,194 88,86 Total Interchanges In Other Catawba Joint Owners 7,999,485 - 723,011 4,890,113 - 3,109,37 Interchanges Out (617,693) (134,209) (692,834) (4,464,622) (2,852,52 (2,852,52 (2,852,52 (2,852,52 (3,809,048) (134,209) (501,976) (501,976) (115,77 (504 Interchanges Out (8,069,048) (134,209) (713,433) (4,966,598) - (2,968,24 (2,968,24) (4,966,598) - (2,968,24) (2,968,24) (4,966,598) - (2,968,24) (2,968,24) (2,968,24) (2,968,24)					_	1,594						
Total Purchased Power \$ 30,631,847 \$ 2,311,229 1,055,637 \$ 18,815,952 \$ 8,704,346 \$ 800,32			,		-	- 15		(17,497)				
Note	Other Fulchases	\$		\$	1,275,700		\$	924,510	\$	_	\$	721,769
Interchanges In Other Catawba Joint Owners 7,605,405 711,849 4,584,919 3,020,48 WS Lee Joint Owner 394,081 11,162 305,194 88,88 Total Interchanges In 7,999,485 - 723,011 4,890,113 - 3,109,37 Interchanges Out Other Catawba Joint Owners (7,451,355) (134,209) (692,834) (4,464,622) (2,852,52 Catawba- Net Negative Generation WS Lee Joint Owner (617,693) (20,599) (501,976) (115,71 Total Interchanges Out (8,069,048) (134,209) (713,433) (4,966,598) - (2,968,24 Interchanges Out (2,968,24 Interchanges Out (34,209) (713,433) (4,966,598) - (2,968,24 Interchanges Out (34,209) (34,20			-									
Other Catawba Joint Owners 7,605,405 - 711,849 4,584,919 3,020,48 WS Lee Joint Owner 394,081 11,162 305,194 88,88 Total Interchanges In 7,999,485 - 723,011 4,890,113 - 3,109,37 Interchanges Out 0ther Catawba Joint Owners (7,451,355) (134,209) (692,834) (4,464,622) (2,852,52 Catawba- Net Negative Generation - - - - - WS Lee Joint Owner (617,693) (20,599) (501,976) (115,71 Total Interchanges Out (8,069,048) (134,209) (713,433) (4,966,598) - (2,968,24)	Total Purchased Power		30,631,847	\$	2,311,229	1,055,637	\$	18,815,952	\$	8,704,346	\$	800,320
WS Lee Joint Owner 394,081 11,162 305,194 88,88 Total Interchanges In 7,999,485 - 723,011 4,890,113 - 3,109,37 Interchanges Out Other Catawba Joint Owners (7,451,355) (134,209) (692,834) (4,464,622) (2,852,52,62,62,62,62,62,62,62,62,62,62,62,62,62												
Total Interchanges In 7,999,485 - 723,011 4,890,113 - 3,109,37 Interchanges Out Other Catawba Joint Owners Catawba- Net Negative Generation WS Lee Joint Owner (7,451,355) (134,209) (692,834) (4,464,622) (2,852,52) WS Lee Joint Owner (617,693) (20,599) (501,976) (115,71) Total Interchanges Out (8,069,048) (134,209) (713,433) (4,966,598) - (2,968,24)					-							3,020,486
Interchanges Out (7,451,355) (134,209) (692,834) (4,464,622) (2,852,522) Catawba- Net Negative Generation - - - - - WS Lee Joint Owner (617,693) (134,209) (501,976) (115,71) Total Interchanges Out (8,069,048) (134,209) (713,433) (4,966,598) - (2,968,24)						· · · · · · · · · · · · · · · · · · ·		<u> </u>				88,887
Other Catawba Joint Owners (7,451,355) (134,209) (692,834) (4,464,622) (2,852,52) Catawba- Net Negative Generation - - - - - - WS Lee Joint Owner (617,693) (20,599) (501,976) (115,71) Total Interchanges Out (8,069,048) (134,209) (713,433) (4,966,598) - (2,968,24)	Total Interchanges In		7,999,485		- .	723,011		4,890,113		-		3,109,373
Other Catawba Joint Owners (7,451,355) (134,209) (692,834) (4,464,622) (2,852,52) Catawba- Net Negative Generation - - - - - - WS Lee Joint Owner (617,693) (20,599) (501,976) (115,71) Total Interchanges Out (8,069,048) (134,209) (713,433) (4,966,598) - (2,968,24)	Interchanges Out											
Catawba- Net Negative Generation -			(7.451.355)		(134,209)	(692 834))	(4.464.622)				(2.852.524)
WS Lee Joint Owner (617,693) (20,599) (501,976) (115,71) Total Interchanges Out (8,069,048) (134,209) (713,433) (4,966,598) - (2,968,24)			-		-	(552,554)	•	(., ,				(=,552,52 +)
Total Interchanges Out (8,069,048) (134,209) (713,433) (4,966,598) - (2,968,24			(617 693)			(20 599))	(501 976)				(115 716)
				_	(134,209)					-		(2,968,240)
Net Purchases and Interchange Power \$ 30,562,284 \$ 2,177,020 1,065,215 \$ 18,739,467 \$ 8,704,346 \$ 941,45			<u>, -,,</u>		,/	·		· · · · · ·				
	Net Purchases and Interchange Power	\$	30,562,284	\$	2,177,020	1,065,215	\$	18,739,467	\$	8,704,346	\$	941,453

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

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

DECEMBER 2019

Exhibit 6
Schedule 3 - Sales
Page 2 of 4

	_	Total		Capacity	Non-capacity					
Sales		\$		\$	mWh		Fuel \$	Non-fuel \$		
Utilities:										
SC Electric & Gas - Emergency	\$	31,543		-	470	\$	27,262	\$ 4,281		
Market Based:										
Central Electric Power Cooperative, Inc.		458,000	\$	458,000	-		-	-		
NCMPA		91,985		87,500	48		4,187	298		
PJM Interconnection, LLC.		168		-	-		-	168		
Other:										
DE Progress - Native Load Transfer Benefit		309,999		-	-		309,999	-		
DE Progress - Native Load Transfer		1,806,427		-	67,488		1,784,838	21,589		
Generation Imbalance		64,487		-	2,220		42,974	21,513		
BPM Transmission		-		-				-		
Total Intersystem Sales	\$	2,762,609	\$	545,500	70,226	\$	2,169,260	\$ 47,849		

^{*} 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 2019 Exhibit 6
Schedule 3 - Purchases
Page 3 of 4

Purchased Power		Total		Capacity		Non-capacity			
Economic		\$		\$	mWh		Fuel \$	Fuel-related \$	Not Fuel \$ Not Fuel-related \$
		20 402 641	•	· · · · · · · · · · · · · · · · · · ·		¢.	·		<u> </u>
Cherokee County Cogeneration Partners DE Progress - Native Load Transfer	Φ	29,493,641 118,187,137	\$	10,668,301	579,750 5,379,774	-	16,005,055 106,969,125	\$ 2,820,285 11,081,282	\$ 136,730
DE Progress - Native Load Transfer (Prior Period Adjust)		51,500,000		_	5,579,774		31,415,000	20,085,000	φ 130,730
DE Progress - Native Load Transfer Benefit		16,958,183		-	_		16,958,183	20,000,000	
DE Progress - Native Load Transfer Benefit DE Progress - Fees		(605,444)		_	_		10,930,103	(605,444)	
EDF Trading North America, LLC.		1,400		_	50		- 854	(603,444)	
Exelon Generation Company, LLC.		383,690		_	10,093		234,051	149,639	
Haywood Electric - Economic		326,963		298,730	1,612		59,547	(31,314)	
Macquarie Energy, LLC		15,963,711		290,730	516,706		9,737,863	6,225,848	
Morgan Stanley Capital Group		95,905		-	3,200		58,502	37,403	
NCEMC		223,880		-	9,040		136,567	87,313	
NCMPA		16,800			400		10,248	6,552	
		•		-					
NCMPA Load Following Economic NTE Carolinas LLC		12,022,983		-	503,380		7,118,791	4,904,192	
		6,091,751		-	217,073		3,715,969	2,375,782	
Piedmont Municipal Power Agency		3,235,884		-	140,334		1,902,778	1,333,106	
PJM Interconnection, LLC.		17,611,868		-	556,050		10,743,799	6,868,069	
South Carolina Electric & Gas Company / Dominion Energy		62,954		-	1,800		38,127	24,827	
Southern Company Services, Inc.		1,126,440		-	61,230		687,130	439,310	
Tennesse Valley Authority		298,582		-	10,277		182,135	116,447	
The Energy Authority		83,800		7,000	2,295		51,118	32,682	
Town of Dallas		7,008		7,008	-		-	-	
Town of Forest City	\$	238,272 273,325,408	\$	238,272 11,212,311	7,993,064	\$	206,024,843	\$ 55,951,524	\$ 136,730
Renewable Energy									
REPS		71,364,365	\$	15,267,970	1,117,992	\$	_	\$ 56,096,395	\$ -
DERP - Purchased Power	Ψ	360,035	Ψ	32,809	5,844	Ψ	_	233,533	93,693
DERP - Net Metered Generation		44,824		8,197	3		_	200,000	36,627
DENI Not Motorca Contractori	\$	71,769,224	\$	15,308,976	1,123,838	\$	_	\$ 56,329,928	-
		,,				•		*	*
HB589 PURPA Purchases Qualifying Facilities		34,809,936	\$	6,969,349	580,279			\$ 26,764,794	\$ 1,075,793
	\$	34,809,936	\$	6,969,349	580,279	\$	-	· , ,	, ,
Non-dispatchable / Other		<u> </u>				-			· · · · · ·
Carolina Power & Light (DE Progress) - Emergency	\$	42,255	\$	-	1,275		25,775		\$ 16,480
Blue Ridge Electric Membership Corp.		15,087,901		8,355,253	300,145		4,106,914		2,625,734
DE Progress - As Available Capacity		206,116		206,116	-		-		-
Haywood Electric		3,979,790		1,896,338	80,812		1,270,906		812,546
Macquarie Energy, LLC		12,796,565		-	216,547		7,805,904		4,990,661
NCEMC - Other		2,205,353		56,208	42,315		1,310,979		838,166
NCMPA - Reliability		24,800		-	400		15,128		9,672
NTE Carolinas LLC		2,437,980		-	49,870		1,487,168		950,812
Piedmont Electric Membership Corp.		7,203,245		3,969,255	140,160		1,972,735		1,261,255
Southern Company Services, Inc.		1,008,100		-	12,695		614,942		393,158
Generation Imbalance		2,122,030			83,419		1,359,973		762,057
Energy Imbalance - Purchases		571,519			(18,945))	333,736		237,783
Energy Imbalance - Sales		(1,040,510)			-		(1,337,249)		296,739
Other Purchases		11,236		<u>-</u>	324		-		11,236
	\$	46,656,380	\$	14,483,170	909,017	\$	18,966,910	-	\$ 13,206,300
Total Purchased Power	\$	426,560,948	\$	47,973,806	10,606,198	\$	224,991,753	\$ 139,046,246	\$ 14,549,143
Interchanges In									
Other Catawba Joint Owners		82,443,582		-	7,990,626		48,460,268		33,983,314
WS Lee Joint Owner		11,034,559			394,803		9,338,713		1,695,846
Total Interchanges In		93,478,141		<u>-</u>	8,385,428		57,798,980	-	35,679,161
Interchanges Out									
Other Catawba Joint Owners		(79,622,083)		(1,580,207)	(7,667,091))	(46,399,114)		(31,642,762)
Catawba- Net Negative Generation		(88,885)		-	(4,227))	(74,385)		(14,500)
WS Lee Joint Owner		(12,214,751)		<u> </u>	(416,958))	(10,306,689)		(1,908,062)
Total Interchanges Out		(91,925,719)		(1,580,207)	(8,088,276))	(56,780,188)		(33,565,324)
Net Purchases and Interchange Power	\$	428,113,370	\$	46,393,599	10,903,350	\$	226,010,545	\$ 139,046,246	\$ 16,662,980
-		•		· · ·	5				

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

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

Twelve Months Ended DECEMBER 2019

Exhibit 6 Schedule 3 - Sales Page 4 of 4

	 Total	 Capacity	Non-capacity			
Sales	 \$	\$	mWh	Fuel \$	Non-fuel \$	
Utilities:						
DE Progress - Emergency	\$ 32,606	-	1,369	\$ 29,331	\$ 3,275	
SC Public Service Authority - Emergency	218,264	-	4,679	188,608	29,656	
SC Electric & Gas - Emergency	176,126	-	4,765	155,600	20,526	
Market Based:						
Central Electric Power Cooperative, Inc.	4,580,000	\$ 4,580,000	-	-	-	
Exelon Generation Company, LLC.	27,020	-	688	18,274	8,746	
Macquarie Energy, LLC	400,050	-	10,450	282,062	117,988	
NCMPA	1,265,860	1,050,350	5,692	221,824	(6,314)	
PJM Interconnection, LLC.	499,356	-	13,483	386,349	113,007	
SC Electric & Gas	27,383	-	505	17,942	9,441	
Southern Company	9,000	-	900	13,435	(4,435)	
The Energy Authority	315,490	-	6,195	176,369	139,121	
Westar Energy	29,400	-	600	21,733	7,667	
Other:						
DE Progress - Native Load Transfer Benefit	5,795,771	-	-	5,795,771	-	
DE Progress - Native Load Transfer	54,397,949	-	1,971,074	52,117,830	2,280,119	
Generation Imbalance	938,849	-	25,038	723,845	215,004	
BPM Transmission	(939,967)	-		-	(939,967)	
Total Intersystem Sales	\$ 67,773,157	\$ 5,630,350	2,045,438	\$ 60,148,973	\$ 1,993,834	

^{*} 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 2019

Line						
No.			Residential	Commercial	Industrial	Total
1 2 3	Actual System kWh sales DERP Net Metered kWh generation Adjusted System kWh sales	Input Input L1 + L2				7,150,989,325 10,508,031 7,161,497,356
4 5 6	N.C. Retail kWh sales NC kWh sales % of actual system kWh sales NC kWh sales % of adjusted system kWh sales	Input L4 T / L1 L4 T / L3	1,929,577,914	1,892,531,687	952,010,008	4,774,119,609 66.76% 66.66%
7	Approved fuel and fuel-related rates (¢/kWh) 7a Billed rates by class (¢/kWh)	Input Annually	1.8126	1.9561	1.8934	1.8856
	7b Lime water emissions in Base Rates	Input	0.0001	0.0001	0.0001	0.0001
	7c Total billed rates by class (¢/kWh)	L7a +L7b	1.8127	1.9562	1.8935	1.8857
	7d Billed fuel expense	L7c * L4 / 100	\$34,977,459	\$37,021,705	\$18,026,310	\$90,025,474
8	Incurred base fuel and fuel-related (less renewable purchase	ed power capacity) rates by class (¢,	/kWh)			
	8a Docket E-7, Sub 1190 allocation factor	Input	35.24%	42.14%	22.62%	
	8b System incurred expense	Input				\$122,163,913
	8c Incurred base fuel and fuel-related expense	L8b * L6 * 8a	\$28,697,516	\$34,322,185	\$18,419,291	\$81,438,992
	8d Incurred base fuel rates by class (¢/kWh)	L8c / L4 * 100	1.4872	1.8136	1.9348	1.7058
9	Incurred renewable purchased power capacity rates by class	s (¢/kWh)				
	9a NC retail production plant %	Input				67.75%
	9b Production plant allocation factors	Input	44.82%	37.86%	17.32%	100.00%
	9c System incurred expense	Input				\$995,058
	9d Incurred renewable capacity expense	L9a * L9b * 9c	\$302,128	\$255,232	\$116,760	\$674,120
	9e Incurred renewable capacity rates by class (¢/kWh)	(L9a * L9c) * L9b / L4 * 100	0.0157	0.0135	0.0123	0.0141
10	Total incurred rates by class (¢/kWh)	L8d + L9e	1.5029	1.8270	1.9470	1.7200
11	Difference in ¢/kWh (incurred - billed)	L7c - L10	(0.3098)	(0.1292)	0.0535	(0.1657)
12	(Over) / under recovery [See footnote]	(L4 * L11) / 100	(\$5,977,815)	(\$2,444,288)	\$509,741	(\$7,912,362)
13	Prior period adjustments	Input	320,433	254,840	74,777	650,050
14	Total (over) / under recovery [See footnote]	L12+ L13	(\$5,657,382)	(\$2,189,448)	\$584,518	(\$7,262,312)
15	Total system incurred expense	L8b + L9c				\$123,158,971
16	Less: Jurisdictional allocation adjustment(s)	Input				341,787
17	Total Fuel and Fuel-related Costs per Schedule 2	L15 + L16				\$122,817,184
	·					

18 (Over) / under recovery for each month of the current calendar year [See footnote]

	(Over) / Under Recovery						
Year 2019	Total To Date	Residential	Commercial	Industrial	Total Company		
_/1 January	\$14,748,997	(\$326,600)	\$7,761,641	\$7,313,957	\$14,748,997		
February	41,100,992	\$5,580,727	\$13,151,612	\$7,619,655	26,351,995		
_/1 March	47,589,069	946,440	3,110,115	2,431,522	6,488,077		
April	48,435,217	2,839,260	(884,254)	(1,108,857)	846,148		
_/1 May	62,229,755	8,673,370	3,019,902	2,101,265	13,794,538		
June	66,742,620	2,477,447	(43,029)	2,078,447	4,512,865		
July	91,969,270	7,865,439	9,604,973	7,756,238	25,226,650		
August	107,565,771	4,555,238	5,409,863	5,631,400	15,596,501		
_/2 September	116,902,262	3,397,342	2,224,259	3,714,890	9,336,491		
_/2 October	110,532,957	(\$176,470)	(\$5,747,964)	(\$444,872)	(6,369,305)		
November	\$116,651,736	5,149,854	340,996	627,928	6,118,779		
_/1 December	\$109,389,424	(\$5,657,382)	(\$2,189,448)	\$584,518	(7,262,312)		
		\$35,324,665	\$35,758,666	\$38,306,091	\$109,389,424		

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.

_/1 Includes prior period adjustments.

_/2 Reflects a prorated rate and prorated allocation factor for periods in which the approved rates changed.

DUKE ENERGY CAROLINAS FUEL AND FUEL RELATED COST REPORT DECEMBER 2019

Description	Allen	Creek	Buck	Catawba	Clemson	Cliffside	Dan River	Lee
	Steam	Steam	CC	Nuclear	CHP	Steam - Dual Fuel	CC	CC
ost of Fuel Purchased (\$)								
Coal	\$2,320,199	\$16,549,328				\$13,627,538		
Oil Gas - CC	45,499	583,901	- 00.070.450			169,053	- CO 074 455	- #4.4.220.745
Gas - CC Gas - CHP			\$9,970,150		\$54,658		\$8,074,155	\$14,230,745
Gas - CT					+,			
Gas - Steam Biogas			357,518			1,596,029	_	_
Total	\$2,365,698	\$17,133,228	\$10,327,668		\$54,658	\$15,392,619	\$8,074,155	\$14,230,745
verage Cost of Fuel Purchased (¢/	MRTII\							
Coal	312.30	260.57				322.87	-	
Oil	1,484.49	1,485.00				1,474.58		
Gas - CC Gas - CHP			348.16		388.57		345.25	347.45
Gas - CT					000.07			
Gas - Steam			0.000.70			355.78		
Biogas Weighted Average	317.12	268.11	2,336.72 358.73		388.57	328.85	345.25	347.45
toot of Eugl Burned (\$)								
Cost of Fuel Burned (\$) Coal	\$779,034	\$10,953,735				\$2,204,005	_	_
Oil - CC	ψ. το,σο τ	ψ10,000,700	-			ψ <u>2,2</u> 01,000	-	-
Oil - Steam/CT Gas - CC	39,704	459,597	¢0.070.450			149,115	¢0.074.455	¢4.4.000.74E
Gas - CC Gas - CHP			\$9,970,150		\$54,658		\$8,074,155	\$14,230,745
Gas - CT					, - ,			
Gas - Steam			357,518			1,596,029	_	_
Biogas Nuclear			357,316	\$10,342,435			-	-
Total	\$818,738	\$11,413,332	\$10,327,668	\$10,342,435	\$54,658	\$3,949,150	\$8,074,155	\$14,230,745
Average Cost of Fuel Burned (¢/MB	TU)							
Coal	315.64	307.81				300.49		
Oil - CC	1 111 10	1 476 20				4 454 70		
Oil - Steam/CT Gas - CC	1,441.18	1,476.29	348.16			1,454.79	345.25	347.45
Gas - CHP			0.10.10		388.57		0.10.20	017.10
Gas - CT						255.70		
Gas - Steam Biogas			2,336.72			355.78	_	_
Nuclear				59.29				
Weighted Average	328.06	317.95	358.73	59.29	388.57	331.21	345.25	347.45
Average Cost of Generation (¢/kWh))							
Coal	4.67	2.92				2.59	-	-
Oil - CC Oil - Steam/CT	18.01	13.63	-			15.25	-	-
Gas - CC			2.47			.0.20	2.54	2.42
Gas - CHP					-			
Gas - CT Gas - Steam						6.17		
Biogas			16.55				-	-
Nuclear Weighted Average	4.85	3.02	2.54	0.59 0.59		3.53	2.54	2.42
	4.00	0.02	2.04	0.00		0.00	2.04	2.72
Burned MBTU's	046.040	2 550 552				722 400		
Coal Oil - CC	246,812	3,558,552				733,480		
Oil - Steam/CT	2,755	31,132				10,250		
Gas - CC Gas - CHP			2,863,693		14,066		2,338,618	4,095,789
Gas - CT					14,000			
Gas - Steam						448,605		
Biogas Nuclear			15,300	17,444,528			-	-
Total	249,567	3,589,684	2,878,993	17,444,528	14,066	1,192,335	2,338,618	4,095,789
Not Conservation (m/M/L)								
Net Generation (mWh) Coal	16,667	374,612				84,991		
Oil - CC	10,007	074,012				0-1,001		
Oil - Steam/CT	220	3,371	40.4.000			978	-	-
Gas - CC Gas - CHP			404,369		(243)		317,530	588,459
Gas - CT					(= :0)			
Gas - Steam			2.160			25,886		
Biogas Nuclear 100%			2,160	1,745,157			-	-
Hydro (Total System)				. ,				
Solar (Total System) Total	16,887	377,983	406,529	1,745,157	(243)	111,855	317,530	588,459
	.0,007	017,000	700,020	1,170,107	(270)	111,000	317,000	500,409
Cost of Reagents Consumed (\$)								
Ammonia		(\$183,864)	\$16,314			\$66,338	\$3,702	\$21,144
Limestone	\$25,696	303,305	ψ10,014			95,536	ΨΟ,1 02	Ψ = 1,1 T T
Sorbents	-	58,214						
Urea	4,616	_						
Re-emission Chemical		-						
Re-emission Chemical Dibasic Acid	-							
Dibasic Acid Activated Carbon	-							
Dibasic Acid	- - - 30,312	- \$177,655	\$16,314			\$161,875	\$3,702	\$21,144

(A) Clemson CHP fuel and fuel related costs represents pre-commercial generation.

Notes:

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 2019

Exhibit 6 Schedule 5 Page 2 of 2

Lee	Lincoln	Marshall	McGuire	Mill Creek	Oconee	Rockingham	Current Month	Total 12 ME December 2019
Steam/CT	СТ	Steam	Nuclear	СТ	Nuclear	СТ		
-	-	\$20,011,016 432,089		-		-	\$52,508,080 1,230,541 32,275,050	\$694,060,992 14,547,822 337,722,147
25,901 338	\$68,436			\$192,900		\$2,023,495	54,658 2,310,732 1,596,367	54,658 40,328,338 42,380,517
\$26,239	\$68,436	\$20,443,105		\$192,900		\$2,023,495	357,518 \$90,332,946	2,384,026 \$1,131,478,500
_	-	266.90 1,494.26		_		-	279.12 1,486.77	331.80 1,468.54
806.33	375.36	.,		348.46		354.79	346.85 388.57 357.07	338.43 388.57 331.44
689.92							355.82 2,336.72	359.19 1,927.92
806.37	375.36	271.62		348.46		354.79	308.11	338.70
-		\$21,915,155					\$35,851,930	\$688,831,904
90,169	\$7,968	354,592		157,369		-	1,258,516 32,275,050 54,658	14,686,684 337,722,147 54,658
\$25,901 338	68,436			\$192,900		\$2,023,495	2,310,732 1,596,367 357,518	40,328,338 42,380,517 2,384,026
\$116,408	\$76,404	\$22,269,748	\$10,463,884 \$10,463,884	\$350,270	\$9,943,647 \$9,943,647	\$2,023,495	30,749,966 \$104,454,736	364,625,765 \$1,491,014,039
		207.76					207.40	242.00
- 1,687.29	1,511.97	307.76 1,468.41		1,794.00		_	307.49 - 1,517.60	342.88 - 1,487.46
1,007.29	1,511.97	1,400.41		1,794.00		-	346.85 388.57	338.43 388.57
806.33 689.92	375.36			348.46		354.79	357.07 355.82	331.44 359.19
			59.52		58.32		2,336.72 59.05	1,927.92 59.06
1,353.90	407.29	311.69	59.52	546.19	58.32	354.79	140.70	158.08
-	-	2.99					2.97 -	3.29
74.78	31.02	14.62		24.66		-	16.18 2.46	15.00 2.40
29.97	9.22			4.71		3.91	6.27 4.08	3.66 3.80
	-						6.27 16.55	3.66 13.75
-	9.95	3.03	0.59 0.59	7.40	0.59 0.59	3.91	0.59 1.31	0.60 1.49
		7,120,799					11,659,643	200,898,297
- 5,344	527	24,148		8,772		_	11,039,043 - 82,928	987,366
0,011	02.	21,110		3,772			9,298,100 14,066	99,790,482 14,066
3,212 42	18,232			55,358		570,335	647,137 448,647	12,167,439 11,798,774
			17,579,448		17,048,868		15,300 52,072,844	123,658 617,400,818
8,598	18,759	7,144,947	17,579,448	64,130	17,048,868	570,335	74,238,665	943,180,900
		731,886					1,208,156	20,916,177
121 -	26	2,426		638		-	- 7,779 1,310,358	97,907 14,049,112
86 (415)	742			4,095		51,698	(243) 56,622 25,471	(243) 1,062,059 1,157,313
			1,771,567		1,687,079		2,160 5,203,803 171,008	17,335 61,066,543 1,713,885
(208)	768	734,312	1,771,567	4,733	1,687,079	51,698	8,911 7,994,025	142,127 100,222,215
		\$537,641					(\$76,367) 962,178	\$3,302,749 18,302,336
		168,388 40,024					226,602 44,639	2,001,326 590,744 284,446
		-					-	171,399
		11,061 \$757,113					11,061 \$1,168,113	277,536 \$24,930,536

(A) Clemson CHP fuel and fuel related costs represents pre-commercial generation.

Notes:

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 2019

DUKE ENERGY CAROLINAS FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT
DECEMBER 2019

Exhibit 6 Schedule 6

Description	A !!	Belews	D	(A)	01111	D 5'			12.	NA- ! "	NATIL CO.	D!!	Current	Total 12 ME
Description	Allen Steam	Creek Steam	Buck CC	Clemson CHP	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	Mill Creek CT	Rockingham CT	Month	December 2019
Coal Data:	Steam	Steam	00	OH	Steam - Duai i dei	00	00	Steam/C1	O1	Steam	O1	O1		
Beginning balance	137,735	789,951			414,459			-		484,089			1,826,234	1,799,939
Tons received during period	34,735	254,637			190,358					283,764			763,494	8,452,675
Inventory adjustments	(4,081)	0			(14,803)			-		24,397			5,514	4,123
Tons burned during period	10,271	143,490			29,561			-		284,097			467,419	8,128,914
Ending balance	158,118	901,099			560,453			-		508,153			2,127,823	2,127,823
MBTUs per ton burned	24.03	24.80			24.81			-		25.06			24.94	24.71
Cost of ending inventory (\$/ton)	75.85	76.34			74.56			-		77.58			76.13	76.13
Oil Data:														
Beginning balance	102,100	131,858	-		194,655	-	-	603,811	9,716,597	304,891	4,366,782	3,133,258	18,553,952	18,866,098
Gallons received during period	22,210	284,927	-		83,076	-	-	-	-	209,541	-	-	599,754	7,177,481
Miscellaneous adjustments	-	(15,752)	-		(6,298)	-	-	-	-	-	-	-	(21,788)	(348,465)
Gallons burned during period	19,946	225,569			74,062	-	-	38,747	3,802	174,735	63,729	-	600,852	7,164,048
Ending balance	104,364	175,464	-		197,371	-	-	565,064	9,712,795	339,697	4,303,053	3,133,258	18,531,066	18,531,066
Cost of ending inventory (\$/gal)	1.99	2.04	-		2.01	-	-	2.33	2.10	2.03	2.47	2.17	2.20	2.20
Natural Gas Data:														
Beginning balance														
MCF received during period			2,782,442	13,697	435,568	2,273,527	3,987,068	3,180	17,791		54,015	552,382	10,119,670	120,302,953
MCF burned during period			2,782,442	13,697	435,568	2,273,527	3,987,068	3,180	17,791		54,015	552,382	10,119,670	120,302,953
Ending balance														
Biogas Data:														
Beginning balance														
MCF received during period			14,866			-	-						14,866	119,928
MCF burned during period			14,866			-	-						14,866	119,928
Ending balance														
Limestone Data:														
Beginning balance	22,816	54,598			11,341					73,350			162,105	115,155
Tons received during period	-	6,490			24,491					12,544			43,525	494,449
Inventory adjustments	(2,613)	-			(3,593)					-			(6,206)	(6,206)
Tons consumed during period	499	6,988			1,881					14,137			23,505	427,479
Ending balance	19,704	54,100			30,357					71,757			175,919	175,919
Cost of ending inventory (\$/ton)	51.45	40.04			42.07					38.03			40.85	40.85
													Qtr Ending December 2019	Total 12 ME December 2019
Ammonia Data:													December 2019	December 2019
Beginning balance		1,189											1,189	1,644
Tons received during period		843											843	3,499
Tons consumed during period		627											627	3,738
Ending balance		1,405											1,405	1,405
Cost of ending inventory (\$/ton)		517.74											517.74	517.74

 ⁽A) Clemson CHP fuel and fuel related consumption represents precommercial activity.
 Notes:
 Detail amounts may not add to totals shown due to rounding.
 Schedule excludes in-transit and terminal activity.
 Gas is burned as received; therefore, inventory balances are not maintained.

DUKE ENERGY CAROLINAS ANALYSIS OF COAL PURCHASED DECEMBER 2019

STATION	ТҮРЕ	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ALLEN	SPOT	23,706	\$ 1,377,986	\$ 58.13
	CONTRACT	11,029	827,865	75.06
	FIXED TRANSPORTATION / ADJUSTMENTS		114,347	-
	TOTAL	34,735	2,320,199	75.69
BELEWS CREEK	SPOT	38,356	2,182,955	56.91
	CONTRACT	216,282	13,798,961	63.80
	FIXED TRANSPORTATION / ADJUSTMENTS	-	567,412	-
	TOTAL	254,637	16,549,328	64.99
CLIFFSIDE	SPOT	50,520	3,491,815	69.12
	CONTRACT	139,838	9,584,744	68.54
	FIXED TRANSPORTATION / ADJUSTMENTS	-	550,979	-
	TOTAL	190,358	13,627,538	77.63
MARSHALL	SPOT	89,954	5,627,671	62.56
	CONTRACT	193,810	13,360,215	68.93
	FIXED TRANSPORTATION / ADJUSTMENTS	-	1,023,130	-
	TOTAL	283,764	20,011,016	65.23
ALL PLANTS	SPOT CONTRACT FIXED TRANSPORTATION / ADJUSTMENTS TOTAL	202,536 560,959 - 763,494	12,680,427 37,571,785 2,255,868 \$ 52,508,080	62.61 66.98 - \$ 68.77

Exhibit 6

Schedule 8

DUKE ENERGY CAROLINAS ANALYSIS OF COAL QUALITY RECEIVED DECEMBER 2019

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ALLEN	6.58	12.60	12,118	0.88
BELEWS CREEK	7.02	10.00	12,471	1.64
CLIFFSIDE	10.18	9.40	12,021	1.91
MARSHALL	6.85	11.48	12,220	1.23

DUKE ENERGY CAROLINAS ANALYSIS OF OIL PURCHASED DECEMBER 2019

		ALLEN	BELE	WS CREEK	
VENDOR		HighTowers	Hi	ghTowers	
SPOT/CONTRACT		Contract	Contract		
SULFUR CONTENT %		0			
GALLONS RECEIVED		22,210		284,927	
TOTAL DELIVERED COST	\$	45,499	\$	583,901	
DELIVERED COST/GALLON	\$	2.05	\$	2.05	
BTU/GALLON		138,000		138,000	
		CLIFFSIDE	MARSHALL		
VENDOR		HighTowers	Hi	ghTowers	
SPOT/CONTRACT		Contract	(Contract	
SULFUR CONTENT %		0		0	
GALLONS RECEIVED		83,076		209,541	
TOTAL DELIVERED COST	\$	169,053	\$	432,089	
DELIVERED COST/GALLON	\$	2.03	\$	2.06	
BTU/GALLON		138,000		138,000	

North Carolina Annual Fuel and Fuel Related Expense Proposed Nuclear Capacity Factor Billing Period Sept 2020 through Aug 2021 Docket E-7, Sub 1228

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1		Oconee 2	Oconee 3	Total
MWhs	9,994,379	9,007,229	9,179,320	9,949,902	6,5	85,428	7,276,686	7,371,013	59,363,957
Cost (Gross of Joint Owners)	\$ 61,864,018	\$ 57,191,501		\$ 60,341,229		61,273	\$ 42,351,267		358,597,316
\$/MWh	6.1899	6.3495	5.8061	6.0645		6.2959	5.8201	5.7105	
Avg \$/MWh Cents per kWh		6.0407 0.6041							
			Sept 2020 - August 2021						
MDC			J						
CATA_UN01	Catawba	MW	1,160.1						
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						
			7,179.8	_					
Hours in month			8,760						
Generation GWHs									
CATA_UN01	Catawba	GWh	9,994						
CATA_UN02	Catawba	GWh	9,007						
MCGU_UN01	McGuire	GWh	9,179						
MCGU_UN02	McGuire	GWh	9,950						
OCON_UN01	Oconee	GWh	6,585						
OCON_UN02	Oconee	GWh	7,277						
OCON_UN03	Oconee	GWh	7,371						
			59,364	=					

94.39%

Proposed Nuclear Capacity Factor

North Carolina Annual Fuel and Fuel Related Expense NERC 5 Year Average Nuclear Capacity Factor Billing Period Sept 2020 through Aug 2021 Docket E-7, Sub 1228

	 Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs with NERC applied	9,281,389	9,201,384	9,264,588	9,261,388	6,833,562	6,841,630	6,930,378	57,614,320
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	91.33%	91.33%	91.33%	91.33%	92.10%	92.10%	92.10%	91.60%
Cost	\$ 56,065,691 \$	55,582,408 \$	55,964,202 \$	55,944,871	\$ 41,279,206 \$	41,327,942 \$	41,864,036	\$ 348,028,357

 Avg \$/MWh
 6.0407

 Cents per kWh
 0.6041

	Capacity	NCF	Weighted
2014-2018	Rating	Rating	Average
Oconee 1	847.0	92.10	10.87%
Oconee 2	848.0	92.10	10.88%
Oconee 3	859.0	92.10	11.02%
McGuire 1	1158.0	91.33	14.73%
McGuire 2	1157.6	91.33	14.73%
Catawba 1	1160.1	91.33	14.76%
Catawba 2	1150.1	91.33	14.63%
·	7179.8		91.60%

Wtd Avg on Capacity Rating

DUKE ENERGY CAROLINAS

McGee Workpaper 3

North Carolina Annual Fuel and Fuel Related Expense North Carolina Generation and Purchased Power in MWhs Billing Period Sept 2020 through Aug 2021 Docket E-7, Sub 1228

Resource Type	Sept 2020 - August 2021	
NUC Total (Gross)	59,363,957	
COAL Total Gas CT and CC total (Gross)	14,450,043 25,505,409	
Run of River	4,305,885	
Net pumped Storage	(3,219,894)	
Total Hydro	1,085,991	
Catawba Joint Owners	(14,848,200)	
Lee CC Joint Owners	(876,000)	
DEC owned solar	385,094	
Total Generation		85,066,294
Purchases for REPS Compliance	1,178,490	
Qualifying Facility Purchases - Non-REPS compliance	1,457,406	
Other Purchases Allocated Economic Purchases	55,260	
Joint Dispatch Purchases	281,308 5,314,338	
Joint Disputer Furchases	8,286,802	
Total Generation and Purchased Power	-,,	93,353,096
Fuel Recovered Through intersystem Sales	(1,024,819)	

McGee Revised Workpaper 4

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Projected Fuel and Fuel Related Costs

Billing Period Sept 2020 through Aug 2021

Docket E-7, Sub 1228

Resource Type	Sept 2020 - August 2021	_
Nuclear Total (Gross)	\$ 358,597,316	
COAL Total	394,529,148	
Gas CT and CC total (Gross)	583,236,234	
Catawba Joint Owner costs	(89,710,135)	
CC Joint Owner costs	(16,315,588)	
Non-Economic Fuel Expense Recovered through Reimbursement	(20,370,677)	
Reagents and gain/loss on sale of By-Products	21,603,715	Workpaper 9
Purchases for REPS Compliance - Energy	63,001,495	
Purchases for REPS Compliance Capacity	13,122,631	
Purchases of Qualifying Facilities - Energy	56,445,045	
Purchases of Qualifying Facilities - Capacity	12,285,396	
Other Purchases	1,628,569	
JDA Savings Shared	14,281,717	Workpaper 5
Allocated Economic Purchase cost	7,049,441	Workpaper 5
Joint Dispatch purchases	 105,078,276	_ Workpaper 6
Total Purchases	272,892,569	_
Fuel Expense recovered through intersystem sales	(21,248,787)	Workpaper 5
Total System Fuel and Fuel Related Costs	\$ 1,483,213,795	

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Projected Joint Dispatch Fuel Impacts

Billing Period Sept 2020 through Aug 2021

Docket E-7, Sub 1228

Positive numbers represent costs to Rate Payers, Negative numbers represent removal of costs to ratepayers

	Allocated Economic	Purc	chase Cost	Economic Sales Cost			es Cost	Fuel Transfer Payment					JDA Savings Payment			
	DEP		DEC		DEP		DEC		DEP		DEC	DEP			DEC	
9/1/2020	\$ 150,586	\$	218,086	\$	(186,875)	\$	(1,877)	\$	(11,497,078)	\$	11,497,078	\$	(1,975,776)	\$	1,975,776	
10/1/2020	\$ 265,863	\$	393,719	\$	(14,356)	\$	(18,503)	\$	(12,216,995)	\$	12,216,995	\$	(4,360,326)	\$	4,360,326	
11/1/2020	\$ 240,709	\$	352,454	\$	(113,164)	\$	(144,187)	\$	(9,859,588)	\$	9,859,588	\$	(1,221,763)	\$	1,221,763	
12/1/2020	\$ 305,584	\$	439,721	\$	(344,748)	\$	(156,339)	\$	(6,964,610)	\$	6,964,610	\$	(728,229)	\$	728,229	
1/1/2021	\$ 555,450	\$	797,270	\$	(2,223,855)	\$	(5,361,748)	\$	(1,671,260)	\$	1,671,260	\$	438,172	\$	(438,172)	
2/1/2021	\$ 276,329	\$	404,845	\$	(1,175,462)	\$	(2,653,321)	\$	(1,478,925)	\$	1,478,925	\$	252,213	\$	(252,213)	
3/1/2021	\$ 115,648	\$	173,267	\$	(267,648)	\$	(249,022)	\$	(4,669,706)	\$	4,669,706	\$	(519,291)	\$	519,291	
4/1/2021	\$ 322,509	\$	493,555	\$	(59,771)	\$	(13,472)	\$	(9,219,652)	\$	9,219,652	\$	(2,086,290)	\$	2,086,290	
5/1/2021	\$ 259,850	\$	377,118	\$	(169,035)	\$	(150,799)	\$	(3,269,361)	\$	3,269,361	\$	(246,015)	\$	246,015	
6/1/2021	\$ 477,664	\$	655,788	\$	(147,998)	\$	(159,459)	\$	(7,563,783)	\$	7,563,783	\$	(808,172)	\$	808,172	
7/1/2021	\$ 703,253	\$	985,552	\$	(337,183)	\$	(358,756)	\$	(12,505,842)	\$	12,505,842	\$	(1,506,194)	\$	1,506,194	
8/1/2021	\$ 1,218,853	\$	1,758,065	\$	(148,196)	\$	(46,457)	\$	(12,226,627)	\$	12,226,627	\$	(1,520,045)	\$	1,520,045	

Sept 20 - Aug 21 \$ 7,049,441 \$ (9,313,939) \$

93,143,428 \$ 14,281,717

^{\$ 105,078,276} Workpaper 6 - Transfer - Purchases

^{\$ (11,934,848)} Workpaper 6 - Transfer - Sales

^{\$ 93,143,428} Sept 20-Aug 21 Net Fuel Transfer Payment

^{\$ (11,934,848)} Workpaper 6 - Transfer - Sales

^{\$ (9,313,939)} Sept 20-Aug 21 Economic Sales Cost

^{\$ (21,248,787)} Total Fuel expense recovered through intersystem sales

North Carolina Annual Fuel and Fuel Related Expense Projected Merger Payments Billing Period Sept 2020 through Aug 2021 Docket E-7, Sub 1228

					purchase sale						sale		purchase	
	Transfer P	rojection	Purchase Alloc	ation Delta	Adjusted Tra	ansfer	Fossil Gen Cost			ost	Pre-Net F	ayr	nents	
	PECtoDEC	DECtoPEC	PEC	DEC	PECtoDEC	ECtoDEC DECtoPEC		PEC		DEC	PECtoDEC		DECtoPEC	
9/1/2020	601,189	4,198	4,350	(4,350)	605,539	4,198	\$	19.08	\$	13.30	\$ 55,829	\$	11,552,907	
10/1/2020	653,593	3,556	7,218	(7,218)	660,811	3,556	\$	18.56	\$	13.50	\$ 47,994	\$	12,264,989	
11/1/2020	530,630	18,110	2,987	(2,987)	533,617	18,110	\$	18.88	\$	11.80	\$ 213,758	\$	10,073,345	
12/1/2020	400,257	109,359	(5,683)	5,683	400,257	115,042	\$	21.51	\$	14.30	\$ 1,644,589	\$	8,609,199	
1/1/2021	166,669	137,750	(8,797)	8,797	166,669	146,548	\$	22.43	\$	14.10	\$ 2,066,735	\$	3,737,995	
2/1/2021	154,232	132,870	(8,082)	8,082	154,232	140,952	\$	22.08	\$	13.67	\$ 1,926,765	\$	3,405,690	
3/1/2021	311,996	93,958	(2,597)	2,597	311,996	96,555	\$	18.94	\$	12.85	\$ 1,240,748	\$	5,910,454	
4/1/2021	557,710	41,790	(4,430)	4,430	557,710	46,219	\$	17.89	\$	16.43	\$ 759,226	\$	9,978,878	
5/1/2021	304,500	124,561	(7,146)	7,146	304,500	131,707	\$	17.27	\$	15.11	\$ 1,989,875	\$	5,259,237	
6/1/2021	442,810	81,622	3,624	(3,624)	446,434	81,622	\$	19.72	\$	15.21	\$ 1,241,824	\$	8,805,608	
7/1/2021	576,231	29,031	13,298	(13,298)	589,529	29,031	\$	22.01	\$	16.18	\$ 469,663	\$	12,975,505	
8/1/2021	549,883	17,473	33,160	(33,160)	583,043	17,473	\$	21.45	\$	15.90	\$ 277,841	\$	12,504,469	
Sept 20 - Aug 21	5,249,701	794,279	27,902	(27,902)	5,314,338	831,014					\$ 11,934,848	\$	105,078,276	

Net Pre-Net Payments \$ 93,143,428

rounding differences may occur

McGee Revised Workpaper 7

Remove impact of

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Projected and Adjusted Projected Sales and Costs

Proposed Nuclear Capacity Factor of 94.39%

Billing Period Sept 2020 through Aug 2021

Docket E-7, Sub 1228

Fall 2019 Forecast Billed Sales Forecast Sales Forecast - MWhs (000)

			remove impact of	
		Projected sales	SC DERP Net	
		for the Billing	Metered	
	-	Period	generation	Adjusted Sales
North Carolina:				
	Residential	22,067,951		22,067,951
	General	23,677,896		23,677,896
	Industrial	12,441,023		12,441,023
	Lighting	273,219		273,219
	NC RETAIL	58,460,089	-	58,460,089
South Carolina:				
	Residential	6,628,994	90,021	6,719,015
	General	5,939,271	71,593	6,010,863
	Industrial	9,134,820	514	9,135,334
	Lighting	45,590	-	45,590
	SC RETAIL	21,748,675	162,127	21,910,802
Total Retail Sales				
	Residential	28,696,946	90,021	28,786,966
	General	29,617,166	71,593	29,688,759
	Industrial	21,575,843	514	21,576,357
	Lighting	318,809	-	318,809
	Retail Sales	80,208,764	162,127	80,370,891
	Wholesale	8,174,475	-	8,174,475
	Projected System MWH Sales for Fuel Factor	88,383,239	162,127	88,545,366
	NC as a percentage of total	66.14%		66.02%
	SC as a percentage of total	24.61%		24.75%
	Wholesale as a percentage of total	9.25%		9.23%
		100.00%		100.00%
	SC Net Metering allocation adjustment			
	Total projected SC NEM MWhs		162,127	
	Marginal fuel rate per MWh for SC NEM		\$ 32.53	
	Fuel benefit to be directly assigned to SC Retail		\$ 5,273,991	
	raci benefit to be affectly assigned to se Netali		φ 3,273,331	
	System Fuel Expense	,	\$ 1 <u>4</u> 83 213 705	McGee Exhibit 2 Schdule 1 Page
	Fuel benefit to be directly assigned to SC Retail		\$ 5,273,991	modec Exhibit 2 Schadic 11 age
	Total Fuel Costs for Allocation	-		McGee Exhibit 2 Schdule 1 Page

			NC Retail			South Car	olina
Reconciliation	System		Customers		Wholesale	Retai	
Total system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	\$ 1,483,213,795						
QF and REPS Compliance Purchased Power - Capacity	\$ 25,408,027	·					
Other fuel costs	\$ 1,457,805,768						
SC Net Metering Fuel Allocation adjustment	\$ 5,273,992	·					
Jurisdictional fuel costs after adj. Exh2,Sch1,p3,L7	\$ 1,463,079,759)					
Allocation to states/classes			66.02%		9.23%	2	4.75%
Jurisdictional fuel costs	\$ 1,463,079,759	\$	965,925,257	\$	135,042,262	\$ 362,11	2,240
Direct Assignment of Fuel benefit to SC Retail	\$ (5,273,992	.)		\$	-	\$ (5,27	3,991)
Total system actual fuel costs	\$ 1,457,805,768	\$	965,925,257	\$	135,042,262	\$ 356,83	8,249
QF and REPS Compliance Purchased Power - Capacity	25,408,027	'	17,162,430	_			
otal system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	\$ 1,483,213,795	\$	983,087,687				
		Ex	kh.2, Sch. 1 page	3, Li	ne 13		

DUKE ENERGY CAROLINAS McGee Revised Workpaper 7a

North Carolina Annual Fuel and Fuel Related Expense **Projected and Adjusted Projected Sales and Costs Proposed Nuclear Capacity Factor of 94.39% and Normalized Test Period Sales** Billing Period Sept 2020 through Aug 2021 Docket E-7, Sub 1228

Fall 2019 Forecast **Billed Sales Forecast - Normalized Test Period Sales** Sales Forecast - MWhs (000)

North Carolina:

South Carolina:

	(Test Period Sales	Customer Growth Adjustment	Weather Adjustment	Remove impact of SC DERP Net Metered generation	Normalized Test Period Sales
	reservenou suies	/ tajastilielle	Weather Adjustment	generation	r eriou ouico
NC RETAIL	58,642,521	296,714	(316,696)	-	58,622,539
SC RETAIL	21,466,517	86,091	4,841	162,127	21,719,576
Wholesale	7,802,295	72,243	76,245	-	7,950,783
Normalized System MWH Sales for Fuel Factor	87,911,333	455,048	(235,610)	162,127	88,292,898
NC as a percentage of total	66.71%				66.40%
SC as a percentage of total	24.42%				24.60%
Wholesale as a percentage of total	8.88%				9.01%
	100.00%			_	100.01%
SC Net Metering allocation adjustment					
Total projected SC NEM MWhs		162,127			
Marginal fuel rate per MWh for SC NEM	_	\$ 32.53	_		
Fuel benefit to be directly assigned to SC Retail		\$ 5,273,991			
System Fuel Expense Fuel benefit to be directly assigned to SC Retai		\$ 1,476,320,673 \$ 5,273,991	McGee Exhibit 2 Schedu	ule 2 Page 1 of 3	
Total Fuel Costs for Allocation	<u>-</u>	\$ 1,481,594,665	McGee Exhibit 2 Schedu	ıle 2 Page 3 of 3, L5	

Reconciliation	System	NC Retail Customers		Wholesale	South Carolina Retail
Total system fuel expense from McGee Exhibit 2 Schedule 2 Page 1	\$ 1,476,320,673				
QF and REPS Compliance Purchased Power - Capacity	\$ 25,408,027	_			
Other fuel costs	\$ 1,450,912,646	_			
SC Net Metering Fuel Allocation adjustment	\$ 5,273,991	_			
Jurisdictional fuel costs after adj. Exh2,Sch2,p3,L7	\$ 1,456,186,638	_			
Allocation to states/classes		66.40%	6	9.01%	24.60%
Jurisdictional fuel costs	\$ 1,456,186,638	\$ 966,907,927	\$	131,202,416	\$ 358,221,913
Direct Assignment of Fuel benefit to SC Retail	\$ (5,273,991)		\$	-	\$ (5,273,991)
Total system actual fuel costs	\$ 1,450,912,646	\$ 966,907,927	\$	131,202,416	\$ 352,947,922
QF and REPS Compliance Purchased Power - Capacity	25,408,027	17,162,430	_		
Total system fuel expense from McGee Exhibit 2 Schedule 2 Page 1	\$ 1,476,320,673	\$ 984,070,357			
		Exh. 2, Sch 2 page 3,	Line 13		

McGee Revised Workpaper 7b

Remove impact of

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Projected and Adjusted Projected Sales and Costs

NERC 5 Year Average Nuclear Capacity Factor of 91.60%

Billing Period Sept 2020 through Aug 2021

Docket E-7, Sub 1228

Fall 2019 Forecast
Billed Sales Forecast
Sales Forecast - MWhs (000)

		•	remove impact of	
		Projected sales	SC DERP Net	
		for the Billing	Metered	
		Period	generation	Adjusted Sales
rth Carolina:				
Till Cal Omia.	Residential	22,067,951		22,067,951
	General	23,677,896		23,677,896
	Industrial	12,441,023		12,441,023
	Lighting	273,219		273,219
	NC RETAIL	58,460,089	-	58,460,089
ıth Carolina:				
itii Caroiiiia.	Residential	6,628,994	90,021	6,719,015
	General	5,939,271	71,593	6,010,863
	Industrial	9,134,820	514	9,135,334
	Lighting	45,590	0	45,590
	SC RETAIL	21,748,675	162,127	21,910,802
al Retail Sales				
ai Retail Sales	Residential	28,696,946	90,021	28,786,966
	General	29,617,166	71,593	29,688,759
	Industrial	21,575,843	514	21,576,357
	Lighting	318,809	-	318,809
	Retail Sales	80,208,764	162,127	80,370,891
	Wholesale	8,174,475	-	8,174,475
	Projected System MWh Sales for Fuel Factor	88,383,239	162,127	88,545,366
	NC as a percentage of total	66.14%		66.02%
	SC as a percentage of total	24.61%		24.75%
	Wholesale as a percentage of total	9.25%		9.23%
	,	100.00%	•	100.00%
	SC Net Metering allocation adjustment			
	Total projected SC NEM MWhs		162,127	
	Marginal fuel rate per MWh for SC NEM		\$ 32.53	
	Fuel benefit to be directly assigned to SC Retail	-	\$ 5,273,998	
	System Eugl Expense		¢ 1 511 110 002	McGee Exhibit 2 Schedule 3 Page 1 of 3
				Micoee Exhibit 2 Schedule 3 Fage 1 01 3
		_		McGoo Evhibit 2 Schodulo 2 Bago 2 of 1
	System Fuel Expense Fuel benefit to be directly assigned to SC Retail Total Fuel Costs for Allocation	_	\$ 5,273,998	McGee Exhibit 2 Schedule 3

Reconciliation		System		N	C Retail Customers	Wholesale	Soi	uth Carolina Retail
Total system fuel expense from McGee Exhibit 2 Schedule 3 Page 1		\$ 1,511,110	,802					
QF and REPS Compliance Purchased Power - Capacity		\$ 25,408	,027					
Other fuel costs		\$ 1,485,702	,775					
SC Net Metering Fuel Allocation adjustment		\$ 5,273	,998					
Jurisdictional fuel costs after adj.	xh2,Sch3,p3,L7	\$ 1,490,976	,773					
Allocation to states/classes					66.02%	9.23	%	24.75%
Jurisdictional fuel costs		\$ 1,490,976	,773	\$	984,342,865	137,617,156	; \$	369,016,751
Direct Assignment of Fuel benefit to SC Retail		\$ (5,273	,998)		(-	\$	(5,273,998)
Total system actual fuel costs		\$ 1,485,702	,775	\$	984,342,865	137,617,156	; \$	363,742,754
QF and REPS Compliance Purchased Power - Capacity		25,408	,027		17,162,430			
Total system fuel expense from McGee Exhibit 2 Schedule 3 Page 1		\$ 1,511,110	,802	\$	1,001,505,295	_	_	
				Ex	h. 2, Sch.3 page 3, Line	e 13		

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Annualized Revenue

Billing Period Sept 2020 through Aug 2021

Docket E-7, Sub 1228

McGee Workpaper 8

January 2020 Actuals Normalized Sales

	Revenue	KWH Sales	Cents/ kwh	McGee EX 4	Total Annualized Revenues
	(a)	(b)	(a) / (b) *100 = (c)	(d)	(c) * (d) * 10
Residential	\$ 205,510,334.69	2,021,126,178	10.1681	22,444,481	\$ 2,282,179,536
General	\$ 144,495,008.55	1,919,161,419	7.5291	23,688,550	\$ 1,783,527,535
Industrial	\$ 48,720,309.60	858,762,556	5.6733	12,489,508	\$ 708,569,199
Total	\$ 398,725,652.84	4,799,050,153	-	58,622,539	\$ 4,774,276,270

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Projected Reagents and ByProducts

Billing Period Sept 2020 through Aug 2021

Docket E-7, Sub 1228

Reagent and ByProduct projections

											(Gain	/Loss or	sale of By	-Products	_	
				Magnesium			Lime-	Water		Gyp	sum (Gain)/				Sa	ale of By-Products
Date	Ammonia	Urea	Limestone	hydroxide	Calcium Ca	arbonate	Emis	sions	Reagent Cost		Loss	Ash (G	iain)/Loss	Steam (Gain)/Los	S	(Gain)/Loss
9/1/2020 \$	233,500 \$	40,858 \$	1,291,541 \$	173,825	\$	89,742	\$	59,960	\$ 1,889,426	\$	358,811	\$	(33,145)	\$ (157,337	') \$	168,329
10/1/2020 \$	188,501 \$	32,984 \$	1,042,637 \$	71,908	\$	42,872	\$	59,960	\$ 1,438,861	\$	290,184	\$	(13,557)	\$ (157,294) \$	119,332
11/1/2020 \$	198,004 \$	34,647 \$	1,095,204 \$	137,550	\$	71,592	\$	59,960	\$ 1,596,957	\$	355,932	\$	(73,420)	\$ (157,256	s) \$	125,255
12/1/2020 \$	261,216 \$	45,708 \$	1,444,841 \$	228,479	\$	110,121	\$	59,960	\$ 2,150,324	\$	509,662	\$	(174,818)	\$ (157,235	5) \$	177,610
1/1/2021 \$	419,456 \$	73,397 \$	2,320,102 \$	333,985	\$	162,393	\$	59,960	\$ 3,369,293	\$	761,396	\$	(243,098)	\$ (157,272	2) \$	361,026
2/1/2021 \$	410,928 \$	71,904 \$	2,272,930 \$	333,052	\$	162,346	\$	59,960	\$ 3,311,120	\$	726,826	\$	(224,855)	\$ (157,342	2) \$	344,628
3/1/2021 \$	211,172 \$	36,951 \$	1,168,035 \$	232,231	\$	105,236	\$	59,960	\$ 1,813,585	\$	444,465	\$	(184,558)	\$ (157,488	3) \$	102,420
4/1/2021 \$	49,963 \$	8,743 \$	276,356 \$	210,962	\$	99,191	\$	59,960	\$ 705,175	\$	85,702	\$	(24,859)	\$ (157,692	2) \$	(96,849)
5/1/2021 \$	36,003 \$	6,300 \$	199,141 \$	188,716	\$	90,692	\$	59,960	\$ 580,811	\$	51,459	\$	(9,663)	\$ (157,977	') \$	(116,181)
6/1/2021 \$	63,789 \$	11,162 \$	352,832 \$	282,721	\$	137,281	\$	59,960	\$ 907,746	\$	104,580	\$	(30,245)	\$ (158,327	') \$	(83,991)
7/1/2021 \$	123,135 \$	21,546 \$	681,086 \$	340,068	\$	167,985	\$	59,960	\$ 1,393,781	\$	208,096	\$	(57,134)	\$ (154,664	\$	(3,702)
8/1/2021 \$	120,576 \$	21,098 \$	666,931 \$	324,557	\$	162,092	\$	59,960	\$ 1,355,215	\$	205,966	\$	(57,385)	\$ (155,036	5) \$	(6,455)
\$	2,316,243 \$	405,298 \$	12,811,635 \$	2,858,054	\$ 1,	,401,545	\$	719,520	\$ 20,512,295	\$	4,103,079	\$	(1,126,738)	\$ (1,884,922	L) \$	1,091,421

Total Reagent cost and Sale of By-products \$ 21,603,715 rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test
Twelve Months Ended December 31, 2019
Billing Period Sept 2020 through Aug 2021
Docket E-7, Sub 1228

Line No.	Description	Forecast \$	(over)/under Collection \$	Total \$
1	1 Amount in current docket	101,750,258	1,617,020	103,367,278
2	2 Amount in Sub 1190, prior year docket	107,380,554	72,488,427	179,868,981
3	3 Increase/(Decrease)	(5,630,296)	(70,871,406)	(76,501,702)
4	2.5% of 2019 NC retail revenue of \$4,869,968,814			121,749,220
	Excess of purchased power growth over 2.5% of Revenue			0
	E-7 Sub 1228			
WP 4	Purchases for REPS Compliance - Energy	63,001,495	66.02%	41,593,587
WP 4	Purchases for REPS Compliance Capacity	13,122,631	67.55%	8,863,980
WP 4	Purchases	1,628,569	66.02%	1,075,181
WP 4	QF Energy	56,445,045	66.02%	37,265,019
WP 4	QF Capacity	12,285,396	67.55%	8,298,450
WP 4	Allocated Economic Purchase cost	7,049,441	66.02%	4,654,041
		153,532,577		101,750,258
	E-7 Sub 1190			
	Purchases for REPS Compliance	63,867,566	66.16%	42,254,782
	Purchases for REPS Compliance Capacity	13,295,654	67.04%	8,912,938
	Purchases	2,029,948	66.16%	1,343,014
	QF Energy	58,754,197	66.16%	38,871,777
	QF Capacity	14,874,084	67.04%	9,971,063
	Allocated Economic Purchase cost	9,109,705	66.16%	6,026,981
		161,931,154		107,380,554

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test

Twelve Months Ended December 31, 2019

Docket E-7, Sub 1228

2019 System KWH Sales - Sch 4, Adjusted NC Retail KWH Sales - Sch 4 NC Retail % of Sales, Adjusted (Calc)		Feb19 7,430,788,664 5,026,972,376 67.65%	Mar19 6,521,808,145 4,366,363,694 66.95%	Apr19 6,367,436,322 4,263,829,687 66.96%	May19 6,726,545,218 4,421,389,704 65.73%	June 19 7,552,455,357 5,029,188,554 66.59%		Aug19 8,548,800,472 5,710,820,956 66.80%	Sep19 8,292,133,918 5,512,226,874 66.48%	Oct19 7,019,132,212 4,692,561,973 66.85%	Nov19 6,533,297,016 4,299,808,753 65.81%	Dec19 7,161,497,356 4,774,119,609 66.66%	12 ME 88,041,044,005 58,642,521,099 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\$: System Actual \$ - Sch 3 Fuel-related\$; Economic Purchases System Actual \$ - Sch 3 Fuel-related\$; Purchased Power for REPS Compliance System Actual\$ - Sch 3 Fuel-related\$; SC DERP System Acutal \$ - Sch 3 Fuel-related\$; HB589 purpa Purchases	\$ 23,687,311 \$ 10,050,079 3,283,437 102 1,367,422	57,492,154 26,532,896 4,116,642 14,377 1,711,969	\$ 14,514,026 2,706,430 3,779,240 8,659 1,557,910	\$ 14,125,368 \$ 4,264,779 5,137,202 21,097 2,135,075	908,542 5,251,425 25,363 2,259,422	7,986,019 5 640,701 5,598,653 30,158 2,837,912	\$ 9,392,534 \$ 1,230,088 5,193,633 22,270 2,660,982	7,209,102 1,129,642 5,586,738 26,481 2,749,375	\$ 18,620,321 1,974,692 5,216,879 26,351 2,583,768	\$ 13,793,051 \$ 1,539,252 4,899,454 26,014 2,605,902	15,085,734 \$ 2,340,043 4,069,122 17,072 2,204,650	2,634,380 \$ 3,963,969 \$ 15,590 \$ 2,090,407 \$	206,024,843 55,951,524 56,096,394 233,534 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
<u>Less:</u> 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 \$	5 7,189,539 \$	7,518,465 \$	6,930,015 \$	6,470,063 \$	7,142,370 \$	7,395,049 \$	106,069,779
Billed rate (¢/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	5 751,041 \$	\$ 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 System Actual \$ - Capacity component of Purchased Power for REPS Compliance System Actual \$ - Capacity component of HB589 Purpa QF purchases System Actual \$ - Capacity component of SC DERP	\$ 426,732 \$ 608,844 240,541 32	426,732 \$ 738,655 314,914 4,343	747,764 229,175 4,209	827,415 301,405 5,850	320,050 \$ 781,129 216,488 3,530	1,386,879 \$ 817,587 298,037 4,199	3,200,490 \$ 2,308,343 1,151,852 3,177	3,200,490 \$ 2,605,889 1,312,758 3,738	2,449,375 1,272,900 3,716	2,179,103 1,184,456 3,670	611,944 259,220 2,375	591,922 \$ 187,603 \$ 2,168 \$	10,668,301 15,267,970 6,969,349 41,006
System Actual \$ - Sch 2 pg 1 ANNUAL VIEW	\$ 1,276,149 \$	1,484,644	5 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 (¢/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) \$	5 (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	5 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.

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test

Twelve Months Ended December 31, 2018

Docket E-7, Sub 1228

2018 System KWH Sales - Sch 4, Adjusted NC Retail KWH Sales - Sch 4 NC Retail % of Sales, Adjusted (Calc)	Jan18 8,703,429,931 5,733,819,698 65.88%	Feb18 7,459,691,118 5,031,181,342 67.44%	Mar18 6,449,998,012 4,190,094,169 64.96%	Apr18 6,590,329,093 4,416,566,036 67.02%	May18 6,591,233,338 4,252,750,024 64.52%	June 18 8,009,317,385 5,245,688,511 65.49%	Jul18 8,486,873,480 5,639,360,853 66.45%	Aug18 8,267,869,991 5,409,821,248 65.43%	Sep18 9,507,963,860 6,212,763,717 65.34%	Oct18 6,345,056,567 4,141,211,581 65.27%	Nov18 6,681,164,890 4,314,713,247 64.58%	Dec18 7,500,839,324 4,892,732,160 65.23%	12 ME 90,593,766,989 59,480,702,586 65.66%
NC retail production plant %	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%	67.56%
Fuel and Fuel related component of purchased power													
System Actual \$ - Sch 3 Fuel\$: System Actual \$ - Sch 3 Fuel-related\$; Economic Purchases System Actual \$ - Sch 3 Fuel-related\$; Purchased Power for REPS Compliance System Actual\$ - Sch 3 Fuel-related\$; SC DERP System Acutal \$ - Sch 3 Fuel-related\$; HB589 purpa Purchases	\$ 54,851,829 18,300,781 3,057,332 122 1,692,902	19,768,561 2,407,886 3,239,022 125 2,049,413	\$ 11,751,953 1,331,655 2,726,561 134 2,053,505	\$ 8,971,622 \$ 1,356,382 3,894,992 163 2,531,173	7,588,225 \$ 1,684,418 4,543,762 218 2,424,811	7,853,735 1,881,586 4,545,750 223 2,829,385	\$ 25,151,873 2,920,154 4,893,476 232 2,716,750	\$ 24,971,461 3,759,304 4,813,048 223 2,487,659	\$ 21,908,434 \$ 6,703,809 4,818,507 213 2,471,326	27,821,901 \$ 4,827,502 3,635,758 203 2,042,872	26,826,328 \$ 6,105,374 4,331,202 157 2,089,973	40,057,563 \$ 13,849,586 \$ 3,811,118 \$ 136 \$ 1,712,356 \$	277,523,485 65,128,437 48,310,528 2,149 27,102,125
Total System Economic & QF\$	77,902,966	27,465,007	17,863,808	16,754,332	16,241,434	17,110,679	35,682,485	36,031,695	35,902,289	38,328,236	39,353,034	59,430,759	418,066,724
<u>Less:</u> Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	\$ 30,897,067	\$ 15,346,230	\$ 7,372,650	\$ 7,540,311 \$	5,735,851	6,332,102	\$ 23,572,626	\$ 21,641,030	\$ 15,422,513 \$	3 23,414,464 \$	20,577,089	5 28,953,467 \$	206,805,400
Total System Economic \$ without Native Load Transfers	\$ 47,005,899 \$	12,118,777 \$	5 10,491,158 \$	9,214,021 \$	10,505,583 \$	10,778,577	\$ 12,109,859 \$	14,390,665	\$ 20,479,776 \$	14,913,772 \$	18,775,945 \$	30,477,292 \$	211,261,324
NC Actual \$ (Calc)	\$ 30,967,487 \$	8,173,497 \$	6,815,342	6,174,856 \$	6,778,340 \$	7,059,410	\$ 8,046,764 \$	9,416,080	\$ 13,382,046 \$	9,733,733 \$	12,125,553 \$	19,880,072 \$	138,553,178
Billed rate (¢/kWh):	0.0868	0.0868	0.0868	0.0868	0.0868	0.0868	0.0868	0.0868	0.1631	0.1921	0.1922	0.1922	
Billed \$:	\$ 4,979,550 \$	4,369,342 \$	3,638,897	3,835,577 \$	3,693,311 \$	4,555,631	\$ 4,897,517 \$	4,698,172	\$ 10,132,031 \$	7,954,367 \$	8,291,468 \$	9,402,231 \$	70,448,093
(Over)/ Under \$:	\$ 25,987,937 \$	3,804,155 \$	5 3,176,444 S	5 2,339,278 \$	3,085,029 \$	2,503,779	\$ 3,149,247 \$	4,717,908	\$ 3,250,015 \$	1,779,366 \$	3,834,085 \$	10,477,841 \$	68,105,086
Capacity component of purchased power													
System Actual \$ - Capacity component of Cherokee County Cogen Purchases System Actual \$ - Capacity component of Purchased Power for REPS Compliance System Actual \$ - Capacity component of HB589 Purpa QF purchases System Actual \$ - Capacity component of SC DERP	\$ 422,948 \$ 486,469 316,410 57	422,948 \$ 465,590 362,951 37	211,474 S 421,064 415,622 64	211,474 \$ 517,448 397,922 28	317,211 \$ 539,749 232,512 13	1,374,581 5 567,326 271,686 21	\$ 3,172,110 \$ 2,279,476 1,225,424 78	3,116,270 2,238,065 1,199,461 84	\$ 630,852 \$ 2,451,979 1,251,154 72	211,474 \$ 1,649,703 924,601 79	211,474 \$ 659,013 242,932 19	211,474 \$ 594,902 \$ 159,399 \$ 13 \$	10,514,290 12,870,784 7,000,074 565
System Actual \$ - Sch 2 pg 1 ANNUAL VIEW	\$ 1,225,884 \$	1,251,526	5 1,048,224	\$ 1,126,872 \$	1,089,485 \$	2,213,614	\$ 6,677,088 \$	6,553,880	\$ 4,334,057 \$	2,785,857 \$	1,113,438 \$	965,788 \$	30,385,713
NC Actual \$ (Calc) (1)	\$ 828,210 \$	845,534 \$	708,183	5 761,317 \$	736,059 \$	1,495,523	\$ 4,511,056 \$	4,427,817	\$ 2,928,099 \$	1,882,131 \$	752,241 \$	652,488 \$	20,528,657
Billed rate (¢/kWh):	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0289	0.0353	0.0353	0.0353	
Billed \$:	\$ 1,383,962 \$	1,214,368	5 1,011,356 S	1,066,019 \$	1,026,479 \$	1,266,143	\$ 1,361,163 \$	1,305,759	\$ 1,795,614 \$	1,462,023 \$	1,524,125 \$	1,728,304 \$	16,145,316
(Over)/Under \$:	\$ (555,752) \$	(368,834) \$	(303,173)	\$ (304,702) \$	(290,420) \$	229,380	\$ 3,149,893 \$	3,122,057	\$ 1,132,485 \$	420,108 \$	(771,884) \$	(1,075,816) \$	4,383,341
TOTAL (Over)/ Under \$:	\$ 25,432,185 \$	3,435,322 \$	2,873,271	5 2,034,577 \$	2,794,608 \$	2,733,159	\$ 6,299,140 \$	7,839,965	\$ 4,382,500 \$	2,199,474 \$	3,062,201 \$	9,402,025 \$	72,488,427

North Carolina Annual Fuel and Fuel Related Expense Actual Sales by Jursidication - Subject to Weather Twelve Months Ended December 31, 2019 Docket E-7, Sub 1228 MWhs

Line			NORTH	SOUTH	Retail TOTAL		
<u>#</u>	<u>Description</u>	<u>Reference</u>	<u>CAROLINA</u>	<u>CAROLINA</u>	COMPANY	<u>% NC</u>	<u>% SC</u>
1	Residential	Company Records	22,091,823	6,769,118	28,860,942	76.55	23.45
2	Total General Service	Company Records	24,259,901	5,688,279	29,948,180		
3	less Lighting and Traffic Signals		272,655	47,509	320,164		
4	General Service subject to weather	_	23,987,245	5,640,770	29,628,016	80.96	19.04
5	Industrial	Company Records	12,290,797	9,009,119	21,299,916	57.70	42.30
6	Total Retail Sales	1+2+5	58,642,521	21,466,517	80,109,038		
7	Total Retail Sales subject to weather	1+4+5	58,369,866	21,419,008	79,788,874	73.16	26.84

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

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense Weather Normalization Adjustment Twelve Months Ended December 31, 2019 Docket E-7, Sub 1228

			Total	NC	RETAIL	SC	RETAIL
Line			Company	% To		% To	_
#	Description	REFERENCE	MWh	Total	MWh	Total	MWh
	Residential						
1	Total Residential		219,018	76.55	167,658	23.45	51,360
	General Service						
2	Total General Service		(765,439)	80.96	(619,699)	19.04	(145,740)
	In decaded						
	<u>Industrial</u>						
3	Total Industrial		234,566	57.70	135,345	42.30	99,221
	Taral Barad	14.12.12	(244.055)		(24.6.606)		4.044
4	Total Retail	L1+ L2+ L3	(311,855)		(316,696)		4,841
5	Wholesale		76,245				
J	vviiolesale		70,243				
6	Total Company	L4 + L5	(235,610)		(316,696)		4,841
	• •			_	, , ,	_	

	Residential	Commercial	Industrial
	TOTAL MWH	TOTAL MWH	TOTAL MWH
2019	ADJUSTMENT	ADJUSTMENT	ADJUSTMENT
JAN	403,189	21,753	106,910
FEB	133,613	(93,968)	7,903
MAR	317,291	-	84,782
APR	(15,943)	(3,954)	34,885
MAY	(122,691)	(142,134)	(66,793)
JUN	(96,008)	(206,667)	51,708
JUL	(78,685)	(39,023)	(12,174)
AUG	(83,867)	(44,228)	(21,152)
SEP	(108,844)	(66,903)	(30,443)
OCT	(294,829)	(193,846)	53,194
NOV	71,113	16,545	25,747
DEC _	94,681	(13,014)	-
Total	219,018	(765,439)	234,566

Wholesale

	TOTAL MWH		
2019	ADJUSTMENT	Note:	The Resale customers include:
JAN	(38,538)	1	Dallas
FEB	41,582	2	Forest City
MAR	(15,191)	3	Due West
APR	5,372	4	Prosperity
MAY	(30,683)	5	Lockhart
JUN	(10,771)	6	Western Carolina University
JUL	(3,961)	7	City of Highlands
AUG	(2,012)	8	Haywood
SEP	(55,637)	9	Piedmont
OCT	16,676	10	Rutherford
NOV	95,238	11	Blue Ridge
DEC	74,172	12	
		13	
Total	76,245	14	

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
Customer Growth Adjustment to kWh Sales
Twelve Months Ended December 31, 2019
Docket E-7, Sub 1228

			NC	SC	Wholesale	
			Proposed KWH ¹	Proposed KWH	Proposed KWH	
	Estimation					
<u>Line</u>	Method ¹	Rate Schedule	Adjustment	Adjustment	Adjustment	Total Company
1	Regression	Residential	184,999,964	76,243,652		
2	J		, ,	, ,		
3		General Service (excluding lighting):				
4	Customer	General Service Small and Large	48,355,467	6,071,876		
5	Regression	Miscellaneous	104,327	(19,325)		
6		Total General	48,459,794	6,052,551		
7						
8		Lighting:				
9	Regression	T & T2 (GL/FL/PL/OL)2	(128,699)	739,852		
10	Regression	TS	16,909	96,601		
11		Total Lighting	(111,790)	836,453		
12						
13		Industrial:				
14	Customer	I - Textile	(2,509,370)	-		
15	Customer	I - Nontextile	65,875,298	2,958,646		
16		Total Industrial	63,365,928	2,958,646		
17						
18						
19		Total	296,713,896	86,091,302	72,243,004 WP 13-2	455,048,203

Notes:

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

[&]quot;Regression" refers to the use of Ordinary Least Squares Regression

[&]quot;Customer" refers to the use of the Customer by Customer approach. See ND330 for further explanation

²T 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

DUKE ENERGY CAROLINAS

McGee Workpaper 13

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North Carolina Annual Fuel and Fuel Related Expense Customer Growth Adjustment to kWh Sales-Wholesale Twelve Months Ended December 31, 2019 Docket E-7, Sub 1228

Calculation of Customer Growth Adjustment to KWH Sales - Wholesale

<u>No.</u>		<u>Reference</u>	
1	Total System Resale (kWh Sales)	Company Records	10,026,499,101
2	Less Intersystem Sales	Schedule 1	2,045,438,486
3	Total KWH Sales Excluding Intersystem Sales	L1 - L2	7,981,060,615
4	Residential Growth Factor	Line 8	0.9052
5	Adjustment to KWH's - Wholesale	L3 * L4 / 100	72,243,004
6	Total System Retail Residential kWh Sales	Company Records	28,860,941,635
7	2019 Proposed Adjustment KWH - Residential (NC+SC)	WP 13 1	261,243,616
8	Percent Adjustment	L7 / L6 * 100	0.9052

[&]quot;RAC001": CarolinasOperating Revenue Report