INFORMATION SHEET

PRESIDING: Chair Mitchell, Presiding; Commissioners Brown-Bland, Gray, Clodfelter, Duffley, Hughes, and McKissick
PLACE: Via WebEx Videoconference
DATE: Tuesday, June 9, 2020
TIME: 1:01 p.m. to 1:10 p.m.
DOCKET NO.: E-7, Sub 1228
VOLUME NUMBER: 2
COMPANIES: Duke Energy Carolinas, LLC
DESCRIPTION: Application of Duke Energy Carolinas, LLC, Pursuant to NCGS § 62-133.2 and NCUC Rule R8-55 Relating to Fuel and Fuel-Related Charge Adjustments for Electric Utilities.

APPEARANCES
See attached.

WITNESSES
See attached.

EXHIBITS
See attached.

EMAIL DISTRIBUTION

TRANSCRIPT COPIES ORDERED:
CONFIDENTIAL EXHIBITS:
REPORTED BY: Joann Bunze
DATE FILED: June 23, 2020

TRANSCRIPT PAGES: 14
PREFILED PAGES: 108
TOTAL PAGES: 122

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	)))))	**DUKE ENERGY CAROLINAS, LLC'S APPLICATION**

Duke Energy Carolinas, LLC ("DEC," "Company," or "Applicant"), pursuant to North Carolina General Statutes ("N.C. Gen. Stat.") § 62-133.2 and North Carolina Utilities Commission ("NCUC" or the "Commission") Rule R8-55, hereby makes this Application to adjust the fuel and fuel-related cost component of its electric rates. In support thereof, the Applicant respectfully shows the Commission the following:

1. The Applicant's general offices are located at 550 South Tryon Street, Charlotte, North Carolina, and its mailing address is:

Duke Energy Carolinas, LLC
P. O. Box 1006
Charlotte, North Carolina 28201-1006

2. The names and addresses of Applicant's attorneys are:

Jack E. Jirak
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Copies of all pleadings, testimony, orders and correspondence in this proceeding should be served upon the attorneys listed above.

3. NCUC Rule R8-55 provides that the Commission shall schedule annual hearings pursuant to N.C. Gen. Stat. § 62-133.2 in order to review changes in the cost of fuel and fuel-related costs since the last general rate case for each utility generating electric power by means of fossil and/or nuclear fuel for the purpose of furnishing North Carolina retail electric service. Rule R8-55 schedules an annual cost of fuel and fuel-related costs adjustment hearing for DEC and requires that DEC use a calendar year test period (12 months ended December 31). Therefore, the test period used in this Application for these proceedings is the calendar year 2019.

4. In Docket No. E-7, Sub 1190, DEC's last fuel case, the Commission approved the following base fuel and fuel-related costs factors (excluding gross receipts tax and regulatory fee):

Residential - 1.9501 ¢ per kWh
Commercial - 2.0488 ¢ per kWh
Industrial - 2.1023 ¢ per kWh

5. In this Application, DEC proposes base fuel and fuel-related costs factors (excluding gross receipts tax and regulatory fee) of:

Residential - 1.5959¢ per kWh
Commercial - 1.7561¢ per kWh
Industrial - 1.6827¢ per kWh

The base fuel and fuel-related cost factors should be adjusted for the Experience Modification Factor ("EMF") by an increment/(decrement) (excluding gross receipts tax and regulatory fee) of:

Residential - 0.1574¢ per kWh
Commercial - 0.1510¢ per kWh
Industrial - 0.3067¢ per kWh

The base fuel and fuel-related costs factors should also be adjusted for the EMF interest (decrement) (excluding gross receipts tax and regulatory fee) of:

Residential - 0¢ per kWh
Commercial - 0¢ per kWh
Industrial - 0¢ per kWh

This results in composite fuel and fuel-related costs factors (excluding gross receipts tax and regulatory fee) of:

Residential - 1.7533¢ per kWh
Commercial - 1.9071¢ per kWh
Industrial - 1.9939¢ per kWh

The new fuel factors would have an effective date of September 1, 2020.

6. The information and data required to be filed by NCUC Rule R8-55 is contained in the testimony and exhibits of Kevin Y. Houston, Kimberly McGee, Brett Phipps, Regis Repko and Steven D. Capps which are being filed simultaneously with this Application and incorporated herein by reference.

7. For comparison, in accordance with Rule R8-55(d)(1) and R8-55(e)(3), base fuel and fuel-related costs factors were also calculated based on the most recent North American Electric Reliability Corporation ("NERC") five-year national weighted average nuclear capacity factor (91.60%) and projected period sales and the methodology used for fuel costs in DEC's last general rate case. These base fuel and fuel-related costs factors are:

	NERC Average	Last General Rate Case
Residential -	1.7932¢ per kWh	1.7523¢ per kWh
Commercial -	1.9358¢ per kWh	1.9024¢ per kWh
Industrial -	2.0159¢ per kWh	1.9920¢ per kWh

WHEREFORE, Duke Energy Carolinas requests that the Commission issue an order approving composite fuel and fuel-related costs factors (excluding gross receipts tax and regulatory fee) of:

Residential -	1.7533¢ per kWh
Commercial -	1.9071¢ per kWh
Industrial -	1.9939¢ per kWh

Respectfully submitted this 25th day of February , 2020.

By: _____

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ATTORNEYS FOR DUKE ENERGY CAROLINAS, LLC

STATE OF NORTH CAROLINA)
)
COUNTY OF MECKLENBURG)

VERIFICATION

Kimberly McGee, being first duly sworn, deposes and says:

That she is RATES MANAGER for DUKE ENERGY CAROLINAS, LLC, applicant in the above-titled action; that she has read the foregoing Application and knows the contents thereof; that the same is true except as to the matters stated therein on information and belief; and as to those matters, she believes it to be true.

Kimberly McGee

Kimberly McGee

Sworn to and subscribed before
me this the 20th day of February, 2020.

Aloma M. Felder

Notary Public Aloma M. Felder

My Commission expires: July 21, 2020

ALOMA M. FELDER NOTARY PUBLIC CABARRUS COUNTY, N. C.

DUKE ENERGY CAROLINAS **McGee Exhibit 1**
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	**1.7523**	**1.9024**	**1.9920**	**1.8663**
6	NERC 5 Year Average Nuclear Capacity Factor of 91.60% and Projected Period Sales	Exh 2 Sch 3 pg 2	**1.7932**	**1.9358**	**2.0159**	**1.9008**
	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	1.5606	1.7286	1.6648	1.6533
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	1.5959	1.7561	1.6872	1.6827
10	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1574	0.1510	0.3067	0.1866
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	**1.7533**	**1.9071**	**1.9939**	**1.8693**

Note: Fuel factors exclude regulatory fee

/A

DUKE ENERGY CAROLINAS
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

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			22,532,174
5	Total Fossil	Sum	39,955,452		1,000,297,556
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		-
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	100,790,494		1,358,894,872
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		1,232,498,472
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	1.6126	1,505,391,041
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			1,484,142,254
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			1.6792

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
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

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
	Calculation of Renewable and Cogeneration Purchased Power Capacity Rate by Class					Amount
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	0.0353	0.0275	0.0224	0.0294
	Summary of Total Rate by Class					
10	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	1.5606	1.7286	1.6648	1.6533
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	1.5959	1.7561	1.6872	1.6827
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1574	0.1510	0.3067	0.1866
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	1.7533	1.9071	1.9939	1.8693

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
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

Line #	Rate Class	Projected Billing Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/(Decrease) as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1190	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	D	E	F	G
		Workpaper 7	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	McGee Exhibit 1	E + F = G
1	Residential	22,067,951	$ 2,282,179,536	$ (43,426,292)	-1.90%	(0.1968)	1.9501	1.7533
2	General Service/Lighting	23,951,115	1,783,527,535	(33,937,727)	-1.90%	(0.1417)	2.0488	1.9071
3	Industrial	12,441,023	708,569,199	(13,482,959)	-1.90%	(0.1084)	2.1023	1.9939
4	NC Retail	58,460,089	$ 4,774,276,270	$ (90,846,978)	-1.90%			

Total Proposed Composite Fuel Rate:

5	Total Fuel Costs for Allocation	Workpaper 7	$ 1,489,416,245
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	$ 1,464,008,218
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	$ 966,538,226
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	$ 983,700,656
14	NC Retail Projected Billing Period MWh Sales	Line 4	58,460,089
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	1.6827
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	0.1866
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000
18	Total Proposed Composite Fuel Rate	Sum	1.8693

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	(0.1554)
24	NC Retail Projected Billing Period MWh Sales	Line 4	58,460,089
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	$ (90,846,978)

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS — **McGee Exhibit 2**
North Carolina Annual Fuel and Fuel Related Expense — **Schedule 2**
Calculation of Fuel and Fuel Related Cost Factors Using: — **Page 1 of 3**
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	-		22,532,174
5	Total Fossil	Sum	39,702,984		993,404,434
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		
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	100,538,026		1,352,001,750
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		1,225,605,350
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		1,498,497,919
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			1,477,249,132
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			1.6762

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
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

McGee Exhibit 2
Schedule 2

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
	Calculation of Renewable Purchased Power Capacity Rate by Class					Amount
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
	Summary of Total Rate by Class					
10	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	1.5602	1.7236	1.6630	1.6504
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	1.5949	1.7514	1.6853	1.6797
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1574	0.1510	0.3067	0.1866
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	1.7523	1.9024	1.9920	1.8663

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
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

Line #	Rate Class	Normalized Test Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/(Decrease) as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1190	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	D	E	F	G
		Exhibit 4	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	McGee Exhibit 1	E + F = G
1	Residential	22,444,481	$ 2,282,179,536	$ (44,387,641)	-1.94%	(0.1978)	1.9501	1.7523
2	General Service/Lighting	23,688,550	$ 1,783,527,535	(34,689,024)	-1.94%	(0.1464)	2.0488	1.9024
3	Industrial	12,489,508	$ 708,569,199	(13,781,438)	-1.94%	(0.1103)	2.1023	1.9920
4	NC Retail	58,622,539	$ 4,774,276,270	$ (92,858,103)				

Total Proposed Composite Fuel Rate:

5	Total Fuel Costs for Allocation	Workpaper 7a	$ 1,482,523,124
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	$ 1,457,115,097
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	$ 967,524,424
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	$ 984,686,854
14	NC Retail Normalized Test Period MWh Sales	Line 9	58,622,539
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	1.6797
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	0.1866
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000
18	Total Proposed Composite Fuel Rate	Sum	1.8663

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	(0.1584)
24	NC Retail Normalized Test Period MWh Sales	Exhibit 4	58,622,539
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	$ (92,858,102)

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS — **McGee Exhibit 2**
North Carolina Annual Fuel and Fuel Related Expense — **Schedule 3**
NERC 5 Year Average Nuclear Capacity Factor of 91.60% and Projected Period Sales — **Page 1 of 3**
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 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	-		22,532,174
5	Total Fossil	Sum	41,267,467		1,036,119,489
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		
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	100,352,872		1,384,147,846
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		1,260,395,479
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		1,533,288,048
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			1,512,039,261
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			1.7108

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
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

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
	Calculation of Renewable Purchased Power Capacity Rate by Class					Amount
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	0.0353	0.0275	0.0224	0.0294
	Summary of Total Rate by Class					
10	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	1.6005	1.7573	1.6868	1.6848
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	1.6358	1.7848	1.7092	1.7142
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1574	0.1510	0.3067	0.1866
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	1.7932	1.9358	2.0159	1.9008

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS
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

Line #	Rate Class	Projected Billing Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/Decrease as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1190	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	C / B = D	E	F	G
		Workpaper 7b	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	McGee Exhibit 1	E + F = G
1	Residential	22,067,951	$ 2,282,179,536	$ (34,623,665)	-1.52%	(0.1569)	1.9501	1.7932
2	General Service/Lighting	23,951,115	$ 1,783,527,535	$ (27,058,458)	-1.52%	(0.1130)	2.0488	1.9358
3	Industrial	12,441,023	$ 708,569,199	$ (10,749,927)	-1.52%	(0.0864)	2.1023	2.0159
4	NC Retail	58,460,089	$ 4,774,276,270	$ (72,432,050)				

Total Proposed Composite Fuel Rate:

5	Total Fuel Costs for Allocation	Workpaper 7b	$ 1,517,313,259
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	$ 1,491,905,232
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	$ 984,955,834
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	$ 1,002,118,264
14	NC Retail Projected Billing Period MWh Sales	Line 4	58,460,089
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	1.7142
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	0.1866
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000
18	Total Proposed Composite Fuel Rate	Sum	1.9008

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	(0.1239)
24	NC Retail Projected Billing Period MWh Sales	Line 4	58,460,089
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	$ (72,432,050)

Note: Rounding differences may occur

/ A

DUKE ENERGY CAROLINAS
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 Retail MWh Sales (c)		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**	**$**	**109,389,423**
14	**Total (Over)/ Under Recovery**				**$**	**109,389,423**
15	NC Retail Normalized Test Period MWh Sales		Exhibit 4			58,622,539
16	**Experience Modification Increment (Decrement) cents/kWh**					**0.1866**

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

DUKE ENERGY CAROLINAS
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)	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	**Total (Over)/ Under Recovery**				**$ 35,324,665**
16	NC Retail Normalized Test Period MWh Sales			Exhibit 4	22,444,481
17	**Experience Modification Increment (Decrement) cents/kWh**				**0.1574**

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
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 #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)		Reported (Over)/ Under Recovery (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**	**$**	**35,758,666**
14	Test Period Wtd Avg. ¢/kWh	2.0178	1.8720			
15	**Total (Over)/ Under Recovery**				**$**	**35,758,666**
16	NC Retail Normalized Test Period MWh Sales			Exhibit 4		23,688,550
17	**Experience Modification Increment (Decrement) cents/kWh**					**0.1510**

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
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 #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)		Reported (Over)/ Under Recovery (d)
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**	**$**	**38,306,091**
14	Test Period Wtd Avg. ¢/kWh	2.1439	1.8330			
15	**Total (Over)/ Under Recovery**				**$**	**38,306,091**
16	NC Retail Normalized Test Period MWh Sales			Exhibit 4		12,489,508
17	**Experience Modification Increment (Decrement) cents/KWh**					**0.3067**

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	Total Company	North Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
1	Test Period MWh Sales (excluding inter system sales)	Exhibit 6 Schedule 1 (Line 4) and Workpaper 11 (NC retail)	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			

		Summer 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.

DUKE ENERGY CAROLINAS **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

Unit	Rate Case Docket E-7, Sub 1146	Fuel Docket E-7, Sub 1190	Proposed Capacity 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

/A

McGee Exhibit 6

DECEMBER 2019 MONTHLY FUEL FILING

Exhibit 6
Schedule 1

DUKE ENERGY CAROLINAS
SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-7, Sub 1198

Line No.		December 2019	12 Months Ended December 2019
1	Fuel and fuel-related costs	$ 122,817,184	$ 1,750,175,434
	MWH sales:		
2	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	
	Generation Mix (MWH):		
	Fossil (by primary fuel type):		
7	Coal	1,208,156	20,916,177
8	Fuel Oil	7,779	97,907
9	Natural Gas - Combined Cycle	1,310,358	14,049,112
10	Natural Gas - Combined Heat and Power	(243)	(243)
11	Natural Gas - Combustion Turbine	56,622	1,062,059
12	Natural Gas - Steam	25,471	1,157,313
13	Biogas	2,160	17,335
14	Total fossil	2,610,303	37,299,660
15	Nuclear 100%	5,203,803	61,066,543
16	Hydro - Conventional	219,651	2,427,405
17	Hydro - Pumped storage	(48,643)	(713,520)
18	Total hydro	171,008	1,713,885
19	Solar Distributed Generation	8,911	142,127
20	Total MWH generation	7,994,025	100,222,215
21	Less joint owners' portion - Nuclear	1,409,284	15,822,621
22	Less joint owners' portion - Combined Cycle	297,823	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.

Exhibit 6
Schedule 2

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	
Reagents			
Catalyst Depreciation Expense			**A**
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	
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			
Capacity component of purchased power (economic)	213,366	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

Purchased Power	Total	Capacity	Non-capacity			
Economic	$	$	mWh	Fuel $	Fuel-related $	Not Fuel $ Not Fuel-related $
Cherokee County Cogeneration Partners	$ 1,679,149	$ 213,366	44,941	$ 1,262,453	$ 203,330	
DE Progress - Native Load Transfer	12,821,002	-	679,100	11,796,943	1,024,484	$ (425)
DE Progress - Native Load Transfer Benefit	2,681,632	-	-	2,681,632	-	
DE Progress - Fees	(336)	-	-	-	(336)	
Exelon Generation Company, LLC.	139,640	-	3,738	85,180	54,460	
Haywood Electric - Economic	20,196	20,030	5	101	65	
Macquarie Energy, LLC	1,127,136	-	39,632	687,553	439,583	
NCMPA - Economic	16,800	-	400	10,248	6,552	
NCMPA Instantaneous - Economic	859,121	-	43,102	509,373	349,748	
NTE Carolinas LLC	609,000	-	24,900	371,490	237,510	
Piedmont Municipal Power Agency	284,034	-	15,447	168,404	115,630	
PJM Interconnection, LLC.	19,080	-	1,124	11,639	7,441	
South Carolina Electric & Gas Company / Dominion Energy	26,216	-	900	15,991	10,224	
Southern Company Services, Inc.	272,090	-	13,139	165,975	106,115	
Tennesse Valley Authority	185,407	-	5,372	113,098	72,309	
The Energy Authority	18,625	-	500	11,361	7,264	
Town of Dallas	584	584	-	-	-	
Town of Forest City	19,856	19,856	-	-	-	
	$ 20,779,232	**$ 253,836**	**872,300**	**$ 17,891,442**	**$ 2,634,380**	**$ (425)**
Renewable Energy						
REPS	$ 4,555,891	$ 591,922	81,362	$ -	$ 3,963,969	$ -
DERP - Purchased Power	24,691	2,168	390	-	15,590	6,933
	$ 4,580,582	**$ 594,090**	**81,752**	**$ -**	**$ 3,979,559**	**$ 6,933**
HB589 PURPA Purchases						
Qualifying Facilities	2,350,054	187,603	46,154		2,090,407	72,044
	$ 2,350,054	**$ 187,603**	**46,154**	**$ -**	**$ 2,090,407**	**$ 72,044**
Non-dispatchable / Other						
Blue Ridge Electric Membership Corp.	$ 1,330,476	$ 743,419	24,753	$ 358,105		$ 228,952
DE Progress - As Available Capacity	14,515	14,515	-	-		-
Haywood Electric	332,643	152,148	6,891	110,102		70,393
Macquarie Energy, LLC	63,800	-	1,595	38,918		24,882
NCEMC - Other	267,337	4,657	3,980	160,235		102,445
Piedmont Electric Membership Corp.	645,228	360,960	11,904	173,403		110,865
Generation Imbalance	246,069	-	4,699	70,161		175,908
Energy Imbalance - Purchases	39,310	-	1,594	31,084		8,226
Energy Imbalance - Sales	(17,924)	-	-	(17,497)		(427)
Other Purchases	524	-	15	-		524
	$ 2,921,979	**$ 1,275,700**	**55,431**	**$ 924,510**	**$ -**	**$ 721,769**
Total Purchased Power	**$ 30,631,847**	**$ 2,311,229**	**1,055,637**	**$ 18,815,952**	**$ 8,704,346**	**$ 800,320**
Interchanges In						
Other Catawba Joint Owners	7,605,405	-	711,849	4,584,919		3,020,486
WS Lee Joint Owner	394,081		11,162	305,194		88,887
Total Interchanges In	7,999,485	-	723,011	4,890,113	-	3,109,373
Interchanges Out						
Other Catawba Joint Owners	(7,451,355)	(134,209)	(692,834)	(4,464,622)		(2,852,524)
Catawba- Net Negative Generation	-	-	-	-		-
WS Lee Joint Owner	(617,693)		(20,599)	(501,976)		(115,716)
Total Interchanges Out	(8,069,048)	(134,209)	(713,433)	(4,966,598)	-	(2,968,240)
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

Sales	Total $	Capacity $	Non-capacity mWh	Non-capacity Fuel $	Non-capacity 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

Purchased Power	Total	Capacity	Non-capacity			
Economic	$	$	mWh	Fuel $	Fuel-related $	Not Fuel $ / Not Fuel-related $
Cherokee County Cogeneration Partners	$ 29,493,641	$ 10,668,301	579,750	$ 16,005,055	$ 2,820,285	
DE Progress - Native Load Transfer	118,187,137	-	5,379,774	106,969,125	11,081,282	$ 136,730
DE Progress - Native Load Transfer (Prior Period Adjust)	51,500,000	-	-	31,415,000	20,085,000	
DE Progress - Native Load Transfer Benefit	16,958,183	-	-	16,958,183	-	
DE Progress - Fees	(605,444)	-	-	-	(605,444)	
EDF Trading North America, LLC.	1,400	-	50	854	546	
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	-	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	12,022,983	-	503,380	7,118,791	4,904,192	
NTE Carolinas LLC	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	-	2,295	51,118	32,682	
Town of Dallas	7,008	7,008	-	-	-	
Town of Forest City	238,272	238,272	-	-	-	
	$ 273,325,408	**$ 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	360,035	32,809	5,844	-	233,533	93,693
DERP - Net Metered Generation	44,824	8,197	3	-		36,627
	$ 71,769,224	**$ 15,308,976**	**1,123,838**	**$ -**	**$ 56,329,928**	**$ 130,320**
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**	**$ -**	**$ 26,764,794**	**$ 1,075,793**
Non-dispatchable / Other						
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	-	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	-	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)	-	(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

Sales	Total $	Capacity $	Non-capacity mWh	Non-capacity Fuel $	Non-capacity 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	Actual System kWh sales	Input				7,150,989,325
2	DERP Net Metered kWh generation	Input				10,508,031
3	Adjusted System kWh sales	L1 + L2				7,161,497,356
4	N.C. Retail kWh sales	Input	1,929,577,914	1,892,531,687	952,010,008	4,774,119,609
5	NC kWh sales % of actual system kWh sales	L4 T / L1				66.76%
6	NC kWh sales % of adjusted system kWh sales	L4 T / L3				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 purchased 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 (¢/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 Steam	Belews Creek Steam	Buck CC	Catawba Nuclear	(A) Clemson CHP	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC
Cost of Fuel Purchased ($)								
Coal	$2,320,199	$16,549,328				$13,627,538		
Oil	45,499	583,901	-			169,053	-	-
Gas - CC			$9,970,150				$8,074,155	$14,230,745
Gas - CHP					$54,658			
Gas - CT								
Gas - Steam						1,596,029		
Biogas			357,518				-	-
Total	$2,365,698	$17,133,228	$10,327,668		$54,658	$15,392,619	$8,074,155	$14,230,745
Average Cost of Fuel Purchased (¢/MBTU)								
Coal	312.30	260.57				322.87	-	
Oil	1,484.49	1,485.00				1,474.58		
Gas - CC			348.16				345.25	347.45
Gas - CHP					388.57			
Gas - CT								
Gas - Steam						355.78		
Biogas			2,336.72			.	-	-
Weighted Average	317.12	268.11	358.73		388.57	328.85	345.25	347.45
Cost of Fuel Burned ($)								
Coal	$779,034	$10,953,735				$2,204,005	-	-
Oil - CC			-				-	-
Oil - Steam/CT	39,704	459,597				149,115		
Gas - CC			$9,970,150				$8,074,155	$14,230,745
Gas - CHP					$54,658			
Gas - CT								
Gas - Steam						1,596,029		
Biogas			357,518				-	-
Nuclear				$10,342,435				
Total	$818,738	$11,413,332	$10,327,668	$10,342,435	$54,658	$3,949,150	$8,074,155	$14,230,745
Average Cost of Fuel Burned (¢/MBTU)								
Coal	315.64	307.81				300.49		
Oil - CC								
Oil - Steam/CT	1,441.18	1,476.29				1,454.79		
Gas - CC			348.16				345.25	347.45
Gas - CHP					388.57			
Gas - CT								
Gas - Steam						355.78		
Biogas			2,336.72				-	-
Nuclear				59.29				
Weighted Average	328.06	317.95	358.73	59.29	388.57	331.21	345.25	347.45
Average Cost of Generation (¢/kWh)								
Coal	4.67	2.92				2.59	-	-
Oil - CC			-				-	-
Oil - Steam/CT	18.01	13.63				15.25	-	-
Gas - CC			2.47				2.54	2.42
Gas - CHP					-			
Gas - CT								
Gas - Steam						6.17		
Biogas			16.55				-	-
Nuclear				0.59				
Weighted Average	4.85	3.02	2.54	0.59	-	3.53	2.54	2.42
Burned MBTU's								
Coal	246,812	3,558,552				733,480		
Oil - CC								
Oil - Steam/CT	2,755	31,132				10,250		
Gas - CC			2,863,693				2,338,618	4,095,789
Gas - CHP					14,066			
Gas - CT								
Gas - Steam						448,605		
Biogas			15,300				-	-
Nuclear				17,444,528				
Total	249,567	3,589,684	2,878,993	17,444,528	14,066	1,192,335	2,338,618	4,095,789
Net Generation (mWh)								
Coal	16,667	374,612				84,991		
Oil - CC								
Oil - Steam/CT	220	3,371				978	-	-
Gas - CC			404,369				317,530	588,459
Gas - CHP					(243)			
Gas - CT								
Gas - Steam						25,886		
Biogas			2,160				-	-
Nuclear 100%				1,745,157				
Hydro (Total System)								
Solar (Total System)								
Total	16,887	377,983	406,529	1,745,157	(243)	111,855	317,530	588,459
Cost of Reagents Consumed ($)								
Ammonia		($183,864)	$16,314			$66,338	$3,702	$21,144
Limestone	$25,696	303,305				95,536		
Sorbents	-	58,214						
Urea	4,616							
Re-emission Chemical		-						
Dibasic Acid	-							
Activated Carbon	-							
Lime (water emissions)	-	-						
Total	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

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

SCHEDULE 6

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

Exhibit 6
Schedule 6

Description	Allen Steam	Belews Creek Steam	Buck CC	(A) Clemson CHP	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	Mill Creek CT	Rockingham CT	Current Month	Total 12 ME December 2019
Coal Data:														
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:				
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.

Exhibit 6
Schedule 7

DUKE ENERGY CAROLINAS

ANALYSIS OF COAL PURCHASED

DECEMBER 2019

STATION	TYPE	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	202,536	12,680,427	62.61
	CONTRACT	560,959	37,571,785	66.98
	FIXED TRANSPORTATION / ADJUSTMENTS	-	2,255,868	-
	TOTAL	763,494	$ 52,508,080	$ 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

Exhibit 6
Schedule 9

DUKE ENERGY CAROLINAS

ANALYSIS OF OIL PURCHASED

DECEMBER 2019

	ALLEN	BELEWS CREEK
VENDOR	HighTowers	HighTowers
SPOT / CONTRACT	Contract	Contract
SULFUR CONTENT %	0	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	HighTowers
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

/ A

DUKE ENERGY CAROLINAS **McGee Workpaper 1**
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	6,585,428	7,276,686	7,371,013	59,363,957
Cost (Gross of Joint Owners)	$ 61,864,018	$ 57,191,501	$ 53,296,002	$ 60,341,229	$ 41,461,273	$ 42,351,267	$ 42,092,026	358,597,316
$/MWh	6.1899	6.3495	5.8061	6.0645	6.2959	5.8201	5.7105	
Avg $/MWh		**6.0407**						
Cents per kWh		**0.6041**						

Sept 2020 - August 2021

MDC			
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
	Proposed Nuclear Capacity Factor		94.39%

/ A

DUKE ENERGY CAROLINAS **McGee Workpaper 2**
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**

2014-2018	Capacity Rating	NCF Rating	Weighted 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

/A

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	14,450,043	
Gas CT and CC total (Gross)	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	55,260	
Allocated Economic Purchases	281,308	
Joint Dispatch Purchases	5,314,338	
	8,286,802	
Total Generation and Purchased Power		93,353,096
Fuel Recovered Through intersystem Sales	(1,024,819)	

/ A

DUKE ENERGY CAROLINAS **McGee Workpaper 4**
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	22,532,174	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	**$ 1,484,142,254**	

/A

DUKE ENERGY CAROLINAS **McGee Workpaper 5**

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 Purchase Cost		Economic Sales 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	

rounding differences may occur

$ 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**

DUKE ENERGY CAROLINAS **McGee Workpaper 6**

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 Projection		**Purchase Allocation Delta**		**Adjusted Transfer**		**Fossil Gen Cost**		**Pre-Net Payments**	
	PECtoDEC	**DECtoPEC**	**PEC**	**DEC**	**PECtoDEC**	**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

DUKE ENERGY CAROLINAS **McGee Workpaper 7**
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)

		Projected sales for the Billing Period	Remove impact of SC DERP Net Metered 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

System Fuel Expense	$ 1,484,142,254	McGee Exhibit 2 Schdule 1 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	$ 5,273,991	
Total Fuel Costs for Allocation	$ 1,489,416,245	McGee Exhibit 2 Schdule 1 Page 3 of 3, L5

Reconciliation

	System	NC Retail Customers	Wholesale	South Carolina Retail	
Total system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	$ 1,484,142,254				
QF and REPS Compliance Purchased Power - Capacity	$ 25,408,027				
Other fuel costs	$ 1,458,734,227				
SC Net Metering Fuel Allocation adjustment	$ 5,273,991				
Jurisdictional fuel costs after adj.	$ 1,464,008,218				
Allocation to states/classes		66.02%	9.23%	24.75%	
Jurisdictional fuel costs	$ 1,464,008,218	$ 966,538,226	$ 135,127,959	$ 362,342,034	67.55% Capacity Allocator
Direct Assignment of Fuel benefit to SC Retail	$ (5,273,991)		$ -	$ (5,273,991)	
Total system actual fuel costs	$ 1,458,734,227	$ 966,538,226	$ 135,127,959	$ 357,068,043	
QF and REPS Compliance Purchased Power - Capacity	25,408,027	17,162,430			
Total system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	$ 1,484,142,254	**$ 983,700,656**			

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

DUKE ENERGY CAROLINAS **McGee Workpaper 7b**
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)

		Projected sales for the Billing Period	Remove impact of SC DERP Net Metered 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	0	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	$ 5,273,998	
System Fuel Expense	$ 1,512,039,261	McGee Exhibit 2 Schedule 3 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	$ 5,273,998	
Total Fuel Costs for Allocation	$ 1,517,313,259	McGee Exhibit 2 Schedule 3 Page 3 of 3, Line 5

Reconciliation

	System	NC Retail Customers	Wholesale	South Carolina Retail
Total system fuel expense from McGee Exhibit 2 Schedule 3 Page 1	$ 1,512,039,261			
QF and REPS Compliance Purchased Power - Capacity	$ 25,408,027			
Other fuel costs	$ 1,486,631,234			
SC Net Metering Fuel Allocation adjustment	$ 5,273,998			
Jurisdictional fuel costs after adj.	$ 1,491,905,232			
Allocation to states/classes		66.02%	9.23%	24.75%
Jurisdictional fuel costs	$ 1,491,905,232	$ 984,955,834	$ 137,702,853	$ 369,246,545
Direct Assignment of Fuel benefit to SC Retail	$ (5,273,998)		$ -	$ (5,273,998)
Total system actual fuel costs	$ 1,486,631,234	$ 984,955,834	$ 137,702,853	$ 363,972,547
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	$ 1,512,039,261	**$ 1,002,118,264**		
		Exh. 2, Sch.3 page 3, Line 13		

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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

McGee Workpaper 9

Reagent and ByProduct projections

Date	Ammonia	Urea	Limestone	Magnesium hydroxide	Calcium Carbonate	Lime	**Reagent Cost**	**Gypsum (Gain)/ Loss**	**Ash (Gain)/Loss**	**Steam (Gain)/Loss**	**Sale of By-Products (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)	$ (80,084)	**$ 245,582**
10/1/2020	$ 188,501	$ 32,984	$ 1,042,637	$ 71,908	$ 42,872	$ 59,960	**$ 1,438,861**	$ 290,184	$ (13,557)	$ (79,927)	**$ 196,699**
11/1/2020	$ 198,004	$ 34,647	$ 1,095,204	$ 137,550	$ 71,592	$ 59,960	**$ 1,596,957**	$ 355,932	$ (73,420)	$ (79,783)	**$ 202,728**
12/1/2020	$ 261,216	$ 45,708	$ 1,444,841	$ 228,479	$ 110,121	$ 59,960	**$ 2,150,324**	$ 509,662	$ (174,818)	$ (79,671)	**$ 255,173**
1/1/2021	$ 419,456	$ 73,397	$ 2,320,102	$ 333,985	$ 162,393	$ 59,960	**$ 3,369,293**	$ 761,396	$ (243,098)	$ (79,644)	**$ 438,654**
2/1/2021	$ 410,928	$ 71,904	$ 2,272,930	$ 333,052	$ 162,346	$ 59,960	**$ 3,311,120**	$ 726,826	$ (224,855)	$ (79,639)	**$ 422,331**
3/1/2021	$ 211,172	$ 36,951	$ 1,168,035	$ 232,231	$ 105,236	$ 59,960	**$ 1,813,585**	$ 444,465	$ (184,558)	$ (79,617)	**$ 180,291**
4/1/2021	$ 49,963	$ 8,743	$ 276,356	$ 210,962	$ 99,191	$ 59,960	**$ 705,175**	$ 85,702	$ (24,859)	$ (79,602)	**$ (18,759)**
5/1/2021	$ 36,003	$ 6,300	$ 199,141	$ 188,716	$ 90,692	$ 59,960	**$ 580,811**	$ 51,459	$ (9,663)	$ (79,599)	**$ (37,803)**
6/1/2021	$ 63,789	$ 11,162	$ 352,832	$ 282,721	$ 137,281	$ 59,960	**$ 907,746**	$ 104,580	$ (30,245)	$ (79,617)	**$ (5,281)**
7/1/2021	$ 123,135	$ 21,546	$ 681,086	$ 340,068	$ 167,985	$ 59,960	**$ 1,393,781**	$ 208,096	$ (57,134)	$ (79,632)	**$ 71,330**
8/1/2021	$ 120,576	$ 21,098	$ 666,931	$ 324,557	$ 162,092	$ 59,960	**$ 1,355,215**	$ 205,966	$ (57,385)	$ (79,647)	**$ 68,934**
	$ 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)	$ (956,462)	**$ 2,019,880**

Total Reagent cost and Sale of By-products **$ 22,532,174**

rounding differences may occur

/A

DUKE ENERGY CAROLINAS **McGee Workpaper 10**
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	Amount in current docket	101,750,258	1,617,020	103,367,278
2	Amount in Sub 1190, prior year docket	107,380,554	72,488,427	179,868,981
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

McGee Workpaper 10a

2019	**Jan19**	**Feb19**	**Mar19**	**Apr19**	**May19**	**June 19**	**Jul19**	**Aug19**	**Sep19**	**Oct19**	**Nov19**	**Dec19**	**12 ME**
System KWH Sales - Sch 4, Adjusted	7,570,888,821	7,430,788,664	6,521,808,145	6,367,436,322	6,726,545,218	7,552,455,357	8,316,260,504	8,548,800,472	8,292,133,918	7,019,132,212	6,533,297,016	7,161,497,356	88,041,044,005
NC Retail KWH Sales - Sch 4	5,021,049,922	5,026,972,376	4,366,363,694	4,263,829,687	4,421,389,704	5,029,188,554	5,524,188,997	5,710,820,956	5,512,226,874	4,692,561,973	4,299,808,753	4,774,119,609	58,642,521,099
NC Retail % of Sales, Adjusted (Calc)	66.32%	67.65%	66.95%	66.96%	65.73%	66.59%	66.43%	66.80%	66.48%	66.85%	65.81%	66.66%	66.61%
NC retail production plant %	67.56%	67.56%	67.56%	67.56%	67.75%	67.75%	67.75%	67.75%	67.75%	67.75%	67.75%	67.75%	67.72%
Fuel and Fuel related component of purchased power													
System Actual $ - Sch 3 Fuel$:	$ 23,687,311	$ 57,492,154	$ 14,514,026	$ 14,125,368	$ 6,227,781	$ 7,986,019	$ 9,392,534	$ 7,209,102	$ 18,620,321	$ 13,793,051	$ 15,085,734	$ 17,891,442	$ 206,024,843
System Actual $ - Sch 3 Fuel-related$; Economic Purchases	10,050,079	26,532,896	2,706,430	4,264,779	908,542	640,701	1,230,088	1,129,642	1,974,692	1,539,252	2,340,043	2,634,380	$ 55,951,524
System Actual $ - Sch 3 Fuel-related$; Purchased Power for REPS Compliance	3,283,437	4,116,642	3,779,240	5,137,202	5,251,425	5,598,653	5,193,633	5,586,738	5,216,879	4,899,454	4,069,122	3,963,969	$ 56,096,394
System Actual$ - Sch 3 Fuel-related$; SC DERP	102	14,377	8,659	21,097	25,363	30,158	22,270	26,481	26,351	26,014	17,072	15,590	$ 233,534
System Acutal $ - Sch 3 Fuel-related$; HB589 purpa Purchases	1,367,422	1,711,969	1,557,910	2,135,075	2,259,422	2,837,912	2,660,982	2,749,375	2,583,768	2,605,902	2,204,650	2,090,407	$ 26,764,794
Total System Economic & QF$	38,388,351	89,868,038	22,566,265	25,683,521	14,672,533	17,093,443	18,499,507	16,701,338	28,422,011	22,863,673	23,716,621	26,595,788	345,071,089
Less:													
Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	$ 11,884,171	$ 71,766,352	$ 8,909,559	$ 10,043,093	$ 3,969,493	$ 6,657,925	$ 7,676,184	$ 5,446,589	$ 17,997,075	$ 13,185,756	$ 12,864,226	$ 15,502,723	$ 185,903,146
Total System Economic $ without Native Load Transfers	$ 26,504,180	$ 18,101,686	$ 13,656,706	$ 15,640,428	$ 10,703,040	$ 10,435,518	$ 10,823,323	$ 11,254,749	$ 10,424,936	$ 9,677,917	$ 10,852,395	$ 11,093,065	$ 159,167,943
NC Actual $ (Calc)	$ 17,577,699	$ 12,245,897	$ 9,143,192	$ 10,473,308	$ 7,035,158	$ 6,949,023	$ 7,189,539	$ 7,518,465	$ 6,930,015	$ 6,470,063	$ 7,142,370	$ 7,395,049	$ 106,069,779
Billed rate (¢/kWh):	0.1922	0.1922	0.1922	0.1922	0.1922	0.1922	0.1922	0.1922	0.1759	0.1535	0.1533	0.1533	
Billed $:	$ 9,650,458	$ 9,661,841	$ 8,392,151	$ 8,195,081	$ 8,497,911	$ 9,666,100	$ 10,617,491	$ 10,976,198	$ 9,696,007	$ 7,203,083	$ 6,591,607	$ 7,318,725	$ 106,466,653
(Over)/ Under $:	$ 7,927,242	$ 2,584,056	$ 751,041	$ 2,278,227	$ (1,462,753)	$ (2,717,077)	$ (3,427,952)	$ (3,457,733)	$ (2,765,992)	$ (733,020)	$ 550,763	$ 76,323	$ (396,874)
Capacity component of purchased power													
System Actual $ - Capacity component of Cherokee County Cogen Purchases	$ 426,732	$ 426,732	$ 213,366	$ 213,366	$ 320,050	$ 1,386,879	$ 3,200,490	$ 3,200,490	$ 640,098	$ 213,366	$ 213,366	$ 213,366	$ 10,668,301
System Actual $ - Capacity component of Purchased Power for REPS Compliance	608,844	738,655	747,764	827,415	781,129	817,587	2,308,343	2,605,889	2,449,375	2,179,103	611,944	591,922	$ 15,267,970
System Actual $ - Capacity component of HB589 Purpa QF purchases	240,541	314,914	229,175	301,405	216,488	298,037	1,151,852	1,312,758	1,272,900	1,184,456	259,220	187,603	$ 6,969,349
System Actual $ - Capacity component of SC DERP	32	4,343	4,209	5,850	3,530	4,199	3,177	3,738	3,716	3,670	2,375	2,168	$ 41,006
System Actual $ - Sch 2 pg 1 ANNUAL VIEW	$ 1,276,149	$ 1,484,644	$ 1,194,514	$ 1,348,036	$ 1,321,197	$ 2,506,702	$ 6,663,862	$ 7,122,875	$ 4,366,089	$ 3,580,594	$ 1,086,905	$ 995,058	$ 32,946,626
NC Actual $ (Calc) (1)	$ 862,169	$ 1,003,029	$ 807,016	$ 910,736	$ 895,069	$ 1,698,211	$ 4,514,555	$ 4,825,522	$ 2,957,887	$ 2,425,739	$ 736,343	$ 674,120	$ 22,310,397
Billed rate (¢/kWh):	0.0353	0.0353	0.0353	0.0353	0.0353	0.0353	0.0353	0.0353	0.0342	0.0327	0.0327	0.0327	
Billed $:	$ 1,773,631	$ 1,775,723	$ 1,542,370	$ 1,506,151	$ 1,561,807	$ 1,776,506	$ 1,951,359	$ 2,017,285	$ 1,886,955	$ 1,535,934	$ 1,406,799	$ 1,561,982	$ 20,296,502
(Over)/Under $:	$ (911,461)	$ (772,694)	$ (735,354)	$ (595,415)	$ (666,739)	$ (78,295)	$ 2,563,196	$ 2,808,237	$ 1,070,932	$ 889,805	$ (670,455)	$ (887,863)	$ 2,013,895
TOTAL (Over)/ Under $:	**$ 7,015,780**	**$ 1,811,363**	**$ 15,688**	**$ 1,682,813**	**$ (2,129,491)**	**$ (2,795,372)**	**$ (864,756)**	**$ (649,496)**	**$ (1,695,060)**	**$ 156,785**	**$ (119,692)**	**$ (811,539)**	**$ 1,617,020**

Note: The billed rate for September and October are pro-rated based on number of billing days in cycle on new rate schedules.

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

McGee Workpaper 10b

2018	**Jan18**	**Feb18**	**Mar18**	**Apr18**	**May18**	**June 18**	**Jul18**	**Aug18**	**Sep18**	**Oct18**	**Nov18**	**Dec18**	**12 ME**
System KWH Sales - Sch 4, Adjusted	8,703,429,931	7,459,691,118	6,449,998,012	6,590,329,093	6,591,233,338	8,009,317,385	8,486,873,480	8,267,869,991	9,507,963,860	6,345,056,567	6,681,164,890	7,500,839,324	90,593,766,989
NC Retail KWH Sales - Sch 4	5,733,819,698	5,031,181,342	4,190,094,169	4,416,566,036	4,252,750,024	5,245,688,511	5,639,360,853	5,409,821,248	6,212,763,717	4,141,211,581	4,314,713,247	4,892,732,160	59,480,702,586
NC Retail % of Sales, Adjusted (Calc)	65.88%	67.44%	64.96%	67.02%	64.52%	65.49%	66.45%	65.43%	65.34%	65.27%	64.58%	65.23%	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$:	$ 54,851,829	$ 19,768,561	$ 11,751,953	$ 8,971,622	$ 7,588,225	$ 7,853,735	$ 25,151,873	$ 24,971,461	$ 21,908,434	$ 27,821,901	$ 26,826,328	$ 40,057,563	$ 277,523,485
System Actual $ - Sch 3 Fuel-related$; Economic Purchases	18,300,781	2,407,886	1,331,655	1,356,382	1,684,418	1,881,586	2,920,154	3,759,304	6,703,809	4,827,502	6,105,374	13,849,586	$ 65,128,437
System Actual $ - Sch 3 Fuel-related$; Purchased Power for REPS Compliance	3,057,332	3,239,022	2,726,561	3,894,992	4,543,762	4,545,750	4,893,476	4,813,048	4,818,507	3,635,758	4,331,202	3,811,118	$ 48,310,528
System Actual$ - Sch 3 Fuel-related$; SC DERP	122	125	134	163	218	223	232	223	213	203	157	136	$ 2,149
System Acutal $ - Sch 3 Fuel-related$; HB589 purpa Purchases	1,692,902	2,049,413	2,053,505	2,531,173	2,424,811	2,829,385	2,716,750	2,487,659	2,471,326	2,042,872	2,089,973	1,712,356	$ 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
Less:													
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	$ 23,414,464	$ 20,577,089	$ 28,953,467	$ 206,805,400
Total System Economic $ without Native Load Transfers	$ 47,005,899	$ 12,118,777	$ 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	$ 3,176,444	$ 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	$ 422,948	$ 422,948	$ 211,474	$ 211,474	$ 317,211	$ 1,374,581	$ 3,172,110	$ 3,116,270	$ 630,852	$ 211,474	$ 211,474	$ 211,474	$ 10,514,290
System Actual $ - Capacity component of Purchased Power for REPS Compliance	486,469	465,590	421,064	517,448	539,749	567,326	2,279,476	2,238,065	2,451,979	1,649,703	659,013	594,902	$ 12,870,784
System Actual $ - Capacity component of HB589 Purpa QF purchases	316,410	362,951	415,622	397,922	232,512	271,686	1,225,424	1,199,461	1,251,154	924,601	242,932	159,399	$ 7,000,074
System Actual $ - Capacity component of SC DERP	57	37	64	28	13	21	78	84	72	79	19	13	$ 565
System Actual $ - Sch 2 pg 1 ANNUAL VIEW	$ 1,225,884	$ 1,251,526	$ 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	$ 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	$ 1,011,356	$ 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**	**$ 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**

DUKE ENERGY CAROLINAS **McGee Workpaper 11**
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 #	Description	Reference	NORTH CAROLINA	SOUTH CAROLINA	Retail TOTAL COMPANY	% NC	% SC
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

Line #	Description	REFERENCE	Total Company MWh	NC RETAIL % To Total	NC RETAIL MWh	SC RETAIL % To Total	SC RETAIL 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)
	Industrial						
3	Total Industrial		234,566	57.70	135,345	42.30	99,221
4	Total Retail	L1+ L2+ L3	(311,855)		(316,696)		4,841
5	Wholesale		76,245				
6	Total Company	L4 + L5	(235,610)		(316,696)		4,841

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

	Residential	Commercial	Industrial	
2019	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT	TOTAL MWH 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**	**(311,855)**

Wholesale

2019	TOTAL MWH ADJUSTMENT
JAN	(38,538)
FEB	41,582
MAR	(15,191)
APR	5,372
MAY	(30,683)
JUN	(10,771)
JUL	(3,961)
AUG	(2,012)
SEP	(55,637)
OCT	16,676
NOV	95,238
DEC	74,172
Total	**76,245**

Note:	The Resale customers include:
1	Dallas
2	Forest City
3	Due West
4	Prosperity
5	Lockhart
6	Western Carolina University
7	City of Highlands
8	Haywood
9	Piedmont
10	Rutherford
11	Blue Ridge
12	
13	
14	

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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

McGee Workpaper 13
Page 1

Line	Estimation Method [1]	Rate Schedule	NC Proposed KWH [1] Adjustment	SC Proposed KWH Adjustment	Wholesale Proposed KWH Adjustment	Total Company
1	*Regression*	Residential	184,999,964	76,243,652		
2						
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	455,048,203
					WP 13-2	

Notes:
[1] Two approved methods are used for estimating the growth adjustment depending on the class/schedule:
"Regression" refers to the use of Ordinary Least Squares Regression
"Customer" refers to the use of the Customer by Customer approach. See ND330 for further explanation
[2] T and T2 were combined due to North Carolina's FL & GL schedules being merged into OL & PL during the 12 month period.
rounding differences may occur

Calculation of Customer Growth Adjustment to KWH Sales - Wholesale

Line No.		Reference	
1	Total System Resale (kWh Sales)	Company Records	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

"RAC001": CarolinasOperating Revenue Report

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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% and Normalized Test Period Sales
Billing Period Sept 2020 through Aug 2021
Docket E-7, Sub 1228

Revised McGee Workpaper 7a

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

		Test Period Sales	Customer Growth Adjustment	Weather Adjustment	Remove impact of SC DERP Net Metered generation	Normalized Test Period Sales
North Carolina:						
	NC RETAIL	58,642,521	296,714	(316,696)	-	58,622,539
South Carolina:						
	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	$ 1,477,249,132	McGee Exhibit 2 Schedule 2 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	$ 5,273,991	
Total Fuel Costs for Allocation	$ 1,482,523,124	McGee Exhibit 2 Schedule 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	$ 1,477,249,132			
QF and REPS Compliance Purchased Power - Capacity	$ 25,408,027			
Other fuel costs	$ 1,451,841,105			
SC Net Metering Fuel Allocation adjustment	$ 5,273,991			
Jurisdictional fuel costs after adj.	$ 1,457,115,097			
Allocation to states/classes		66.40%	9.01%	24.60%
Jurisdictional fuel costs	$ 1,457,115,097	$ 967,524,424	$ 131,286,070	$ 358,450,314
Direct Assignment of Fuel benefit to SC Retail	$ (5,273,991)		$ -	$ (5,273,991)
Total system actual fuel costs	$ 1,451,841,105	$ 967,524,424	$ 131,286,070	$ 353,176,322
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	$ 1,477,249,132	**$ 984,686,854**		
		Exh. 2, Sch 2 page 3, Line 13		

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Supplemental

DUKE ENERGY CAROLINAS
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

Revised McGee Exhibit 1

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

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Supplemental

DUKE ENERGY CAROLINAS
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

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		-
10	Total Generation	Line 1 + Line 5 + Line 8 + 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

DUKE ENERGY CAROLINAS — **Revised McGee Exhibit 2**
North Carolina Annual Fuel and Fuel Related Expense — **Schedule 2**
Calculation of Fuel and Fuel Related Cost Factors Using: — **Page 1 of 3**
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		
10	Total Generation	Line 1 + Line 5 + Line 8 + 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

Note: Rounding differences may occur

DUKE ENERGY CAROLINAS — **Revised McGee Exhibit 2**
North Carolina Annual Fuel and Fuel Related Expense — **Schedule 3**
NERC 5 Year Average Nuclear Capacity Factor of 91.60% and Projected Period Sales — **Page 1 of 3**
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 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		
10	Total Generation	Line 1 + Line 5 + Line 8 + 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

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Supplemental

DUKE ENERGY CAROLINAS
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 Retail MWh Sales (c)	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 Period and Update Period**				**$ 57,140,548**
19	NC Retail Normalized Test Period MWh Sales		Exhibit 4		58,622,539
20	**Experience Modification Increment (Decrement) 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

DUKE ENERGY CAROLINAS
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)	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 Period and Update Period**				**$ 8,172,161**
20	NC Retail Normalized Test Period MWh Sales			Exhibit 4	22,444,481
21	**Experience Modification Increment (Decrement) cents/kWh**				**0.0364**

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
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 #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)		Reported (Over)/ Under Recovery (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**				**$**	**(19,988,636)**
19	**Total (Over)/Under Recovery - Test Period and Update Period**				**$**	**15,770,030**
20	NC Retail Normalized Test Period MWh Sales			Exhibit 4		23,688,550
21	**Experience Modification Increment (Decrement) 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

DUKE ENERGY CAROLINAS
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 #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)		Reported (Over)/ Under Recovery (d)
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 - Update Period January -March 2020**				**$**	**(5,107,737)**
19	**Total (Over)/Under Recovery - Test Period and Update Period**				**$**	**33,198,354**
20	NC Retail Normalized Test Period MWh Sales			Exhibit 4		12,489,508
21	**Experience Modification Increment (Decrement) cents/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

/A
Supplemental

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	Total Company	North Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
1	Test Period MWh Sales (excluding inter system sales)	Exhibit 6 Schedule 1 (Line 4) and Workpaper 11 (NC retail)	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			

		Summer 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.

DUKE ENERGY CAROLINAS **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

Unit	Rate Case Docket E-7, Sub 1146	Fuel Docket E-7, Sub 1190	Proposed Capacity 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

/A

McGee Exhibit 6

DECEMBER 2019 MONTHLY FUEL FILING

Exhibit 6
Schedule 1

DUKE ENERGY CAROLINAS
SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-7, Sub 1198

Line No.		December 2019	12 Months Ended December 2019
1	Fuel and fuel-related costs	$ 122,817,184	$ 1,750,175,434
	MWH sales:		
2	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	
	Generation Mix (MWH):		
	Fossil (by primary fuel type):		
7	Coal	1,208,156	20,916,177
8	Fuel Oil	7,779	97,907
9	Natural Gas - Combined Cycle	1,310,358	14,049,112
10	Natural Gas - Combined Heat and Power	(243)	(243)
11	Natural Gas - Combustion Turbine	56,622	1,062,059
12	Natural Gas - Steam	25,471	1,157,313
13	Biogas	2,160	17,335
14	Total fossil	2,610,303	37,299,660
15	Nuclear 100%	5,203,803	61,066,543
16	Hydro - Conventional	219,651	2,427,405
17	Hydro - Pumped storage	(48,643)	(713,520)
18	Total hydro	171,008	1,713,885
19	Solar Distributed Generation	8,911	142,127
20	Total MWH generation	7,994,025	100,222,215
21	Less joint owners' portion - Nuclear	1,409,284	15,822,621
22	Less joint owners' portion - Combined Cycle	297,823	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.

Exhibit 6
Schedule 2

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	
Reagents			
Catalyst Depreciation Expense			**A**
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	
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			
Capacity component of purchased power (economic)	213,366	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

Purchased Power	Total	Capacity	Non-capacity			
Economic	$	$	mWh	Fuel $	Fuel-related $	Not Fuel $ Not Fuel-related $
Cherokee County Cogeneration Partners	$ 1,679,149	$ 213,366	44,941	$ 1,262,453	$ 203,330	
DE Progress - Native Load Transfer	12,821,002	-	679,100	11,796,943	1,024,484	$ (425)
DE Progress - Native Load Transfer Benefit	2,681,632	-	-	2,681,632	-	
DE Progress - Fees	(336)	-	-	-	(336)	
Exelon Generation Company, LLC.	139,640	-	3,738	85,180	54,460	
Haywood Electric - Economic	20,196	20,030	5	101	65	
Macquarie Energy, LLC	1,127,136	-	39,632	687,553	439,583	
NCMPA - Economic	16,800	-	400	10,248	6,552	
NCMPA Instantaneous - Economic	859,121	-	43,102	509,373	349,748	
NTE Carolinas LLC	609,000	-	24,900	371,490	237,510	
Piedmont Municipal Power Agency	284,034	-	15,447	168,404	115,630	
PJM Interconnection, LLC.	19,080	-	1,124	11,639	7,441	
South Carolina Electric & Gas Company / Dominion Energy	26,216	-	900	15,991	10,224	
Southern Company Services, Inc.	272,090	-	13,139	165,975	106,115	
Tennesse Valley Authority	185,407	-	5,372	113,098	72,309	
The Energy Authority	18,625	-	500	11,361	7,264	
Town of Dallas	584	584	-	-	-	
Town of Forest City	19,856	19,856	-	-	-	
	$ 20,779,232	**$ 253,836**	**872,300**	**$ 17,891,442**	**$ 2,634,380**	**$ (425)**
Renewable Energy						
REPS	$ 4,555,891	$ 591,922	81,362	$ -	$ 3,963,969	$ -
DERP - Purchased Power	24,691	2,168	390	-	15,590	6,933
	$ 4,580,582	**$ 594,090**	**81,752**	**$ -**	**$ 3,979,559**	**$ 6,933**
HB589 PURPA Purchases						
Qualifying Facilities	2,350,054	187,603	46,154		2,090,407	72,044
	$ 2,350,054	**$ 187,603**	**46,154**	**$ -**	**$ 2,090,407**	**$ 72,044**
Non-dispatchable / Other						
Blue Ridge Electric Membership Corp.	$ 1,330,476	$ 743,419	24,753	$ 358,105		$ 228,952
DE Progress - As Available Capacity	14,515	14,515	-	-		-
Haywood Electric	332,643	152,148	6,891	110,102		70,393
Macquarie Energy, LLC	63,800	-	1,595	38,918		24,882
NCEMC - Other	267,337	4,657	3,980	160,235		102,445
Piedmont Electric Membership Corp.	645,228	360,960	11,904	173,403		110,865
Generation Imbalance	246,069	-	4,699	70,161		175,908
Energy Imbalance - Purchases	39,310	-	1,594	31,084		8,226
Energy Imbalance - Sales	(17,924)	-	-	(17,497)		(427)
Other Purchases	524	-	15	-		524
	$ 2,921,979	**$ 1,275,700**	**55,431**	**$ 924,510**	**$ -**	**$ 721,769**
Total Purchased Power	**$ 30,631,847**	**$ 2,311,229**	**1,055,637**	**$ 18,815,952**	**$ 8,704,346**	**$ 800,320**
Interchanges In						
Other Catawba Joint Owners	7,605,405	-	711,849	4,584,919		3,020,486
WS Lee Joint Owner	394,081		11,162	305,194		88,887
Total Interchanges In	7,999,485	-	723,011	4,890,113	-	3,109,373
Interchanges Out						
Other Catawba Joint Owners	(7,451,355)	(134,209)	(692,834)	(4,464,622)		(2,852,524)
Catawba- Net Negative Generation	-	-	-	-		-
WS Lee Joint Owner	(617,693)		(20,599)	(501,976)		(115,716)
Total Interchanges Out	(8,069,048)	(134,209)	(713,433)	(4,966,598)	-	(2,968,240)
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

	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

Purchased Power	Total	Capacity	Non-capacity			
Economic	$	$	mWh	Fuel $	Fuel-related $	Not Fuel $ / Not Fuel-related $
Cherokee County Cogeneration Partners	$ 29,493,641	$ 10,668,301	579,750	$ 16,005,055	$ 2,820,285	
DE Progress - Native Load Transfer	118,187,137	-	5,379,774	106,969,125	11,081,282	$ 136,730
DE Progress - Native Load Transfer (Prior Period Adjust)	51,500,000	-	-	31,415,000	20,085,000	
DE Progress - Native Load Transfer Benefit	16,958,183	-	-	16,958,183	-	
DE Progress - Fees	(605,444)	-	-	-	(605,444)	
EDF Trading North America, LLC.	1,400	-	50	854	546	
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	-	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	12,022,983	-	503,380	7,118,791	4,904,192	
NTE Carolinas LLC	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	-	2,295	51,118	32,682	
Town of Dallas	7,008	7,008	-	-	-	
Town of Forest City	238,272	238,272	-	-	-	
	$ 273,325,408	**$ 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	360,035	32,809	5,844	-	233,533	93,693
DERP - Net Metered Generation	44,824	8,197	3	-		36,627
	$ 71,769,224	**$ 15,308,976**	**1,123,838**	**$ -**	**$ 56,329,928**	**$ 130,320**
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**	**$ -**	**$ 26,764,794**	**$ 1,075,793**
Non-dispatchable / Other						
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	-	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	-	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)	-	(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

Sales	Total $	Capacity $	Non-capacity mWh	Non-capacity Fuel $	Non-capacity 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	Actual System kWh sales	Input				7,150,989,325
2	DERP Net Metered kWh generation	Input				10,508,031
3	Adjusted System kWh sales	L1 + L2				7,161,497,356
4	N.C. Retail kWh sales	Input	1,929,577,914	1,892,531,687	952,010,008	4,774,119,609
5	NC kWh sales % of actual system kWh sales	L4 T / L1				66.76%
6	NC kWh sales % of adjusted system kWh sales	L4 T / L3				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 purchased 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 (¢/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 Steam	Belews Creek Steam	Buck CC	Catawba Nuclear	(A) Clemson CHP	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC
Cost of Fuel Purchased ($)								
Coal	$2,320,199	$16,549,328				$13,627,538		
Oil	45,499	583,901	-			169,053	-	-
Gas - CC			$9,970,150				$8,074,155	$14,230,745
Gas - CHP					$54,658			
Gas - CT								
Gas - Steam						1,596,029		
Biogas			357,518				-	-
Total	$2,365,698	$17,133,228	$10,327,668		$54,658	$15,392,619	$8,074,155	$14,230,745
Average Cost of Fuel Purchased (¢/MBTU)								
Coal	312.30	260.57				322.87	-	
Oil	1,484.49	1,485.00				1,474.58		
Gas - CC			348.16				345.25	347.45
Gas - CHP					388.57			
Gas - CT								
Gas - Steam						355.78		
Biogas			2,336.72			.	-	-
Weighted Average	317.12	268.11	358.73		388.57	328.85	345.25	347.45
Cost of Fuel Burned ($)								
Coal	$779,034	$10,953,735				$2,204,005	-	-
Oil - CC			-				-	-
Oil - Steam/CT	39,704	459,597				149,115		
Gas - CC			$9,970,150				$8,074,155	$14,230,745
Gas - CHP					$54,658			
Gas - CT								
Gas - Steam						1,596,029		
Biogas			357,518				-	-
Nuclear				$10,342,435				
Total	$818,738	$11,413,332	$10,327,668	$10,342,435	$54,658	$3,949,150	$8,074,155	$14,230,745
Average Cost of Fuel Burned (¢/MBTU)								
Coal	315.64	307.81				300.49		
Oil - CC								
Oil - Steam/CT	1,441.18	1,476.29				1,454.79		
Gas - CC			348.16				345.25	347.45
Gas - CHP					388.57			
Gas - CT								
Gas - Steam						355.78		
Biogas			2,336.72				-	-
Nuclear				59.29				
Weighted Average	328.06	317.95	358.73	59.29	388.57	331.21	345.25	347.45
Average Cost of Generation (¢/kWh)								
Coal	4.67	2.92				2.59	-	-
Oil - CC			-				-	-
Oil - Steam/CT	18.01	13.63				15.25	-	-
Gas - CC			2.47				2.54	2.42
Gas - CHP					-			
Gas - CT								
Gas - Steam						6.17		
Biogas			16.55				-	-
Nuclear				0.59				
Weighted Average	4.85	3.02	2.54	0.59	-	3.53	2.54	2.42
Burned MBTU's								
Coal	246,812	3,558,552				733,480		
Oil - CC								
Oil - Steam/CT	2,755	31,132				10,250		
Gas - CC			2,863,693				2,338,618	4,095,789
Gas - CHP					14,066			
Gas - CT								
Gas - Steam						448,605		
Biogas			15,300				-	-
Nuclear				17,444,528				
Total	249,567	3,589,684	2,878,993	17,444,528	14,066	1,192,335	2,338,618	4,095,789
Net Generation (mWh)								
Coal	16,667	374,612				84,991		
Oil - CC								
Oil - Steam/CT	220	3,371				978	-	-
Gas - CC			404,369				317,530	588,459
Gas - CHP					(243)			
Gas - CT								
Gas - Steam						25,886		
Biogas			2,160				-	-
Nuclear 100%				1,745,157				
Hydro (Total System)								
Solar (Total System)								
Total	16,887	377,983	406,529	1,745,157	(243)	111,855	317,530	588,459
Cost of Reagents Consumed ($)								
Ammonia		($183,864)	$16,314			$66,338	$3,702	$21,144
Limestone	$25,696	303,305				95,536		
Sorbents	-	58,214						
Urea	4,616							
Re-emission Chemical		-						
Dibasic Acid	-							
Activated Carbon	-							
Lime (water emissions)	-	-						
Total	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

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

SCHEDULE 6

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

Exhibit 6
Schedule 6

Description	Allen Steam	Belews Creek Steam	Buck CC	(A) Clemson CHP	Cliffside Steam - Dual Fuel	Dan River CC	Lee CC	Lee Steam/CT	Lincoln CT	Marshall Steam	Mill Creek CT	Rockingham CT	Current Month	Total 12 ME December 2019
Coal Data:														
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:		
Beginning balance	1,189	1,644
Tons received during period	843	3,499
Tons consumed during period	627	3,738
Ending balance	1,405	1,405
Cost of ending inventory ($/ton)	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.

Exhibit 6
Schedule 7

DUKE ENERGY CAROLINAS

ANALYSIS OF COAL PURCHASED

DECEMBER 2019

STATION	TYPE	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	202,536	12,680,427	62.61
	CONTRACT	560,959	37,571,785	66.98
	FIXED TRANSPORTATION / ADJUSTMENTS	-	2,255,868	-
	TOTAL	763,494	$ 52,508,080	$ 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

Exhibit 6
Schedule 9

DUKE ENERGY CAROLINAS

ANALYSIS OF OIL PURCHASED

DECEMBER 2019

	ALLEN	BELEWS CREEK
VENDOR	HighTowers	HighTowers
SPOT / CONTRACT	Contract	Contract
SULFUR CONTENT %	0	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	HighTowers
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

DUKE ENERGY CAROLINAS **Supplemental McGee Workpaper 1**
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	6,585,428	7,276,686	7,371,013	59,363,957
Cost (Gross of Joint Owners)	$ 61,864,018	$ 57,191,501	$ 53,296,002	$ 60,341,229	$ 41,461,273	$ 42,351,267	$ 42,092,026	358,597,316
$/MWh	6.1899	6.3495	5.8061	6.0645	6.2959	5.8201	5.7105	
Avg $/MWh		**6.0407**						
Cents per kWh		**0.6041**						

			Sept 2020 - August 2021
MDC			
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
	Proposed Nuclear Capacity Factor		94.39%

/ A

DUKE ENERGY CAROLINAS **Supplemental McGee Workpaper 2**
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**

2014-2018	Capacity Rating	NCF Rating	Weighted 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 **Supplemental 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	14,450,043	
Gas CT and CC total (Gross)	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	55,260	
Allocated Economic Purchases	281,308	
Joint Dispatch Purchases	5,314,338	
	8,286,802	
Total Generation and Purchased Power		93,353,096
Fuel Recovered Through intersystem Sales	(1,024,819)	

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

Supplemental McGee Workpaper 5

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

	Allocated Economic Purchase Cost		Economic Sales 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**

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

Supplemental McGee Workpaper 6

					purchase	sale			sale	purchase
	Transfer Projection		**Purchase Allocation Delta**		**Adjusted Transfer**		**Fossil Gen Cost**		**Pre-Net Payments**	
	PECtoDEC	**DECtoPEC**	**PEC**	**DEC**	**PECtoDEC**	**DECtoPEC**	**PEC**	**DEC**	**PECtoDEC**	**DECtoPEC**
9/1/2020	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

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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

Supplemental 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

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DUKE ENERGY CAROLINAS **Supplemental McGee Workpaper 10**
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	Amount in current docket	101,750,258	1,617,020	103,367,278
2	Amount in Sub 1190, prior year docket	107,380,554	72,488,427	179,868,981
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

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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

Supplemental McGee Workpaper 10b

2018	**Jan18**	**Feb18**	**Mar18**	**Apr18**	**May18**	**June 18**	**Jul18**	**Aug18**	**Sep18**	**Oct18**	**Nov18**	**Dec18**	**12 ME**
System KWH Sales - Sch 4, Adjusted	8,703,429,931	7,459,691,118	6,449,998,012	6,590,329,093	6,591,233,338	8,009,317,385	8,486,873,480	8,267,869,991	9,507,963,860	6,345,056,567	6,681,164,890	7,500,839,324	90,593,766,989
NC Retail KWH Sales - Sch 4	5,733,819,698	5,031,181,342	4,190,094,169	4,416,566,036	4,252,750,024	5,245,688,511	5,639,360,853	5,409,821,248	6,212,763,717	4,141,211,581	4,314,713,247	4,892,732,160	59,480,702,586
NC Retail % of Sales, Adjusted (Calc)	65.88%	67.44%	64.96%	67.02%	64.52%	65.49%	66.45%	65.43%	65.34%	65.27%	64.58%	65.23%	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$:	$ 54,851,829	$ 19,768,561	$ 11,751,953	$ 8,971,622	$ 7,588,225	$ 7,853,735	$ 25,151,873	$ 24,971,461	$ 21,908,434	$ 27,821,901	$ 26,826,328	$ 40,057,563	$ 277,523,485
System Actual $ - Sch 3 Fuel-related$; Economic Purchases	18,300,781	2,407,886	1,331,655	1,356,382	1,684,418	1,881,586	2,920,154	3,759,304	6,703,809	4,827,502	6,105,374	13,849,586	$ 65,128,437
System Actual $ - Sch 3 Fuel-related$; Purchased Power for REPS Compliance	3,057,332	3,239,022	2,726,561	3,894,992	4,543,762	4,545,750	4,893,476	4,813,048	4,818,507	3,635,758	4,331,202	3,811,118	$ 48,310,528
System Actual$ - Sch 3 Fuel-related$; SC DERP	122	125	134	163	218	223	232	223	213	203	157	136	$ 2,149
System Acutal $ - Sch 3 Fuel-related$; HB589 purpa Purchases	1,692,902	2,049,413	2,053,505	2,531,173	2,424,811	2,829,385	2,716,750	2,487,659	2,471,326	2,042,872	2,089,973	1,712,356	$ 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
Less:													
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	$ 23,414,464	$ 20,577,089	$ 28,953,467	$ 206,805,400
Total System Economic $ without Native Load Transfers	$ 47,005,899	$ 12,118,777	$ 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	$ 3,176,444	$ 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	$ 422,948	$ 422,948	$ 211,474	$ 211,474	$ 317,211	$ 1,374,581	$ 3,172,110	$ 3,116,270	$ 630,852	$ 211,474	$ 211,474	$ 211,474	$ 10,514,290
System Actual $ - Capacity component of Purchased Power for REPS Compliance	486,469	465,590	421,064	517,448	539,749	567,326	2,279,476	2,238,065	2,451,979	1,649,703	659,013	594,902	$ 12,870,784
System Actual $ - Capacity component of HB589 Purpa QF purchases	316,410	362,951	415,622	397,922	232,512	271,686	1,225,424	1,199,461	1,251,154	924,601	242,932	159,399	$ 7,000,074
System Actual $ - Capacity component of SC DERP	57	37	64	28	13	21	78	84	72	79	19	13	$ 565
System Actual $ - Sch 2 pg 1 ANNUAL VIEW	$ 1,225,884	$ 1,251,526	$ 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	$ 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	$ 1,011,356	$ 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**	**$ 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**

DUKE ENERGY CAROLINAS **Supplemental McGee Workpaper 11**
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 #	Description	Reference	NORTH CAROLINA	SOUTH CAROLINA	Retail TOTAL COMPANY	% NC	% SC
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

Line #	Description	REFERENCE	Total Company MWh	NC RETAIL % To Total	NC RETAIL MWh	SC RETAIL % To Total	SC RETAIL 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)
	Industrial						
3	Total Industrial		234,566	57.70	135,345	42.30	99,221
4	Total Retail	L1+ L2+ L3	(311,855)		(316,696)		4,841
5	Wholesale		76,245				
6	Total Company	L4 + L5	(235,610)		(316,696)		4,841

DUKE ENERGY CAROLINAS **Supplemental McGee Workpaper 12**
North Carolina Annual Fuel and Fuel Related Expense **Page 2**
Weather Normalization Adjustment by Class by Month
Twelve Months Ended December 31, 2019
Docket E-7, Sub 1228

	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**	**(311,855)**

Wholesale

2019	TOTAL MWH ADJUSTMENT
JAN	(38,538)
FEB	41,582
MAR	(15,191)
APR	5,372
MAY	(30,683)
JUN	(10,771)
JUL	(3,961)
AUG	(2,012)
SEP	(55,637)
OCT	16,676
NOV	95,238
DEC	74,172
Total	**76,245**

Note:	**The Resale customers include:**
1	Dallas
2	Forest City
3	Due West
4	Prosperity
5	Lockhart
6	Western Carolina University
7	City of Highlands
8	Haywood
9	Piedmont
10	Rutherford
11	Blue Ridge
12	
13	
14	

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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

Supplemental McGee Workpaper 13

Line	Estimation Method [1]	Rate Schedule	NC Proposed KWH [1] Adjustment	SC Proposed KWH Adjustment	Wholesale Proposed KWH Adjustment	Total Company
1	*Regression*	Residential	184,999,964	76,243,652		
2						
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	455,048,203
					WP 13-2	

Notes:
[1] Two approved methods are used for estimating the growth adjustment depending on the class/schedule:
"Regression" refers to the use of Ordinary Least Squares Regression
"Customer" refers to the use of the Customer by Customer approach. See ND330 for further explanation
[2] T and T2 were combined due to North Carolina's FL & GL schedules being merged into OL & PL during the 12 month period.
rounding differences may occur

DUKE ENERGY CAROLINAS **McGee Workpaper 13**
North Carolina Annual Fuel and Fuel Related Expense **Page 2**
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

Line No.		Reference	
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

"RAC001": CarolinasOperating Revenue Report

Duke Energy Carolinas, LLC Fossil Fuel Procurement Practices

Coal

- Near and long-term coal consumption is forecasted based on inputs such as load projections, fleet maintenance and availability schedules, coal quality and cost, environmental permit and emissions considerations, projected renewable capacity, and wholesale energy imports and exports.
- Station and system inventory targets are developed to provide reliability, insulation from short-term market volatility, and sensitivity to evolving coal production and transportation conditions. Inventories are monitored continuously.
- On a continuous basis, existing purchase commitments are compared with consumption and inventory requirements to determine additional needs.
- All qualified suppliers are invited to participate in proposals to satisfy additional or contract needs.
- Spot market solicitations are conducted on an on-going basis to supplement contract purchases.
- Contracts are awarded based on the lowest evaluated offer, considering factors such as price, quality, transportation, reliability and flexibility.
- Delivered coal volume and quality are monitored against contract commitments. Coal and freight payments are calculated based on certified scale weights and coal quality analysis meeting ASTM standards as established by ASTM International.

Gas

- Near and long-term natural gas consumption is forecasted based on inputs such as load projections, commodity and emission prices, projected renewable capacity, and fleet maintenance and availability schedules.
- Physical procurement targets are developed to procure a cost effective and reliable natural gas supply.
- Over time, short-term and long-term Requests for Proposals and market solicitations are conducted with potential suppliers to procure the cost competitive, secure, and reliable natural gas supply, firm transportation, and storage capacity needed to meet forecasted gas usage.
- Short-term and spot purchases are conducted on an on-going basis to supplement term natural gas supply.
- On a continuous basis, existing purchases are compared against forecasted gas usage to ascertain additional needs.
- Natural gas transportation for the generation fleet is obtained through a mix of long term firm transportation agreements, and shorter term pipeline capacity purchases.
- A targeted percentage of the natural gas fuel price exposure is managed via a rolling 36-month structured financial natural gas hedging program.
- Through the Asset Management and Delivered Supply Agreement between Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC implemented on January 1, 2103, DEC serves as the designated Asset Manager that procures and manages the combined gas supply needs for the combined Carolinas gas fleet.

Fuel Oil

- No. 2 fuel oil is burned primarily for initiation of coal combustion (light-off at steam plants) and in combustion turbines (peaking assets).
- All No. 2 fuel oil is moved via pipeline to applicable terminals where it is then loaded on trucks for delivery into the Company's storage tanks. Because oil usage is highly variable, the Company relies on a combination of inventory, responsive suppliers with access to multiple terminals, and trucking agreements to manage its needs. Replenishment of No. 2 fuel oil inventories at the applicable plant facilities is done on an "as needed basis" and coordinated between fuel procurement and station personnel.
- Formal solicitations for supply may be conducted as needed with an emphasis on maintaining a network of reliable suppliers at a competitive market price in the region of our generating assets.

DUKE ENERGY CAROLINAS
Summary of Coal Purchases
Twelve Months Ended December 31, 2019 & 2018
Tons

Line No.	Month	Contract (Tons)	Net Spot Purchase and Sales(Tons)	Total (Tons)
1	January 2019	467,830	111,867	579,698
2	February	555,624	64,276	619,900
3	March	551,679	112,937	664,616
4	April	476,648	227,914	704,562
5	May	549,400	152,538	701,938
6	June	647,313	140,296	787,609
7	July	692,046	77,088	769,134
8	August	732,253	115,963	848,217
9	September	469,275	204,304	673,579
10	October	471,409	231,850	703,259
11	November	397,228	239,441	636,669
12	December	560,959	202,536	763,494
13	**Total** (Sum L1:L12)	**6,571,664**	**1,881,010**	**8,452,675**

Line No.	Month	Contract (Tons)	Net Spot Purchase and Sales(Tons)	Total (Tons)
14	January 2018	453,756	60,390	514,146
15	February	770,299	0	770,299
16	March	818,185	48,963	867,148
17	April	728,025	13,269	741,294
18	May	712,466	11,116	723,582
19	June	683,250	37,208	720,458
20	July	717,234	149,366	866,600
21	August	678,523	221,949	900,470
22	September	564,680	218,860	783,537
23	October	387,121	95,651	482,771
24	November	349,180	53,825	403,003
25	December	483,536	96,525	580,061
26	**Total** (Sum L14:L25)	**7,346,255**	**1,007,122**	**8,353,369**

DUKE ENERGY CAROLINAS
Summary of Gas Purchases
Twelve Months Ended December 31, 2019 & 2018
MBTUs

Line No.	Month	MBTUs
1	January 2019	11,540,233
2	February	11,895,973
3	March	8,829,116
4	April	7,309,473
5	May	12,448,810
6	June	10,195,827
7	July	12,505,061
8	August	12,104,186
9	September	12,459,839
10	October	8,409,940
11	November	5,772,711
12	December	10,423,250
13	**Total** (Sum L1:L12)	**123,894,419**

Line No.	Month	MBTUs
14	January 2018	6,638,156
15	February	6,512,143
16	March	10,050,310
17	April	10,537,626
18	May	10,067,211
19	June	12,715,364
20	July	15,647,875
21	August	12,892,804
22	September	12,377,677
23	October	10,303,322
24	November	11,867,520
25	December	9,183,559
26	**Total** (Sum L14:L25)	**128,793,567**

/A
Rosenkranz Exhibit 1
E-7, Sub 1228

JOHN A. ROSENKRANZ
56 Washington Drive
Acton, MA 01720
(617) 755-3622
jrosenkranz@verizon.net

PROFESSIONAL EXPERIENCE

North Side Energy, LLC, Acton, MA 2006 – Present
PRINCIPAL

Consultant to energy companies, government agencies and natural gas consumers. Project areas include:
- Gas distribution company resource planning and procurement practices.
- Fuel supply for power generation and electric-gas interface issues.
- Natural gas transmission and storage cost allocation.
- Market studies and avoided cost analysis.

Calpine Corporation, Boston, MA 2000 – 2006
DIRECTOR, GAS ORIGINATION

Developed and implemented fuel supply plans for gas-fired power plants in the Northeast U.S. and Eastern Canada. Negotiated and managed contracts with natural gas suppliers and transporters.
- Testified on the availability of natural gas supply and pipeline delivery capacity to support the permitting of a gas-fired power plant in the Midwest.
- Supported arbitration cases to enforce long-term natural gas contracts.

PG&E Gas Transmission, Boston, MA and Portland, OR 1997 – 1999
DIRECTOR, BUSINESS DEVELOPMENT

Identified and managed development projects and investment opportunities involving natural gas pipelines, underground storage and LNG peaking plants.
- Project manager for a natural gas storage feasibility study in the Pacific Northwest.
- Owner representative and management committee member for the Iroquois Gas Transmission System and Portland Natural Gas Transmission System partnerships.

MANAGER, PROJECT DEVELOPMENT – J. Makowski Company, Boston, MA 1992 – 1997
Supervised a team that provided project management and marketing support for natural gas pipeline and storage projects. Conducted regional gas market studies for internal projects and outside clients.

VICE PRESIDENT - EnerPro, Inc., Chicago, IL 1990 – 1992
Consultant to gas distribution companies. Helped clients define gas portfolio objectives, draft requests for proposals, evaluate suppliers, and negotiate long-term gas purchase contracts.

MANAGER, GAS MODELING GROUP - Planmetrics, Inc., Chicago, IL 1986 – 1990
Provided consulting support to gas distribution companies on gas dispatch modeling and cost forecasts.

ADVISORY ECONOMIST - Chicago Board of Trade, Chicago, IL 1983 – 1986
Researched commodity markets for futures and options trading potential. Prepared a natural gas futures trading proposal that was submitted to the Commodity Futures Trading Commission.

EDUCATION

Graduate study in Economics - Northwestern University**,** Evanston, IL
Completed all course and examination requirements for Ph.D.

Bachelor of Arts, Economics - George Washington University, Washington, DC

RECENT REGULATORY PROCEEDINGS

Natural Gas Supply Planning and Cost of Gas

National Grid Denial of Service Investigation
Case #: New York Public Service Commission Case 19-G-0678
Client: Eastern Environmental Law Center
Scope: Comments on National Grid Long-Term Capacity Report

Liberty Utilities (EnergyNorth) Proposed Transportation Agreement with Tennessee Gas Pipeline
Case #: New Hampshire PUC Docket 14-380
Client: Pipe Line Awareness Network for the Northeast, Inc.
Scope: Testimony on alternatives to a proposed long-term pipeline transportation contract.

Liberty Utilities (EnergyNorth) Granite Bridge Project
Case #: New Hampshire PUC Docket 17-198
Client: Pipe Line Awareness Network for the Northeast, Inc.
Scope: Testimony on proposed intrastate pipeline and LNG peaking facility.

Berkshire Gas Company 2016 Integrated Resource Plan
Case#: Massachusetts DPU Docket 16-103
Client: Town of Montague
Scope: Testimony on alternatives for ending moratorium on new gas service.

Berkshire Gas Company Long Term Contract Approval
Case#: Massachusetts DPU Docket 15-178
Client: Town of Montague
Scope: Testimony on alternatives to a proposed long-term gas transportation contract.

Bangor Natural Gas Company Request for Contract Approvals
Case#: Maine PUC Docket 2019-00105
Client: Maine Public Advocate
Scope: Testimony on proposed long-term gas transportation contracts.

Northern Utilities, Inc. Integrated Resource Plans
Case #: Maine PUC Dockets 2015-00018 and 2011-00526
Client: Maine Public Advocate
Scope: Prepare discovery requests and participate in technical conferences.

Northern Utilities, Inc. Cost of Gas Factor Cases
Case #: Annual, 2012 to present.
Client: Maine Public Advocate
Scope: Review cost of gas filings. Prepare discovery requests and participate in technical conferences.

South Jersey Gas Company Basic Gas Supply Service Reviews
Case #: Annual. 2013 to present
Client: New Jersey Division of Rate Counsel
Scope: Draft discovery requests, prepare written report, and support settlement negotiations.

Elizabethtown Gas Capacity Management Plan
Case#: New Jersey BPU Docket GO13040272
Client: New Jersey Division of Rate Counsel
Scope: Prepare discovery requests and participate in settlement negotiations.

Cost Allocation and Rates

Union Gas 2014 Rate Case
Case #: Ontario Energy Board Case EB-2013-0365
Client: Canadian Manufacturers & Exporters and other consumer groups
Scope: Testimony recommending changes to the allocation of transmission costs.

Northern Utilities Approval of Affiliated Interest Transaction
Case #: Maine PUC Dockets 2011-00302, 2012-00393, and 2013-00259
Client: Maine Public Advocate
Scope: Review proposed contract with pipeline affiliate. Examine rate implications for sales customers.

Granite State Gas Transmission, Inc. Rate Case
Case #: FERC Docket No. RP10-896
Clients: Maine Public Advocate and MPUC Staff
Scope: Review rate case application. Participate in settlement negotiations.

Maritimes & Northeast Rate Case
Case #: FERC Docket No. RP04-360
Client: Calpine Corporation
Scope: Testimony on distance-based rates.

Natural Gas Markets

Merger of The Southern Company and AGL Resources, Inc.
Case #: New Jersey BPU Docket GM15101196
Client: New Jersey Division of Rate Counsel
Scope: Testimony on potential affiliate preference in asset management arrangement.

Union Gas 2016 Dawn Parkway Expansion Project
Case #: Ontario Energy Board Case EB-2014-0261
Client: Canadian Manufacturers & Exporters and other consumer groups
Scope: Testimony on market developments that may reduce Northeast U.S. companies' demand for Canadian gas transportation services.

Ontario Natural Gas Market Review
Case #: Ontario Energy Board Cases EB-2014-0289 and EB-2010-0199
Client: Canadian Manufacturers & Exporters and other consumer groups
Scope: Written and oral submissions on natural gas market issues.

Enbridge Gas Distribution GTA Project
Case #: Ontario Energy Board Case EB-2012-0451
Client: Green Energy Coalition
Scope: Prepare discovery requests on the need for a proposed expansion project.

Portland Natural Gas Transmission System Rate Case
Case #: FERC Docket RP10-729
Client: Maine Public Advocate
Scope: Rebuttal testimony on the market risks faced by the pipeline.

Natural Gas for Power Generation

New Jersey Natural Gas Service Agreement for Red Oak Power
Case #: New Jersey BPU Docket GO13010059
Client: New Jersey Division of Rate Counsel
Scope: Prepare discovery requests and participate in settlement negotiations.

Ontario Integrated Power System Plan
Case #: OEB Case EB-2007-0707
Client: Ontario Power Authority
Scope: Report on the implications of increased gas-fired power generation for the Ontario gas market.

Natural Gas Electricity Interface Review
Case #: OEB Case EB-2005-0551
Client: Association of Power Producers of Ontario
Scope: Written evidence on power generators' gas service needs. Expert witness at hearing.

Greenfield Energy Centre Leave to Construct
Case#: Ontario Energy Board Case EB-2005-0441
Client: Greenfield Energy Centre
Scope: Witness supporting application to construct a gas supply pipeline.

Rulemakings

Storage and Transportation Access Rules
Case #: Ontario Energy Board Case EB-2008-0052
Client: Ontario Energy Board Staff
Scope: Report on transporter and storage operator conduct and reporting requirements in other jurisdictions. Assist in drafting proposed rules and reviewing intervenor comments.

Guidelines for Pre-Approval of Long-Term Gas Supply Contracts
Case #: Ontario Energy Board Case EB-2008-0280
Client: Ontario Energy Board Staff
Scope: Assist Board Staff in evaluating policy options.

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1228
Fuel and Fuel-Related Cost Proceeding
Test Year Ended December 31, 2019
SIERRA CLUB Data Request No. 1-8
Date Sent: 5/4/2020
Requested Due Date: 5/4/2020

REQUEST:

Reference: Phipps Exhibit 1, page 1. For each Duke Energy Carolinas plant that burned natural gas during the test period, please identify the gas transporter(s) connected to the plant. For plants with direct connections to an interstate pipeline, please identify the transporter deliver meter.

CONFIDENTIAL RESPONSE:

Please see the CONFIDENTIAL attachment.

Response provided by:
Tiffany Weir, Regulatory Strategy Manager

Duke Energy Carolinas, LLC
Sierra Club 1-8 - Natural Gas Pipeline Firm Gas Transportation Agreements (Intrastate and Interstate)
Test Period: 1/1/19-12/31/19

Plant	Meter Number*	Interconnect
Belews Creek	Duke VAD (9004742)	Piedmont
Buck	Duke VAD (9004742)	Piedmont
Cherokee (Tolled)	07334	Transco
Clemson CHP	1006669	Fort Hill NGA
Cliffside	PSNC VAD (1006608)	PSNC
Dan River	Duke VAD (9004742)	Piedmont
Lincoln	Duke VAD (9004742)	Piedmont
Mill Creek	Duke VAD (9004742)	Piedmont
Rockingham	Duke VAD (9004742)	Piedmont
WS Lee CC	Duke VAD (9004742)	Piedmont
WS Lee CT	Duke VAD (9004742)	Piedmont

*Note, most DEC natural gas plants do not directly connect to interstate pipelines. For these plants, DEC uses a single Transco VAD.

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1228
Fuel and Fuel-Related Cost Proceeding
Test Year Ended December 31, 2019
SIERRA CLUB Data Request No. 1-5
Date Sent: 5/4/2020
Requested Due Date: 5/4/2020

REQUEST:

Reference: Phipps Exhibit 1, page 1, and Phipps Exhibit 2, page 2. For each month of the test period, please break out the total gas purchase quantity in Exhibit 2 to show: (a) the gas quantity that was transported to plants using a Duke Energy Carolinas or Duke Energy Progress long term firm transportation agreement, (b) the gas quantity that was transported to plants using a shorter term pipeline capacity purchase, and (c) the gas quantity that was delivered to plants by the gas seller.

RESPONSE:

DR 1-5 requests information that is not reasonably available as it relates to tying the gas purchase quantity in Exhibit 2 to (a) the gas quantity that was transported to plants using a Duke Energy Carolinas or Duke Energy Progress long term firm transportation agreement, (b) the gas quantity that was transported to plants using a shorter term pipeline capacity purchase, and (c) the gas quantity that was delivered to plants by the gas seller.

Please see the attached Excel file showing the total natural gas purchases by month as well as the total 3rd party delivered natural gas purchases together with the daily firm long term and short term capacity available by month to transport non-3rd party delivered gas supply to the Transco Duke VAD referenced in DR 1-8.

2020 DEC SC DR 1-5
Natural Gas Purchase

Response provided by:
Tiffany Weir, Regulatory Strategy Manager

Duke Energy Carolinas, LLC
Sierra Club 1-5 - Total gas purchase quantity, 3rd party delivered gas & available transportation capacity
Test Period: 1/1/19-12/31/19

Note: E-7 Sub 1228- 2020 DEC NC Fuel - Phipps Exhibit 2 presents gas receipts by DEC Generating Stations only, excluding receipts by DEP Generation Stations and DEP tolling facilities as they are outside the scope of the DEC fuel proceeding and DEC tolling Facilities as they are reviewd as purchased power expense. The following is a breakout of actual gas purchases for the test period 1/1/2019-12/31/2019. DEC is the face to the market and purchases natural gas supply and transportation for both DEC and DEP on a combined basis. Given this, the purchased and available transportation capacity below are for DEC and DEP combined and the costs/volumes are allocated based on actual burns according to the NCUC AMA approved methodology. The exception to this are gas purchase contracts for NC REPS requirements.

	Total Monthly Purchases (Mbtu/Month)	Monthly 3rd Party Deliveries (Mbtu/Month)	Contracted Long Term Transportation Capacity (Mbtu/day)	Contracted Short Term Transportation Capacity (Mbtu/day)
Jan-19	27,116,131	16,502,867	434,560	0
Feb-19	26,803,938	16,688,277	434,560	0
Mar-19	23,163,935	9,301,002	434,560	45,239
Apr-19	21,521,450	9,048,041	434,560	30,000
May-19	22,851,291	8,867,692	434,560	70,000
Jun-19	25,207,732	11,786,761	434,560	70,000
Jul-19	29,036,804	15,660,366	434,560	70,000
Aug-19	29,523,737	15,105,607	434,560	70,000
Sep-19	28,945,719	15,303,090	434,560	70,000
Oct-19	25,758,461	10,991,992	434,560	30,000
Nov-19	23,074,372	10,120,869	434,560	18,779
Dec-19	25,678,758	12,795,044	434,560	18,779

EXHIBIT 1

Proposed Fuel and Fuel-Related Cost Factors in cents per kWh effective September 1, 2020 (excludes regulatory fee)

TABLE 1 – Company PROPOSED Fuel and Fuel-Related Cost Factors

(¢ per kWh)

Rate Class	Base & Prospective	EMF	EMF Interest	Total Fuel Factor
Residential	1.6027	0.0364	0	1.6391
General Service/Lighting	1.7583	0.0666	0	1.8249
Industrial	1.6652	0.2658	0	1.9310

For comparison, Table 2 below provides the existing fuel and fuel-related cost factors (excluding the regulatory fee) approved in Docket No. E-7, Sub 1190:

TABLE 2 – EXISTING Fuel and Fuel-Related Cost Factors (¢ per kWh)

Rate Class	Base & Prospective	EMF	EMF Interest	Total Fuel Factor
Residential	1.8126	0.1375	0	1.9501
General Service/Lighting	1.9561	0.0927	0	2.0488
Industrial	1.8934	0.2089	0	2.1023