INFORMATION SHEET

PRESIDING: Chair Mitchell, Presiding; and Commissioners Brown-Bland,

Dockham, Patterson, Gray, and Clodfelter

PLACE: Dobbs Building, Room 2115, Raleigh, NC

DATE: Tuesday, June 11, 2019 TIME: 9:30 a.m. to 9:38 a.m. DOCKET NO.: E-7, Sub 1190

VOLUME NUMBER:

COMPANIES: Duke Energy Carolinas, LLC

DESCRIPTION: Application of Duke Energy Carolinas, LLC Pursuant to N.C.G.S. § 62-133.2 and NCUC Rule R8-55 Relating to Fuel and Fuel-Related Charge Adjustments

for Electric Utilities

APPEARANCES

Please see attached.

WITNESSES

Please see attached.

EXHIBITS

Please see attached.

EMAIL DISTRIBUTION

TRANSCRIPT COPIES ORDERED: Downey, Thompson, Hicks and Smith

CONFIDENTIAL EXHIBITS: Downey, Thompson, Hicks and Smith

REPORTED BY: Kim Mitchell

DATE FILED: June 27, 2019

TRANSCRIPT PAGES: 23

PREFILED PAGES: 82 TOTAL PAGES: 105

FILED

JUN 2 7 REC'D

Clerk's Office

N.C. Utilities Commission

- 1		
1	PLACE: Dobbs Building, Raleigh, North Carolina	
2	DATE: Tuesday, June 11, 2019	
3	TIME: 9:30 a.m 9:40 a.m.	
4	DOCKET NO: E-7, Sub 1190	
5	BEFORE: Chair Charlotte A. Mitchell, Presiding	
6	Commissioner ToNola D. Brown-Bland	
7	Commissioner Jerry C. Dockham	
8	Commissioner James G. Patterson	
9	. Commissioner Lyons Gray	
10	Commissioner Daniel G. Clodfelter	
11		
12		
13 [.]	IN THE MATTER OF:	
13 [.]	IN THE MATTER OF: Application of Duke Energy Carolinas, LLC	
	-	
14	Application of Duke Energy Carolinas, LLC	
14 15	Application of Duke Energy Carolinas, LLC Pursuant to N.C.G.S. § 62-133.2 and NCUC Rule R8-55	
14 15 16	Application of Duke Energy Carolinas, LLC Pursuant to N.C.G.S. § 62-133.2 and NCUC Rule R8-55 Relating to Fuel and Fuel-Related Charge Adjustments	
14 15 16	Application of Duke Energy Carolinas, LLC Pursuant to N.C.G.S. § 62-133.2 and NCUC Rule R8-55 Relating to Fuel and Fuel-Related Charge Adjustments	
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14 15 16 17 18 19 20 21	Application of Duke Energy Carolinas, LLC Pursuant to N.C.G.S. § 62-133.2 and NCUC Rule R8-55 Relating to Fuel and Fuel-Related Charge Adjustments	

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1190

In the Matter of)	
Application of Duke Energy Carolinas, LLC)	
Pursuant to G.S. 62-133.2 and NCUC Rule)	DUKE ENERGY CAROLINAS,
R8-55 Relating to Fuel and Fuel-Related)	LLC'S APPLICATION
Charge Adjustments for Electric Utilities)	

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 name and address of Applicant's attorney are:

Jack E. Jirak
Associate General Counsel
Duke Energy Corporation
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Robert W. Kaylor Law Office of Robert W. Kaylor, P.A. 353 Six Forks Road, Suite 260 Raleigh, North Carolina 27609 (919) 828-5250 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 2018.
- 4. In Docket No. E-7, Sub 1163, 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 - 1.7983¢ per kWh Commercial - 1.9382¢ per kWh Industrial -2.0233¢ per kWh

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

Residential -1.7943¢ per kWh Commercial - 1.9529¢ per kWh Industrial -1.9313¢ 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 - 0.1108¢ per kWh

Commercial - 0.0632¢ per kWh Industrial - 0.1476¢ per kWh

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

Residential - 1.9051¢ per kWh Commercial - 2.0161¢ per kWh Industrial - 2.0789¢ per kWh

The new fuel factors would have an effective date of September 1, 2019.

- 6. The information and data required to be filed by NCUC Rule R8-55 is contained in the testimony and exhibits of Eric S. Grant, Regis T. Repko, Kevin Y. Houston, Stephen D. Capps, and Kimberly McGee, 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 (90.21%) 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 -	1.9519¢ per kWh	1.9212¢ per kWh
Commercial -	2.0501¢ per kWh	2.0300¢ per kWh
Industrial -	2.1032¢ per kWh	2.0917¢ 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 - 1.9051¢ per kWh Commercial - 2.0161¢ per kWh Industrial - 2.0789¢ per kWh

Respectfully submitted this 26th day of February, 2019.

.

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ATTORNEYS FOR DUKE ENERGY CAROLINAS, LLC

STATE OF NORTH CAROLINA)	
)	VERIFICATION
COUNTY OF MECKLENBURG)	

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.

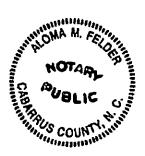
Kimberly McGee

Sworn to and subscribed before me this the 22rd day of February, 2019.

Notary Public Alomh M. Feld

My Commission expires:

21,2020



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, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190 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 1163)					
1	Approved Fuel and Fuel Related Costs Factors	Input	1.7003	1.8314	1.8020	1.7769
2	EMF Increment	Input	0.0980	0.1068	0.2213	0.1290
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	1.7983	1.9382	2.0233	1.9059
	Fuel and Fuel Related Cost Factors Required by Rule R8-55					
5	Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales	Exh 2 Sch 2 pg 2	1.9212	2.0300	2.0917	2.0045
6	NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales	Exh 2 Sch 3 pg 2	1.9519	2.0501	2.1032	2.0261
	Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of 92,95%					
7	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	Exh 2 Sch 1 pg 2	1.7460	1.9278	1.9105	1.8574
8	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Exh 2 Sch 1 pg 2	0.0483	0.0251	0.0208	0.0327
9	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum	1.7943	1.9529	1.9313	1.8901
10	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1108	0.0632	0.1476	0.0994
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	1.9051	2.0161	2.0789	1.9895

Note: Fuel factors exclude regulatory fee

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 92.95%

Test Period Ended December 31, 2018

Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 1 Page 1 of 3

Line#	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Totał Nuclear	Workpaper 1	58,459,031	0.6115	357,497,468
2	Coal	Workpaper 3 & 4	18,355,203	3.1057	570,050,837
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9		_	24,959,649
5	Total Fossil	Sum	39,176,820		1,098,194,572
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation	Workpaper 3	184,444		-
		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Line 9	98,785,509		1,455,692,040
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
_e 12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)	_	(91,061,695)
` 13	Net Generation	Sum Lines 10-12	83,018,229	_	1,346,517,369
14	Purchased Power	Workpaper 3 & 4	9,280,339	3.1771	294,841,746
15	JDA Savings Shared	Workpaper 5		_	19,972,407
16	Total Purchased Power		9,280,339	_	314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	92,298,568	1.8000	1,661,331,522
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)	2.4698	(16,986,301)
19	Line losses and Company use	Line 21-Line 17-Line 18	(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,644,345,221
21	Projected System MWh Sales for Fuel Factor	Workpaper 7	87,243,844		87,243,844
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.8848

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 92.95% Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190 McGee Exhibit 2 Schedule 1 Page 2 of 3

Line#	Description	Reference	Residential	GS/Lighting	Industrial	Totaí
1	NC Projected Billing Period MWh Sales	Workpaper 7	21,397,068	23,381,644	12,939,285	57,717,997
Calcula	tion of Renewable and Cogeneration Purchased Power Capacity Rate by Class					<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				14,874,084
4 5 6 7 8	Total of Renewable and QF Purchased Power Capacity NC Portion - Jursidicational % based on Production Plant Allocator NC Renewable and QF Purchased Power - Capacity Production Plant Allocation Factors Renewable and QF Purchased Power - Capacity allocated on Production Plant % Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 2 + Line 3 Input Line 4 * Line 5 Input Line 6 * Line 7 Line 8 / Line 1 / 10	54.68% \$ 10,325,952 \$ 0.0483	31.06% 5,864,785 \$ 0.0251	14.26% 2,693,265 0.0208	\$ 28,169,738 67.04% \$ 18,884,001 100.00% \$ 18,884,001 0.0327
5umma 10 11 12 13 14	Fuel and Fuel Related Costs excluding Purchased Power for REPS Compliance and QF Purchased Capacity cents/kWh REPS Compliance and QF Purchased Power - Capacity cents/kWh Total adjusted Fuel and Fuel Related Costs cents/kWh EMF Increment (Decrement) cents/kWh EMF Interest (Decrement) cents/kWh	Line 15 - Line 11 - Line 13 - Line 14 Line 9 Line 10 + Line 11 Exh 3 pg 2, 3, 4 Exh 3 pg 2, 3, 4	1.7460 0.0483 1.7943 0.1108	1.9278 0.0251 1.9529 0.0632	1.9105 0.0208 1.9313 0.1476	1.8574 0.0327 1.8901 0.0994
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 1 Page 3	1.9051	2.0161	2.0789	1.9895

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 92.95%
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 1 Page 3 of 3

Line #	Rate Class	Projected Billing Period MWh Sales A Workpaper 7		nual Revenue at Current rates B Workpaper 8	Allocate Fuel Costs Increase/(Decrease) to Customer Class C Line 25 as a % of Column 8	Increase/(De as % of An Revenue at 6 Rates D	nual urrent	Total Fuel Rate Increase/(Decrease) E If D=0 then 0 if not then (C*100)/(A*1000)	Current Total Fuel Rate (Including Capacity and EMF) E-7, Sub 1163 F McGee Exhibit 1	Proposed Total Fuel Rate (including Capacity and EMF) G E+F=G
1	Residential	21,397,068	s	2,183,285,633	\$ 22,857,098		1.05%	0.1068	1.7983	1.9051
2	General Service/Lighting	23,381,644	•	1,738,716,194	18,202,843		1.05%	0.0779	1.9382	2,0161
3	Industrial	12,939,285		687,001,167	7,192,304		1.05%	0.0556	2.0233	2.0789
4	NC Retail	57,717,997	\$	4,609,002,994	\$ 48,252,245		1,05%			
	Total Proposed Composite Fuel Rate;									
5	Total Fuel Costs for Aliocation	Workpaper 7	\$	1,648,542,239						
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 1, Page 2		28,169,738						
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,620,372,501	•					
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7		87,243,844						
9	NC Retail Projected Billing Period MWh Sales	Line 4	_	57,717,997	-					
10	Allocation %	Line 9 / Line 8		66.16%						
	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	1,072,038,447						
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 1, Page 2	_	18,884,001	•					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	1,090,922,448						
14	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997						
	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.8901						
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.0994						
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	_	0.0000	•					
18	Total Proposed Composite Fuel Rate	Sum		1.9895						
	Total Current Composite Fuel Rate - Docket 5-7 Sub 1163:									
	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.7769						
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1290						
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1	_	0.0000	•					
22	Total Current Composite Fuel Rate	Sum		1.9059						
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		0,0836				-		
24	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997						
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	48,252,245						
	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 92.95% and Normalized Test Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 2 Page 1 of 3

Line#	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
		•	D	E	D*E=F
1	Total Nuclear	Workpaper 1	58,459,031	0.6115	357,497,468
2	Coal	Calculated	19,630,442	3,1057	609,655,475
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9		_	24,959,649
5	Total Fossil	Sum	40,452,059		1,137,799,210
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation		184,444		
		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Lìne 9	100,060,748		1,495,296,678
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)	_	(91,061,695)
13	Net Generation	Sum	84,293,468		1,386,122,007
14	Purchased Power	Workpaper 3 & 4	9,280,339		294,841,746
15	JDA Savings Shared	Workpaper 5	-		19,972,407
16	Total Purchased Power	Sum	9,280,339	_	314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	93,573,807		1,700,936,160
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)		(16,986,301)
19	Line losses and Company use		(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,683,949,859
21	Normalized Test Period MWh Sales	Exhibit 4, Workpaper 7a	88,519,083		88,519,083
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.9024

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 92.95% and Normalized Test Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 2 Page 2 of 3

Line#	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Normalized Test Period MWh Sales	Exhibit 4	22,043,791	23,487,580	12,454,944	57,986,315
Calcula	tion of Renewable Purchased Power Capacity Rate by Class					<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				14,874,084
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				\$ 28,169,738
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				67.04%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5			·	\$ 18,884,001
7	Production Plant Allocation Factors	Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 10,325,952 \$	5,864,785	2,693,265	\$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0468	0.0250	0.0216	0.0326
Summa	ry 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	1.7636	1.9418	1.9225	1.8725
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0468	0.0250	0.0216	0.0326
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.8104	1.9668	1.9441	1.9051
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1108	0.0632	0.1476	0.0994
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	1.9212	2.0300	2.0917	2.0045

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 92.95% and Normalized Test Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 2 Page 3 of 3

Line#	Rate Class	Normalized Test Period MWh Sales		nual 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 1163	Proposed Total Fuel Rate (including Capacity and EMF)
		Α		В	С	D	E	F	Ğ
		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	22,043,791	\$	2,183,285,633	\$ 27,083,575	1.24%	0.1229	1.7983	1.9212
2	General Service/Lighting	23,487,580	\$	1,738,716,194	21,568,708	1.24%	0.0918	1.9382	2.0300
3	Industrial	12,454,944	\$	687,001,167	8,522,223	1.24%	0.0684	2.0233	2.0917
4	NC Retail	57,986,315	\$	4,609,002,994	\$ 57,174,506	•			
	Total Proposed Composite Fuel Rate;								
5	Total Fuel Costs for Allocation	Workpaper 7a	\$	1,688,146,877					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 2, Page 2		28,169,738					
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,659,977,139	-				
8	Normalized Test Period System MWh Sales for Fuel Factor	Workpaper 7a		88,648,222					
9	NC Retail Normalized Test Period MWh Sales	Exhibit 4	_	57,986,315					
10	Allocation %	Line 9 / Line 8		65.41%	i				
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	1,085,791,046					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 2, Page 2		18,884,001					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	1,104,675,048					
14.	NC Retail Normalized Test Period MWh Sales	Line 4		57,986,315					
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.9051					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.0994					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000	-				
18	Total Proposed Composite Fuel Rate	Sum		2.0045					
	Total Current Composite Fuel Rate - Docket E-7 Sub 1163:								
19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.7769					
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1290					
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000	_				
22	Total Current Composite Fuel Rate	Sum		1.9059					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		0.0986					•
24	NC Retail Normalized Test Period MWh Sales	Exhibit 4		57,986,315					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	57,174,506					•
	Note: Rounding differences may occur						-		

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 3 Page 1 of 3

_	Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
	_			D	E	D*E=F
	1	Total Nuclear	Workpaper 2	56,739,499	0.6115	346,981,926
	2	Coal	Calculated	19,636,789	3.1057	609,852,590
	3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
	4	Reagents and Byproducts	Workpaper 9	-		24,959,649
	5	Total Fossil	Sum	40,458,406	-	1,137,996,325
	6	Hydro	Workpaper 3	4,839,425		
	7	Net Pumped Storage	Workpaper 3	(3,874,211)		
	8	Total Hydro	Sum	965,214		
	9	Solar Distributed Generation	Workpaper 3	184,444		
			Line 1 + Line 5 + Line 8 +			
	10	Total Generation	Line 9	98,347,563		1,484,978,251
1	11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
Ĵ	12	Less Catawba Joint Owners	Calculated	(14,450,934)	_	(88,383,179)
	13	Net Generation	Sum	83,018,229	_	1,378,482,097
	14	Purchased Power	Workpaper 3 & 4	9,280,339		294,841,746
	15	JDA Savings Shared	Workpaper 5		_	19,972,407
	16	Total Purchased Power	Sum	9,280,339	_	314,814,153
	17	Total Generation and Purchased Power	Line 13 + Line 16	92,298,568		1,693,296,250
	18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)		(16,986,301)
	19	Line losses and Company use		(4,366,969)		-
	20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,676,309,949
	21	Projected System MWh Sales for Fuel Factor	Workpaper 7b	87,243,844		87,243,844
	22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.9214



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 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 3 Page 2 of 3

Line#	Description	Reference	Residential GS/Lighting		Industrial	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7b	21,397,068	23,381,644	12,939,285	57,717,997
<u>Calculat</u>	tion of Renewable Purchased Power Capacity Rate by Class					<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				\$ 14,874,084
4 5 6 7	Total of Renewable and QF Purchased Power Capacity NC Portion - Jursidicational % based on Production Plant Allocator NC Renewable and QF Purchased Power - Capacity Production Plant Allocation Factors	Line 2 + Line 3 Input Line 4 * Line 5 Input	54.68%	31.06%	14.26%	\$ 28,169,738 67.04% \$ 18,884,001 100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 10,325,952 \$	5,864,785	\$ 2,693,265	\$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0483	0.0251	0.0208	0.0327
Summa	ry 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	1.7928	1.9618	1.9348	1.8940
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0483	0.0251	0.0208	0.0327
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.8411	1.9869	1.9556	1.9267
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1108	0.0632	0.1476	0.0994
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	. 1.9519	2.0501	2.1032	2.0261

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 90.21% and Projected Period Sales

Test Period Ended December 31, 2018

Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 3 Page 3 of 3

Line	Rate Class	Projected Billing Period MWh Sales		nual Revenue at Current rates	Increase/(Decrease to Customer Class	% of Annual Revenueat Current Rates	Total Fuel Rate Increase/(Decrease)	(Including Capacity and EMF) E-7, Sub 1163	Rate (including Capacit and EMF)
		Α		В	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
		Workpaper /b		Workpaper 6	Line 25 as a 201 Column	C/6	(C 100)/(A 1000)	McGes Exumit 1	241-0
1	Residential	21,397,068	\$	2,183,285,633			0.1536	1.7983	1.951
2	General Service/Lighting	23,381,644		1,738,716,194			0.1119	1.9382	2.050
3	Industrial	12,939,285		687,001,167			0,0799	2.0233	2.103
4	NC Retail	57,717,997	\$	4,609,002,994	\$ 69,377,032	<u>.</u>			
	Total Proposed Composite Fuel Rate:								
5	Total Fuel Costs for Allocation	Workpaper 7b	\$	1,680,506,966					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 3, Page 2		28,169,738					
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,652,337,228	•				
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7b		87,243,844					
9	NC Retail Projected Billing Period MWh Sales	Line 4	_	57,717,997					
10	Allocation %	Line 9 / Line 8		66.16%					
11	NC Retail Other Fuel Costs	Line 7 ° Line 10	\$	1,093,186,310					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 3, Page 2		18,884,001					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	1,112,070,311					
14	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,9 97					
15		Line 13 / Line 14 / 10		1.9267					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.0994					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000	•				
18	Total Proposed Composite Fuel Rate	Sum		2.0261					
	Total Current Composite Fuel Rate - Docket E-7 Sub 1163;								
19		McGee Exhibit 1		1.7769					
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1290					
21		McGee Exhibit 1		0.0000					
22	Total Current Composite Fuel Rate	Sum		1.9059					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		0.1202				•	
24	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	69,377,032					
25									

McGee Exhibit 3
Page 1 of 4



North Carolina Annual Fuel and Fuel Related Expense **Calculation of Experience Modification Factor - Proposed Composite** Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

Line		Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	,	NC Retail MWh Sales (c)	(0	Reported Over)/ Under Recovery (d)
No.	January 2018	-			F 722 020		70 240 460
2	February	į			5,733,820	\$	70,210,460
3	March(1)				5,031,181	\$	(21,289,748)
4	April(1)	-		,	4,190,094	\$	4,767,793
5	May	1		ē.	4,416,566 4,252,750	Ş	(13,763,436)
6	June(1)	1			• •	\$ \$	6,136,829
7	July(1)			•	5,245,689 5,639,361	\$	6,622,242 14,497,484
8	August	1			5,409,821	\$	13,507,110
9	September	; 1		•	6,212,764	\$	(8,995,949)
10	October				4,141,212	\$	11,156,943
11	November	1			4,314,713	\$	11,789,339
12		,		•	• •	-	
	December				4,892,732	\$	16,666,116
13	Total Test Period				59,480,703	\$	111,305,183
14	Adjustment to remove (Over) / Under	Recovery - Januar	y - March 2018 ⁽²⁾			\$	53,688,503
15	Include Under Recovery related to Coal	Inventory Rider				\$	37,667
16	Adjusted (Over)/ Under Recovery					\$	57,654,346
17	NC Retail Normalized Test Period MWh	Sales		Exhibit 4			57,986,315
18	Experience Modification Increment (De	crement) cents/k	Wh				0.0994

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



⁽²⁾ January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 16. 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, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWH Sales (c)	(0	Reported Over)/ Under Recovery (d)
1	January 2018	2.2454	1.7919	2,747,953	Ś	12,463,615
2	February	1.2214	1.7919	2,101,525	Ś	(11,989,284)
3	March ⁽¹⁾	1.8936	1.7919	1,546,024	\$	1,587,096
4	April ⁽¹⁾	1.5682	1.7919	1,557,073	\$	(3,496,659)
5	May	2.2261	1.7919	1,361,386	\$	5,910,833
6	June ⁽¹⁾	1.9042	1.7919	1,940,879	\$	2,162,126
7	July ⁽¹⁾	1.9028	1.7919	2,227,922	\$	2,375,059
8	August	1.9776	1.7885	2,050,040	\$	3,875,805
9	September	1.7474	1.7894	2,200,376	\$	(925,298)
10	October	2.0726	1.7983	1,554,551	\$	4,264,193
11	November	2.3435	1.7983	1,436,836	\$	7,833,590
12	December	1.9167	1.7983	2,038,462	\$	2,413,589
13	Total Test Period		_	22,763,029	\$	26,474,665
14	Test Period Wtd Avg. C/kWh	1.9096	1.7928			
15	Adjustment to remove (Over) / Under	Recovery - Janua	ry - March 201	8 ⁽²⁾	\$	2,061,427
16	Include Under Recovery related to Coa	al Inventory Rider			\$	14,415
17	Adjusted (Over)/Under Recovery				\$	24,427,653
18	NC Retail Normalized Test Period MW	h Sales	E	Exhibit 4		22,043,791
19	Experience Modification Increment (De		0.1108			

Notes:

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

⁽²⁾ January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17.
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, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

McGee Exhibit 3 Page 3 of 4

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed c/kWh (b)	NC Retail MWh Sales (c)	(0	Reported Over)/ Under Recovery (d)
1	January 2018	3,5376	1.9253	2,053,224	\$	33,104,497
2	February	1.5865	1.9253	1,899,154	\$	(6,434,005)
3	March ⁽¹⁾	2.0122	1.9253	1,709,988	\$	1,503,768
4	April ⁽¹⁾	1.5762	1.9253	1,819,014	\$	(6,335,002)
5	May	1.9140	1.9253	1,860,965	\$	(210,465)
6	June ⁽¹⁾	1.9786	1.9253	2,190,371	\$	1,145,088
7	July ⁽¹⁾	2.1543	1.9253	2,291,796	\$	5,295,453
8	August	2.1026	1.9219	2,244,902	\$	4,054,944
9	September	1.6846	1.9256	2,660,685	\$	(6,412,545)
10	October	2.1707	1.9382	1,727,851	\$	4,018,244
11	November	2.1580	1.9382	1,824,017	\$	4,009,350
12	December	2.4310	1.9382	1,880,041	\$	9,264,795
13	Total Test Period			24,162,007	\$	43,004,122
14	Test Period Wtd Avg. ¢/kWh	2.1057	1.9279			
15	Adjustment remove (Over) / Under Reco	very - January - March 2	2018 ⁽²⁾		\$	28,174,260
16	Include Under Recovery related to Coal I	nventory Rider			\$	15,301
17	Adjusted (Over)/ Under Recovery				\$	14,845,163
18	NC Retail Normalized Test Period MWh	Sales		Exhibit 4		23,487,580
19	Experience Modification Increment (Dec	rement) cents/kWh				0.0632

Notes:

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

⁽²⁾ January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17.
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, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

McGee Exhibit 3 Page 4 of 4

Line	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	(C	Reported Over)/ Under Recovery (d)
1	January 2018	4.6719	2.0297	932,643	Ś	24,642,348
2	February	1.7515	2.0297	1,030,502	Ś	(2,866,460)
3	March ⁽¹⁾	2,2081	2.0297	934,082	\$	1,676,929
4	April ⁽¹⁾	1.6509	2.0297	1,040,479	Š	(3,931,775)
5	May June ⁽¹⁾	2.0721	2.0297	1,030,399	\$	436,461
6		2.3283	2.0297	1,114,438	\$	3,315,028
7	July ⁽¹⁾	2.6319	2.0297	1,119,643	\$	6,826,972
8	August	2.5265	2.0263	1,114,879	\$	5,576,360
9	September	1.8991	2.0218	1,351,703	\$	(1,658,106)
10	October	2.3580	2.0233	858,810	\$	2,874,506
11	November	2.0182	2.0233	1,053,860	\$	(53,600)
12	December	2.5353	2.0233	974,229	\$	4,987,733
13	Total Test Period			12,555,667	\$	41,826,395
14	Test Period Wtd Avg. ¢/kWh	2.3595	2.0271			
15	Adjustment to remove (Over) / Under	Recovery - January	- March 2018 ⁽²⁾		\$	23,452,816
16	Include Under Recovery related to Co	al Inventory Rider			\$	7,951
17	Adjusted (Over)/ Under Recovery				\$	18,381,529
18	NC Retail Normalized Test Period MW	h Sales	Ex	chibit 4		12,454,944
19	Experience Modification Increment (D	ecrement) cents/KW	/h			0.1476

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

January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17. Rounding differences may occur

McGee Exhibit 4

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense Sales, Fuel Revenue, Fuel Expense and System Peak Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

Line#	Description	Reference	т	otal Company	ı	North Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
		Exhibit 6 Schedule 1 (Line 4)		00 107 500		50 400 703	22 762 020	24.459.007	42 FFF 667
1	Test Period MWh Sales (excluding inter system sales)	and Workpaper 11 (NC retail)		90,487,628		59,480,703	22,763,029	24,162,007	12,555,667
2	Customer Growth MWh Adjustment	Workpaper 13 Pg 1		309,143		155,235	188,587	(37,644)	4,292
3	Weather MWh Adjustment	Workpaper 12		(2,277,688)		(1,649,623)	(907,825)	(636,783)	(105,015)
4	Total Normalized MWh Sales	Sum		88,519,083		57,986,315	22,043,791	23,487,580	12,454,944
5	Test Period Fuel and Fuel Related Revenue *		\$	1,691,073,964	\$	1,128,424,268			
6	Test Period Fuel and Fuel Related Expense *		\$	1,852,256,576	\$	1,239,729,451			
7	Test Period Unadjusted (Over)/Under Recovery		\$	161,182,612	\$	111,305,183			
				nter Coincidental Peak (CP) kW					
8	Total System Peak			18,871,786	-				
9	NC Retail Peak			12,650,981					
_									
10	NC Residential Peak			6,917,677					
11	NC General Service/Lighting Peak			3,929,002					
12	NC Industrial Peak			1,804,302					

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.

TIA

McGee Exhibit 5

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Nuclear Capacity Ratings

Test Period Ended December 31, 2018

Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

	Rate Case		
	Docket E-7,	Fuel Docket E-7,	Proposed Capacity
Unit	Sub 1146	Sub 1163	Rating MW
Oconee Unit 1	847	847.0	847.0
Oconee Unit 2	848	848.0	848.0
Oconee Unit 3	859	859.0	859.0
McGuire Unit 1	1,158	1158.0	1158.0
McGuire Unit 2	1,158	1157.6	1157.6
Catawba Unit 1	1,160	1160.1	1160.1
Catawba Unit 2	1,150	1150.1	1150.1
Total Company	7,180	7,179.8	7,179.8

DECEMBER 2018 MONTHLY FUEL FILING

DUKE ENERGY CAROLINAS SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-7, Sub 1161

Line <u>No.</u>		December 2018	12 Months Ended December 2018
1	Fuel and fuel-related costs	\$ 167,457,560	\$ 1,885,269,344
	MWH sales:		
2	Total system sales	7,718,637	92,433,072
3	Less intersystem sales	228,210	1,945,444
4	Total sales less intersystem sales	7,490,427	90,487,628
5	Total fuel and fuel-related costs (¢/KWH)		
	(line 1/line 4)	2.2356	2.0835
6	Current fuel and fuel-related cost component (¢/KWH)	1.8969	
	(per Schedule 4, Line 2a Total)		
	Generation Mix (MWH):		
_	Fossil (by primary fuel type):		•
7	Coal	1,366,724	22,653,740
8	Fuel Oil	12,042	232,515
9	Natural Gas - Combined Cycle	1,059,332	13,695,555
10	Natural Gas - Combustion Turbine	42,178	2,550,671
11	Natural Gas - Steam	127,536	187,574
12	Biogas	3,259	30,204
13	Total fossil	2,611,071	39,350,259
14	Nuclear 100%	4,981,169	59,936,028
15	Hydro - Conventional	368,610	2,877,050
16	Hydro - Pumped storage	(44,946)	(529,226)
17	Total hydro	323,664	2,347,824
18	Solar Distributed Generation	5,768	130,018
19	Total MWH generation	7,921,672	101,764,129
20	Less joint owners' portion - Nuclear	1,147,290	15,165,371
21	Less joint owners' portion - Combined Cycle	27,377	465,202
22	Adjusted total MWH generation	6,747,005	86,133,556

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

DUKE ENERGY CAROLINAS DETAILS OF FUEL AND FUEL-RELATED COSTS

Docket No. E-7, Sub 1161

Fuel and fuel-related costs:	December 2018	12 Months Ended December 2018
0501110 coal consumed - steam	\$ 46,847,568	\$ 675,888,074
0501222-0501223 biomass/test fuel consumed	-	
0501310 fuel oil consumed - steam	1,223,578	8,586,389
0501330 fuel oil light-off - steam	593,669	7,287,851
Total Steam Generation - Account 501	48,664,815	691,762,314
Nuclear Generation - Account 518		
0518100 burnup of owned fuel	23,069,842	275,311,826
Other Generation - Account 547		
0547100, 0547124 - natural gas consumed - Combustion Turbine	2,272,971	98,161,049
0547100 natural gas consumed - Steam	5,696,114	8,633,545
0547101 natural gas consumed - Combined Cycle	31,773,516	373,047,230
0547106 biogas consumed - Combined Cycle	175,961	1,523,560
0547200 fuel oil consumed - Combustion Turbine	57,020	25,830,495
Total Other Generation - Account 547	39,975,582	507,195,879
Reagents		
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	1,549,134	27,110,200
Total Reagents	1,549,134	27,110,200
By-products		
Net proceeds from sale of by-products	583,525	6,085,203
Total By-products	583,525	6,085,203
Total Fossil and Nuclear Fuel Expenses		
Included in Base Fuel Component	113,842,898	1,507,465,422
Purchased Power and Net Interchange - Account 555		
Capacity component of purchased power (economic)	211,474	10,514,290
Capacity component of purchased power (economic) Capacity component of purchased power (renewables)	594,915	13,300,661
Capacity component of purchased power (PURPA)	159,399	6,541,261
Fuel and fuel-related component of purchased power	59,686,689	434,709,945
Total Purchased Power and Net Interchange - Account 555	60,652,477	465,066,157
Total I dichased I ower and Net interoritings - Account 600	00,002,477	100,000,101
Less:		
Fuel and fuel-related costs recovered through intersystem sales	6,944,585	86,336,253
Fuel in loss compensation	92,474	925,224
Solar integration charge revenue	758_	7 <u>58</u>
Total Fuel Credits - Accounts 447 /456	7,037,817	87,262,235
	.	A 4
Total Fuel and Fuel-related Costs	<u>\$ 167,457,560</u>	\$ 1,885,269,344

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

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

December 2018

Purchased Power	Total		Capacity		Not Fuel \$		
Economic			\$	mWh	Fuel \$	Fuel-related \$	Not Fuel-related \$
Cherokee County Cogeneration Partners	\$ 1,287,426	5	211.474	27,369 \$	946,407	\$ 129.545	
City of Kings Mountain	8,979	•	8,979	27,000 0			
DE Progress - Native Load Transfer	27,945,591		0,010	741,793	23,410,601	4,543,696	\$ (8,706
E Progress - Native Load Transfer Benefit	1,156,134		_	741,733	1,156,134	4,040,000	ψ (0,100
E Progress - Native Load Transfer Benefit E Progress - Fees	(156,964)		•		1,100,104	(156,984)	
aywood Electric - Economic	40,903		20,630	336	12,367	7,906	
			20,030	146,439	4,164,428	2,662,503	
acquarie Energy, LLC	6,826,931		•		70,272	44,928	
CEMC - Economic	115,200	•	-	3,600 53,310	1,088,467	725,343	
CMPA Instantaneous - Economic	1,813,810		-	78,830			
TE Carolinas LLC	3,232,610		•		1,971,892	1,260,718	
edmont Municipal Power Agency	307,201		•	10,960	184,355	122,846	
JM Interconnection, LLC.	11,214,935		-	313,334	6,841,110	4,373,825	
outhern Company Services, Inc.	250,370		•	9,167	152,726	97,644	
ennesse Valley Authority	96,400		•	2,600	58,804	37,596	
own of Dallas	584		584	-	•	•	
own of Forest City	19,856		19,856		•		
	\$ 54,159,966	\$	261,523	1,387,738 \$	40,057,563	\$ 13,849,586	\$ (8,706
Renewable Energy	\$ 4,406,020	\$	594,902	77.027 \$		\$ 3,811,118	•
EPS ERP - Purchased Power		>	594,902 13	11,021 \$	-	136	•
:Kr - Purchased Power	\$ 4,406,169	\$	594,915	77,030 \$:	\$ 3,811,254	\$
HB589 PURPA Purchases							
ualifying Facilities	1,936,441		159,399	37.040		1,712,356	64,686
	\$ 1,936,441	\$	159,399	37,040 \$		\$ 1,712,356	\$ 64,686
Non-dispatchable	 				_		
ue Ridge Electric Membership Corp.	\$ 1,244,696	\$	724,668	26,268 \$	317,217		\$ 202,811
aywood Electric	351,238		152,148	7,201	121,445		77,645
acquarie Energy, LLC	957,341		•	12,433	583,978		373,363
CEMC - Other	4,398		4,398	-	•		
CMPA	155,400		-	1,110	94,794		60,600
edmont Electric Membership Corp.	592,764		346,426	11,904	150,266		96,072
eneration Imbalance	1,078,303		-	8,735	242,385		835,916
nergy Imbalance - Purchases	(277,960)		•	(11,956)	(169,556)		(108,404
nergy Imbalance - Sales	(269,174)			-	(269,534)		360
ther Purchases	648		-	19	-		648
	\$ 3,837,654	\$	1,227,640	55,714 \$	1,070,995	\$.	\$ 1,539,019
Total Purchased Power	\$ 64,340,230	<u> </u>	2,243,477	1,557,522 \$	41,128,558	\$ 19,373,196	\$ 1,594,999
terchanges in							
ther Catawba Joint Owners	6,629,878		-	579,425	3,870,366		2,759,512
/S Lee Joint Owner	1,406,837			43,619	1,229,697		177,140
otal Interchanges In	8,036,714		- -	623,044	5,100,063		2,936,65
terchanges Out	/7 00C 000		(404 000)	IONE ACO	/4 C47 DD4\		,
ther Catawba Joint Owners	(7,985,890)		(134,209)	(695,363)	(4,647,804)		(3,203,87
atawba- Net Negative Generation	(66,943)		-	(2,964)	(51,150)		(15,79)
/S Lee Joint Owner	(1,402,174)			(42,514)	(1,216,174)		(186,000
otal Interchanges Out	(9,455,007)		(134,209)	(740,841)	(5,915,128)	-	(3,405,670
Net Purchases and Interchange Power	\$ 62,921,937	\$	2,109,268	1,439,725 \$	40,313,493	\$ 19,373,196	\$ 1,125,979

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

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

DECEMBER 2018

		Total		apacity	Non-capacity					
Sales		\$		\$	mWh		Fuel \$		Non-fuel \$	
Utilities:										
SC Public Service Authority - Emergency	\$	19,312		-	` 475	\$	16,530	\$	2,782	
SC Electric & Gas - Emergency	·	22,373		-	383		21,699		674	
Market Based:										
NCMPA		110,344	\$	87,568	392		22,919		(143)	
PJM Interconnection, LLC.		69		-	-		-		69	
SC Electric & Gas		2,050		-	-		-		2,050	
Other:										
DE Progress - Native Load Transfer Benefit		287,133		-	-		287,133		-	
DE Progress - Native Load Transfer		8,259,541		-	225,840		6,529,920		1,729,621	
Generation Imbalance		76,917		-	1,120		66,384		10,533	
BPM Transmission		(67,517)		-					(67,517)	
Total Intersystem Sales	\$	8,710,222	\$	87,568	228,210	\$	6,944,585	\$	1,678,069	

^{*} 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 2018

City of Norm Moretamin Progress - Name Moretami	Purchased Power		Total		Capacity			Nоп-са	pacity	,	N	
City of Norm Moretamin Progress - Name Moretami	Economic		\$		\$	mWa		Fuel \$	F	uel-related \$		
EP Progress - Native Load Transler 194,410,580 5,426,200 174,375,404 19,871,245 294,22	Cherokee County Cogeneration Partners City of Kings Mountain	\$		\$		536,248	\$	18,602,696	\$	2,596,502		
De Progress - Fore	DE Progress - Native Load Transfer DE Progress - Native Load Transfer Benefit		194,410,960			5,426,920				19,671,245	\$	264,221
EDF Training Meth America, LLC, 77,116	DE Progress - Fees							10,751,026		(1.093.167)		
Haywood Bernic Septimin Sep	EDF Trading North America, LLC.					3,005		46,430				
Mesquarin Energy Land Group 28,508,008 77,008 17,998,988 11,508,109 14,6	Exelon Generation Company, LLC.				•					46,053		
Magan Flating Capital Group 24,839 1,112 15,152 6,567					251,870							
NCEMO					•							
NCMPA Land Fullowing Economic	Morgan Stanley Capital Group				•							
NCMPA Lader Following Economic 16,007,553 5,064,685 10,121,891 5,085,572 7,004,810 195,650 427,2735 27,318.75 7,004,810 195,650 427,2735 27,318.75 7,004,810 195,650 427,2735 27,318.75 42,004,810 1,004,035 31,141,109 32,044,100 1,004,035 31,141,109 32,044,100 1,004,035 31,141,109 32,044,100 1,004,035 31,141,109 32,044,100 1,004,035 31,141,109 32,044,100 1,004,035 31,141,109 32,044,100 1,004,035 31,141,109 32,044,100 1,004,035 31,141,109 31,141,109 31,141,141,109 31,141,141,141,141,141,141,141,141,141,1					•							
NTE Customis LLC 7,004,810 1995,650 4,727,335 2,731,875												
Piedmant Municipal Power Agency												
FRIM Interconnection, LLC. \$1,171,173	Piedmont Municipal Power Agency											
Rainbow Energy Marketing Copporation												
South Cardina Electric & Gas Company 212,527	Rainbow Energy Marketing Corporation				-	3,285						
Tromess Valley Authority 1,503,241 - 30,641 977,377 825,264 The Energy Authority 8,8,483 7,08 1,167 22,475 15,008 Town of Dalas 703,277 23,425 15,003 7,000 1,000	South Carolina Electric & Gas Company				•			127,811				
The Energy Authority Town of Dallas 7,008 7,008 1,167 23,475 15,008					•							
Town of Dalas					•							
Town of Forest City						1,167		23,475		15,008		
Sacration						•		•		-		
Renewable Energy \$ 62,977,408 \$ 13,300,096 \$76,170 \$ \$ 49,677,312 \$ \$ 2,148 DERP - Purchased Power 2,713 5.55 49 2,148 DERP - Net Metered Generation 43,550 7,598 15 - 9,49,679,460 \$35,56 ESSO2023,077 \$13,300,625 \$976,235 \$ - \$49,679,460 \$35,56 Hissay PURPA Purchases 33,208,999 6,541,261 \$40,098 \$ 25,595,400 \$1,082,33 Non-dispatchable	Town or Forest Only			-		9 564 015	-	277 622 ADS	•	EE 120 /27		064 201
REPS \$ 62,977,408			334,033,331	_*_	11,115,100	0,304,313		217,323,463	-	63,128,437	•	264,221
DERP - Purchased Power 2,713 5.55 49 2,146 35.56 5.	Renewable Energy	— s	62 977 408	•	13 300 006	976 170	•		e	40 677 212		
DERP - Not Metered Generation		•		•				•	4		ъ	•
HB589 PURPA Purchases	DERP - Net Metered Generation		43.550					·		Z,140		35 586
HB589 PURPA Purchases 33,208,999 6,541,261 549,098 \$ 25,595,400 \$ 1,022,33		_\$	63,023,671	\$					s	49.679.460	s	35,586
Clusifying Facilities	tiprop pluppa p						·		•			
Non-dispatchable Sala Sa			33 208 999		6 541 961	540.008			•	25 505 400		1 000 000
Blue Ridge Electric Membership Corp. \$ 14,972,210 \$ 8,136,773 295,129 \$ 4,169,615 \$ 2,655,825 14,090,000 1,995,370 80,216 1,385,271 885,66 88		\$					S		ŝ			1,082,338
Haywood Electric	Non-dispatchable											
Haywood Electric Haywoo	Blue Ridge Electric Membership Corp.	s	14,972,210	s	8,136,773	295,129	\$	4,169,615			\$	2,665,822
NCEMPA - Reliability 245,400 - 2,610 149,694 95,776 NCEMPA - Reliability 245,400 - 2,610 149,694 95,776 NTE Carolinas LLC 1,715,987 3,902,138 140,568 1,999,488 1,278,36 NTE Carolinas LLC 2,810 149,694 95,773,70 NTE Carolinas LLC 1,715,987 3,902,138 140,568 1,999,488 1,278,36 South Carolina Electric & Gas Company 131,734 - 1,400 80,358 51,37 Souther Company Services, Inc. 2,984,720 - 47,510 1,820,679 1,164,04 Generation Imbalance Durchases 2,199,376 82,65 1,893,991 1,888,70 Energy Imbalance - Purchases 2,199,376 25,123 1,350,748 848,62 Energy Imbalance - Sales (1,765,005) 25,123 1,350,748 848,62 Energy Imbalance - Sales (1,765,005) 352 Ulter Purchases 2,196,2482 \$ 14,027,057 1,026,152 \$ 18,941,336 \$ - \$ 21,724,08 Total Purchased Power \$ 504,960,483 \$ 44,996,131 11,116,400 \$ 296,464,821 \$ 140,393,297 \$ 23,106,23 Interchanges In Cher Catawba Joint Owners 91,135,514 - 7,642,809 56,961,998 34,173,51 WS Lee Joint Owner 98,661,227 - 7,914,116 63,573,032 35,288,19 Interchanges Out 1,146,804 1,146					1,935,370			1,385,271				885,666
NCMPA - Relability NCMPA - Relab					-							7,124,124
NTE Carolinas LLC 1,828,310 1,828,310 1,828,310 1,719,987 3,902,138 140,558 1,994,488 1,278,368 South Carolina Electric & Gas Company 131,734 1,400 80,358 51,37 Southern Company Services, Inc. 2,944,720 47,510 1,820,679 1,164,04 60ereardoin Imbalance Energy Imbalance - Purchases 2,199,376 2,199,379 2,106,23 2,199,379 2,106,23 2,199,379 2,106,23 2,199,379 2,106,23 2,199,379 2,106,23 2,199,379 2,106,23 2,199,376 2,					52,776							231,855
Piedmont Electric Membership Corp. 7,179,987 3,902,138 140,568 1,999,488 1,278,36 1,278,36 3,902,138 140,568 1,999,488 1,278,36 3,902,138 140,568 1,999,488 1,278,36 3,902,138 1,000 80,358 51,37 1,000 80,3					-							
South Carolina Electric & Gas Company South Carolina Electric & Gas Company Souther Company Services, Inc. 2,984,720 47,510 1,820,679 1,164,04 88,265 1,893,951 1,888,70 1,888,70 1,888,70 1,893,951 1,888,70 1,888,70 1,888,70 1,888,70 1,888,70 1,888,70 1,893,951 1,894,951 1,89					2 002 120							
Southern Company Services, Inc. 2,984,720 47,510 1,820,679 1,164,04 1,640,04					3,502,100							
Secretation Imbalance Secr	Southern Company Services, Inc.					47,510						
Energy Imbalance - Sales Other Purchases (1,765,005) 12,518 (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,692,492) (5,54,996,131) (5,64,280) (5,64,821) (5,64,821) (6,529,253) (1,941,336) (5,529,253) (1,941,336) (5,521,293) (5,644,821) (1,941,393,297) (1,941,194,894) (1,941,393,297) (1,941,194) (1,941,393,297) (1,941,194) (1,941,393,297) (1,941,194) (1,941,393,297) (1,941,194) (1,941,394) (1,94												1,888,703
Other Purchases 12,518 352 352 12,518 12,518 12,518 12,518 352 18,941,336 \$ 12,51724,08 12,51724,08 12,51724,08 13,941,336 \$ - \$ 21,724,08 \$ 296,464,821 \$ 140,393,297 \$ 23,106,23 \$ 140,27,057 \$ 11,116,400 \$ 296,464,821 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 23,106,23 \$ 140,393,297 \$ 21,106,297 \$ 271,306 \$ 6,611,033 \$ 1,114,68 \$ 271,306 \$ 6,611,033 \$ 1,114,68 \$ 271,306 \$ 6,611,033 \$ 1,114,68 \$ 271,306 \$ 23,573,032 \$ 35,288,19 \$ 281,19 \$ 271,306 \$ 23,573,032 \$ 35,288,19 \$ 281,19 \$ 271,306 \$ 271,306 \$ 271,303,203 <td></td> <td></td> <td></td> <td></td> <td></td> <td>25,123</td> <td></td> <td>1,350,748</td> <td></td> <td></td> <td></td> <td>848,628</td>						25,123		1,350,748				848,628
S 54,692,482 S 14,027,057 1,026,152 S 18,941,336 S - S 21,724,06 Total Purchased Power S 504,960,483 S 44,996,131 11,116,400 S 296,454,821 S 140,393,297 S 23,106,23 Interchances In Other Catawba Joint Owner 91,135,514 - 7,642,809 56,961,998 34,173,51 WS Lee Joint Owner 7,725,713 - 271,306 6,611,033 1,114,68 Total Interchanges In 98,851,227 - 7,914,116 63,573,032 - 35,288,19 Interchanges Out (93,139,372) (1,580,207) (7,784,646) (57,610,256) (33,948,90 Catawba - Not Negative Generation (231,152) (1,580,207) (1,304) (160,241) (50,91 WS Lee Joint Owner (9,390,983) - (327,441) (7,930,708) (1,480,27 Total Interchanges Out (102,761,507) (1,580,207) (6,123,391) (65,721,205) - (35,460,03 Total Interchanges Out (102,761,507) (1,580,207) (1,580,207) (8,123,391) (65,721,205) (33,640,03 Total Interchanges Out (102,761,507) (1,580,207) (1,580,207) (8,123,391) (65,721,205) (33,640,03 Total Interchanges Out (102,761,507) (1,580,207) (1,580,207) (8,123,391) (65,721,205) (33,640,03 Total Interchanges Out (102,761,507) (1,580,207)								(6,529,253)				4,764,248
Total Purchased Power \$ 504,960,483 \$ 44,996,131 11,116,400 \$ 296,454,821 \$ 140,393,297 \$ 23,106,23	Other Purchases		12,518		44 007 017			40.044.000	_			12,518
Section Sect			34,092,482	_\$	14,027,057	1,026,152	_\$	18,941,336	5	<u>-</u>	5	21,724,089
Cither Catawba Joint Owners 91,135,514 7,642,809 56,961,998 34,173,51 WS Lee Joint Owner 7,725,713 271,306 6,611,033 1,114,68 Total Interchanges In Interchanges Out 98,861,227 7,914,116 63,573,032 35,288,19 Cher Catawba Joint Owners (93,139,372) (1,580,207) (7,784,646) (57,610,256) (33,948,90 Catawba- Net Negative Generation (231,152) (11,304) (180,241) (50,91 WS Lee Joint Owner (9,399,883) (327,441) (7,930,708) (1,460,27 Total Interchanges Out (102,761,507) (1,580,207) (8,123,391) (65,721,205) (35,460,09)	Total Purchased Power	\$	504,960,483	\$	44,996,131	11,116,400	\$	296,464,821	\$	140,393,297	\$	23,106,234
WS Lee Joint Owner 7,725,713 - 271,306 6,611,033 1,114,68 98,851,227 - 7,914,116 63,573,032 35,288,19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Interchanges in											•
WS Lee Joint Owner 7,725,713 - 271,306 8,611,033 1,114,68 Total Interchanges In 98,851,227 7,914,116 63,573,032 35,288,19 Interchanges Out Other Catawba Joint Owners (93,139,372) (1,580,207) (7,784,646) (57,610,256) (33,948,90 Catawba - Net Negative Generation (231,152) - (11,304) (160,241) (50,91 WS Lee Joint Owner (9,390,983) - (327,441) (7,930,708) (1,460,27 Total Interchanges Out (102,761,507) (1,580,207) (8,123,391) (65,721,205) (35,460,09)	Other Catawba Joint Owners				-							34,173,516
Interchanges In 98,861,227 7,914,116 63,573,032 35,298,19 Interchanges Out Interchanges Out (93,139,372) (1,580,207) (7,784,646) (57,610,256) (33,948,90 Catawba- Not Negative Generation (231,152) (11,304) (160,241) (50,91 WS Lee Joint Owner (9,390,983) (327,441) (7,930,708) (1,480,27 Total Interchanges Out (102,761,507) (1,580,207) (8,123,391) (65,721,205) (35,460,09					<u> </u>			6,611,033				1,114,680
Other Catawba Joint Owners (93,139,372) (1,580,207) (7,784,646) (57,610,256) (33,946,90 Catawba- Not Negative Generation (231,152) - (11,304) (180,241) (50,91 WS Lee Joint Owner (9,390,983) - (327,441) (7,930,708) (1,460,27) Total Interchanges Out (102,761,507) (1,580,207) (8,123,391) (65,721,205) - (35,460,09)	iciai interchanges in		98,861,227		-	<u>7,914,116</u>		63,573,032				35,288,195
Catawba- Net Negative Generation (231,152) - (11,304) (160,241) (50,91) WS Lee Joint Owner (9,390,983) - (327,441) (7,930,708) (1,460,27) Total Interchanges Out (102,761,507) (1,580,207) (8,123,391) (65,721,205) (35,460,09)	Interchanges Out											
WS Lee Joint Owner (9,390,983) (327,441) (7,930,708) (1,460,27) Total Interchanges Out (102,761,507) (1,580,207) (6,123,391) (65,721,205) (35,460,09)					(1,580,207)							(33,948,909)
Total Interchanges Out (102,761,597) (1,580,207) (8,123,391) (65,721,205) (35,460,09)					•							(50,911)
				-	/4 E00 007							(1,460,275)
Net Purchases and Interchange Power \$ 501,060,203 \$ 43,415,924 10,907,125 \$ 294,316,649 \$ 140,993,997 \$ 29,034,99.	rotar interchanges Out		(102,/61,50/)		(1,580,207)	(8,123,391)		(65,721,205)		•		(35,460,095)
	Net Purchases and Interchange Power	\$	501,060,203	\$	43,415,924	10,907,125	\$	294,316,648	\$	140,393,297	\$	22,934,334

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 2018

		Total			Capacity	_	Non-capacity					
Sales		\$		\$			mWh		Fuel \$		Non-fuel \$	
Utilities:												
DE Progress - Emergency	\$	15,390			-		333	\$	13,113	\$	2,277	
SC Public Service Authority - Emergency		2,315,135		\$	224,000		7,527		2,007,790	•	83,345	
SC Electric & Gas - Emergency		103,368	A		-	A	1,974		87,826		15,542	
Market Based:												
Central Electric Power Cooperative, Inc.		2,793,800	В		2,793,800	В	-		-		_	
EDF Trading Company		2,600			_		50		1,976		624	
Macquarie Energy, LLC		19,200			-		_		· -		19,200	
NCMPA		1,454,481			1,050,069		5,529		368,868		35,544	
PJM Interconnection, LLC.		1,502,443			-		24,365		918,000		584,443	
SC Electric & Gas		317,950	Α		-	A	4,050		268,115		49,835	
Tennessee Valley Authority		49,525			-		1,025		37,501		12,024	
The Energy Authority		55,545			-		604		33,101		22,444	
Other:												
DE Progress - Native Load Transfer Benefit		5,666,748			-		_		5,666,748		_	
DE Progress - Native Load Transfer		78,027,793			-		1,883,308		74,808,327		3,219,466	
Generation Imbalance		1,760,829			-		16,679		2,124,888		(364,059)	
BPM Transmission		(245,056)			-		•		-		(245,056)	
Total Intersystem Sales	\$	93,839,751		\$	4,067,869	_	1,945,444	\$	86,336,253	\$	3,435,629	

^{*} Sales for resale other than native load priority.

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

- A Twelve months ended December 2018 includes a correction to reclassify market sales for the month of October 2018 as an emergency sale. The October 2018 sales were as follows: Total dollars = \$24,456, Non capacity MWH = 408, Non-capacity fuel dollars = \$20,096, and Non-capacity non-fuel dollars = \$3,550.
- B Twelve months ended December 2018 includes a correction to include market capacity sales for the period January 2018 October 2018. Market capacity sales each month were as follows: Total dollars = \$279,380, and capacity dollars= \$279,380. Total market capacity sales dollars for the period January 2018 October 2018 = \$2,793,800.

Duke Energy Carolinas (Over) / Under Recovery of Fuel Costs December 2018

Line			-			
No.			Residential	Commercial	Industrial	Total
1 2 3	Actual System kWh sales DERP Net Metered kWh generation Adjusted System kWh sales	input Input L1 + L2			_	7,490,426,895 10,412,429 7,500,839,324
4 5 6	N.C. Retail kWh sales NC kWh sales % of actual system kWh sales NC kWh sales % of adjusted system kWh sales .	Input L4 T / L1 . L4 T / L3	2,038,461,729	1,880,040,961	974,229,470	4,892,732,160 65.32% 65.23%
7	Approved fuel and fuel-related rates (¢/kWh) 7a Billed rates by class (¢/kWh) 7b Billed fuel expense	Input Annually L7a * L4 / 100	1.7983 \$36,657,657	1.9382 \$36,438,954	2.0233 \$19,711,585	1.8969 \$92,808,196
8	Incurred base fuel and fuel-related (less renewable purchased power capacity) rates by class (¢/kWh) 8a Docket E-7, Sub 1163 allocation factor 8b System incurred expense 8c Incurred base fuel and fuel-related expense 8d Incurred base fuel rates by class (¢/kWh)	Input Input L8b * L6 * 8a L8c / L4 * 100	35.64% \$38,786,219 1.9027	41.77% \$45,458,159 2.4179	22.59% \$24,577,446 2.5228	\$166,830,104 \$108,821,824 2.2242
9	Incurred renewable purchased power capacity rates by class (¢/kWh) 9a. NC retail production plant % 9b. Production plant allocation factors 9c. System incurred expense 9d. Incurred renewable capacity expense 9e. Incurred renewable capacity rates by class (¢/kWh)	Input Input Input L9a * L9b * 9c (L9a * L9c) * L9b / L4 * 100	43.68% \$285,027 0.0140	37.64% \$245,590 0.0131	18.68% \$121,872 0.0125	67.56% 100.00% \$965,788 \$652,488 0.0133
10 11 12	Total incurred rates by class (#/kWh) Difference in #kWh (incurred - billed) (Over) / under recovery [See footnote]	L8d + L9e L7c - L10 (L4 * L11) / 100	1.9167 0.1184 \$2,413,589	2.4310 0.4928 \$9,264,795	2.5353 0.5120 \$4,987,733	2.2375 0,3406 \$16,666,116
13 14	Prior period adjustments Total (over) / under recovery [See footnote]	Input L12+ L13	\$2,413,589	\$9,264,795	\$4,987,733	\$16,666,116
15 16 17	Total system incurred expense Less: Jurisdictional allocation adjustment(s) Total Fuel and Fuel-related Costs per Schedule 2	L8b + L9c Input L15 + L16			_	\$167,795,892 338,332 \$167,457,560

	`	(Over) / Under Recovery						
	Year 2018	Total To Date	Residential	Commercia!	Industrial	Total Company		
	January	\$70,210,459	\$12,463,615	\$33,104,497	\$24,642,348	\$70,210,459		
	February	48,920,711	(\$11,989,284)	(\$6,434,005)	(\$2,866,460)	(21,289,748)		
/1	March	53,688,504	\$1,587,096	\$1,503,768	\$1,676,929	4,767,793		
<i>_J</i> 1	April	39,952,067	(\$3,469,659)	(\$6,335,002)	(\$3,931,775)	(13,736,437)		
	May	46,088,897	\$5,910,833	(\$210,465)	\$436,461	6,136,830		
	June	52,711,139	\$2,162,126	\$1,145,088	\$3,315,028	6,622,242		
_/2	July	67,208,623	\$2,375,059	\$5,295,453	\$6,826,972	14,497,484		
	August	80,715,732	\$3,875,805	\$4,054,944	\$5,576,360	13,507,109		
_/2	September	71,719,783	(\$925,298)	(\$6,412,545)	(\$1,658,106)	(8,995,949)		
_/2	October	82,876,726	\$4,264,193	\$4,018,244	\$2,874,506	11,156,943		
	November	\$94,666,066	\$7,833,590	\$4,009,350	(\$53,600)	\$11,789,340		
	December	\$111,332,182	\$2,413,589	\$9,264,795	\$4,987,733	\$16,666,116		
		•	\$26,501,665	\$43,004,122	\$41,826,396	\$111,332,182		

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 DECEMBED 2018

Description								2								
חחוחווחוספסח	Allen	Belews Creek	Buck		Cliffside	Dan River	ee	8	Lincoln	Marshall	McGuire	Creek	Ocoppe	Bookinnham	Current	Total 12 ME
	Steam	Steam	ខ	Nuclear	Steam - Dual Fuel	3	8	Steam/CT	ct	Steam	Nuclear	D C		CT		
Cost of Fuel Purchased (\$)																
<u>.</u>	549,933	\$17,907,637	•		\$8,548,228					\$22,079,739					\$48,585,537	\$657,498,215
Gas - CC		2001	\$13,103,055		2001	\$12,923,692	\$6.858.257	•	•						1,499,256	48,634,50
Gas - CT					-			104,195	\$110,569			\$158,525		\$1,899,682	2,272,971	98,161,04
Blogas			•		5,695,205	361.043	1	606							5,696,114 361,043	8,633,545
Total	\$193,066	\$18,990,604	\$13,103,055		\$14,516,590	\$13,284,725	\$6,858,257	\$105,103	\$110,569	\$22,079,739	r	\$158,525		\$1,899,682	\$91,299,914	\$1,201,085,721
Average Cost of Fuel Purchased (C/MBTU)	MBTU)															
Çoa O	1 224 64	555.02			687.75					399.01					485.71	324.7
Gas - CC	1,321,04	172.99	442 19		692.52	AA2 08	145 27		•	,	`				221.68	1,358.8
Gas - CT						8	#99.E/	532.70	467.48			510.56		457.22	442.14	392.8
Gas - Steam Bloom					445.73									}	•	410.5
Weighted Average	1,782.98	492.94	442.19		567.03	450.90	455.27	532.60	467.48	399.01		510.56		457.22	1,577.30	358.68
Cost of Fuel Burnod (\$)	4774	200														
8 8 8	690'14/6	601,626,814			\$12,888,384		• 1	•		\$13,692,987					\$46,847,568	\$675,888,074
Oil - Steam/CT	163,523	1,219,227	613 102 055		286,271	649 659 649	60 000 957	25,472	\$25,788	148,226		•			1,874,266	41,704,735
Gas - CT			2000			200,026,316	107'000'0#	\$104,195	110,569			\$158,525		\$1,899,682	32,864,994	384,692,20
Gas - Steam Biogas			•		5,695,205	383 043		606							5,696,114	8,633,545
Nuclear				\$8,356,486		250'100					\$10,990,838	-	110,470,715		361,043 29.818.039	3,466,205
Total	\$904,613	\$20,744,336	\$13,103,055	\$8,356,486	\$18,869,860	\$13,284,725	\$6,858,257	\$130,575	\$136,358	\$13,841,212	\$10,990,838	\$158,525	\$10,470,715	\$1,899,682	\$119,754,995	\$1,583,385,062
Average Cost of Fuel Burned (#MBTU) Coal	7U) 359.55	352.99			354.20					341.94					350.11	315.40
Oil - Steam/CT	1,564.97	1,487.41			1,505.97	;	!	12,245.95	1,521,44	1,620.84					1,530,31	1,604.5
Gas - CT			B			442.08	455.27	532.70	467,48			510.56		457.22	442,14	392.81
Gas • Sleam Biocas					445.73	1,577.30	•							!		410.58
Nuclear				58.63		00.310.1					62.46		59.28		59.86	1,603.3
Weighted Average	417,71	369.55	442.18	58.63	382.33	450.90	455.27	654.77	537.96	344.86	62.46	510.56	58.28	457.22	165.17	166.7
Average Cost of Generation (c/kWh) Coal Oil - CC	2.92	3.41	,		3.52	•	ı	1,287.30	632.18	3.41					3.43	2.98
Oil - Steam/CT	12.43	15.65			14.52	, , ;		128.73	63.22	16.41				,	15.56	17.9
Gas - CT			9.00				اري 1	5.57	10.88			B.08		5.09	3,10 5,39	3.85
Gas - Steam Biogas					4.45	11.08	•								4.47	9.4
Nuclear				0.59		90.1	,				0.62		0.59	j	0.60	9.1.
Welghted Average Burned MRTII's	93.39	3.57	3.08	0.59	3.80	3.17	3.19	9.16	12.90	8. 44.	0.62	8.08	0.59	6.09	1.51	1,56
Coal Coal	205,117	5,531,427			3,638,779			•		4,004,460					13,380,783	214,294,473
Oil - Steam/CT	10,449	81,970	296 639 2		19,009	9 653 367	1 FAR 423	208	1,695	9 145					122,476	2,599,17
Gas - CT Gas - Steam					127.73		174	19,560	23,652			31,049		415,485	489,746	28,537,792
Biogas Nuclear			•	14.252.377		22,690					17 FOR BEG		17 065 007		22,890	216,190
Totaî	216,566	5,613,397	2,963,222	14,252,377	4,935,525	2,946,257	1,506,423	19,942	25,347	4,013,605	17,596,869	31,049	17,965,994	415,485	72,502,058	949,363,78

DUKE ENERGY CAROLINAS FUEL AND FUEL RELATED COST REPORT DECEMBER 2018

Description	Allen	Belews Creek	Buck	Catawba	Cliffside	Dan River	Lee	1	P 1 t		11.0.5	Mill		es	Current	Total 12 ME
Lescription	Steam	Steam	CC	Nuclear	Steam - Dual Fuel	CC	CC	Lee	Lincoln	Marshall	McGuire	Creek	Oconee	Rockingham	Month	December 2018
	olean	oteam	00	Nucrear	Steam - Duai Fuei	w	CC.	Steam/CT	СТ	Steam	Nuclear	CT	Nuclear	C T		
Net Generation (mWh)																
Coal	25,397	573,052			366,421					401,855					1,366,724	22,653,740
Oil - CC	20,001	0.0,002			000,421					401,000					1,300,724	22,033,740
OII - Steam/CT	1,315	7,791			1,972		_	20	41	903		_		_	12,042	232,515
Gas - CC	.,	.,	428,198		1,072	416,157	214,977		71	303				-	1,059,332	13,695,555
Gas - CT			,			,	2. 40. 1	1,871	1,016			1,961		37,330	42,178	2,650,671
Gas - Steam					128,002			(466)	1,010			1,501		37,330	127,536	187,574
Biogas					,	3,259		()							3,259	30,204
Nuclear 100%				1,420,722		-,					1,778,199		1,782,248		4,981,169	59,936,028
Hydro (Total System)					•						1,110,100		110010-0		323,664	2,347,824
Solar (Total System)															5.768	130,018
Total	26,712	580,843	428,198	1,420,722	496,394	419,416	214,977	1,425	1,057	402,758	1,778,199	1,961	1,782,248	37,330	7,921,672	101,764,129
														·	, ,	, ,
Cost of Reagents Consumed (\$)																
Ammonia		(\$46,049)	\$14,280		\$11,119	\$8.043	\$11,630								/ # 0.770	64 077 070
Limestone	\$24,711	467,587	\$14,200		478,632	\$0,043	\$11,030			\$374,113					(\$977)	\$4,077,078
Sorbents	427,711	53,543			470,032					73,539					1,345,043 127,081	19,594,631
Urea		40,544								45,004					45,004	2,353,863 928,117
Re-emission Chemical		-								43,004					43,004	
Dibasic Acid															-	69,161
Activated Carbon	34,464									_					34,464	170,782
Total	\$59,175	\$475,081	\$14,280		489,751	\$8,043	\$11,630			\$492,656				-	\$1,550,615	\$27,193,652
					•					- • •					4.100010.0	42.,.50,00E

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.

DUKE ENERGY CAROLINAS
FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT
DECEMBER 2018

Description	Allen	Belews Creek	Buck	Cliffside	Dan River	Lee	Lee	Lincoln	Marshall	Mill Creek	Rockingham	Current Month	Total 12 ME December 2018
Coal Data:	Steam	Steam	CC	Steam - Dual Fuel	CC	CC	Steam/CT	CT	Steam	CT	CŤ		-
	100.074	744.070		505.054					440 =04				
Beginning balance	196,674	741,379		565,251			•		448,731			1,952,035	
Tons received during period	440.000	221,261		95,812					262,988			580,061	8,353,369
Inventory adjustments	(16,000)	(91,871)		(46,501)			•		(41,785)			(196,158)	•
Tons burned during period	8,841	221,660		146,683			•		158,816			536,000	
Ending balance	171,833	649,109		467,879			•		511,118			1,799,939	
MBTUs per ton burned	23.31	24.95		24.81			•		25.21			24.96	
Cost of ending Inventory (\$/ton)	83.82	88.09		87.87			•		86.22			87.09	87.09
Oil Data:													
Beginning balance	90,694	221,182	-	236,089	•	-	714,747	9,834,797	312,274	4,366,782	3,238,190	19,014,755	16,962,536
Gallons received during period	75,652	578,080	•	144,399	-	-	•	•	-	-	-	798,131	21,144,157
Miscellaneous adjustments	448	(35,415)	-	(11,633)	-		(9,425)	-	-	-	•	(57,379)	(352,297
Gallons burned during period	75,879	596,667		137,943	-	-	1,520	12,305	66,449	-	•	889,408	18,888,297
Ending balance	90,915	167,180	-	230,912	-		703,802	9,822,492	245,825	4,366,782	3,238,190	18,866,098	18,866,098
Cost of ending inventory (\$/gal)	2.16	1.99	-	2.08	-	•	2.33	2.10	2.23	2.47	2.17	2.20	2.20
Natural Gas Data: Beginning balance MCF received during period MCF burned during period Ending balance			2,880,290 2,880,290	· ·	2,818,207 2,818,207	1,473,258 1,473,258	19,360 19,360	23,206 23,206		30,487 30,487	400,698 400,698	8,889,956 8,889,956	125,135,402 125,135,402
Biogas Data:													
Beginning balance													
MCF received during period			-		22,062	-						22,062	210,727
MCF burned during period			-		22,062	-						22,062	210,727
Ending balance													
Limestone Data:													
Beginning balance	23,869	38,673		34,190					37,083			133,815	169,322
Tons received during period	-	6,707		7,615					12,836			27,159	444,242
Inventory adjustments	(2,996)	(4,910)		=					(7,085)			(14,991)	(14,991
Tons consumed during period	527	11,600		9,514					9,187			30,828	483,419
Ending balance	20,346	28,870		32,292					33,647			115,155	115,155
Cast of ending inventory (\$/tan)	46.89	39.54		39.44					40.72			41.16	41.16
											_	Otr Ending	Total 12 ME December 2018
Ammonia Data:											-	2000mb0r 2010	DOUGHDUI EUIO
Beginning balance		1,315										1,315	1,159
Tons received during period		901										901	4,715
Tons consumed during period		583										583	4,241
Ending balance		1,633										1,633	1,633
Cost of ending Inventory (\$/ton)		620.44										620.44	620.44

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.

Schedule 6

DUKE ENERGY CAROLINAS ANALYSIS OF COAL PURCHASED DECEMBER 2018

STATION	ТҮРЕ	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERE COST PER T	
ALLEN	SPOT	-	\$ -	\$	_
	CONTRACT	-	•		-
	ADJUSTMENTS		49,933		
	TOTAL		49,933		
BELEWS CREEK	SPOT	-	11, 9 82		-
	CONTRACT	221,261	17,706,037	8	80.02
	ADJUSTMENTS	<u>-</u>	189,618		-
	TOTAL	221,261	17,907,637		80.93
CLIFFSIDE	SPOT		-		_
	CONTRACT	95,812	7,221,379	7	75.37
	ADJUSTMENTS	<u> </u>	1,326,849		
	TOTAL	95,812	8,548,228	8	89.22
MARSHALL	SPOT	96,525	8,181,703	8	84.76
	CONTRACT	166,463	13,355,663	8	80.23
	ADJUSTMENTS	<u> </u>	542,373		-
	TOTAL	262,988	22,079,739	{	83.96
ALL PLANTS	SPOT	96,525	8,193,685	8	84.89
	CONTRACT	483,536	38,283,079		79.17
	ADJUSTMENTS		2,108,773		<u></u> .
	TOTAL	580,061	\$ 48,585,537	,\$ E	83.76

DUKE ENERGY CAROLINAS ANALYSIS OF COAL QUALITY RECEIVED DECEMBER 2018

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
BELEWS CREEK	6.91	10.15	12,468	1.58
CLIFFSIDE	8.48	7.60	12,603	2.35
MARSHALL	6.73	10.02	12,508	1.73

DUKE ENERGY CAROLINAS ANALYSIS OF OIL PURCHASED DECEMBER 2018

			-			
		ALLEN	BEL	EWS CREEK	CI	.IFFSIDE
VENDOR	Hi	ghTowers	н	ighTowers	Hi	ghTowers
SPOT/CONTRACT	. (Contract		Contract	•	Contract
SULFUR CONTENT %		0		0		0
GALLONS RECEIVED		75,652		578,080		144,399
TOTAL DELIVERED COST	\$	143,133	\$	1,082,966	\$	273,156
DELIVERED COST/GALLON	\$	1.89	\$	1.87	\$	1.89
BTU/GALLON		138,000		138,000		138,000

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Duke Energy Carolinas Power Plant Performance Data

Twelve Month Summary

January, 2018 - December, 2018 Nuclear Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Oconee 1	6,745,635	847	90.91	89.94
Oconee 2	7,581,168	848	102.06	100.00
Oconee 3	6,967,442	859	92.59	92.12
McGuire 1	10,359,250	1,158	102.12	99.56
McGuire 2	9,502,818	1,158	93.68	91.80
Catawba 1	9,510,487	1,160	93.59	92.99
Catawba 2	9,269,228	1,150	92.01	91.84

Twelve Month Summary January, 2018 through December, 2018 Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Buck CC	11	1,463,456	206	81.10	88.68
Buck CC	12	1,471,968	206	81.57	89.09
Buck CC	ST10	2,237,637	312	81.87	96.78
Buck CC	Block Total	5,173,061	724	81.57	92.29
Dan River CC	8	1,433,925	199	82.26	86.38
Dan River CC	9	1,410,200	199	80.90	85.84
Dan River CC	ST7	2,118,133	320	75.56	91.38
Dan River CC	Block Total	4,962,258	718	78.90	88.46
WS Lee CC	11	1,030,538	223	70.01	75.09
WS Lee CC	12	1,090,492	223	74.08	77.05
WS Lee CC	ST10	1,402,639	337	63.05	76.36
WS Lee CC	Block Total	3,523,669	783	68.17	76.19

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

Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary January, 2018 through December, 2018

Baseload Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Belews Creek 1	4,793,474	1,110	49.30	88.06
Belews Creek 2	3,227,943	1,110	33.20	69.66
Marshall 3	3,176,205	658	55.10	89.31
Marshall 4	3,675,692	660	63.58	88.48

Notes:

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

Twelve Month Summary January, 2018 through December, 2018

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Cliffside 6	4,311,369	844	58.31	75.32
Marshall I	958,416	380	28.79	88.74
Marshall 2	675,957	380	20.31	68.31

Notes:

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

Twelve Month Summary January, 2018 through December, 2018 Other Cycling Steam Units

Unit Name	;	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Allen	1	71,408	167	4.88	83.17
Allen	2	86,505	167	5.91	84.03
Allen	3	158,113	270	6.68	80.91
Allen	4	178,336	267	7.62	89.89
Allen	5	325,399	259	14.34	85.49
Cliffside	5	1,243,104	546	25.99	61.63
Lee	3	54,152	1 73	3.57	36.34

Notes:

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

Twelve Month Summary January, 2018 through December, 2018 Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Lee CT	79,514	96	84.70
Lincoln CT	82,484	1,565	93.72
Mill Creek CT	201,194	735	99.23
Rockingham CT	2,325,235	895	90.19

Notes:

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

er Plant Performance Data

Twelve Month Summary

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January, 2018 through December, 2018 Hydroelectric Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Conventional Hydroelectric Stations:		-	
Bear Creek	37,232	9.5	86.90
Bridgewater	117,680	31.5	95.52
Bryson	4,632	0.9	85.69
Cedar Cliff	27,610	6.8	92.39
Cedar Creek	178,151	45.0	81.91
Cowans Ford	312,212	324.0	58.69
Dearborn	222,145	42.0	97.55
Fishing Creek	203,570	50.0	88.41
Franklin	3,726	1.0	58.90
Gaston Shoals	14,686	4.5	96.65
Great Falls	-92	12.0	100.00
Keowee	98,064	152.0	99.21
Lookout Shoals	162,927	27.0	99.26
Mission	5,388	1.8	51.83
Mountain Island	207,502	62.0	90.56
Nantahala	270,145	50.0	99.03
Ninety-Nine Islands	83,267	15.2	91.67
Oxford	107,478	40.0	38.56
Queens Creek	4,621	1.4	99.89
Rhodhiss	119,297	33.5	94.18
Rocky Creek	-73	3.0	0.00
Tennessee Creek	48,111	9.8	93.76
Thorpe	96,019	19.7	93.15
Tuckasegee	7,077	2.5	85.11
Tuxedo	33,861	6.4	96.21
Wateree	336,004	85.0	81.96
Wylie	175,810	72.0	55.96
Pumped Storage Hydroelectric Stations:			
Gross Generation			
Bad Creek	1,447,036	1,360.0	65.67
Jocassee	1,204,730	, 780.0	92.99
Energy for Pumping			
Bad Creek	-1,838,591		
Jocassee	-1,342,401		
Net Generation			
Bad Creek	-391,555		
Jocassee	-137,671		

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

Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary January 2018 through December 2018 Pre-commercial Combined Cycle Units

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

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
January 2018	3				
Lee	11	-10	n/a	n/a	n/a
Lee	12	-11	n/a	n/a	n/a
Lee	ST10	0	n/a	n/a	n/a
Lee	Block Total	-21	n/a	n/a	n/a
February 201	18				
Lee	11	-1,575	n/a	n/a	n/a
Lee	12	-1,120	n/a	n/a	n/a
Lee	ST10	0	n/a	n/a	n/a
Lee	Block Total	-2,695	n/a	n/a	n/a
March 2018					
Lee	11	25,973	n/a	n/a	n/a
Lee	12	14,939	n/a	n/a	n/a
Lee	ST10	-1,349	n/a	n/a	n/a
Lee	Block Total	39,563	n/a	n/a	n/a
April 1 - 4					
Lee	11	14,158	n/a	n/a	n/a
Lee	12	6,771	n/a	n/a	n/a
Lee	ST10	8,994	n/a	n/a	n/a
Lee	Block Total	29,923	n/a	n/a	n/a
Γotal		66,771		•	

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

Period:	December.	2018
I CI IUU.	December.	4010

Station	Unit	Date of Outage	Duration of Outage	Scheduled Unscheduled		Reason Outage Occurred	Remedial Action Taken
Oconce	1	11/30/2018 - 12/08/2018	177.87	Unscheduled	1B2 reactor coolant pump seal leakage	Failure of reactor coolant pump seal	Replaced reactor coolant pump seal
	2	None					
	3	None					
McGuire	1	None					
	2	None					
Catawba	1	11/17/2018 - 12/11/2018	255.70	Scheduled	End-of-cycle 24 refueling outage	Planned refueling outage	Refueling outage in progress
	2	None					

Belews Creek Station

		_				
Unit	Duration of Outage	Type of Outage	Cause	of Outage	Reason Outage Occurred	Remedial Action Taken
1	12/3/2018 5:37:00 PM To 12/6/2018 5:07:00 AM	Unsch	1070	Second Reheater Leaks	HRH Leak on 9th floor. P17 Tube 7,8,9,10,11 and 12, P18 Tubes 10,11 and 12.	
1	12/22/2018 6:00:00 PM To 12/23/2018 2:55:00 PM	Sch	1000	Furnace Wall Leaks	Furnace wall leak on 6th floor.	
1	12/26/2018 7:00:00 AM To 1/1/2019 12:00:00 AM	Sch	8110	Wet Scrubber - Spray Nozzles	1B Absorber agitator and mist eliminator header repairs.	
2	9/8/2018 3:00:00 AM To 12/8/2018 12:00:00 AM	Sch	4520	Gen. Stator Windings; Bushings; And Terminals	Unit 2 fall outage for SSH replacement, LP Generator rewind and CCP final ties.	
2	12/8/2018 12:00:00 AM To 12/13/2018 3:23:00 AM	Sch	3999	Other Miscellaneous Balance Of Plant Problems	Fuel oil fire from replaced accumulator, 2B SAH Rub from new seals, 200-2 not wired.	
2	12/14/2018 10:41:00 AM To 12/16/2018 11:54:00 PM	Unsch	8499	Other Miscellaneous Wet Scrubber Problems	FGD Stack doors left open and could not be closed online.	
2	12/27/2018 9:34:00 PM To 12/31/2018 9:30:00 PM	Sch	1492	Air Heater Fouling (Tubular)	Unit 2 PAH plugged and unable to make mill temps.	

Buck Combined Cycle Station

No Outages at Baseload Units During the Month.

Dan River Combined Cycle Station

No Outages at Baseload Units During the Month.

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

Marshall Station

Unit	Duration of Outage	Type of Outage	Cause	of Outage	Reason Outage Occurred	Remedial Action Taken
4	12/7/2018 9:58:00 PM To 12/15/2018 4:00:00 PM	Sch	1493	Air Heater Fouling (Regenerative)	APH Wash.	
4	12/18/2018 8:00:00 AM To 12/20/2018 5:00:00 PM	Sch	0890	Bottom Ash Systems (Wet or Dry)	Bottom Ash Hopper Seal Trough Repairs.	

WS Lee Combined Cycle

ws Lee Combined Cycle								
Unit	Duration of Outage	Type of Outage	Cause	of Outage	Reason Outage Occurred	Remedial Action Taken		
WS Lee CC ST 10	12/3/2018 7:05:00 PM To 12/20/2018 5:00:00 PM	Unsch	4289	Turbine - Other Lube Oil System Problems	Trip due to low lube oil in reservoir.			
WS Lee CC ST 10	12/22/2018 12:10:00 AM To 12/22/2018 1:00:00 AM	Unsch	4289	Turbine - Other Lube Oil System Problems	EBOP fail to start.			
WS Lee CC ST 10	12/22/2018 1:53:00 AM To 12/22/2018 11:00:00 AM	Unsch	4289	Turbine - Other Lube Oil System Problems	EBOP fail to start.			
WS Lee CC ST 10	12/22/2018 11:42:00 AM To 12/22/2018 2:00:00 PM	Unsch	4289	Turbine - Other Lube Oil System Problems	EBOP fail to start.			
WS Lee CC GT 11	12/3/2018 7:05:00 PM To 12/20/2018 5:00:00 PM	Unsch	3430	Feedwater Regulating (Boiler Level Control) Valve	Trip due to IP drum level.			
WS Lee CC GT 11	12/21/2018 6:30:00 AM To 12/21/2018 10:00:00 AM	Sch	3352	Feedwater Chemistry	Shut down due to water chemistry/vac.			
WS Lee CC GT 12	12/3/2018 7:05:00 PM To 12/20/2018 5:00:00 PM	Unsch	3430	Feedwater Regulating (Boiler Level Control) Valve	Trip due to IP drum level.			

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

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December 2018 Oconee Nuclear Station

	Unit	1	Unit	<u> 2</u>	Unit	3
(A) MDC (mW)	847		848		859	
(B) Period Hours	744		744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	481,371	76.39	648,846	102.84	652,031	102.02
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	0	0.00	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	150,653	23.91	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-1,856	-0.30	-17,934	-2.84	-12,935	-2.02
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00	0	0.00
(J) Net mWh Possible in Period	630,168	100.00%	630,912	100.00%	639,096	100.00%
(K) Equivalent Availability (%)		75.43		100.00		100.00
(L) Output Factor (%)		100.39		102.84		102.02
M) Heat Rate (BTU/NkWh)		10,230		10,050		10,901

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December 2018 McGuire Nuclear Station

	Unit	1	Unit	2
(A) MDC (mW)	1158		1158	
(B) Period Hours	744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	891,451	103.47	886,748	102.92
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-29,899	-3.47	-25,196	-2.92
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	861,552	100.00%	861,552	100.00%
(K) Equivalent Availability (%)		100.00		100.00
(L) Output Factor (%)		103.47		102.92
M) Heat Rate (BTU/NkWh)		9,869		9,923

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December 2018 Catawba Nuclear Station

	Unit 1		Unit 2	
(A) MDC (mW)	1160		1150	
(B) Period Hours	744		744	
(C) Net Gen (mWh) and Capacity Factor (%)	552,976	64.07	867,746	101.42
(D) Net mWh Not Gen due to Full Schedule Outages	296,612	34.37	0	0.00
* (E) Net mWh Not Gen due to Partial Scheduled Outages	13,307	1.54	0	0.00
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	145	0.02	-12,146	-1.42
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	863,040	100.00%	855,600	100.00%
(K) Equivalent Availability (%)		63.35		100.00
(L) Output Factor (%)		97.63		101.42
M) Heat Rate (BTU/NkWh)		10,134		9,967

Belews Creek Station

	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	744	744
(C) Net Generation (mWh)	404,610	176,233
(D) Capacity Factor (%)	48.99	21.34
(E) Net mWh Not Generated due to Full Scheduled Outages	175,287	429,921
(F) Scheduled Outages: percent of Period Hrs	21.23	52.06
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	66,045	67,951
(J) Forced Outages: percent of Period Hrs	8.00	8.23
(K) Net mWh Not Generated due to Partial Forced Outages	3,159	45,010
(L) Forced Derates: percent of Period Hrs	0.38	5.45
(M) Net mWh Not Generated due to Economic Dispatch	176,739	106,725
(N) Economic Dispatch: percent of Period Hrs	21.40	12.92
(O) Net mWh Possible in Period	825,840	825,840
(P) Equivalent Availability (%)	70.39	34.26
(Q) Output Factor (%)	85.98	54.19
(R) Heat Rate (BTU/NkWh)	9,236	10,647

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Buck Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	724
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	129,223	129,215	169,760	428,198
(D) Capacity Factor (%)	84.31	84.31	73.13	79.49
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	5,952	5,952
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	2.56	1.10
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	24,041	24,049	56,416	104,506
(N) Economic Dispatch: percent of Period Hrs	15.69	15.69	24.30	19.40
(O) Net mWh Possible in Period	153,264	153,264	232,128	538,656
(P) Equivalent Availability (%)	100.00	100.00	97.44	98.90
(Q) Output Factor (%)	85.29	86.03	73.13	80.21
(R) Heat Rate (BTU/NkWh)	9,945	9,739	1,661	6,599

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Dan River Combined Cycle Station

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	130,730	122,378	166,308	419,416
(D) Capacity Factor (%)	88.30	82.66	69.85	78.51
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	17,326	25,678	71,772	114,776
(N) Economic Dispatch: percent of Period Hrs	11.70	17.34	30.15	21.49
(O) Net mWh Possible in Period	148,056	148,056	238,080	534,192
(P) Equivalent Availability (%)	100.00	100.00	100.00	100.00
(Q) Output Factor (%)	89.45	88.83	71,12	81.01
(R) Heat Rate (BTU/NkWh)	10,412	10,566	1,784	7,036

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Marshall Station

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	744	744
(C) Net Generation (mWh)	250,510	51,399
(D) Capacity Factor (%)	51.17	10.47
(E) Net mWh Not Generated due to Full Scheduled Outages	0	160,402
(F) Scheduled Outages: percent of Period Hrs	0.00	32.67
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	239,042	279,239
(N) Economic Dispatch: percent of Period Hrs	48.83	56.87
(O) Net mWh Possible in Period	489,552	491,040
(P) Equivalent Availability (%)	100.00	67.33
(Q) Output Factor (%)	51.17	46.92
(R) Heat Rate (BTU/NkWh)	9,867	10,142

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

WS Lee Combined Cycle

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	223	223	337	783
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	65,805	67,050	82,122	214,977
(D) Capacity Factor (%)	39.66	40.41	32.75	36.90
(E) Net mWh Not Generated due to Full Scheduled Outages	781	0	0	781
(F) Scheduled Outages: percent of Period Hrs	0.47	0.00	0.00	0.13
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	90,519	90,519	140,922	321,961
(J) Forced Outages: percent of Period Hrs	54.56	54.56	56.21	55.27
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	8,807	8,343	27,684	44,834
(N) Economic Dispatch: percent of Period Hrs	5.31	5.03	11.04	7.70
(O) Net mWh Possible in Period	165,912	165,912	250,728	582,552
(P) Equivalent Availability (%)	44.97	45.44	43.79	44.60
(Q) Output Factor (%)	91.32	94.95	83.12	89.03
(R) Heat Rate (BTU/NkWh)	9,815	9,566	2,061	6,775

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Duke Energy Carolinas Intermediate Power Plant Performance Review Plan December 2018

Cliffside Station

		Cliffside 6
(A)	MDC (mW)	844
(B)	Period Hrs	744
(C)	Net Generation (mWh)	383,291
(D)	Net mWh Possible in Period	627,936
(E)	Equivalent Availability (%)	87.46
(F)	Output Factor (%)	69.10
(G)	Capacity Factor (%)	61.04

Notes:

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

Cliffside Station

		Unit 5
(A)	MDC (mW)	546
(B)	Period Hrs	744
(C)	Net Generation (mWh)	113,103
(D)	Net mWh Possible in Period	406,224
(E)	Equivalent Availability (%)	80.73
(F)	Output Factor (%)	74.07
(G)	Capacity Factor (%)	27.84

Notes:

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

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January 2018 - December 2018. Oconee Nuclear Station

	Unit	1	Unit	2	Unit	3
(A) MDC (mW)	847		848		859	
(B) Period Hours	8760		8760		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	6,745,635	90.91	7,581,168	102.06	6,967,442	92.59
(D) Net mWh Not Gen due to Full Schedule Outages	524,378	7.07	0	0.00	582,288	7.74
* (E) Net mWh Not Gen due to Partial Scheduled Outages	29,529	0.40	347	0.00	46,294	0.62
(F) Net mWh Not Gen due to Full Forced Outages	184,787	2.49	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-64,608	-0.87	-153,035	-2.06	-71,184	-0.95
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00	0	0.00
(J) Net mWh Possible in Period	7,419,720	100.00%	7,428,480	100.00%	7,524,840	100.00%
(K) Equivalent Availability (%)		89.94		100.00		92.12
(L) Output Factor (%)		100.52		102.06		100.36
M) Heat Rate (BTU/NkWh)		10,233		10,127		10,102

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January 2018 - December 2018 McGuire Nuclear Station

	Unit	1	Unit	<u> 2</u>
(A) MDC (mW)	1158		1158	
(B) Period Hours	8760		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	10,359,250	102.12	9,502,818	93.68
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	791,628	7.80
* (E) Net mWh Not Gen due to Partial Scheduled Outages	796	0.01	28,506	0.28
(F) Net mWh Not Gen due to Full Forced Outages	34,991	0.34	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	-250,957	-2.47	-178,872	-1.76
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	10,144,080	100.00%	10,144,080	100.00%
(K) Equivalent Availability (%)		99.56		91.80
(L) Output Factor (%)		102.47		101.61
M) Heat Rate (BTU/NkWh)		9,957		10,015

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Duke Energy Carolinas Base Load Power Plant Performance Review Plan

January 2018 - December 2018 Catawba Nuclear Station

	Unit	1	Unit	2
(A) MDC (mW)	1160		1150	
(B) Period Hours	0		8760	
(C) Net Gen (mWh) and Capacity Factor (%)	9,510,487	102.28	9,269,228	92.01
(D) Net mWh Not Gen due to Full Schedule Outages	, 0	0.00	. 777,783	7.72
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	76,740	0.76
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00
* (G) Net mWh Not Gen due to Partial Forced Outages	0	0.00	-49,751	-0.49
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00
* (I) Core Conservation	0	0.00	0	0.00
(J) Net mWh Possible in Period	. 0	100.00%	10,074,000	100.00%
(K) Equivalent Availability (%)		95.52		91.84
(L) Output Factor (%)		100.33		99.71
M) Heat Rate (BTU/NkWh)		10,098		10,048

Belews Creek Station

•	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	4,793,474	3,227,943
(D) Capacity Factor (%)	49.30	33.20
(E) Net mWh Not Generated due to Full Scheduled Outages	747,659	2,689,881
(F) Scheduled Outages: percent of Period Hrs	7.69	27.66
(G) Net mWh Not Generated due to Partial Scheduled Outages	1,040	740
(H) Scheduled Derates: percent of Period Hrs	0.01	0.01
(I) Net mWh Not Generated due to Full Forced Outages	311,892	173,216
(J) Forced Outages: percent of Period Hrs	3.21	1.78
(K) Net mWh Not Generated due to Partial Forced Outages	100,192	86,443
(L) Forced Derates: percent of Period Hrs	1.03	0.89
(M) Net mWh Not Generated due to Economic Dispatch	3,769,344	3,545,377
(N) Economic Dispatch: percent of Period Hrs	38.76	36.46
(O) Net mWh Possible in Period	9,723,600	9,723,600
(P) Equivalent Availability (%)	88.06	69.66
(Q) Output Factor (%)	73.99	67.36
(R) Heat Rate (BTU/NkWh)	9,305	9,599

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Buck Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	. 724
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,463,456	1,471,968	2,237,637	5,173,061
(D) Capacity Factor (%)	81.10	81.57	81.87	81.57
(E) Net mWh Not Generated due to Full Scheduled Outages	61,021	56,502	58,692	176,215
(F) Scheduled Outages: percent of Period Hrs	3.38	3.13	2.15	2.78
(G) Net mWh Not Generated due to Partial Scheduled Outages	139,166	139,968	28,219	307,353
(H) Scheduled Derates: percent of Period Hrs	7.71	7.76	1.03	4.85
(I) Net mWh Not Generated due to Full Forced Outages	4,003	354	806	5,163
(J) Forced Outages: percent of Period Hrs	0.22	0.02	0.03	0.08
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	277	277
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.01	0.00
(M) Net mWh Not Generated due to Economic Dispatch	136,914	135,768	407,489	680,170
(N) Economic Dispatch: percent of Period Hrs	7.59	7.52	14.91	10.72
(O) Net mWh Possible in Period	1,804,560	1,804,560	2,733,120	6,342,240
(P) Equivalent Availability (%)	88.68	89.09	96.78	92.29
(Q) Output Factor (%)	84.66	84.85	84.14	84.49
(R) Heat Rate (BTU/NkWh)	10,221	9,937	2,440	6,774

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Dan River Combined Cycle Station

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,433,925	1,410,200	2,118,133	4,962,258
(D) Capacity Factor (%)	82.26	80.90	75.56	78.90
(E) Net mWh Not Generated due to Full Scheduled Outages	97,347	105,218	156,480	359,045
(F) Scheduled Outages: percent of Period Hrs	5.58	6.04	5.58	5.71
(G) Net mWh Not Generated due to Partial Scheduled Outages	132,928	132,170	5,760	270,858
(H) Scheduled Derates: percent of Period Hrs	7.63	7.58	. 0.21	4.31
(I) Net mWh Not Generated due to Full Forced Outages	7,068	9,462	11,920	28,450
(J) Forced Outages: percent of Period Hrs	0.41	0.54	0.43	0.45
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	67,418	67,418
(L) Forced Derates: percent of Period Hrs	0.00	0.00	2.41	1.07
(M) Net mWh Not Generated due to Economic Dispatch	71,972	86,190	443,489	601,650
(N) Economic Dispatch: percent of Period Hrs	4.13	4.94	15.82	9.57
(O) Net mWh Possible in Period	1,743,240	1,743,240	2,803,200	6,289,680
(P) Equivalent Availability (%)	86.38	85.84	91.38	88.46
(Q) Output Factor (%)	87.94	87.41	80.83	84.62
(R) Heat Rate (BTU/NkWh)	10,614	10,673	2,397	7,123

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Marshall Station

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	3,176,205	3,675,692
(D) Capacity Factor (%)	55.10	63.58
(E) Net mWh Not Generated due to Full Scheduled Outages	372,746	501,545
(F) Scheduled Outages: percent of Period Hrs	6.47	8.67
(G) Net mWh Not Generated due to Partial Scheduled Outages	2,091	12,896
(H) Scheduled Derates: percent of Period Hrs	0.04	0.22
(I) Net mWh Not Generated due to Full Forced Outages	95,739	81,433
(J) Forced Outages: percent of Period Hrs	1.66	1.41
(K) Net mWh Not Generated due to Partial Forced Outages	145,499	69,994
(L) Forced Derates: percent of Period Hrs	2.52	1.21
(M) Net mWh Not Generated due to Economic Dispatch	1,971,800	1,440,040
(N) Economic Dispatch: percent of Period Hrs	34.21	24.91
(O) Net mWh Possible in Period	5,764,080	5,781,600
(P) Equivalent Availability (%)	89.31	88.48
(Q) Output Factor (%)	68.89	75.74
(R) Heat Rate (BTU/NkWh)	9,553	9,406

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

WS Lee Combined Cycle

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	223	223	337	783
(B) Period Hrs	6,601	6,601	6,601	6,601
(C) Net Generation (mWh)	1,030,538	1,090,492	1,402,639	3,523,669
(D) Capacity Factor (%)	70.01	74.08	63.05	68.17
(E) Net mWh Not Generated due to Full Scheduled Outages	200,652	187,320	291,168	679,140
(F) Scheduled Outages: percent of Period Hrs	13.63	12.73	13.09	13.14
(G) Net mWh Not Generated due to Partial Scheduled Outages	27,459	28,514	67,117	123,090
(H) Scheduled Derates: percent of Period Hrs	1.87	1.94	3.02	2.38
(I) Net mWh Not Generated due to Full Forced Outages	138,565	122,014	167,641	428,220
(J) Forced Outages: percent of Period Hrs	9.41	8.29	7.54	8.29
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	74,809	43,683	295,972	414,464
(N) Economic Dispatch: percent of Period Hrs	5.08	2.97	13.30	8.02
(O) Net mWh Possible in Period	1,472,023	1,472,023	2,224,537	5,168,583
(P) Equivalent Availability (%)	75.09	77.05	76.36	76.19
(Q) Output Factor (%)	96.75	98.41	85.00	92.16
(R) Heat Rate (BTU/NkWh)	10,365	10,240	1,646	6,855

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

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Duke Energy Carolinas Base Load Power Plant

Performance Review Plan

January 2018 through December 2018

Pre-Commercial Lee Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)				
(B) Period Hrs				
(C) Net Generation (mWh)	38,546	20,580	7,645	66,771
(D) Capacity Factor (%)				
(E) Net mWh Not Generated due				

(F) Scheduled Outages: percent of Period Hrs

to Full Scheduled Outages

- (G) Net mWh Not Generated due to Partial Scheduled Outages
- (H) Scheduled Derates: percent of Period Hrs
- (I) Net mWh Not Generated due to Full Forced Outages
- (J) Forced Outages: percent of Period Hrs
- (K) Net mWh Not Generated due to Partial Forced Outages
- (L) Forced Derates: percent of Period Hrs
- (M) Net mWh Not Generated due to Economic Dispatch
- (N) Economic Dispatch: percent of Period Hrs
- (O) Net mWh Possible in Period
- (P) Equivalent Availability (%)
- (Q) Output Factor (%)
- (R) Heat Rate (BTU/NkWh)

Note: The Power Plant Performance Data reports are limited to capturing data beginning the first month a station is in commercial operation. Lee CC began commercial operations April 5, 2018.

Duke Energy Carolinas Intermediate Power Plant Performance Review Plan January, 2018 through December, 2018

Cliffside Station

Unit	rs .	Unit 6					
(A)	MDC (mW)	844					
(B)	Period Hrs	8,760					
(C)	Net Generation (mWh)	4,311,369					
(D)	Net mWh Possible in Period	7,393,440					
(E)	Equivalent Availability (%)	75.32					
(F)	Output Factor (%)	79.29					
(G)	Capacity Factor (%)	58.31					

Notes:

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

Duke Energy Carolinas Peaking Power Plant Performance Review Plan January, 2018 through December, 2018

Cliffside Station

Unit	s	Unit 5					
(A)	MDC (mW)	546					
(B)	Period Hrs	8,760					
(C)	Net Generation (mWh)	1,243,104					
(D)	Net mWh Possible in Period	4,782,960					
(E)	Equivalent Availability (%)	60.18					
(F)	Output Factor (%)	71.78					
(G)	Capacity Factor (%)	25.99					

Notes:

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

McGee Workpaper 1

Total

58,459,031 357,497,468

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Proposed Nuclear Capacity Factor
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

MWhs										
Cost (Gross of Joint Owners) \$ 57,728,557 \$ 58,001,149 \$ 60,167,863 \$ 56,622,253 \$ 46,212,440 \$ 38,923,889 \$ 39,841,317 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		Catawba 1	Catawba 2	McGuire 1	McGuire 2		Oconee 1	Oconee 2	Oconee 3	_
Cost (Gross of Joint Owners) \$ 57,728,557 \$ 58,001,149 \$ 60,167,863 \$ 56,622,253 \$ 46,212,440 \$ 38,923,889 \$ 39,841,317 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	MWhe	9 270 870	9 127 064	10 021 874	9 249 360		7 252 338	6 692 637	988 448 9	
\$\text{S/MWh}\$ 6.2269 6.3549 6.0037 6.1217 6.3721 5.8159 5.8206 Avg \$\text{S/MWh}\$ Cents per kWh 6.1154 \$\text{Cents per kWh}\$ \$\text{Sept 2019-}{\text{August 2020}}\$ MDC \$\text{CATA_UN01} \text{Catawba} \text{MW} \text{1,160.1} \\ \$\text{CATA_UN02} \text{Catawba} \text{MW} \text{1,150.1} \\ \$\text{MCGU_UN02} \text{McGuire} \text{MW} \text{1,157.6} \\ \$\text{QCON_UN01} \text{ Qconee} \text{MW} \text{84.0} \\ \$\text{QCON_UN02} \text{Qconee} \text{MW} \text{848.0} \\ \$\text{QCON_UN03} \text{Qconee} \text{MW} \text{859.0} \\ \$\text{7,179.8} \\ \$\text{Hours In month} \text{8,760} \end{array} \text{Generation GWHs} \text{Catawba} \text{GWh} \text{9,271} \\ \$\text{CATA_UN01} \text{ Catawba} \text{GWh} \text{9,127} \\ \$\text{MCGU_UN01} \text{McGuire} \text{GWh} \text{9,271} \\ \$\text{CATA_UN01} \text{Catawba} \text{GWh} \text{9,127} \\ \$\text{MCGU_UN01} \text{McGuire} \text{GWh} \text{9,249} \\ \$\text{CON_UN01} \text{Qconee} \text{GWh} \text{9,249} \\ \$\text{CON_UN02} \text{Qconee} \text{GWh} \text{9,249} \\ \$\text{CON_UN01} \text{Qconee} \text{GWh} \text{9,249} \\ \$\text{CON_UN01} \text{Qconee} \text{GWh} \text{9,249} \\ \$\text{CON_UN02} \text{Qconee} \text{GWh} \text{6,683} \\ \$\text{QCON_UN02} \text{Qconee} \text{GWh} \text{6,6845} \\ \$\text{QCON_UN03} \text{Qconee} \text{GWh} \text{6,6845} \\ \$\text{QCON_UN02} \text{Qconee} \text{GWh} \text{6,6845} \\ \$\text{QCON_UN02} \text{Qconee} \text{GWh} \text{6,6845} \\ \$\text{QCON_UN02} \text{Qconee} \text{Qconee} \text{QCON_UN02} \\ \$\text{Qcon_UN03} \text{Qconee} \text{Qconee} \text{QCON_UN02}						Ś				
Sept 2019 - August 2020	355. (3.555 5. 55 3	\$ 51,120,051	00,002,210	¢ 00,207,003	ψ 50,022,230	*	10,222, 110	<i>ϕ</i> 30,323,633	Ų 00,0 11,011.	
Cents per kWh	\$/MWh	6.2269	6.3549	6.0037	6.1217		6.3721	5.8159	5.8206	
Sept 2019 - August 2020	Avg \$/MWh		6.1154							
August 2020 MDC August 2020 CATA_UN01 Catawba MW 1,160.1 CATA_UN02 Catawba MW 1,150.1 MCGU_UN01 McGuire MW 1,157.6 OCON_UN01 Oconee MW 847.0 OCON_UN02 Oconee MW 859.0 OCON_UN03 Oconee MW 859.0 7,179.8 Thours in month 8,760 Generation GWHs CATA_UN01 Catawba GWh 9,271 CATA_UN01 Catawba GWh 9,127 MCGU_UN01 McGuire GWh 9,127 MCGU_UN01 McGuire GWh 9,249 OCON_UN02 McGuire GWh 9,249 OCON_UN01 Oconee GWh 6,893 OCON_UN02 Oconee GWh 6,845	Cents per kWh		0.6115							
August 2020 MDC August 2020 CATA_UN01 Catawba MW 1,160.1 CATA_UN02 Catawba MW 1,150.1 MCGU_UN01 McGuire MW 1,157.6 OCON_UN01 Oconee MW 847.0 OCON_UN02 Oconee MW 859.0 OCON_UN03 Oconee MW 859.0 7,179.8 Thours in month 8,760 Generation GWHs CATA_UN01 Catawba GWh 9,271 CATA_UN01 Catawba GWh 9,127 MCGU_UN01 McGuire GWh 9,127 MCGU_UN01 McGuire GWh 9,249 OCON_UN02 McGuire GWh 9,249 OCON_UN01 Oconee GWh 6,893 OCON_UN02 Oconee GWh 6,845										
MDC CATA_UN01										
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 7,179.8 Hours In month 8,760 Generation GWHs CATA_UN01 Catawba GWh 9,271 CATA_UN01 Catawba GWh 9,127 MCGU_UN01 McGuire GWh 9,127 MCGU_UN01 McGuire GWh 10,022 MCGU_UN02 McGuire GWh 9,249 OCON_UN01 Oconee GWh 7,252 OCON_UN02 Oconee GWh 6,845				-						
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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 7,179.8 Hours In month 8,760 Generation GWHs CATA_UN01 Catawba GWh 9,271 CATA_UN02 Catawba GWh 9,127 MCGU_UN01 McGuire GWh 10,022 MCGU_UN02 McGuire GWh 10,022 MCGU_UN02 McGuire GWh 9,249 OCON_UN01 Oconee GWh 7,252 OCON_UN02 Oconee GWh 6,693 OCON_UN03 Oconee GWh 6,845	_			•						
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Generation GWHs CATA_UN01 Catawba GWh 9,271 CATA_UN02 Catawba GWh 9,127 MCGU_UN01 McGuire GWh 10,022 MCGU_UN02 McGuire GWh 9,249 OCON_UN01 Oconee GWh 7,252 OCON_UN02 Oconee GWh 6,693 OCON_UN03 Oconee GWh 6,845				7,179.8						
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MCGU_UN02 McGuire GWh 9,249 OCON_UN01 Oconee GWh 7,252 OCON_UN02 Oconee GWh 6,693 OCON_UN03 Oconee GWh 6,845	CATA_UN02	Catawba '	GWh	9,127						
OCON_UN01 Oconee GWh 7,252 OCON_UN02 Oconee GWh 6,693 OCON_UN03 Oconee GWh 6,845	MCGU_UN01	McGuire	GWh	10,022						
OCON_UN02 Oconee GWh 6,693 OCON_UN03 Oconee GWh 6,845	MCGU_UN02	McGuire	GWh	9,249						
OCON_UN03 Oconee GWh6,845	OCON_UN01	Oconee	GWh	7,252						
-		Oconee	GWh	6,693						
58,459	OCON_UN03	Oconee	GWh	6,845						
				58,459	_					

92.95%

Proposed Nuclear Capacity Factor

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
NERC 5 Year Average Nuclear Capacity Factor
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

McGee Workpaper 2

	Catawba 1	Cat	tawba 2	M	IcGuire 1	N	1cGuire 2	 Oconee 1	Осолее 2	Oconee 3	Total
MWhs with NERC applied	9,098,46	5	9,020,036		9,081,995		9,078,858	6,785,334	6,793,345	6,881,466	56,739,499
Hours	87	60	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	89.53	%	89.53%		89.53%		89.53%	91.45%	91.45%	91.45%	90.21%
Cost	\$ 55,640,30	2 \$ 5	55,160,685	\$	55,539,582	\$	55,520,397	\$ 41,494,696 \$	41,543,686	\$ 42,082,578	\$ 346,981,926
Avg \$/MWh			6.1154								
Cents per kWh			0.6115								

2013-2017	Capacity Rating	NCF Rating	Weighted Average
Oconee 1	847.0	91.45	10.79%
Oconee 2	848.0	91.45	10.80%
Oconee 3	859.0	91.45	10.94%
McGuire 1	` 1158.0	89.53	14.44%
McGuire 2	1157.6	89.53	14.43%
Catawba 1	1160.1	89.53	14.47%
Catawba 2	1150.1	89.53	14.34%
•	7179.8	_	90.21%

Wtd Avg on Capacity Rating

DUKE ENERGY CAROLINAS McGee Workpaper 3

North Carolina Annual Fuel and Fuel Related Expense North Carolina Generation and Purchased Power in MWhs Billing Period Sept 2019 through Aug 2020 Docket E-7, Sub 1190

	Sept 2019 - August	
Resource Type	2020	
NUC Total (Gross)	58,459,031	
COAL Total	18,355,203	
Gas CT and CC total (Gross)	20,821,617	
Run of River	4,839,425	
Net pumped Storage	(3,874,211)	
Total Hydro	965,214	
Catawba Joint Owners	(14,888,880)	
Lee CC Joint Owners	(878,400)	
DEC owned solar	184,444	
Total Generation	20 1,	83,018,229
Purchases for REPS Compliance	1,204,212	
Qualifying Facility Purchases - Non-REPS compliance	1,275,248	
Other Purchases	66,854	
Allocated Economic Purchases	319,079	
Joint Dispatch Purchases	6,414,946_	
	9,280,339	
Total Generation and Purchased Power		92,298,568
Fuel Recovered Through intersystem Sales	(687,755)	

McGee Workpaper 4

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Projected Fuel and Fuel Related Costs

Billing Period Sept 2019 through Aug 2020

Docket E-7, Sub 1190

Resource Type	Sept 2019 - August 2020	-
Nuclear Total (Gross)	\$ 357,497,46	8
COAL Total	570,050,83	7
Gas CT and CC total (Gross)	503,184,08	6
Catawba Joint Owner costs	(91,061,69	5)
CC Joint Owner costs	(18,112,97	6)
Reagents and gain/loss on sale of By-Products	24,959,64	9 Workpaper 9
Purchases for REPS Compliance - Energy	63,867,56	6
Purchases for REPS Compliance Capacity	13,295,65	4
Purchases of Qualifying Facilities - Energy	58,754,19	7
Purchases of Qualifying Facilities - Capacity	14,874,08	
Other Purchases	2,029,94	
JDA Savings Shared	19,972,40	
Allocated Economic Purchase cost .	9,109,70	
Joint Dispatch purchases	132,910,59	
Total Purchases	314,814,15	3
Fuel Expense recovered through intersystem sales	(16,986,30	1) Workpaper 5
Total System Fuel and Fuel Related Costs	\$ 1,644,345,22	1

McGee Workpaper 5

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Projected Joint Dispatch Fuel Impacts
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

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

	Allocated Econom	Allocated Economic Purchase Cost					Economic Sales Cost				ayment	JDA Savings Payment			
	DEP		EC		DEP		DEC		DEP		DEC		DEP		DEC
9/1/2019	\$ 475,131	\$	665,890	\$	(169,265)	\$	(112,397)	\$	(10,444,194)	\$	10,444,194	\$	(1,053,331)	\$	1,053,331
10/1/2019	\$ 414,456	\$	591,080	\$	(4,395)	\$	(67,808)	\$	(7,750,156)	\$	7,750,156	\$	(1,182,598)	\$	1,182,598
11/1/2019	\$ 950,625	\$ 1	1,370,649	\$	(419,575)	\$	(61,033)	\$	(15,340,171)	\$	15,340,171	\$	(2,955,441)	\$	2,955,441
12/1/2019	\$ 479,370	\$	692,032	\$	(371,479)	\$	(59,958)	\$	(12,761,635)	\$	12,761,635	\$	(1,792,678)	\$	1,792,678
1/1/2020	\$ 730,828	\$ 1	L,011,856	\$	(1,806,953)	\$	(2,697,340)	\$	(1,005,527)	\$	1,005,527	\$	626,965	\$	(626,965)
2/1/2020	\$ 463,058	\$	655,004	\$	(1,255,361)	\$	(1,044,487)	\$	(2,708,449)	\$	2,708,449	\$	(215,029)	\$	215,029
3/1/2020	\$ 426,687	\$	608,794	\$	(409,836)	\$	(356,416)	\$	(9,719,397)	\$	9,719,397	\$	(1,442,087)	\$	1,442,087
4/1/2020	\$ 459,023	\$	693,091	\$	(291,103)	\$	(49,201)	\$	(10,408,733)	\$	10,408,733	\$	(2,336,142)	\$	2,336,142
5/1/2020	\$ 531,216	\$	804,769	\$	(483,810)	\$	(86,028)	\$	(13,269,047)	\$	13,269,047	\$	(2,608,123)	\$	2,608,123
6/1/2020	\$ 345,100	\$	504,336	\$	(265,478)	\$	(113,940)	\$	(13,397,425)	\$	13,397,425	\$	(2,137,472)	\$	2,137,472
7/1/2020	\$ 587,846	\$	827,961	\$	(399,661)	\$	(463,252)	\$	(12,439,738)	\$	12,439,738	\$	(3,016,091)	\$_	3,016,091
8/1/2020	\$ 483,920	\$	684,244	\$	(327,024)	\$	(196,140)	4	(11,987,821)	\$	11,987,821	\$	(1,860,381)	\$	1,860,381

Sept 19 - Aug 20 \$ 9,109,705 \$ (5,308,001) \$ 121,232,293 \$ 19,972,407

- \$ 132,910,592 Workpaper 6 Transfer Purchases
- \$ (11,678,300) Workpaper 6 Transfer Sales
- \$ 121,232,293 Sept 19-Aug 20 Net Fuel Transfer Payment
- \$ (11,678,300) Workpaper 6 Transfer Sales
- \$ (5,308,001) Sept 19-Aug 20 Economic Sales Cost
- \$ (16,986,301) Total Fuel expense recovered through intersystem sales

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
Projected Merger Payments
Billing Period Sept 2019 through Aug 2020

Docket E-7, Sub 1190

McGee Workpaper 6

_					purchase	sale					sale		purchase
	Transfer P	rojection	Purchase Alloca	ation Delta	Adjusted Tra	ansfer	Fossil Gen Cost			Pre-Net	Pay	ments	
	PECtoDEC	DECtoPEC	PEC	DEC	PECtoDEC	DECtoPEC		PEC		DEC	PECtoDEC		DECtoPEC
9/1/2019	464,096	14,623	10,534	(10,534)	474,630	14,623	\$	22.64	\$	20.60	\$ 301,261	\$	10,745,454
10/1/2019	406,906	75,054	8,370	(8,370)	415,276	75,054	\$	22.10	\$	19.03	\$ 1,427,980	\$	9,178,136
11/1/2019	675,108	1,571	33,083	(33,083)	708,192	1,571	\$	21.71	\$	20.01	\$ 31,436	\$	15,371,607
12/1/2019	564,868	22,814	2,716	(2,716)	567,583	22,814	\$	23.37	\$	22.13	\$ 504,795	\$	13,266,429
1/1/2020	207,223	163,501	(7,592)	7,592	207,223	171,093	\$	25.26	\$	24.72	\$ 4,228,626	\$	5,234,152
2/1/2020	232,255	123,728	(8,963)	8,963	232,255	132,692	\$	24.98	\$	23.30	\$ 3,092,324	\$	5,800,773
3/1/2020	468,979	12,017	7,840	(7,840)	476,820	12,017	\$	20.80	\$	16.50	\$ 198,232	\$	9,917,629
4/1/2020	580,234	41,238	(4,789)	4,789	580,234	46,027	\$	19.35	\$	17.80	\$ 819,312	\$	11,228,046
5/1/2020	666,200	17,354	14,825	(14,825)	681,026	17,354	\$	19.93	\$	17.44	\$ 302,581	\$	13,571,628
6/1/2020	739,202	5,870	4,470	(4,470)	743,672	5,870	\$	18.15	\$	16.50	\$ 96,828	\$	13,494,252
7/1/2020	672,958	24,313	(279)	279	672,958	24,592	\$	19.09	\$	16.62	\$ 408,669	\$	12,848,407
8/1/2020	642,936	17,040	12,142	(12,142)	655,079	17,040	\$	18.71	\$	15.63	\$ 266,256	\$	12,254,078
_					_								<u>-</u> -
ot 19 - Aug 20	6,320,965	519,122	72,358	(72,358)	6,414,946	540,745					\$ 11,678,300	\$	132,910,592

Net Pre-Net Payments \$ 121,232,293

McGee Workpaper 7

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
Proposed Nuclear Capacity Factor of 92.95%
Billing Period Sept 2019 through Aug 2020
Docket F-7, Sub 1190

Fail 2018 Forecast Billed Sales Forecast Sales Forecast - MWhs (000)

		Projected sales for the Billing Period	Remove Impact of SC DERP Not Metered generation	Adjusted Sales
North Carolina:				
	Residential	21,397,068	`	21,397,068
	Genera!	23,127,702		23,127,702
	Industrial	12,939,285		12,939,285
	Lighting	253,942		253,942
	NC RETAIL	57,717,997		57,717,997
South Carolina:				
	Residentiaf	6,427,468	78,602	6,506,070
	General	5,801,262	49,849	5,851,111
	Industrial	9,500,669	688	9,501,357
	Lighting	42,373	•	42,373
	SC RETAIL	21,771,772	129,139	21,900,911
Total Retail Sales				
	Residentia!	27,824,536	78,602	27,903,138
	General	28,928,964	49,849	28,978,813
	Industrial	22,439,954	688	22,440,642
	Lighting	296,315	•	296,315
	Retail Sales	79,489,769	129,139	79,618,908
	Wholesale	7,624,936	-	7,624,936
	Projected System MWH Sales for Fuel Factor	87,114,705	129,139	87,243,844
	NC as a percentage of total	66.25%		66,16%
	SC as a percentage of total	24.99%		25.10%
	Wholesale as a percentage of total	8.75%		8.74%
		100.00%		100.00%
	SC Net Metering allocation adjustment			
	Total projected SC NEM MWhs		129,139	
	Marginal fuel rate per MWh for SC NEM		\$ 32.50	
	Fuel benefit to be directly assigned to SC Retail		S 4,197,018	

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

		NC Retail		South Carolina
Reconciliation	System	Customers	Who!esale	Retail
Total system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	\$ 1,644,345,221			
QF and REPS Compliance Purchased Power - Capacity	\$ 28,169,738			
Other fuel costs	\$ 1,616,175,484			
SC Net Metering Fuel Allocation adjustment	\$ 4,197,018			
Jurisdictional fuel costs after adj.	\$ 1,620,372,501			
Allocation to states/classes		66.16%	8.74%	25.10%
Jurisdictional fuel costs	\$ 1,620,372,501 \$	1,072,038,447	141,620,557	\$ 405,713,498
Direct Assignment of Fuel benefit to SC Retali	\$ (4,197,018)		• -	5 (4,197,018)
Total system actual fuel costs	\$ 1,616,175,484 \$	1,072,038,447	141,620,557	\$ 402,516,480
QF and REPS Compliance Purchased Power - Capacity	28,169,738	18,884,001		
Total system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	\$ 1,644,345,221 \$	1,090,922,448		
		xh.2, Sch. 1 page 3	l.	

\$ 1,644,345,221 McGee Exhibit 2 Schdule 1 Page 1 of 3 \$ 4,197,018 \$ 1,648,542,239

Revised McGee Workpaper 7a

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense Projected and Adjusted Projected Sales and Costs Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales Billing Period Sept 2019 through Aug 2020 Docket E-7, Sub 1190

Fall 2018 Forecast Billed Sales Forecast - Normalized Test Period Sales Sales Forecast - MWhs (000)

> North Carolina: South Carolina:

		Customer Growth		Remove Impact of SC DERP Net Metered	Normalized Test
	Test Period Sales	Adjustment	Weather Adjustment	generation	Period Sales
NC RETAIL	59,480,703	155,235	(1,649,623)	-	57,986,315
SC RETAIL	21,918,532	72,754	(507,334)	129,139	21,613,091
Wholesale	9,088,393	81,154	(120,731)		9,048,816
Normalized System MWH Sales for Fuel Factor	90,487,628	309,143	(2,277,688)	129,139	88,648,222
NC as a percentage of total	65.73%				65.41%
SC as a percentage of total	24.22%				24.38%
Wholesale as a percentage of total	10.04%				10.21%
	100.00%			-	100.00%
SC Net Metering allocation adjustment					
Total projected SC NEM MWhs		129,139			
Marginal fuel rate per MWh for SC NEM		\$ 32.50			
Fuel benefit to be directly assigned to SC Retail	-	\$ 4,197,018	-		
System Fuel Expense		\$ 1,683,949,859	McGee Exhibit 2 Scheda	ile 2 Page 1 of 3	
Fuel benefit to be directly assigned to SC Retail		\$ 4,197,018			
Total Fuel Costs for Allocation	-	\$ 1,688,146,877	-		

Reconciliation	System	NC Retall Customers	Wholesale	South Carolina Retail
Total system fuel expense from McGee Exhibit 2 Schedule 2 Page 1	\$ 1,683,949,859	•		
QF and REPS Compliance Purchased Power - Capacity	\$ 28,169,738			
Other fuel costs	\$ 1,655,780,122			
SC Net Metering Fuel Allocation adjustment	\$ 4,197,018			
Jurisdictional fuel costs after adj.	\$ 1,659,977,139			
Allocation to states/classes		65.41%	10.21%	24.38%
Jurisdictional fuel costs	\$ 1,659,977,139	\$ 1,085,791,047 \$	169,483,666	\$ 404,702,427
Direct Assignment of Fuel benefit to SC Retail	\$ (4,197,018)	\$_		\$ (4,197,018)
Total system actual fuel costs	\$ 1,655,780,122	\$ 1,085,791,047 \$	169,483,666	\$ 400,505,409
QF and REPS Compliance Purchased Power - Capacity	28,169,738	18,884,001		
Total system fuel expense from McGee Exhibit 2 Schedule 2 Page 1	\$ 1,683,949,859	\$ 1,104,675,048		
		Exh. 2, Sch 2 page 3		

McGee Workpaper 7b

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
NERC 5 Year Average Nuclear Capacity Factor of 90.21%
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Fall 2018 Forecast Billed Sales Forecast Sales Forecast - MWhs (000)

	1	Projected sales	Remove Impact of SC DERP Net	
		for the Billing	Metered	
		Period	generation	Adjusted Salas
Vorth Carolina:				
	Residential	21,397,068		21,397,068
	General	23,127,702		23,127,702
	Industrial	12,939,285		12,939,285
	Lighting	253,942		253,942
	NC RETAIL	57,717,997	•	57,717,997
uth Carolina;				
	Residential	5,427,46B	78,602	6,506,070
	General	5,801,262	49,849	5,651,111
	Industrial	9,500,669	688	9,501,357
	Lighting	42,373	0	42,373
	SC RETAIL	21,771,772	129,139	21,900,911
tal Retail Sales				
	Residential	27,824,536	78,602	27,903,138
	General	28,928,964	49,849	28,978,813
	Industrial	22,439,954	688	22,440,642
	Lighting	296,315		296,315
	Retail Sales	79,489,769	129,139	79,618,908
	Wholesale	7,624,936	•	7,624,936
	Projected System MWh Sales for Fuel Factor	87,114,705	129,139	87,243,844
	NC as a percentage of total	66.26 %		66.169
	SC as a percentage of total	24.99%		25.109
	Wholesale as a percentage of total	8.75%	_	8.74%
		100.00%	_	100.009
	SC Net Metering allocation adjustment			
	Total projected SC NEM MWhs		129,139	
	Marginal fuel rate per MWh for SC NEM	_	\$ 32.50	
	Fuel benefit to be directly assigned to SC Retail		\$ 4,197,018	
	System Fuel Expense			AcGee Exhibit 2 Sched
	Fuel benefit to be directly assigned to SC Retail	_	\$ 4,197,018	
	Total Fuel Costs for Allocation		\$ 1,680,506,966	McGee Exhibit 2 Scher

Reconciliation	System	NC	Retail Customers		Wholesale	Sout	h Carolina Retall
Total system fuel expense from McGee Exhibit 2 Schedule 3 Page 1	\$ 1,676,309,949						
QF and REPS Compliance Purchased Power - Capacity	\$ 28,169,738						
Other fuel costs	\$ 1,648,140,211						
SC Net Metering Fuel Allocation adjustment	\$ 4,197,018						
Jurisdictional fuel costs after adj.	\$ 1,652,337,229						
Allocation to states/classes			66.16%		8.74%		25.10%
Jurisdictional fuel costs	\$ 1,652,337,229	\$	1,093,186,310	s	144,414,274	5	414,736,644
Direct Assignment of Fuel benefit to SC Retail	\$ (4,197,018)			\$	•	s	(4,197,018)
Total system actual fuel costs	\$ 1,648,140,211	\$	1,093,186,310	s	144,414,274	5	410,539,627
QF and REPS Compliance Purchased Power - Capacity	28,169,738		18,884,001				
Total system fuel expense from McGee Exhibit 2 Schedule 3 Page 1	\$ 1,676,309,949	\$	1,112,070,311				
_		Exh.	2. Sch.3 page 3				

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Annualized Revenue
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

McGee Workpaper 8

Normalized
Sales

		Janu	ary 2019 Actuals		Sales	
	•	Revenue	KWH Sales	Cents/ kwh	McGee EX 4	Total Annualized Revenues
	\ <u></u>	(a)	(b)	(a) / (b) *100 = (c)	(d)	(c)*(d)*10
Residential	\$	217,323,443.93	2,194,230,798	9.9043	22,043,791	\$ 2,183,285,633
General	\$	143,353,269.17	1,936,498,544	7.4027	23,487,580	\$ 1,738,716,194
Industrial	\$	49,109,115.03	890,320,580	5.5159	12,454,944	\$ 687,001,167
Total	\$	409,785,828.13	5,021,049,922	-	57,986,315	\$ 4,609,002,994

McGee Workpaper 9

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Projected Reagents and ByProducts
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Reagent and ByProduct projections

						Magnesium					Gypsum		S	ale of By-Products
Date	Ammonia		Urea	Limestone		hydroxide	Ca	alcium Carbonate	Reagent Cost	(4	Gain)/ Loss	Asi	h (Gain)/Loss	(Gain)/Loss
9/1/2019	\$ 342,	265 \$	77,914	\$ 1,644,941	\$	215,442	\$	119,083	\$ 2,399,645	\$	347,807	\$	(20,361) \$	327,447
10/1/2019	\$ 203,	263 \$	46,271	\$ 976,890	\$	96,653	\$	59,479	\$ 1,382,556	\$	222,691	\$	(500) \$	222,191
11/1/2019	\$ 295,	573 \$	67,308	\$ 1,421,021	\$	141,587	\$	80,226	\$ 2,005,816	\$	307,158	\$	(14,173) \$	292,986
12/1/2019	\$ 280,	585 \$	63,896	\$ 1,348,984	\$	200,980	\$	105,495	\$ 2,000,040	\$	253,684	\$	(31,440) \$	222,244
1/1/2020	\$ 480,	295 \$	109,336	\$ 2,308,323	\$	235,514	\$	119,285	\$ 3,252,753	\$	448,822	\$	(51,070) \$	397,752
2/1/2020	\$ 455,	543 \$	103,724	\$ 2,189,841	\$	224,812	\$	115,218	\$ 3,089,236	\$	426,261	\$	(54,924) \$	371,337
3/1/2020	\$ 280,	333 \$	63,929	\$ 1,349,695	\$	197,989	\$	96,692	\$ 1,989,138	\$	249,549	\$	(49,646) \$	199,903
4/1/2020	\$ 112,	329 \$	25,571	\$ 539,858	\$	73,146	\$	41,882	\$ 792,786	\$	114,210	\$	(7,717) \$	106,493
5/1/2020	\$ 127,	330 \$	29,100	\$ 614,359	\$	89,834	\$	50,633	\$ 911,756	\$	128,869	\$	(9,205) \$	119,664
6/1/2020	\$ 116,	520 \$	26,548	\$ 560,481	\$	93,291	\$	51,598	\$ 848,537	\$	114,157	\$	(8,031) \$	106,126
7/1/2020	\$ 252,	134 \$	57,465	\$ 1,213,211	5	193,957	\$	106,887	\$ 1,823,954	\$	246,905	\$	(18,748) \$	228,157
8/1/2020	\$ 228,	139 \$	51,934	\$ 1,096,445	\$	180,818	\$	101,250	\$ 1,658,586	\$	225,313	\$	(14,765) \$	210,548
	\$ 3,176,	009 \$	722,995	\$ 15,264,049	\$	1,944,022	\$	1,047,728	\$ 22,154,802	\$	3,085,428	\$	(280,581) \$	2,804,847

Total Reagent cost and Sale of By-products \$ 24,959,649

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test
Twelve Months Ended December 31, 2017
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

McGee Workpaper 10

Line No.	Description	Forecast \$	(over)/under Callection \$	Total \$
	1 Amount in current docket	107,380,554	72,488,427	179,868,981
	2 Amount in Sub 1163, prior year docket	129,739,014	25,206,674	154,945,688
	3 Increase/(Decrease)	(22,358,461)	47,281,753	24,923,292
	4 2.5% of 2018 NC revenue of \$4,895,869,250.56			122,396,731
	Excess of purchased power growth over 2.5% of Revenue			0
	E-7 Sub 1190			
WP 4	Purchases for REPS Compliance - Energy	63,867,566	66.16%	42,254,782
WP 4	Purchases for REPS Compliance Capacity	13,295,654	67.04%	8,912,938
WP 4	Purchases	2,029,948	66.16%	1,343,014
WP 4	QF Energy	5 8,75 4,197	66.16%	38,871,777
WP 4	QF Capacity	14,874,084	67.04%	9,971,063
WP 4	Allocated Economic Purchase cost	9,109,705	66.16%	6,026,981
		161,931,154		107,380,554
	E-7 Sub 1163			
	Purchases for REPS Compliance	76,265,967	65,58%	50,015,221
	Purchases for REPS Compliance Capacity	16,389,786	66.39%	10,881,179
	Purchases	1,354,014	65,58%	887,962
	QF Energy	59,741,306	65.58%	39,178,348
	QF Capacity	13,954,158	66.39%	9,264,165
	Allocated Economic Purchase cost	29,753,184	65.58%	19,512,138
	 -	197,458,415		129,739,014

McGeg Workpaper 10a

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test
Twehe Months Ended December 31, 2018
Docket F-7, Sub 1190

Z018 System KWH Sales - Sch 4, Adjusted NC Retail KWH Seles - Sch 4 NC Retail K of Sales, Adjusted (Calc)	8,7			Mar18 8,449,985,012 4,190,094,169 64,96%	Apr18 8,590,329,093 4,416,568,038 67.02%		June 18 8,009,317,385 5,245,688,611 6S.49%		Aug 18 8,267,869,991 6,409,821,248 65,43%	Sep18 9,507,963,680 6,212,763,717 65,34%	Oct18 6,345,056,567 4,141,211,581 65,27%	Nay18 0,681,184,890 4,314,723,247 64,58%	Dec28 7,500,839,324 4,892,732,160 65.23%	12 ME 90,593,766,989 59,480,702,586 65.66%
NC retail production plant %		67.56%	67.56%	67.56%	67.56%	67.56%	67,56%	67,56 %	67.56%	67.56%	67.56%	67,56%	67.56 %	67.56%
Fuel and Fuel related component of purchased power	_													
System Actual 5 - Sch 3 FuelS: System Actual 5 - Sch 3 Fuel-relatedS; Economic Purchases System Actual 5 - Sch 3 Fuel-relatedS; Furchased Power for REPS Compilance System Actual 5 - Sch 3 Fuel-relatedS; SC DEPP System Actual 5 - Sch 3 Fuel-relatedS; NBS89 purpa Purchases	\$ 	54,851,829 \$ 16,300,781 3,057,332 122 1,692,902	19,768,561 3 2,407,886 3,239,022 125 2,049,413	11,751,953 1,331,655 2,726,561 134 2,053,505	\$ 8,971,622 1,356,382 3,894,992 163 2,531,173	\$ 7,588,225 : 1,584,418 4,543,762 218 2,424,811	7,853,735 1,881,586 4,545,750 223 2,829,385	5 25,151,873 2,920,154 4,893,476 232 2,716,750	\$ 24,971,461 3,759,304 4,813,048 223 2,487,659	\$ 21,908,434 6,703,809 4,818,507 213 2,471,326	\$ 27,821,901 5 4,827,502 8,635,758 203 2,042,672	5 26,826,328 \$ 6,105,374 4,331,202 157 2,089,973	40,057,563 \$ 13,849,585 \$ 3,811,118 \$ 136 \$ 1,712,356 \$	277,523,485 65,128,437 48,310,528 2,149 27,302,125
Total System Economic & QF\$		77,902,956	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	418,056,724
iciss: 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	\$ 23,641,030	\$ 15,422,513	\$ 23,414,484	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_9	10,505,583_5	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	\$ 9,415,080	3 13,382,046 1	9,733,733 \$	12,125,553 \$	19,880,072 \$	138,553,178
Billed rate (C/kWh):		0.0868	0.0858	0.0868	0.0868	8380.0	0,0868	0.0868	0.0868	0.1631	0.1921	0.1922	0.1922	
Billed 5:	\$	4,979,550 \$	4,369,342 \$	3,638,897	3,835,577	3,693,311 5	4,555,631	\$ 4,897,517	\$ 4,698,172	20,132,031	7,954,367 \$	8,291,468 \$	9,402,231 \$	70,448,093
(Over)/ Under S:	\$	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 5 - Capacity component of Cherokee County Cogen Purchases System Actual 5 - Capacity component of Purchased Power for REPS Compliance System Actual 5 - Capacity component of HBSBB Purpa QF purchases System Actual 5 - Capacity component of SC DERP	s	422,948 \$ 486,469 316,410 57	422,948 \$ 465,590 362,951 37	213,474 1 421,064 415,622 64	211,474 5 517,448 397,922 28	317,211 5 539,749 232,512 13	1,374,581 5 567,326 271,686 21	\$ 3,172,110 : 2,279,476 1,225,424 78	\$ 3,116,270 \$ 2,238,065 1,199,461 84	630,852 5 2,451,979 1,251,154 72	211,474 5 1,649,703 924,601 79	211,474 \$ 659,013 242,932 19	211,474 \$ 594,902 \$ 159,399 \$ 13 \$	10,514,290 12,870,784 7,000,074 565
System Actual \$ - Sch 2 pg 1 ANNUAL VIEW	s	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 \$	708,163	761,317	736,059 5	1,495,529	5 4,511,056	\$ 4,427,817	2,928,099	1,882,131 \$	752,241 \$	652,488 \$	20,528,657
Billed rate (C/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	
Gilled 5:	\$	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	5 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) \$	4,583,341
TOTAL (Over)/ Under 5:	s	25,432,185 \$	8,435,322 \$	2,873,271	2,034,577	2,794,608	2,733,159	\$ 6,299,140	\$ 7,839,965	4,382,500	5 2,199,474 5	3,062,201 \$	9,402,025 \$	72,488,427

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 CAROUNAS
North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test
Tweeter Months Ended December 31, 2017
Docket E-7, Sub 1190

McGee Workpaper 10b

2017 System KWH Sales - Sch 4, Adjusted NC Retall KWH Sales - Sch 4 NC Retall % of Sales, Adjusted (Calc)	Jan17 7,537,70 4,974,78		Feb17 6,554,206,632 4,409,516,555 67.28%	Mar17 6,358,740,783 4,161,725,776 65.45%	Apr17 7,141,766,120 4,712,572,814 65.99%	May17 5,899,728,291 3,804,926,476 64,49%	June 17 7,386,182,606 4,858,493,561 65,78%	Juli7 8,217,318,035 5,393,164,464 65.63%	Aug17 8,246,356,880 5,434,256,910 65,90%	Sep17 7,636,553,967 5,082,625,773 66,56%	Oct17 6,672,440,753 4,373,336,154 65,54%	Nav17 6,414,671,902 4,193,859,450 65,38%	Dec17 7,061,789,900 4,613,039,595 65,32%	12 ME 85,127,463,884 56,012,298,688 65.80%
NC retail production plant %	•	7.09%	67.09%	67.09%	67.09%	67.09%	67,09%	67.09%	67.09%	67.09%	67.09%	67,09%	67,09%	67.09%
Fuel and Fuel related component of purchased power	_													
System Actual S - Sch 3 FuelS: System Actual S - Sch 3 Fuel-relatedS; Economic Purchases System Actual S - Sch 3 Fuel-relatedS; Purchased Power for REPS Compliance System Actual S - Sch 3 Fuel-relatedS; Sc OERP System Acutal S - Sch 3 Fuel-relatedS; COERP	2,01	77,669 \$ 5,378 3,055	15,875,907 1,988,183 2,550,377	\$ 10,096,048 1,423,270 3,307,695	\$ 8,192,583 : 946,815 4,043,976	9,721,355 1,094,013 3,816,768	\$ 10,071,142 1,076,835 4,301,618	\$ 12,026,892 1,880,095 4,300,868	\$ 14,840,029 2,503,480 4,332,085 (8,513) 2,942,527	\$ 18,993,838 1,906,962 3,902,317 242 2,459,473	\$ 17,656,690 \$ 2,121,832 3,805,061 225 2,447,053	\$ 22,489,529 \$ 2,815,382 3,655,861 208 2,384,629	25,927,577 \$ 3,654,363 \$ 2,991,972 \$ 147 \$ 2,150,732 \$	181,370,259 23,426,608 43,461,653 (7,691) 12,384,414
Total System Economic & QFS	18,94	5,102	21,415,467	14,827,013	13,183,374	14,632,136	15,449,595	18,207,855	24,609,608	27,262,832	26,030,861	31,345,609 \$	34,724,791	250,635,243
Less; Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	\$ 10,0	3,655 \$	13,734,418	\$ 7,330,149	\$ 6,099,895	3 7,828,909	5 6,973,202	\$ 9,283,031	\$ 11,761,966	\$ 17,022,958	\$ 15,515,603 (\$ 18,675,689 \$	20,326,204 \$	144,615,679
Total System Economic \$ without Native Load Transfers	\$ 8,88	2,447 \$	7,681,049 \$	7,496,864	7,083,479 \$	6,803,227	8,476,393	8,924,824	\$ 12,847,642	\$ 10,239,874	10,515,258_\$	12,669,920_\$	14,398,587 \$	116,019,564
NC Actual \$ (Calc)	\$ 5,86	2,290 \$	5,167,630 \$	4,906,615	4,674,111 \$	4,387,622 \$	5,575,614	5,857,513	\$ 8,466,452	\$ 6,815,306	6,892,044 \$	8,283,489 \$	9,405,725 \$	76,294,410
Billed rate (C/kWh):	(.1074	0.1074	0.1074	0.1074	0.1074	0.1074	0.1074	0.1074	0.0868	0.0858	0.0868	0.0868	
Billed \$:	\$ 5,34	3,741 \$	4,736,553 \$	4,470,385	5,062,086 \$	4,087,123	5,218,629	5,793,154	\$ 5,837,295	\$ 4,414,019	3,798,034 \$	3,642,167 \$	4,006,205 \$	56,409,592
(Over)/ Under \$:	\$ 51	8,549 \$	431,076 \$	436,230 \$	(387,975) \$	300,499 \$	356,785 \$	64,358	\$ 2,629,158	\$ 2,401,287	3,094,010 \$	4,641,322 \$	5,399,519 \$	19,884,818
Capacity component of purchased power	_													
System Actual 5 - Capacity component of Cherokee County Cogen Purchases System Actual 5 - Capacity component of Purchased Power for REPS Compiliance System Actual 5 - Capacity component of HBSS9 Purpa QF purchases System Actual 5 - Capacity component of SC DERP		9,234 \$ 2,592	419,233 \$ 412,586	209,616 \$ 456,453	209,616 \$ 533,339	314,425 \$ 443,290	1,352,507 5 522,270	3,144,246 2,084,627	\$ 3,144,246 2,035,395 1,341,938 (4,510)	\$ 628,850 : 1,896,602 1,167,715	209,616 5 1,684,518 1,069,000 101	209,616 \$ 519,390 326,098 37	209,616 \$ 374,434 \$ 234,918 \$ 22 \$	10,480,821 11,355,496 4,139,669 (4,251)
System Actual S - Sch 2 pg 1 ANNUAL VIEW	\$ 81	1,826 \$	831,819 \$	666,069	742,955 \$	757,715	1,884,777	5,228,873	\$ 6,517,069	5 3,693,266	2,963,235	1,055,141 \$	818,990 \$	25,971,735
NC Actual \$ (Calc)	\$ 54	1,694 \$	558,108 \$	446,898 \$	498,485 \$	508,388 \$	1,264,590 \$	3,508,308	\$ 4,372,622	\$ 2,477,994	1,988,180 \$	707,946 \$	549,501 \$	17,425,714
Billed rate (¢/kWh);	C	.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0241	0.0241	0.0241	0.0241	
Bifled \$:	\$ 1,02	1,183 \$	898,945 \$	848,429 \$	960,728 \$	775,691 \$	990,476	1,099,476	\$ 1,107,854	\$ 1,226,785	1,055,585 \$	1,012,265 \$	1,113,442 \$	12,103,858
(Over)/Under S:	\$ (46	9,489) \$	(340,837) \$	(401,531) \$	(462,243) \$	(267,302) \$	274,114 \$	2,408,832	\$ 3,264,768	\$ 1,251,209	932,595 \$	(304,319) \$	(563,941) \$	5,321,856
TOTAL [Over]/ Under \$:													<u>\$</u>	25,206,674

McGee Workpaper 11

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
Actual Sales by Jursidication - Subject to Weather
Twelve Months Ended December 31, 2018

Docket E-7, Sub 1190

MWhs

Line #	<u>Description</u>	<u>Reference</u>	NORTH CAROLINA	SOUTH CAROLINA	Retail TOTAL COMPANY	<u>% NC</u>	<u>% SC</u>
1	Residential	Company Records	22,763,029	6,953,474	29,716,503	76.60	23.40
2 3 4	Total General Service less Lighting and Traffic Signals General Service subject to weather	Company Records	24,162,007 261,740 23,900,267	5,800,354 44,385 5,755,969	29,962,361 306,125 29,656,236	80.59	19.41
5	Industrial	Company Records	12,555,667	9,164,704	21,720,370	57.81	42.19
6 7	Total Retail Sales Total Retail Sales subject to weather	1+2+5 1+4+5	59,480,703 59,218,963	21,918,532 21,874,146	81,399,234 81,093,109	73.03	26.97

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, 2018
Docket E-7, Sub 1190

McGee Workpaper 12 Page 1

			Total	NC	RETAIL	sc	RETAIL
Line			Company	% To		% То	
#_	Description	REFERENCE	MWh	Total	MWh	Total	MWh
	Residential						•
1	Total Residential		(1,185,150)	76.60	(907,825)	23.40	(277,325)
	General Service						
2	Total General Service		(790,151)	80.59	(636,783)	19.41	(153,368)
	<u>Industrial</u>						
3	Total Industrial		(181,656)	57.81	(105,015)	42.19	(76,641)
4	Total Retail	L1+ L2+ L3	(2,156,957)		(1,649,623)		(507,334)
			•				
5	Wholesale		(120,731)				
6	Total Company	L4 + L5	(2,277,688)		(1,649,623)		(507,334)

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense Weather Normalization Adjustment by Class by Month Twelve Months Ended December 31, 2018 Docket E-7, Sub 1190

McGee Workpaper 12 Page 2

	Residential	Commercial	Industrial	
2018	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT	TOTAL MWH	
JAN	(218,136)	(35,856)	-	,
FEB	(21,771)	(2,405)	(1,317)	
MAR	297,124	-	-	
APR	(74,206)	(16,924)	41,146	
MAY	7,286	(10,553)	3,908	
JUN	(349,703)	(195,436)	(108,358)	
JUL	(226,914)	(108,742)	(35,233)	
AUG	51,266	25,765	13,164	
SEP	(130,432)	(533,537)	(522,476)	
OCT	(295,132)	119,399	432,355	
NOV	(13,417)	(2,573)	(4,846)	
DEC _	(211,114)	(29,290)	-	,
Total	(1,185,150)	(790,151)	(181,656)	

2018	TOTAL MWH ADJUSTMENT	Note:	The Resale customers include:
JAN	(60,423)	1	Concord
FEB	54,716	2	Dallas
MAR	(36,354)	3	Forest City
APR	4,476	4	Kings Mountain
MAY	(9,856)	5	Due West
JUN	(30,811)	6	Prosperity
JUL	(5,051)	7	Lockhart
AUG	8,937	8	Western Carolina University
SEP	(26,557)	9	City of Highlands
ост	1,983	10	Haywood
NOV	(390)	11	Piedmont
DEC	(21,401)	12	Rutherford
		13	Blue Ridge
Total	(120,731)	14	Greenwood

Wholesale

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
Customer Growth Adjustment to kWh Sales
Twelve Months Ended December 31, 2018
Docket E-7, Sub 1190

McGee Workpaper 13
Page 1

			NC	SC	Wholesale	
			Proposed KWH 1	Proposed KWH	Proposed KWH	
	<u>Estimation</u>					
<u>Line</u>	Method 1	Rate Schedule	Adjustment	Adjustment	Adjustment	Total Company
1	Regression	Residential	188,586,837	70,684,402		
2						
3		General Service (excluding lighting):				
4	Customer	General Service Small and Large	(36,464,624)	(6,608,226)		
	Regression	T2 Flood Lighting/Outdoor Lighting	-	-		
5	Regression	Miscellaneous	(127,805)	272,435		
6		Total General	(36,592,429)	(6,335,791)		
7						
8		Lighting:				
9	Regression	T & T2 (GL/FL/PL/OL)2	(1,092,054)	1,005,314		
10	Regression	TS	40,545	(8,749)		
11		Total Lighting	(1,051,509)	996,565		
12						
13		Industrial:				
14	Customer	I - Textile	4,245,005	4,245,005		
15	Customer	I - Nontextile	47,195	3,163,678		
16		Total Industrial	4,292,201	7,408,683		
17						
18						
19		Total	155,235,100	72,753,859	81,154,151 WP 13-2	309,143,111

Notes

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

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

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

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

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Customer Growth Adjustment to kWh Sales-Wholesale
Twelve Months Ended December 31, 2018
Docket E-7, Sub 1190

McGee Workpaper 13 Page 2

Calculation of Customer Growth Adjustment to KWH Sales - Wholesale

Line <u>No.</u>		Reference	
1	Total System Resale (kWh Sales)	Company Records	11,246,967,907
2	Less Intersystem Sales	Schedule 1	1,945,444,289
3	Total KWH Sales Excluding Intersystem Sales	L1 - L2	9,301,523,618
4	Residential Growth Factor	Line 8	0.8725
5	Adjustment to KWH's - Wholesale	L3 * L4 / 100	81,154,151
6	Total System Retail Residential kWh Sales	Company Records	29,716,502,591
7	2018 Proposed Adjustment KWH - Residential (NC+SC)	WP 13 1	259,271,239
8	Percent Adjustment	L7 / L6 * 100	0.8725

[&]quot;RAC001": CarolinasOperating Revenue Report

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Coal Inventory Rider True-up Calculation
Docket E-7, Sub 1190

Workpaper 14

				2018		2018		2018	2018	:	2018	2019				
Une No.				August	_	September	_	October	November	De	cember	Januar	<u>, </u>	Total	to Date	_
1	Full Load Burn 35 day supply Beginning Actual tons on hand	Input		2,209,515		2,209,515		2,209,515								
2	(including Terminals and In-transit) - actual Ending Actual tons on hand	Input		2,349,694		2,356,042		2,244,622								
3	(including Terminals and In-transit) - actual	Input		2,356,042		2,244,622		2,347,399								
4	Average tons on hand	(12 + 13)/2		2,352,868		2,300,332		2,296,010								
5	Coal tons in excess of 35 days	t4 - L1		143,353		90,817		86,495								
6	Price per ton	Input	\$	73.23	\$	73.23	5	73.23								
7	Dollars in excess of 35 day supply	L5 * 16	\$	10,497,741	\$	6,650,537	\$	5,334,064								
8	Number of days supply Carrying cost percentage	L4 / 63,129 tons		37		36		36								
9	8/1/2018-12/31/2018 (a) (b)			0.745623%		0.745623%		0.745623%								
10	Total system amount to recover	17 ° L9	\$	78,274	\$	49,588	\$	47,228					\$	\$	175,090	
11	NC allocation percentage	input		66,6244%		66.6244%		66.6244%							66.6244%	
12	Total NC retail emount to recover	110 * 111	\$	52,149	5	33,038	5	31,466					\$	\$	116,653	
13	NC Actual \$ Collected	Input	\$	8,997	5	24,938	5	18,962	\$ 17,250	\$	11,647	;	33 \$	\$	81,827	
14	GRT & Reg. Fee percentage	Input		0,14%		0.14%		0,14%	0.14%		0.14%		0,14%		0.14%	
15	GRT and Reg Fee \$'s To Back Out	L13 " L14	\$	13	5	35	5	26	\$ 24	5	16	;	0 \$	\$	114	
16	Rider Excluding GRT & Reg Fee	L13 - L15	\$	8,984	\$	24,903	\$	18,936	\$ 17,226	\$	11,631	;	33 \$	\$	81,712	
17	(Over)/Under Collected - at current tax rate	L12 - L16	s	43,165	\$	8,135	\$	12,530	\$ (17,226)	\$	(11,631)	;	(33) \$	\$	34,940	
18	(Over)/Under Collected - at future tax rate Notes;	L19*(1-CTR)/(1-FTR)	\$	43,016	\$	8,107	\$	12,486	\$ (17,166)	\$	(11,590) (:	(33) \$	5	34,820	

- (a) Carrying costs exclude gross receipts tax and regulatory fee.
- (b) Revised to reflect current state income tax apportionment percentages.

		(OVER)/UNDER BALANCE	CUMULATIVE BASIS FOR COMPUTING RETURN	MONTHLY DEFERRED INCOME TAX 0410.11 - (Current Tax Rate)	CUMULATIVE DEFERRED INCOME TAX	NET DEFERRED BALANCE AFTER- TAX	MONTHLY AFTER- TAX RETURN ON DEFERRAL (Interest)	CUMULATIVE AFTER-TAX INTEREST INCOME	GROSS UP OF "AFTER-TAX RETURN ON DEFERRAL" TO PRETAX STATUS 0421.54	CUMULATIVE GROSS PRETAX RETURN
	Rate Case			0.236686			0.005891		0.763314	-
	Rates 1/01/2018 - 12/31/18			0.236149			0.005892		0.763851	
	Rates 1/1/19 - current			0.233503			0.005697		0.766498	_
BEGINNING BAL		0	0	0			0	0	ō	
	Aug-18	43,165	43,165	10,193	10,183	32,972	84	84	123	123
	Sep-18	8,135	51,300	1,921	12,114	39,186	205	299	287	390
	Oct-18	12,530	63,830	2,959	15,073	49,757	250	549	326	716
	Nov-18	(17,226)	46,604	(4,068)	11,005	35,599	240	789	313	1,029
	Dec-18	(11,631)	34,973	(2,747)	8,258	28,715	177	968	231	1,260
	Jan-19	(33)	34,940	(B)	8,250	28,690	152	1,118	198	1,459
	Feb-19	0	34,940	0	8,250	26,690	152	1,270	198	1,657
	Mar-19	0	34,940	0	8,250	26,690	152	1,422	198	1,855
	Apr-19	0	34,940	0	8,250	26,690	152	1,574	198	2,054
	May-19	0	34,940	0	8,250	26,690	152	1,728	198	2,252
	Jun-19	0	34,840	0	8,250	26,690	152	1,878	198	2,451
	Jul-19	0	34,940	0	8,250	26,690	152	2,030	198	2,649
	Aug-19	0	34,940	0	8,250	26,690	152	2,182	198	2,847
ENDING BALANCE		34,940	34,940	8,250	8,250	26,690	2,1B2	2,162	2,847	2,847

Docket No. E-7, Sub 1190 Grant Exhibit 1 Page 1 of 2

I/A

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.

Docket No. E-7, Sub 1190 Grant Exhibit 1 Page 2 of 2

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.

Docket No. E-7 Sub 1190 Grant Exhibit 2 Page 1 of 2

DUKE ENERGY CAROLINAS Summary of Coal Purchases Twelve Months Ended December 31, 2018 & 2017 Tons

13	Total (Sum L1:L12)	7,346,255	1,007,122	8,353,369
12	December	483,536	96,525	580,061
11	November	349,180	53,825	403,003
10	October	387,121	95,651	482,771
9	September	564,680	218,860	783,537
8	August	678,523	221,949	900,470
7	July	717,234	149,366	866,600
6	June	683,250	37,208	720,458
5	May	712,466	11,116	723,582
4	April	728,025	13,269	741,294
3	March	818,185	48,963	867,148
2	February	770,299	-	770,299
1	January 2018	453,756	60,390	514,146
<u>No.</u>	<u>Month</u>	(Tons)	Sales(Tons)	<u>(Tons)</u>
Line	=	Contract	Purchase and	<u>Total</u>
			Net Spot	

Line

		Contract	Net Spot Purchase and	<u>Total</u>
<u>No.</u>	<u>Month</u>	(Tons)	Sales(Tons)	(Tons)
14	January 2017	492,404	285,634	778,038
15	February	769,679	34,968	804,647
16	March	797,907	47,438	845,345
17	April	762,700	122,152	884,852
18	May	616,088	196,451	812,539
19	June	587,819	212,158	799,977
20	July	824,226	96,829	921,055
21	August	807,076	179,219	986,295
22	September	678,951	105,441	784,392
23	October	505,295	95,857	601,152
24	November	415,136	58,617	473,753
25	December _	593,868	47,389	641,257
26	Total (Sum L14:L25)	7,851,149	1,482,153	9,333,302

Docket No. E-7 Sub 1190 Grant Exhibit 2 Page 2 of 2

DUKE ENERGY CAROLINAS Summary of Gas Purchases Twelve Months Ended December 31, 2018 & 2017 MBTUs

<u>Line</u> No.	- <u>Month</u>	MBTUs
	Month	MIDTOS
1	January 2018	6,638,156
2	February	6,512,143
3	March	10,050,310
4	April	10,537,626
5	May	10,067,211
6	June	12,715,364
7	July	15,647,875
8	August	12,892,804
9	September	12,377,677
10	October	10,303,322
11	November	11,867,520
12	December	9,183,559
13	Total (Sum L1:L12)	128,793,567
Line		
<u>No.</u>	<u>Month</u>	<u>MBTUs</u>
14	January 2017	6,197,082
15	February	6,087,279
16	March	6,952,395
17	April	4,229,605
18	May	6,556,798
19	June	6,420,642
20	July	7,915,859
21	August	7,227,606
22	September	6,912,715
23	October	7,406,015
24	November	8,220,853
25	December	6,709,366
26	Total (Sum L14:L26)	80,836,215



BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1190

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)
	•

ERIC S. GRANT CONFIDENTIAL EXHIBIT 3

FILED UNDER SEAL

FEBRUARY 26, 2019



BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-7, SUB 1190

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)

STEVEN D. CAPPS CONFIDENTIAL EXHIBIT 1

FILED UNDER SEAL

FEBRUARY 26, 2019

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, 2018

Billing Period September 2019 - August 2020 Docket E-7, Sub 1190 Supplement # L REVISED McGee Exhibit 1

I/A

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 1163)					
1	Approved Fuel and Fuel Related Costs Factors	Input	1.7003	1.8314	1.8020	1.7769
2	EMF Increment	Input	0.0980	0.1068	0.2213	0.1290
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	1.7983	1.9382	2.0233	1.9059
	Fuel and Fuel Related Cost Factors Required by Rule R8-55					
5	Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales	Exh 2 Sch 2 pg 2	1.9841	2.0766	2.1267	2.0548
6	NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales	Exh 2 Sch 3 pg 2	2.0167	2.0973	2.1369	2.0768
	Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of 92.95%					
7	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	Exh 2 Sch 1 pg 2	1.8092	1.8986	1.8552	1.8574
8	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Exh 2 Sch 1 pg 2	0.0483	0.0251	0.0208	0.0327
9	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum	1.8575	1.9237	1.8760	1.8901
10	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1124	0.1396	0.2366	0.1501
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	1.9699	2.0633	2.1126	2.0402

Note: Fuel factors exclude regulatory fee

orth Carolina Annual Fuel and Fuel Related Expense াবিয়াবার প্রায়ের বিষয়ের বিষয়ের প্রায়ের বিষয়ের প্রায়ের বিষয়ের প্রায়ের বিষয়ের Proposed Nuclear Capacity Factor of 92.95% Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

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McGee Exhibit 2

Schedule 1

Page 1 of 3

Line#	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
Ellicir	<u> </u>	Keleience	D	(cents/kvvn) E	D * E = F
1	Total Nuclear	Workpaper 1	_	_	
•	Total Nuclear	workbaber T	58,459,031	0.6115	357,497,468
2	Coal	Workpaper 3 & 4	18,355,203	3.1057	570,050,837
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9			24,959,649
5	Total Fossil	Sum	39,176,820	-	1,098,194,572
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation	Workpaper 3	184,444		-
		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Line 9	98,785,509		1,455,692,040
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
`, 12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)		(91,061,695)
. 13	Net Generation	Sum Lines 10-12	83,018,229	_	1,346,517,369
14	Purchased Power	Workpaper 3 & 4	9,280,339	3,1771	294,841,746
15	JDA Savings Shared	Workpaper 5	,		19,972,407
16	Total Purchased Power		9,280,339	_	314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	92,298,568	1.8000	1,661,331,522
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)	2.4698	(16,986,301)
19	Line losses and Company use	Line 21-Line 17-Line 18	(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,644,345,221
21	Projected System MWh Sales for Fuel Factor	Workpaper 7	87,243,844		87,243,844
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.8848

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.95%
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

REVISED McGee Exhibit 2 Schedule 1 Page 2 of 3

Line #	Description	Reference	Residential	GS/Lighting	Industriai	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7	21,397,068	23,381,644	12,939,285	57,717,997
<u>Calcula</u>	tion of Renewable and Cogeneration Purchased Power Capacity Rate by Class					<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				14,874,084
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3			,	\$ 28,169,738
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input			•	67.04%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5			•	\$ 18,884,001
7	Production Plant Allocation Factors	Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 10,325,952 \$	5,864,785 \$	2,693,265	\$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0483	0.0251	0.0208	0.0327
Summa	ry 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	1.8092	1.8986	1.8552	1.8574
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0483	0.0251	0.0208	0.0327
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.8575	1.9237	1.8760	1.8901
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1124	0.1396	0.2366	0.1501
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	1.9699	2.0633	2.1126	2.0402

Note: Rounding differences may occur

Note: Rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
Proposed Nuclear Capacity Factor of 92.95%
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

REVISED McGee Exhibit 2 Schedule 1 Page 3 of 3

Une #	Rate Class	Projected Billing Period MWh Sales		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 1163	Proposed Total Fuel Rate (including Capacity and EMF)
		Α		В	Ċ	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	21,397,068	Ś	2,183,285,633	\$ 36,718,999	1.68%	0.1716	1.7983	1.9699
2	General Service/Lighting	23,381,644		1,738,716,194	29,242,128	1.68%	0.1251	1.9382	2.0633
3	Industrial	12,939,285		687,001,167	11,554,143	1.68%	0.0893	2.0233	2.1126
4	NC Retail	57,717,997	\$	4,609,002,994		1.68%		2.04,02	2.1120
	<u>Total Proposed Composite Fuel Rate:</u>								
5	Total Fuel Costs for Allocation	Workpaper 7	\$	1,648,542,239					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 1, Page 2		28,169,738					
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,620,372,501					
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7		87,243,844					
9	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
10	Allocation %	Line 9 / Line 8		66.16%					
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	1,072,038,447					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 1, Page 2		18,884,001					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	1,090,922,448					
14	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
	Calculated Fuel Rate cents/kWh	Line 13/Line 14/10		1.8901					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.1501					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000					
18	Total Proposed Composite Fuel Rate	Sum		2.0402					
	Total Current Composite Fuel Rate - Docket E-7 Sub 1163:								
19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.7769					
	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1290					
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000					
22	Total Current Composite Fuel Rate	Sum		1.9059					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		0.1343					
24	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	77,515,270					

Porth Carolina Annual Fuel and Fuel Related Expense Falculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

REVISED McGee Exhibit 2 Schedule 2 Page 1 of 3

Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
_			D	E.	D*E=F
1	Total Nuclear	Workpaper 1	58,459,031	0.6115	357,497,468
2	Coal	Calculated	19,611,529	3.1057	609,068,093
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9	· · · -	_	24,959,649
5	Total Fossil	Sum	40,433,146	-	1,137,211,828
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation		184,444		
		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Line 9	100,041,835		1,494,709,296
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
) 12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)		(91,061,695)
/ 13	Net Generation	Sum	84,274,555	_	1,385,534,625
14	Purchased Power	Workpaper 3 & 4	9,280,339		294,841,746
15	JDA Savings Shared	Workpaper 5	-		19,972,407
16	Total Purchased Power	Sum	9,280,339	_	314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	93,554,894		1,700,348,778
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)		(16,986,301)
19	Line losses and Company use		(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,683,362,477
21	Normalized Test Period MWh Sales	Exhibit 4	88,500,170		88,500,170
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.9021



North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Note: Rounding differences may occur

REVISED McGee Exhibit 2 Schedule 2 Page 2 of 3

Line#	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Normalized Test Period MWh Sales	Exhibit 4	22,043,791	23,564,462	12,465,801	58,074,054
Calcula	tion of Renewable Purchased Power Capacity Rate by Class					<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				14,874,084
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				\$ 28,169,738
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				67.04%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				\$ 18,884,001
7	Production Plant Allocation Factors	Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 10,325,952 \$	5,864,785	2,693,265	\$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0468	0.0249	0.0216	0.0325
Summa	ry 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	1,8249	1.9121	1.8685	1.8722
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0468	0.0249	0.0216	0.0325
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.8717	1.9370	1.8901	1.9047
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1124	0.1396	0.2366	0.1501
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	1.9841	2.0766	2.1267	2.0548

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

REVISED McGee Exhibit 2 Schedule 2 Page 3 of 3

<u>Une #</u>	Rate Class	Normalized Test Period MWh Sales A Exhibit 4	Cun	Il Revenue at rent rates B orkpaper 8	Allocate Fuel Costs Increase/(Decrease) to Customer Class C	Increase/(Decrease) as % of Annual Revenue at Current Rates D C/B	Total Fuel Rate increase/(Decrease) E If D=0 then 0 if not then (C*100)/(A*1000)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1163 F: McGee Exhibit 1	Proposed Total Fuel Rate (including Capacity and EMF) G E+F=G
						270	(0 100)/(/ 2000)	Michel Califort 1	ETT=G
1 2	Residential	22,043,791		183,285,633		1.88%	0.1858	1.7983	
3	General Service/Lighting Industrial	23,564,462		738,716,194	32,621,096	1.88%	0.1384	1.9382	
4	NC Retail	12,465,80 <u>1</u> 58,074,054		687,001,167 609,002,994	12,889,240 \$ 86,472,266	1.88%	0.1034	2.0233	2.1267
•	No.	30,074,034	. 3 4,	,603,002,334	3 80,472,266				
	Total Proposed Composite Fuel Rate:								
5	Total Fue! Costs for Alfocation	Workpaper 7a	\$ 1,	687,559,495					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 2, Page 2		28,169,738					
7	System Other Fuel Costs	Line 5 - Line 6	\$ 1,	659,38 9,757					
8	Normalized Test Period System MWh Sales for Fuel Factor	Workpaper 7a		88,629,309					
9	NC Retail Normalized Test Period MWh Sales	Exhibit 4		58,074,054					
10	Allocation %	Line 9 / Line 8		65,52%					
11	NC Retail Other Fuel Costs	Line 7 * Line 10		087,232,168					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 2, Page 2		18,884,001					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 1,1	106,116,170					
14	NC Retail Normalized Test Period MWh Sales	Line 4		58,074,054					
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.9047					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.1501					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000					
18	Total Proposed Composite Fuel Rate	Sum		2.0548					
	Total Current Composite Fuel Rate - Docket F-7 Sub 1163:								
	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.7769					
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0,1290					
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000					
22	Total Current Composite Fuel Rate	Sum		1.9059					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		0.1489					
24	NC Retail Normalized Test Period MWh Safes	Exhibit 4		58,074,054					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	86,472,266					
	Note: Rounding differences may occur								

Forth Carolina Annual Fuel and Fuel Related Expense
ERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 3 Page 1 of 3

Line#	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
		-	D	E	D * E = F
1	Total Nuclear	Workpaper 2	56,739,499	0.6115	346,981,926
2	Coal	Calculated	19,636,789	3.1057	609,852,590
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9	-		24,959,649
5	Total Fossil	Sum	40,458,406	_	1,137,996,325
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation	Workpaper 3	184,444		
		Line 1 + Line 5 + Line 8 +			
<u> </u>	Total Generation	Lìne 9	98,347,563		1,484,978,251
; 11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
12	Less Catawba Joint Owners	Calculated	(14,450,934)		(88,383,179)
13	Net Generation	Sum	83,018,229	_	1,378,482,097
14	Purchased Power	Workpaper 3 & 4	9,280,339		294,841,746
15	JDA Savings Shared	Workpaper 5		_	19,972,407
16	Total Purchased Power	Sum	9,280,339	_	314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	92,298,568		1,693,296,250
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)		(16,986,301)
19	Line losses and Company use		(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19	·		1,676,309,949
21	Projected System MWh Sales for Fuel Factor	Workpaper 7b	87,243,844		87,243,844
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.9214

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 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Revised McGee Exhibit 2 Schedule 3 Page 2 of 3

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7b	21,397,068	23,381,644	12,939,285	57,717,997
Calcula	tion of Renewable Purchased Power Capacity Rate by Class					Amount
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				\$ 14,874,084
4 5	Total of Renewable and QF Purchased Power Capacity NC Portion - Jursidicational % based on Production Plant Allocator	Line 2 + Line 3 Input			•	\$ 28,169, 7 38 67.04%
6 7	NC Renewable and QF Purchased Power - Capacity Production Plant Allocation Factors	Line 4 * Line 5	F4.C00/	24.05%	44.500	\$ 18,884,001
,		Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 10,325,952 \$	5,864,785 \$	2 ,693,2 65	\$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0483	0.0251	0.0208	0.0327
Summa	ry 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	1.8560	1.9326	1.8795	1.8940
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0483	0.0251	0.0208	0.0327
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.9043	1.9577	1.9003	1.9267
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1124	0.1396	0.2366	0.1501
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	2.0167	, 2.0973	2.1369	2.0768

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 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Revised McGee Exhibit 2 Schedule 3 Page 3 of 3

Une #	Rate Class	Projected Billing Period MWh Sales		Current rates	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 1163	Proposed Total Fuel Rate (including Capacity and EMF)
		A		В	С	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
	Part land								
1 2	Residential	21,397,068	-	2,183,285,633	. , .		0.2184	1.7983	2.0167
3	General Service/Lighting Industrial	23,381,644	•	1,738,716,194		2.14%	0.1591	1.9382	2.0973
4	NC Retail	12,939,285 57,717,997		687,001,167 4,609,002,994			0,1136	2.0233	2.1369
						•			
	Total Proposed Composite Fuel Rate:								
5	Total Fuel Costs for Allocation	Workpaper 7b	\$	1,680,506,966					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 3, Page 2		28,169,738					
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,652,337,228	-				
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7b		87,243,844					
9	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
10	Allocation %	Line 9 / Line 8		66.16%	-				
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	1,093,186,310					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 3, Page 2		18,884,001	_				
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	1,112,070,311					
14	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.9267					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.1501					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000	_				
18	Total Proposed Composite Fuel Rate	Sum		2.0768					
	Total Current Composite Fuel Rate - Docket E-7 Sub 1163:								
19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.7769					
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1290		•			
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000					
22	Total Current Composite Fuel Rate	Sum		1.9059					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		0.1709					
24	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
25	Increase/(Decrease) In Fuel Costs	Line 23 * Line 24 * 10	\$	98,640,057					
	Note: Rounding differences may occur								

Supplemental Page 1 of 4

0.1501

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense Calculation of Experience Modification Factor - Proposed Composite Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

Fuel Cost Fuel Cost Reported Incurred Billed **NC Retail** (Over)/ Under c/kWh ¢/kWh **MWh Sales** Recovery Line (a) (b) (c) (d) No. Month 1 January 2018 5,733,820 \$ 70,210,460 February 2 5,031,181 \$ (21,289,748)3 March(1) 4,190,094 4,767,793 4 April(1) 4,416,566 \$ (13,736,437) 5 May 4,252,750 \$ 6,136,829 6 June(1) 5,245,689 \$ 6,622,242 7 July(1) 5,639,361 \$ 14,497,484 8 August 5,409,821 13,507,110 9 September 6,212,764 (8,995,949)10 October 4,141,212 \$ 11,156,943 11 November 4,314,713 \$ 11,789,339 December 12 4,892,732 16,666,116 13 **Total Test Period** 59,480,703 111,332,182 14 January 2019 5,021,050 \$ 8,560,193 15 February 2019 5,026,972 \$ 19,998,561 16 March 2019 4,366,364 \$ 925,006 17 Adjustment to remove (Over) / Under Recovery - January - March 2018 (2) \$ 53,688,503 18 Include Under Recovery related to Coal Inventory Rider \$ 37,667 19 Adjusted (Over)/ Under Recovery 87,165,106 NC Retail Normalized Test Period MWh Sales 20 Exhibit 4 58,074,054 21 Experience Modification Increment (Decrement) cents/kWh

⁽¹⁾ Prior period corrections not included in rate incurred but are included in over/(under) recovery total (2) January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 16. Rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense Calculation of Experience Modification Factor - Residential Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

Line		Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWH Sales (c)	(0	Reported Over)/ Under Recovery (d)
#	Month	1-7	(-)	(0)		(0)
1	January 2018	2.2454	1,7919	2,747,953	Ś	12,463,615
2	February	1.2214	1.7919	2,101,525	Ś	(11,989,284)
3	March ⁽¹⁾	1.8936	1.7919	1,546,024	Š	1,587,096
4	April ⁽¹⁾	1.5682	- 1.7919	1,557,073	\$	(3,469,659)
5	May	2.2261	1.7919	1,361,386	\$	5,910,833
6	June ⁽¹⁾	1.9042	1.7919	1,940,879	\$	2,162,126
7	July ⁽¹⁾	1.9028	1.7919	2,227,922	Ś	2,375,059
8	August	1.9776	1.7885	2,050,040	Ś	3,875,805
9	September	1.7474	1.7894	2,200,376	\$	(925,298)
10	October	2.0726	1.7983	1,554,551	\$	4,264,193
11	November	2.3435	1.7983	1,436,836	\$	7,833,590
12	December	1.9167	1.7983	2,038,462	\$	2,413,589
13	Total Test Period		_	22,763,029	\$	26,501,665
14	Test Period Wtd Avg. ¢/kWh	1.9096	1.7928			•
15	January 2019	1.6843	1.7983	2,194,231	Ś	(2,476,946)
16	February 2019	1.9667	1.7983	2,094,914	Ś	3,527,711
17	March 2019	1.7655	1.8042	1,704,915	\$	(724,377)
18	Adjustment to remove (Over) / Under Ro	ecovery - Januai	ry - March 2018	3 ⁽²⁾	\$	2,061,427
19	Include Under Recovery related to Coal	Inventory Rider			\$	14,415
20	Adjusted (Over)/Under Recovery				\$	24,781,042
21	NC Retail Normalized Test Period MWh	Sales	E	xhibit 4		22,043,791
22	Experience Modification Increment (Dec	rement) cents/l	kWh			0.1124

Notes:

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

⁽²⁾ January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17. 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, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Revised McGee Exhibit 3 Page 3 of 4

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	(0	Reported Over)/ Under Recovery (d)
1	January 2018	3.5376	1.9253	2,053,224	\$	33,104,497
2	February	1.5865	1.9253	1,899,154	\$	(6,434,005)
3	March ⁽¹⁾	2.0122	1.9253	1,709,988	\$	1,503,768
4	April ⁽¹⁾	1.5762	1.9253	1,819,014	\$	(6,335,002)
5	Мау	1. 91 40	1.9253	1,860,965	\$	(210,465)
6	June ⁽¹⁾	1.9786	1.9253	2,190,371	\$	1,145,088
7	July ⁽¹⁾	2.1543	1.9253	2,291,796	Ś	5,295,453
8	August	2.1026	1.9219	2,244,902	\$	4,054,944
9	September	1.6846	1.9256	2,660,685	\$	(6,412,545)
10	October	2.1707	1.9382	1,727,851	\$	4.018,244
11	November	2.1580	1.9382	1,824,017	\$	4,009,350
12	December	2.4310	1.9382	1,880,041	\$	9,264,795
13	Total Test Period		_	24,162,007	\$	43,004,122
14	Test Period Wtd Avg. ¢/kWh	2.1057	1.9279			, ,
15	January 2019	2.2307	1.9382	1,936,499	\$	5,693,461
16	February 2019	2.5196	1.9382	1,911,117	\$	11,110,540
17	March 2019	2.0159	1.9441	1,744,567	\$	1,246,918
18	Adjustment remove (Over) / Under Recove	ery - January - March 2	2018 ⁽²⁾		\$	28,174,260
19	Include Under Recovery related to Coal Inv	entory Rider			\$	15,301
20	Adjusted (Over)/ Under Recovery				\$	32,896,080
21	NC Retail Normalized Test Period MWh Sal	es	Ε	xhibit 4		23,564,462
22	Experience Modification Increment (Decre	ment) cents/kWh				0.1396

Notes:

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

⁽²⁾ January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17.
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, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Revised McGee Exhibit 3
Page 4 of 4

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	(0	Reported Over)/ Under Recovery (d)
1	January 2018	4.6719	2.0297	932,643	\$	24,642,348
2	February	1.7515	2.0297	1,030,502	\$	(2,866,460)
3	March ⁽¹⁾	2.2081	2.0297	934,082	\$	1,676,929
4	April ⁽¹⁾	1.6509	2.0297	1,040,479	\$	(3,931,775)
5	May	2.0721	2.0297	1,030,399	\$	436,461
6	June ⁽¹⁾	2.3283	2.0297	1,114,438	\$	3,315,028
7	July ⁽¹⁾	2.6319	2.0297	1,119,643	\$	6,826,972
8	August	2.5265	2.0263	1,114,879	\$	5,576,360
9	September	1.8991	2.0218	1,351,703	\$	(1,658,106)
10	October	2.3580	2.0233	858,810	\$	2,874,506
11	November	2.0182	2.0233	1,053,860	\$	(53,600)
12	December	2.5353	2.0233	974,229	\$	4,987,733
13	Total Test Period		_	12,555,667	\$	41,826,395
14	Test Period Wtd Avg. ¢/kWh	2.3595	2.0271			
15	January 2019	2.6216	2.0233	890,321	\$	5,343,678
16	February 2019	2.5483	2.0233	1,020,942	\$	5,360,311
17	March 2019	2.0724	2.0292	916,881	\$	402,464
18	Adjustment to remove (Over) / Under Recov	very - January -	- March 2018 ⁽²⁾	ı	\$	23,452,816
19	Include Under Recovery related to Coal Inve	ntory Rider			\$	7,951
20	Adjusted (Over)/ Under Recovery				\$	29,487,982
21	NC Retail Normalized Test Period MWh Sale	s	E	khibit 4		12,465,801
22	Experience Modification Increment (Decrem	ient) cents/KW	/h			0.2366

Notes

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

⁽²⁾ January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17. Rounding differences may occur

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense Sales, Fuel Revenue, Fuel Expense and System Peak Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

Supplemental
Revised McGee Exhibit 4

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Line#	Description	Reference	<u> </u>	otal Company	١	Vorth Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
		Exhibit 6 Schedule 1 (Line 4)							
1	Test Period MWh Sales (excluding inter system sales)	and Workpaper 11 (NC retail)		90,487,628		59,480,703	22,763,029	24,162,007	12,555,667
2	Customer Growth MWh Adjustment	Workpaper 13 Pg 1		419,697		242,974	188,587	39,238	15,149
3	Weather MWh Adjustment	Workpaper 12		(2,407,155)		(1,649,623)	(907,825)	(636,783)	(105,015)
4	Total Normalized MWh Sales	Sum		88,500,170		58,074,054	22,043,791	23,564,462	12,465,801
5	Test Period Fuel and Fuel Related Revenue *		\$	1,691,073,964	\$	1,128,424,268			
6	Test Period Fuel and Fuel Related Expense *		\$	1,852,283,575	\$	1,239,756,450			
7	Test Period Unadjusted (Over)/Under Recovery	•	\$	161,209,611	\$	111,332,182			

		Winter Coincidental Peak (CP) kW
8	Total System Peak	18,875,799
9	NC Retail Peak	12,650,981
10	NC Residential Peak	. 6,917,677
11	NC General Service/Lighting Peak	3,929,002
12	NC Industrial Peak	1,804,302

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.

Supplemental
McGee Exhibit 5 I/A

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

Nuclear Capacity Ratings

Test Period Ended December 31, 2018

Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

	Rate Case		
	Docket E-7,	Fuel Docket E-7,	Proposed Capacity
Unit	Sub_1146	Sub 1163	Rating MW
Oconee Unit 1	847	847.0	847.0
Oconee Unit 2	848	848.0	848.0
Oconee Unit 3	859	859.0	859.0
McGuire Unit 1	1,158	1158.0	1158.0
McGuire Unit 2	1,158	1157.6	1157.6
Catawba Unit 1	1,160	1160.1	1160.1
Catawba Unit 2	1,150	1150.1	1150.1
Total Company	7,180	7,179.8	7,179.8

DECEMBER 2018 MONTHLY FUEL FILING

DUKE ENERGY CAROLINAS SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-7, Sub 1161

Line <u>No.</u>		December 2018	12 Months Ended December 2018
1	Fuel and fuel-related costs	\$ 167,457,560	\$ 1,885,269,344
2	MWH sales: Total system sales Less intersystem sales	7,718,637 228,210	92,433,072 1,945,444
4	Total sales less intersystem sales	7,490,427	90,487,628
5	Total fuel and fuel-related costs (¢/KWH) (line 1/line 4)	2.2356	2.0835
6	Current fuel and fuel-related cost component (¢/KWH) (per Schedule 4, Line 2a Total)	1.8969	
9	Natural Gas - Combustion Turbine Natural Gas - Steam	1,366,724 12,042 1,059,332 42,178 127,536 3,259 2,611,071	22,653,740 232,515 13,695,555 2,550,671 187,574 30,204
14	Nuclear 100%	4,981,169	59,936,028
15 16 17	Hydro - Conventional Hydro - Pumped storage Total hydro	368,610 (44,946) 323,664	2,877,050 (529,226) 2,347,824
18	Solar Distributed Generation	5,768	130,018
19	Total MWH generation	7,921,672	101,764,129
20 21	Less joint owners' portion - Nuclear Less joint owners' portion - Combined Cycle	1,147,290 27,377	15,165,371 465,202
22	Adjusted total MWH generation	6,747,005	86,133,556

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

DUKE ENERGY CAROLINAS DETAILS OF FUEL AND FUEL-RELATED COSTS

Docket No. E-7, Sub 1161

Fuel and fuel-related costs:	December 2018	12 Months Ended December 2018
0501110 coal consumed - steam 0501222-0501223 biomass/test fuel consumed	\$ 46,847,568	\$ 675,888,074
0501310 fuel oil consumed - steam	1,223,578	0 506 000
0501330 fuel oil light-off - steam	593,669	8,586,389
Total Steam Generation - Account 501	48,664,815	7,287,851 691,762,314
		091,702,314
Nuclear Generation - Account 518		
0518100 burnup of owned fuel	23,069,842	275,311,826
Other Generation - Account 547		
0547100, 0547124 - natural gas consumed - Combustion Turbine	2,272,971	98,161,049
0547100 natural gas consumed - Steam	5,696,114	8,633,545
0547101 natural gas consumed - Combined Cycle	31,773,516	373,047,230
0547106 biogas consumed - Combined Cycle	175,961	1,523,560
0547200 fuel oil consumed - Combustion Turbine	57,020	25,830,495
Total Other Generation - Account 547	39,975,582	507,195,879
	00,070,002	307,133,673
Reagents		
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	1,549,134	27,110,200
Total Reagents	1,549,134	27,110,200
·	1,0-0,10-	27,110,200
By-products		
Net proceeds from sale of by-products	583,525	6,085,203
Total By-products	583,525	6,085,203
Total Fossil and Nuclear Fuel Expenses		
Included in Base Fuel Component	113,842,898	1,507,465,422
	, ,	1,201,100,122
Purchased Power and Net Interchange - Account 555		
Capacity component of purchased power (economic)	211,474	10,514,290
Capacity component of purchased power (renewables)	594,915	13,300,661
Capacity component of purchased power (PURPA)	159,399	6,541,261
Fuel and fuel-related component of purchased power	59,686,689	434,709,945
Total Purchased Power and Net Interchange - Account 555	60,652,477	465,066,157
	<u>-</u>	
Less:		
Fuel and fuel-related costs recovered through intersystem sales	6,944,585	86,336,253
Fuel in loss compensation	92,474	925,224
Solar integration charge revenue	758	758
Total Fuel Credits - Accounts 447 /456	7,037,817	87,262,235
	• •	• •
Total Fuel and Fuel-related Costs	\$ 167,457,560	\$ 1,885,269,344

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

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

December 2018

Purchased Power		Total		Capacity	Non-capacity Non-capacity					
Economic		\$		\$	mWh_		Fuel \$	Fuel-related \$	Not Fuel \$ Not Fuel-related \$	
Cherokee County Cogeneration Partners	\$	1,287,426	\$	211,474	27,369	s	946,407	129,545		
City of Kings Mountain		8,979	•	8,979		*	040,401	120,040		
DE Progress - Native Load Transfer		27,945,591		-	741,793		23,410,601	4,543,696	\$ (8,706)	
DE Progress - Native Load Transfer Benefit		1,156,134					1,156,134	-10-10-00	4 (01.00)	
DE Progress - Fees		(156,964)			_		.,,	(156,964)		
Haywood Electric - Economic		40,903		20,630	336		12,367	7,906		
Macquarie Energy, LLC		6,826,931		-	146,439		4,164,428	2.662.503		
NCEMC - Economic		115,200			3,600		· 70.272	44,928		
NCMPA Instantaneous - Economic		1,813,810		-	53,310		1,088,467	725,343		
NTE Carolinas LLC		3,232,610		-	78.830		1,971,892	1,260,718		
Piedmont Municipal Power Agency		307,201		-	10,960		184,355	122,846		
PJM Interconnection, LLC.		11,214,935		-	313,334		6,841,110	4.373.825		
Southern Company Services, Inc.		250,370		_	9,167		152,726	97,644		
Tennesse Valley Authority		96,400		-	2,600		58,804	37,596		
Town of Dallas		584		584			-	J, 550		
Town of Forest City		19,856		19.856	-			_		
	\$	54,159,966	\$	261,523	1,387,738	\$	40,057,563	13,849,586	\$ (8,706)	
Renewable Energy										
REPS	s	4.406.020	\$	594,902	77,027	e	- \$	3,811,118	e	
DERP - Purchased Power	•	149	•	13	3	Ψ	- 4	3,011,110	.	
	\$	4,406,169	\$	594,915	77,030	\$			\$ -	
HB589 PURPA Purchases										
Qualifying Facilities		1,936,441		159,399	37.040			4 740 050		
	\$	1,936,441	\$	159,399	37,040	\$	- 5	1,712,356 1,712,356	\$ 64,686 \$ 64,686	
Non-dispatchable								·, ·	<u> </u>	
Blue Ridge Electric Membership Corp.		1 044 000	<u> </u>	70.4.000		_				
Haywood Electric Membership Corp.	Þ	1,244,696	Þ	724,668	26,268	\$	317,217		\$ 202,811	
Macquarie Energy, LLC		351,238		152,148	7,201		121,445		77,645	
NCEMC - Other		957,341 4,398			12,433		583,978		373,363	
NCMPA		4,398 155,400		4,398					-	
Piedmont Electric Membership Corp.		592,764		040.400	1,110		94,794		60,606	
Generation Imbalance		1,078,303		346,426	11,904		150,266		96,072	
Energy Imbalance - Purchases		(277,960)		•	8,735		242,385		835,918	
Energy Imbalance - Pales		(269,174)		-	(11,956)		(169,556)		(108,404)	
Other Purchases		648		•	-		(269,534)		360	
Suidi i dicireses	-\$	3,837,654	\$	1,227,640		s	1,070,995	•	\$ 1,539,019	
Total Purchased Power	s	64,340,230	\$	2,243,477	1,557,522					
	- -	01,010,200		2,213,417	1,337,322	-	41,128,558 \$	19,373,196	\$ 1,594,999	
terchanges In										
Other Catawba Joint Owners		6,629,878		-	579,425		3,870,366		2,759,512	
VS Lee Joint Owner		1,406,837			43,619		1,229,697		177,140	
otal Interchanges In		8,036,714		.	623,044		5,100,063		2,936,651	
nterchanges Out									(1)	
Other Catawba Joint Owners		(7,985,890)		(134,209)	(695,363)		(4,647,804)		(3,203,877)	
atawba- Net Negative Generation		(66,943)			(2,964)		(51,150)		(3,203,877)	
VS Lee Joint Owner		(1,402,174)			(42,514)		(1,216,174)			
otal Interchanges Out		(9,455,007)		(134,209)	(740,841)		(5,915,128)		(186,000) (3,405,670)	
Net Purchases and Interchange Power	s	62,921,937	\$	2 100 269	4 400 500			40.000.400		
Mar Laterasas and intalenanão Lowel	ð	166,136,20	Þ	2,109,268	1,439,725	\$	40,313,493 \$	19,373,196	\$ 1,125,979	

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

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

DECEMBER 2018

	 Total	C	apacity	Non-capacity				<u> </u>
Sales	 \$		\$	mWh Fuel\$		Fuel \$	Non-fuel \$	
Utilities:								
SC Public Service Authority - Emergency	\$ 19,312		-	475	\$	16,530	\$	2,782
SC Electric & Gas - Emergency	22,373			383	Ψ	21,699	Ψ	674
Market Based:								
NCMPA	110,344	\$	87,568	392		22,919		(143)
PJM Interconnection, LLC.	69	•	-	-		-		69
SC Electric & Gas	2,050		-	-		-		2,050
Other:								
DE Progress - Native Load Transfer Benefit	287,133		-	_		287,133		_
DE Progress - Native Load Transfer	8,259,541		_	225,840		6,529,920		1,729,621
Generation Imbalance	76,917		-	1,120		66,384		10,533
BPM Transmission	 (67,517)		-	,		,		(67,517)
Total Intersystem Sales	\$ 8,710,222	\$	87,568	228,210	\$	6,944,585	\$	1,678,069

^{*} 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 2018

Purchased Power		Total		Capacity		Nоп-сар:	acity	
Economic		\$		\$	mWh	Fuel\$	Fuel-related \$	Not Fuel \$ Not Fuel-related
Cherokee County Cogeneration Partners City of Kings Mountain	\$	31,713,488 107,748	\$	10,514,290 107,748	536,248 \$	18,602,696	2,596,502	
DE Progress - Native Load Transfer DE Progress - Native Load Transfer Benefit		194,410,960 13,751,828		-	5,426,920	174,475,494	19,671,245	\$ 264,22
DE Progress - Fees		(1,093,167)		•		13,751,828	(1,093,167)	
DF Trading North America, LLC. xelon Generation Company, LLC.		76,115 118,087		•	3,005	46,430	29,685	
laywood Electric - Economic		487,779		251,870	4,060 5,097	72,034 143.904	46,053 92,005	
facquarie Energy, LLC		29,508,026		•	770,086	17,999,896	11,508,130	
Norgan Stanley Capital Group ICEMC		24,839 169,200		•	1,112 5,490	15,152 103,212	9,687 65,988	
CMPA		4,490,834		-	71,519	3,053,238	1,437,596	
ICMPA Load Following Economic ITE Carolinas LLC		16,007,553 7,004,810		•	506,485 195,650	10,121,981 4,272,935	5,885, 572 2,731,8 7 5	
iedmont Municipal Power Agency		2,609,446		-	88,744	1,680,985	928,461	
UM Interconnection, LLC. Iainbow Energy Marketing Corporation		51,171,173		•	864,902	31,214,417	19,956,756	
outh Carolina Electric & Gas Company		87,525 212,527		:	3,285 4,600	53,390 1 27, 811	34,135 84,716	
outhern Company Services, Inc.		1,289,556		-	45,702	786,630	502,926	
ennesse Valley Authority he Energy Authority		1,603,241 38,483			30,841 1,167	977,977 23,475	625,264 15,008	
own of Dallas		7,008		7,008	-	20,475	15,000	
own of Forest City	-\$	238,272 354,035,331	\$	238,272 11,119,188	8,564,915 \$	277,523,485	65,128,437	\$ 264,22
		100,000,001		71,110,100	0,304,313 3	211,323,403 \$	03,120,437	\$ 204,22
Renewable Energy EPS	— s	63,156,850	\$	13,329,597	974.338 \$	- \$	49,827,253	e
ERP - Purchased Power	•	2,713	•	565	49	- 1	2,148	•
ERP - Net Metered Generation	_	43,550 63,203,112	_	7,964	15	·_		35,58
	\$	63,203,112	\$	13,338,125	974,403 \$	- 5	49,829,401	\$ 35,58
HB589 PURPA Purchases	 -	00 000 553	_	0.544.550		_		
dalilying Facilities	\$	33,029,557 33,029,557	<u>\$</u> \$	6,511,759 6,511,759	550,930 550,930 \$		20,700,700	\$ 1,082,33 \$ 1,082,33
Non-dispatchable	<u></u>			<u>, , , , , , , , , , , , , , , , , , , </u>				100-100
ue Ridge Electric Membership Corp.	s	14,972,210	<u> </u>	8,136,773	295,129 \$	4 400 045		
aywood Electric	•	4,206,307	Ψ	1,935,370	80,216	4,169,615 1,385,271		\$ 2,665,82 885,66
acquarie Energy, LLC CEMC - Other		18,266,985			307,544	11,142,861		7,124,12
CMPA - Reliability		647,276 245.400		52,776	6,570 2,610	362,645 149,694		231,85 95,70
TE Carolinas LLĆ		1,828,310		-	36,865	1,115,269		713,04
iedmont Electric Membership Corp. outh Carolina Electric & Gas Company		7,179,987 131,734		3,902,138	140,568 1,400	1,999,488 80,358		1,278,36
outhern Company Services, Inc.		2,984,720		:	47,510	1,820,679		51,37 1,164,04
eneration Imbalance nergy Imbalance - Purchases		3,782,664 2,199,376			82,265	1,893,961		1,888,70
nergy Imbalance - Sales		(1,765,005)			25,123	1,350,748 (6,529,253)		848,62 4,764,24
ther Purchases	\$	12,518 54,692,482	s	14,027,057	352			12,51
Total Purchased Power	\$	504,960,482	<u> </u>		1,026,152 \$	18,941,336 5		\$ 21,724,08
-		304,500,402	4	44,996,129	11,116,400 \$	296,464,821	140,393,298	\$ 23,106,23
terchanges In ther Catawba Joint Owners		91,135,514		_	7,642,809	56,961,998		34,173,51
S Lee Joint Owner		7,725,713			271,306	6,611,033		1,114,68
otal Interchanges in		98,861,227		<u></u> -	7,914,116	63,573,032		35,288,19
terchanges Out		/A			4-4			
ther Catawba Joint Owners atawba- Net Negative Generation		(93,139,372) (231,152)		(1,580,207)	(7,784,646) (11,304)	(57,610,256) (180,241)		(33,948,90
S Lee Joint Owner		(9,390,983)		_ <u></u> :	(327,441)	(7,930,708)		(50,91 (1,460,27)
ital Interchanges Out		(102,761,507)		(1,580,207)	(8,123,391)	(65,721,205)		(35,460,09
Net Purchases and Interchange Power	\$	501,060,202	s	43,415,922	10,907,125 \$	294,316,648 S	140,393,298	\$ 22,934,33

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 2018

		Total	-	Capacity		Non-capacity				
Sales	<u> </u>	\$	-	\$		mWh		Fuel \$		Non-fuel \$
Utilities:										
DE Progress - Emergency	\$	15,390		_		333	\$	13,113	\$	2,277
SC Public Service Authority - Emergency		2,315,135		\$ 224,000		7,527	Ψ.	2,007,790	Ψ	83,345
SC Electric & Gas - Emergency		103,368	A		A	1,974		87,826		15,542
Market Based:										
Central Electric Power Cooperative, Inc.		2,793,800	В	2,793,800	В	_		-		
EDF Trading Company		2,600		-		50		1,976		624
Macquarie Energy, LLC		19,200		-		- -		-		19,200
NCMPA		1,454,481		1,050,069		5,529		368,868		35,544
PJM Interconnection, LLC.		1,502,443		-		24,365		918,000		584,443
SC Electric & Gas		317,950	Α	-	Α	4,050		268,115		49,835
Tennessee Valley Authority		49,525		-		1,025		37,501		12,024
The Energy Authority		55,545		-		604		33,101		22,444
Other:										
DE Progress - Native Load Transfer Benefit		5,666,748		-		_		5,666,748		_
DE Progress - Native Load Transfer		78,027,793		-		1,883,308		74,808,327		3,219,466
Generation Imbalance		1,760,829		-		16,679		2,124,888		(364,059)
BPM Transmission		(245,056)						,,		(245,056)
Total Intersystem Sales	\$	93,839,751		\$ 4,067,869	. –	1,945,444	\$	86,336,253	\$	3,435,629

^{*} Sales for resale other than native load priority.

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

- A Twelve months ended December 2018 includes a correction to reclassify market sales for the month of October 2018 as an emergency sale. The October 2018 sales were as follows: Total dollars = \$24,456, Non capacity MWH = 408, Non-capacity fuel dollars = \$20,096, and Non-capacity non-fuel dollars = \$3,550.
- B Twelve months ended December 2018 includes a correction to include market capacity sales for the period January 2018 October 2018. Market capacity sales each month were as follows: Total dollars = \$279,380, and capacity dollars= \$279,380. Total market capacity sales dollars for the period January 2018 - October 2018 = \$2,793,800.

Duke Energy Carolinas (Over) / Under Recovery of Fuel Costs December 2018

Line No.			Residential	Commercial	Industrial	Total
1 2 3	Actual System kWh sales DERP Net Metered kWh generation Adjusted System kWh sales	Input Input L1 + L2			_	7,490,426,895 10,412,429 7,500,839,324
4 5 6	N.C. Retail kWh sales NC kWh sales % of actual system kWh sales NC kWh sales % of adjusted system kWh sales	Input L4 T / L1 L4 T / L3	2,038,461,729	1,880,040,961	974,229,470	4,892,732,160 65.32% 65.23%
7	Approved fuel and fuel-related rates (¢/kWh) 7a Billed rates by class (¢/kWh) 7b Billed fuel expense	Input Annually L7a * L4 / 100	1.7983 \$36,657,657	1.9382 \$36,438,954	2.0233 \$19,711,585	1.8969 \$92,808,196
8	Incurred base fuel and fuel-related (less renewable purchased power capacity) rates by class (¢/kWh) 8a Docket E-7, Sub 1163 allocation factor 8b System incurred expense 8c Incurred base fuel and fuel-related expense 8d Incurred base fuel rates by class (¢/kWh)	Input tnput L8b * L6 * 8a L8c / L4 * 100	35.64% \$38,786,219 1.9027	41.77% \$45,458,159 2.4179	22.59% \$24,577,446 2.5228	\$166,830,104 \$108,821,824 2.2242
9	Incurred renewable purchased power capacity rates by class (¢/kWn) 9a NC retail production plant % 9b Production plant allocation factors 9c System incurred expense 9d Incurred renewable capacity expense 9e Incurred renewable capacity rates by class (¢/kWn)	Input Input Input L9a * L9b * 9c (L9a * L9c) * L9b / L4 * 100	43.68% \$285,027 0.0140	37.64% \$245,590 0.0131	18.68% \$121,872 0.0125	67.56% 100.00% \$965,788 \$652,488 0.0133
10 11 12	Difference in ¢/kWh (incurred - billed)	L8d +L9e L7c - L10 (L4 * L11) / 100	1.9167 0.1184 \$2,413,589	2.4310 0.4928 \$9.264,795	2.5353 0.5120 \$4,987,733	2.2375 0.3406 \$16,666,116
13 14	Prior period adjustments Total (over) / under recovery [See footnote]	Input L12+L13	\$2,413,589	\$9,264,795	\$4,987,733	\$16,666,116
	Total system incurred expense Less: Jurisdictional allocation adjustment(s) Total Fuel and Fuel-related Costs per Schedule 2	£8b + L9c Input £15 + £16			_	\$167,795,892 338,332 \$167,457,560

			(Over)	/ Under Recovery		
	Year 2018	Total To Date	Residential	Commercial .	Industrial	Total Company
	January	\$70,210,459	\$12,463,615	\$33,104,497	\$24,642,348	\$70,210,459
	· February	48,920,711	(\$11,989,284)	(\$6,434,005)	(\$2,866,460)	(21,289,748)
_/1	March	53,688,504	\$1,587,096	\$1,503,768	\$1,676,929	4,767,793
<i>J</i> 1	April	39,952,067	(\$3,469,659)	(\$6,335,002)	(\$3,931,775)	(13,736,437)
	May	46,088,897	\$5,910,833	(\$210,465)	\$436,461	6,136,830
	June	52,711,139	\$2,162,126	\$1,145,088	\$3,315,028	6,622,242
_/2	July	67,208,623	\$2,375,059	\$5,295,453	\$6,826,972	14,497,484
	August	80,715,732	\$3,875,805	\$4,054,944	\$5,576,360	13,507,109
	September	71,719,783	(\$925,298)	(\$6,412,545)	(\$1,658,106)	(8,995,949)
_/2	October	82,876,726	\$4,264,193	\$4,018,244	\$2,874,506	11.156.943
	November	\$94,666,066	\$7,833,590	\$4,009,350	(\$53,600)	\$11,789,340
	December	\$111,332,182	\$2,413,589	\$9,264,795	\$4,987,733	\$16,666,116
			\$26,501,665	\$43,004,122	\$41,826,396	\$111.332.182

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 2018

Oi-dia-	A11	Balews										Milt			Current	Total 12 ME
Description	Allen Steam	Creek Steam	Buck CC	Catawba Nuclear	Cliffside Steam - Dual Fuel	Dan River	Lee	Lee	Lincoln	Marshall	McGuire	Creek	Осопее	Rockingham	Month	December 2018
	Cisam	Steam	CC	Nuclear	Steam - Duai Fuel	cc	cc	Steam/CT	CŤ	Steam	Nuclear	СТ	Nuclear	CT		
Cost of Fuel Purchased (\$)																
Coal Oil	\$49,933	\$17,907,637			\$8,548,228					\$22,079,739					\$48,585,537	\$657,498,215
Gas • CC	143,133	1,082,966	******		273,156			•							1,499,256	48,634,501
Gas - CT			\$13,103,055			\$12,923,682	\$6,858,257								32,884,994	384,692,206
Gas - Steam					5,695,205			104,195 909	\$110,569			\$158,525		\$1,899,682	2,272,971	98,161,049
Biogas					0,000,000	361,043		303							5,696,114	8,633,545
Total	\$193,066	\$18,990,604	\$13,103,055		\$14,516,590	\$13,284,725	\$6,858,257	\$105,103	\$110,569	\$22,079,739		\$158,525		\$1,899,682	361,043 \$91,299,914	3,466,205 \$1,201,085,721
Average Cost of Fuel Purchased (¢	/MRTIII													***	401,200,214	ψ1,E01,003,721
Coal	,	555.02			687.75	-				222.24						
Oil	1,321,84	172.99			692.52	-			_	399.01					485.71	324.71
Gas - CC			442.19			442.08	455.27		_	-		-		•	221.68 442.14	1,358.88 392.80
Gas - CT Gas - Steam		•						532.70	467.48			510.56		457,22	464.11	343.97
Biogas					445.73	1 577 00									•	410.58
Weighted Average	1,782.98	492,94	442.19		567.03	1,577.30 450.90	455.27	532.60	467.48	399.01					1,577.30	1,603.31
					007,00	450.55	400.E7	332.00	407.40	399.01		510.56		457,22	459.65	358.68
Cost of Fuel Burned (\$) Coal	6741.000	0.0.500														
Oil - CC	\$741,089	\$19,525,109			\$12,688,384	•	-	-		\$13,692,987					\$46,847,568	\$675,888,074
Oil - Steam/CT	163,523	1,219,227	•		286,271	•	•	25,472	£05 700	140.000					•	•
Gas - CC	•		\$13,103,055		200,211	\$12,923,682	\$6,858,257	25,472	\$25,788	148,226		-		•	1,874,266	41,704,735
Gas - CT						*,,	44,000(20)	\$104,195	110,569			\$158,525		\$1,899,682	32,884,994 2,272,971	384,692,206 98,161,049
Gas - Steam Biogas					5,695,205			909				***************************************		41,000,002	5,696,114	8,633,545
Nuclear			•	\$8,356,486		361,043	•								361,043	3,466,205
Total	\$904,513	\$20,744,336	\$13,103,055	\$8,356,486	\$18,869,860	\$13,284,725	\$6,858,257	\$130,575	\$136,358	\$13,841,212	\$10,990,838 \$10,990,838	A4FD FEE	\$10,470,715		29,818,039	370,839,248
					**********	****	40,000,20	\$100.075	\$140,556	910,041,212	310,550,050	\$158,525	\$10,470,715	\$1,899,682	\$119,754,995	\$1,583,385,062
Average Cost of Fuel Burned (c/M8 Coal	TU) 359.55	352.99														
Oil - CC	333.33	352.99			354,20			-		341.94					350.11	315.40
Oil - Steam/CT	1,564.97	1,487.41			1,505.97			12,245.96	1,521,44	1,620.84					•	•
Gas - CC			442.19		1,000,07	442.08	455.27	12,240.00	1,021,44	1,020.84		•		•	1,530.31	1,604.54
Gas - CT Gas - Steam								532.70	467.48			510.56		457.22	442.14 464.11	392.80 343.97
Biogas					445.73	4 500 00		-							70-7.11	410.58
Nuclear			-	58.63		1,577.30	•								1,577.30	1,603.31
Weighted Average	417.71	369.55	442.19	58.63	382.33	450.90	455.27	654.77	537.96	344.86	62.46 62.46	510.56	58.28 58.28	457.22	59.86	61.43
Average Cost of Generation (c/kWh										000	06.70	310.50	30.20	437.22	165.17	166.78
Coal Coal Coal Coal Coal	2.92	3.41			2.50			1,287.30	632.18							
Oil - CC	E-32	3.41			3.52	-	:	-	-	3.41					3.43	2.98
Oil - Steam/CT	12,43	15.65			14.52	-		128.73	63.22	16.41						•.
Gas - CC			3.06			3.11	3.19	123.10	VO.22	10.41		•		•	15.56 3.10	17,94 2,81
Gas - CT Gas - Steam								5.57	10.88			8.08		5.09	5.39	3.85
Blogas					4.45	11.08			•						4.47	4.60
Nuciear	_			0.59		11.00	•				0.62				11.08	11.48
Weighted Average	3.39	3.57	3.06	0.59	3.80	3.17	3,19	9.16	12.90	3.44	0.62	8.08	0.59 0.59	5.09	0.60 1.51	0.62 1.56
Burned MBTU's											0.02	0.00	0.55	5.03	1.51	1.55
Coal	206,117	5,531,427			3,638,779											
Oil - CG	200,117	0,001,727			3,030,779			-		4,004,460					13,380,783	214,294,473
Oil - Steam/CT	10,449	81,970			19,009			208	1,695	9,145		_			400 476	-
Gas - CC Gas - CT			2,963,222			2,923,367	1,506,423			~,···				-	122,476 7,393,012	2,599,178 97,936,802
Gas - Cl Gas - Steam					1,277,737			19,560	23,652			31,049		415,485	489,746	28,537,792
Biogas					1,277,737	22,890	174							•	1,277,911	2,102,783
Nuclear				14,252,377		PE020	•				17,596,869		17,965,994		22,890	216,190
Total	216,566	5,613,397	2,963,222	14,252,377	4,935,525	2,946,257	1,506,423	19,942	25,347	4,013,605	17,596,869	31,049	17,965,994	415,485	49,815,240 72,502,058	603,676,564
								•				,0-0	,500,550	710,400	1 & JUV 2, UDB	949,363,782



DUKE ENERGY CAROLINAS FUEL AND FUEL RELATED COST REPORT DECEMBER 2018

Description	Allen	Belews Creek	Buck	Catawba	Clittside	Dan River	Lee	Lee	Lincoln	Marshall	McGuire	Mill Creek	Oconee	Rockingham	Current Month	Tota! 12 ME December 2018
	Steam	Steam	CC	Nuclear	Steam - Dual Fuel	CC	CC	Steam/CT	CT	Steam	Nuclear	CT	Nuclear	CT		
Net Generation (mWh)																
Coal Oil - CC	25,397	573,052			356,421					401,855					1,366,724	22,653,740
Oil - Steam/CT Gas - CC	1,315	7,791	428,198		1,972	- 416,157	- 214,977	20	41	903		-		•	12,042	232,515
Gas - CT Gas - Steam					128,002	,	213,077	1,871 (466)	1,016			1,961		37,330	1,059,332 42,178 127,536	13,695,555 2,650,671 187,574
Biogas Nuclear 100% Hydro (Total System) Solar (Total System)			•	1,420,722		3,259	•				1,778,199		1,782,248		3,259 4,981,169 323,664	30,204 59,936,028 2,347,824
Total	26,712	580,843	42B,198	1,420,722	496,394	419,416	214,977	1,425	1,057	402,758	1,778,199	1,961	1,782,248	37,330	5,768 7,921,672	130,018 101,764,129
Cost of Reagents Consumed (\$)																
Ammonia Limestone Sorbents Urea	\$24,711 -	(\$45,049) 467,587 53,543	\$14,280		\$11,119 478,632	\$8,043	\$11,630			\$374,113 73,539					(\$977) 1,345,043 127,081	\$4,077,078 19,594,631 2,353,683
Re-emission Chemical Dibasic Acid Activated Carbon	34,464	•								45,004					45,004	928,117 69,161
Total	\$59,175	\$475,081	\$14,280		489,751	\$8,043	\$11,630			\$492,656					34,464 \$1,550,615	170,782 \$27,193,652

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.

DUKE | CAROLINAS
FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT
DECEMBER 2018

		Dalassa				DECEMBER 20	118						
Description	Allen	Belews Creek	Buck	Cliffside	_Dan River	Lee	Lee	Lincoln	Marshall	Mill Creek	Rockingham	Current Month	Total 12 ME December 20
oal Data:	Steam	Steam	CC	Steam - Dual Fuel	CC	CC	Steam/CT	CT	Steam	CT	CT		
Beginning balance	196,674	741,379		565,251									
Tons received during period	130,074	221,261		95,812			•		448,731			1,952,035	2,321,8
Inventory adjustments	(16,000)	(91,871)							262,988			580,061	8,353,36
Tons burned during period	8,841	221,660		(46,501) 146,683			-		(41,785)			(196,158)	-
Ending balance	171,833	649,109		467,879			•		158,816			536,000	8,703,76
MBTUs per ton burned	23.31	24,95		467,679 24.81			-		511,118			1,799,939	1,799,9
Cost of ending inventory (\$/ton)	83.82	88.09		24.81 87.87			-		25.21 86.22			24,95 87,09	24.6 87.0
Dil Data:									COLEE			60.09	87.0
Beginning balance	90,694	221,182		236,089	_		714,747	0.004.707	040.074	4 555 755	0.000.100		
Gallons received during period	75,652	578,080		144,399	•	-	714,747	9,834,797	312,274	4,366,782	3,238,190	19,014,755	16,962,53
Miscellaneous adjustments	448	(35,415)		_	-	-		•	-	-	•	798,131	21,144,18
Gallons burned during period	75,879	596,667	•	137,943	•		(9,425)	40.005		-	-	(57,379)	-
Ending balance	90,915	167,180	_	230,912	•	•	1,520	12,305	66,449			889,408	18,888,29
Cost of ending inventory (\$/gal)	2.16	1.99		2.08	-	-	703,802 2,33	9,822,492 2.10	245,825 2. 2 3	4,366,782 2.47	3,238,190 2.17	18,866,098	18,866,09
				2.00			2,50	2.10	2.23	2.41	2.17	2.20	2.2
latural Gas Data:													
Beginning balance													
MCF received during period			2,880,290	1,244,450	2,818,207	1,473,258	19,360	23,206		30,487	400,698	8,889,956	125,135,40
MCF burned during period Ending balance			2,880,290	1,244,450	2,818,207	1,473,258	19,360	23,206		30,487	400,698	8,889,956	125,135,40
logas Data:													
Beginning balance													
MCF received during period					22,062	_						22 222	040.75
MCF burned during period			_		22,062							22,062	210,72
Ending balance					24,002							22,062	210,72
mestone Data:													
Beginning batance	23,869	38,673		34,190					37,083			133,815	169,32
Tons received during period	-	6,707		7,615					12,836			27,159	444,24
Inventory adjustments	(2,996)	(4,910)		•					(7,085)			(14,991)	(14,99
Tons consumed during period	527	11,600		9,514					9,187			30,828	483,41
Ending balance	20,346	28,870		32,292					33,647			115,155	115,15
Cost of ending inventory (\$/ton)	46.89	39.54		39.44					40.72			41.16	41.1
											_		
nmonia Data:											_	Otr Ending December 2018	Total 12 ME December 201
Beginning balance		1,315											
Tons received during period		901										1,315	1,15
Tons consumed during period		583										901	4,71
Ending balance		1,633										583	4,24
Cost of ending inventory (\$/ton)		620.44										1,633	1,63
Coat or ending inventory (avtori)		020.44										620,44	620.4

Notes:
Detail amounts may not add to totals shown due to rounding.
Schedule excludes in-transit and terminal activity.
Gas is burned as received; therefore, inventory balances are not maintained.

DUKE ENERGY CAROLINAS ANALYSIS OF COAL PURCHASED DECEMBER 2018

STATION	ТҮРЕ	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON		
ALLEN	SPOT	-	\$ -	\$	-	
	CONTRACT	-	-	•	-	
	ADJUSTMENTS	<u> </u>	49,933		-	
	TOTAL		49,933		-	
BELEWS CREEK	SPOT	-	11,982		_	
	CONTRACT	221,261	17,706,037		80.02	
	ADJUSTMENTS		189,618		-	
	TOTAL	221,261	17,907,637		80.93	
CLIFFSIDE	SPOT	_	_			
	CONTRACT	95,812	7,221, 379		75. 37	
	ADJUSTMENTS		1,326,849	_		
	TOTAL	95,812	<u>8,548,228</u>		89.22	
MARSHALL	SPOT .	96,525	8,181,703		84.76	
	CONTRACT	166,463	13,355,663		80.23	
	ADJUSTMENTS	-	542,373		-	
	TOTAL	262,988	22,079,739		83.96	
ALL PLANTS	SPOT	05 525	0.400.400			
	CONTRACT	96,525 483,536	8,193,685 39,793,070		84.89	
	ADJUSTMENTS	- -	38,283,079 2,108,773		79.17	
	TOTAL	580,061	\$ 48,585,537	\$	83,76	

DUKE ENERGY CAROLINAS ANALYSIS OF COAL QUALITY RECEIVED DECEMBER 2018

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
BELEWS CREEK	6.91	10.15	12,468	1.58
CLIFFSIDE	8.48	7.60	12,603	2.35
MARSHALL	6.73	10.02	12.508	1.73

DUKE ENERGY CAROLINAS ANALYSIS OF OIL PURCHASED DECEMBER 2018

	_					
		ALLEN	BEL	EWS CREEK	CI	LIFFSIDE
VENDOR	Н	ighTowers	Н	lighTowers	Hi	ghTowers
SPOT/CONTRACT		Contract		Contract	ı	Contract
SULFUR CONTENT %		0		0		0
GALLONS RECEIVED		75,652		578,080		144,399
TOTAL DELIVERED COST	\$	143,133	\$	1,082,966	\$	273,156
DELIVERED COST/GALLON	\$	1.89	\$	1.87	\$	1.89
BTU/GALLON		138,000		138,000		138,000

Schedule 10 Page 1 of 8

Duke Energy Carolinas Power Plant Performance Data

Twelve Month Summary

January, 2018 - December, 2018 Nuclear Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Oconeé 1	6,745,635	847	90.91	89.94
Oconee 2	7,581,168	848	102.06	100.00
Oconce 3	6,967,442	859	92.59	92.12
McGuire 1	10,359,250	1,158	102.12	99.56
McGuire 2	9,502,818	1,158	93.68	91.80
Catawba 1	9,510,487	1,160	93.59	92,99
Catawba 2	9,269,228	1,150	92,01	91.84
	* ***	Michie gr		

Twelve Month Summary January, 2018 through December, 2018 Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Buck CC	11	1,463,456	206	81.10	88.68
Buck CC	12	1,471,968	206	81.57	89.09
Buck CC	ST10	2,237,637	312	81.87	96.78
Buck CC	Block Total	5,173,061	724	81.57	92.29
Dan River CC	8	1,433,925	199	82.26	86.38
Dan River CC	9	1,410,200	199	80.90	85.84
Dan River CC	ST7	2,118,133	320	75.56	.91.38
Dan River CC	Block Total	4,962,258	718	78.90	88.46
WS Lee CC	11	1,030,538	223	70.01	75.09
WS Lee CC	12	1,090,492	223	74.08	77.05
WS Lee CC	ST10	1,402,639	337	63.05	76.36
WS Lee CC	Block Total	3,523,669	783	68.17	76.19
		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- 		, 0.1.

Notes:

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

Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary January, 2018 through December, 2018

Baseload Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Belews Creek 1	4,793,474	1,110	49.30	88.06
Belews Creek 2	3,227,943	1,110	33.20	69.66
Marshall 3	3,176,205	658	55.10	89.31
Marshall 4	3,675,692	660	63.58	88.48

Notes:

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

Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary January, 2018 through December, 2018

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Cliffside 6	4,311,369	844	58.31	75.32
Marshall 1	958,416	380	28.79	88.74
Marshall 2	675,957	380	20.31	68.31

Notes:

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

Twelve Month Summary January, 2018 through December, 2018 Other Cycling Steam Units

Unit Name	e	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Allen	1	71,408	167	4.88	83.17
Allen	2	86,505	167	5.91	84.03
Allen	3	158,113	270	6.68	80.91
Allen	4	178,336	267	7.62	89.89
Allen	5	325,399	259	14.34	85.49
Cliffside	5	1,243,104	546	25.99	61.63
Lee	3	54,152	173	3.57	36.34

Notes:

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

Twelve Month Summary January, 2018 through December, 2018 Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Lee CT	79,514	96	84.70
Lincoln CT	82,484	1,565	93.72
Mill Creek CT	201,194	735	99.23
Rockingham CT	2,325,235	895	90.19

Notes:

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

Twelve Month Summary
January, 2018 through December, 2018
Hydroelectric Stations

Schedule 10 Page 7 of 8

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%
Conventional Hydroelectric Stations:			_
Bear Creek	37,232	9.5	86.90
Bridgewater	117,680	31.5	95.52
Bryson	4,632	0.9	85.69
Cedar Cliff	27,610	6.8	92.39
Cedar Creek	178,151	45.0	81.91
Cowans Ford	312,212	324.0	58.69
Dearborn	222,145	42.0	97.55
Fishing Creek	203,570	50.0	88.41
Franklin	3,726	1.0	58.90
Gaston Shoals	14,686	4.5	96.65
Great Falls	-92	12.0	100.00
Keowee	98,064	152.0	99.21
Lookout Shoals	162,927	27.0	99.26
Mission	5,388	1.8	51.83
Mountain Island	207,502	62.0	90.56
Nantahala	270,145	50.0	99.03
Ninety-Nine Islands	83,267	15.2	91.67
Oxford	107,478	40.0	38.56
Queens Creek	4,621	1.4	99.89
Rhodhiss	119,297	33.5	94.18
Rocky Creek	-73	3.0	0.00
Tennessee Creek	48,111	9.8	93.76
Thorpe	96,019	19.7	93.15
Tuckasegee	7,077	2.5	85.11
Tuxedo	33,861	6.4	96.21
Wateree	336,004	85.0	81.96
Wylie	175,810	72.0	55.96
Pumped Storage Hydroelectric Stations:			
Gross Generation			
Bad Creek	1,447,036	1,360.0	65.67
Jocassee	1,204,730	780.0	92.99
Energy for Pumping			
Bad Creek	-1,838,591		
Jocassee	-1,342,401		
Net Generation			
Bad Creek	-391,555		
Jocassee	-137,671		

Notes:

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

Twelve Month Summary January 2018 through December 2018 Pre-commercial Combined Cycle Units

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

Unit Name		Net Generation Capacity (mWh) Rating (mW)		Capacity Factor (%)	Equivalent Availability (%)	
January 201	8					
Lee	11	-10	n/a	n/a	n/a	
Lee	12	-11	n/a	n/a	n/a	
Lee	ST10	0	n/a	n/a	n/a	
Lee	Block Total	-21	n/a	n/a	n/a	
February 201	18					
Lee	11	-1,575	n/a	n/a	n/a	
Lee	12	-1,120	n/a	n/a	n/a	
Lee	ST10	0	n/a	n/a	n/a	
Lee	Block Total	-2,695	n/a	n/a	n/a	
March 2018						
Lee	11	25,973	n/a	n/a	n/a	
Lee	12	14,939	n/a	n/a	n/a	
Lee	ST10	-1,349	n/a	n/a	n/a	
Lee	Block Total	39,563	n/a	n/a	n/a	
April 1 - 4						
Lee	11	14,158	n/a	n/a	n/a	
_ee	12	6,771	n/a	n/a	n/a	
Lee	ST10	8,994	n/a	n/a	n/a	
Lee	Block Total	29,923	n/a	n/a	n/a	
Total .		66,771				

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

Duke Energy dlinas Base Load Power Plant Performance Review Plan

Period:	December,	2018
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Station	Outage Outage Unscheduled ee 1 11/30/2018 - 177.87 Unscheduled 1B2 r			Reason Outage Occurred	Remedial Action Taken		
Oconce			1B2 reactor coolant pump scal leakage	Replaced reactor coolant pump seal			
• •	2	None	-			•	
	3	None	. ,	·			<u>-</u>
McGuire	1	None .	~				
-	2	None					~ · · · · · · · · · · · · · · · · · · ·
Catawba	1	11/17/2018 - 12/11/2018	255.70	Scheduled	End-of-cycle 24 refueling outage	Planned refueling outage	Refueling outage in progress
	2	None					

Duke Energy Carolinas Base Load Power Plant Performance Review Plan December 2018

Belews Creek Station

	Unit	Duration of Outage	Type of Outage	Cause	of Outage	Reason Outage Occurred	Remedia! Action Taken
	1	12/3/2018 5:37:00 PM To 12/6/2018 5:07:00 AM	Unsch	1070	Second Reheater Leaks	HRH Leak on 9th floor. P17 Tube 7,8,9,10,11 and 12, P18 Tubes 10,11 and 12.	
	1	12/22/2018 6:00:00 PM To 12/23/2018 2:55:00 PM	Sch	1000	Furnace Wall Leaks	Furnace wall leak on 6th floor.	
	1	12/26/2018 7:00:00 AM To 1/1/2019 12:00:00 AM	Sch	8110	Wet Scrubber - Spray Nozzles	1B Absorber agitator and mist eliminator header repairs.	
	2	9/8/2018 3:00:00 AM To 12/8/2018 12:00:00 AM	Sch	4520	Gen. Stator Windings; Bushings; And Terminals	Unit 2 fall outage for SSH replacement, LP Generator rewind and CCP final ties.	
	2	12/8/2018 12:00:00 AM To 12/13/2018 3:23:00 AM	Sch	3999	Other Miscellaneous Balance Of Plant Problems	Fuel oil fire from replaced accumulator, 2B SAH Rub from new seals,200-2 not wired.	
,	2	12/14/2018 10:41:00 AM To 12/16/2018 11:54:00 PM	Unsch	8499	Other Miscellaneous Wet Scrubber Problems	FGD Stack doors left open and could not be closed online.	
	2	12/27/2018 9:34:00 PM To 12/31/2018 9:30:00 PM	Sch	1492	Air Heater Fouling (Tubular)	Unit 2 PAH plugged and unable to make mill temps.	

Buck Combined Cycle Station

No Outages at Baseload Units During the Month.

Dan River Combined Cycle Station

No Outages at Baseload Units During the Month.

Notes:

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



Duke Energy Carolinas Base Load Power Plant Performance Review Plan December 2018

Marshall Station

Unit	Duration of Outage Type of Cause of Outage Outage		5 V		Reason Outage Occurred	Remedial Action Taken
4	12/7/2018 9:58:00 PM To 12/15/2018 4:00:00 PM	Sch	1493	Air Heater Fouling (Regenerative)	APH Wash.	
4	12/18/2018 8:00:00 AM To 12/20/2018 5:00:00 PM	Sch	0890	Bottom Ash Systems (Wet or Dry)	Bottom Ash Hopper Seal Trough Repairs.	

WS Lee Combined Cycle

Unit	Duration of Outage	Type of Outage	Cause	of Outage	Reason Outage Occurred	Remedial Action Taken
WS Lee CC ST 10	12/3/2018 7:05:00 PM To 12/20/2018 5:00:00 PM	Unsch	4289	Turbine - Other Lube Oil System Problems	Trip due to low lube oil in reservoir.	
WS Lee CC ST 10	12/22/2018 12:10:00 AM To 12/22/2018 1:00:00 AM	Unsch	4289	Turbine - Other Lube Oil System Problems	EBOP fail to start.	
WS Lee CC ST 10	12/22/2018 1:53:00 AM To 12/22/2018 11:00:00 AM	Unsch	4289	Turbine - Other Lube Oil System Problems	EBOP fail to start.	
WS Lee CC ST 10	12/22/2018 11:42:00 AM To 12/22/2018 2:00:00 PM	Unsch	4289	Turbine - Other Lube Oil System Problems	EBOP fail to start.	
WS Lee CC GT 11	12/3/2018 7:05:00 PM To 12/20/2018 5:00:00 PM	Unsch	3430	Feedwater Regulating (Boiler Level Control) Valve	Trip due to IP drum level.	
WS Lee CC GT 11	12/21/2018 6:30:00 AM To 12/21/2018 10:00:00 AM	Sch	3352	Feedwater Chemistry	Shut down due to water chemistry/vac.	
WS Lee CC GT 12	12/3/2018 7:05:00 PM To 12/20/2018 5:00:00 PM	Unsch	3430	Feedwater Regulating (Boiler Level Control) Valve	Trip due to IP drum level.	

Notes:

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

Duke Energy Carolinas Base Load Power Plant Performance Review Plan

December 2018 Oconee Nuclear Station

-				- —			
	Unit	1	Uni	t 2	Unit	3	
(A) MDC (mW)	847	•	848	v	859		
(B) Period Hours	744	٠,	744	•	744		
(C) Net Gen (mWh) and Capacity Factor (%)	481,371	76.39	648,846	102.84	652,031	102.02	
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00	0	0.00	. , ,
, * (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	0	0.00	0	0.00	* * * * * * * * * * * * * * * * * * *
(F) Net mWh Not Gen due to Full Forced Outages	150,653	23.91	0	0.00	0	0.00	क काम क्ष ्र क
* (G) Net mWh Not Gen due to Partial Forced Outages	-1,856	-0.30	-17,934	-2.84	-12,935	-2.02	
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00	0	0.00	en S. Bergoven a
* (I) Core Conservation		0.00	0	0.00	Õ	0.00	TO THE STATE OF TH
(J) Net mWh Possible in Period	630,168	100.00%	630,912	100.00%	639,096	100.00%	and the constant and an ex-
(K) Equivalent Availability (%)	d n h Athan an a h	75.43		100.00		~ 100.00	ر د د میواند
(L) Output Factor (%)	****	100.39	~ *	102.84	e 75 e	102.02	e en e men en en
Heat Rate (BTU/NkWh)		10,230	•	10,050	<u>.</u>	10,001	···
1	. 4	*					

Duke Energy Carolinas Base Load Power Plant Performance Review Plan

December 2018 McGuire Nuclear Station

	Unit	1	Unit	t 2		
(A) MDC (mW)	1158		1158			
(B) Period Hours	744	a.	744		•	-
(C) Net Gen (mWh) and Capacity Factor (%)	891,451	103.47	886,748	102,92		·- /
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	0	0.00		
* (E) Net mWh Not Gen due to Partial Scheduled Outages	0	0.00	0	0.00		Prof. Serv. N
(F) Net mWh Not Gen due to Full Forced Outages	ő.	0.00	0	0.00		and an analysis of the second
* (G) Net mWh Not Gen due to Partial Forced Outages	-29,899	-3.47	-25,196	-2.92		
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	.0	0.00		 گفاو پا
* (I) Core Conservation	Ō	0.00		0.00	i onthe in white an activations we eving .	e energia de solência e a
(J) Net mWh Possible in Period	861,552	100.00%	861,552	100.00%		اليوالونون الموار الواجي والمعادم العادمة الع
(K) Equivalent Availability (%)	Anna Cremer in a consider a	100.00		100.00	the second secon	er mente ent est milita y ui
(L) Output Factor (%)	a de s P	103.47	•	102.92	e se	
Heat Rate (BTU/NkWh)	e en og	9,869		9,923	rest and the second of the sec	* ** / * *# -

December 2018 Catawba Nuclear Station

	Unit	1	Uni	t 2				
(A) MDC (mW)	1160		1150	•		•		
(B) Period Hours	744		744		-	-		
(C) Net Gen (mWh) and Capacity Factor (%)	552,976	64.07	867,746	101.42				
(D) Net mWh Not Gen due to Full Schedule Outages	296,612	34.37	0	0.00				
* (E) Net mWh Not Gen due to Partial Scheduled Outages	13,307	1.54	0	0.00		-		
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00		~	,	- w.e
* (G) Net mWh Not Gen due to Partial Forced Outages	145	0.02	-12,146	-1.42		••	-	
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00				
* (I) Core Conservation	0	0.00	0	0.00	• • •			•
(J) Net mWh Possible in Period	863,040	100.00%	855,600	100.00%		,	-	,
(K) Equivalent Availability (%)	••	63.35		100.00	·			
(L) Output Factor (%)	96 A W + +	97.63	-	101.42			س <u>ـ</u>	A N .
Heat Rate (BTU/NkWh)	-	10,134		9,967			i e	

Belews Creek Station

	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	744	744
(C) Net Generation (mWh)	404,610	176,233
(D) Capacity Factor (%)	48.99	21.34
(E) Net mWh Not Generated due to Full Scheduled Outages	175,287	429,921
(F) Scheduled Outages: percent of Period Hrs	21.23	52.06
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	66,045	67,951
(J) Forced Outages: percent of Period Hrs	8.00	8.23
(K) Net mWh Not Generated due to Partial Forced Outages	3,159	45,010
(L) Forced Derates: percent of Period Hrs	0.38	5.45
(M) Net mWh Not Generated due to Economic Dispatch	176,739	106,725
(N) Economic Dispatch: percent of Period Hrs	21.40	12.92
(O) Net mWh Possible in Period	825,840	825,840
(P) Equivalent Availability (%)	70.39	34.26
(Q) Output Factor (%)	85.98	54.19
(R) Heat Rate (BTU/NkWh)	9,236	10,647

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Buck Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	724
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	129,223	129,215	169,760	428,198
(D) Capacity Factor (%)	84.31	84.31	73.13	79.49
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	5,952	5,952
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	2.56	1.10
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	24,041	24,049	56,416	104,506
(N) Economic Dispatch: percent of Period Hrs	15.69	15.69	24.30	19.40
(O) Net mWh Possible in Period	153,264	153,264	232,128	538,656
(P) Equivalent Availability (%)	100.00	100.00	97.44	98.90
(Q) Output Factor (%)	85.29	86.03	73.13	80,21
(R) Heat Rate (BTU/NkWh)	9,945	9,739	1,661	6,599

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Dan River Combined Cycle Station

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	130,730	122,378	166,308	419,416
(D) Capacity Factor (%)	88.30	82.66	69.85	78. 51
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	17,326	25,678	71,772	114,776
(N) Economic Dispatch: percent of Period Hrs	11.70	17.34	30.15	21.49
(O) Net mWh Possible in Period	148,056	148,056	238,080	534,192
(P) Equivalent Availability (%)	100.00	100.00	100.00	100.00
(Q) Output Factor (%)	89.45	88.83	71,12	81.01
(R) Heat Rate (BTU/NkWh)	10,412	10,566	1,784	7,036

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Marshall Station

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	744	744
(C) Net Generation (mWh)	250,510	51,399
(D) Capacity Factor (%)	51.17	10.47
(E) Net mWh Not Generated due to Full Scheduled Outages	0	160,402
(F) Scheduled Outages: percent of Period Hrs	0.00	32.67
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	239,042	279,239
(N) Economic Dispatch: percent of Period Hrs	48.83	56.87
(O) Net mWh Possible in Period	489,552	491,040
(P) Equivalent Availability (%)	100.00	67.33
(Q) Output Factor (%)	51.17	46.92
(R) Heat Rate (BTU/NkWh)	9,867	10,142

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

WS Lee Combined Cycle

	_		•	
	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	223	223	337	783
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	65,805	67,050	82,122	214,977
(D) Capacity Factor (%)	39.66	40.41	32.75	36.90
(E) Net mWh Not Generated due to Full Scheduled Outages	781	0	0	781
(F) Scheduled Outages: percent of Period Hrs	0.47	0.00	0.00	0.13
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	90,519	90,519	140,922	321,961
(J) Forced Outages: percent of Period Hrs	54.56	54.56	56.21	55.27
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	8,807	8,343	27,684	44,834
(N) Economic Dispatch: percent of Period Hrs	5.31	5.03	11.04	7.70
(O) Net mWh Possible in Period	165,912	165,912	250,728	582,552
(P) Equivalent Availability (%)	44.97	45.44	43.79	44.60
(Q) Output Factor (%)	91.32	94.95	83.12	89.03
(R) Heat Rate (BTU/NkWh)	9,815	9,566	2,061	6,775
				•

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's
- Data is reflected at 100% ownership.

Duke Energy Carolinas Intermediate Power Plant Performance Review Plan December 2018

Cliffside Station

Cliffside 6

(A)	MDC (mW)	844
(B)	Period Hrs	744
(C)	Net Generation (mWh)	383,291
(D)	Net mWh Possible in Period	627,936
(E)	Equivalent Availability (%)	87.46
(F)	Output Factor (%)	69.10
(G)	Capacity Factor (%)	61.04

Notes:

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

Cliffside Station

		Unit 5
(A)	MDC (mW)	546
(B)	Period Hrs	744
(C)	Net Generation (mWh)	113,103
(D)	Net mWh Possible in Period	406,224
(E)	Equivalent Availability (%)	80.73
(F)	Output Factor (%)	74.07
(G)	Capacity Factor (%)	27.84

Notes:

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

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January 2018 - December 2018 Oconee Nuclear Station

Duke Energy Carolinas

Base Load Power Plant Performance Review Plan

	Unit	1	Uni	t 2	Unit	3			
(A) MDC (mW)	847	•	848		859				
(B) Period Hours	8760		8760		8760		-		
(C) Net Gen (mWh) and Capacity Factor (%)	6,745,635	90.91	7,581,168	102.06	6,967,442	92.59	. -		
(D) Net mWh Not Gen due to Full Schedule Outages	524,378	7.07	0	0.00	582,288	7.74		•	
* (E) Net mWh Not Gen due to Partial Scheduled Outages	29,529	0.40	347	0.00	46,294	0.62	•	-	
(F) Net mWh Not Gen due to Full Forced Outages	184,787	2.49	0	0.00	0	0.00	•		
* (G) Net mWh Not Gen due to Partial Forced Outages	-64,608	-0.87	-153,035	-2.06	-71,184	-0.95			
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00	0	0.00	-		-
* (I) Core Conservation	0	0.00	0	0.00	o o	0.00		-	
(J) Net mWh Possible in Period	7,419,720	100.00%	7,428,480	100.00%	7,524,840	100.00%	-	-	-
(K) Equivalent Availability (%)		89.94		100.00	/-	92.12	-		
(L) Output Factor (%)	•	100.52		102.06		100.36		•	,
Heat Rate (BTU/NkWh)		10,233	•	10,127	-	10,102	•	-	-
	F	•			-	-	-		

January 2018 - December 2018 McGuire Nuclear Station

	Unit	1	<u>Uni</u>	it 2	
(A) MDC (mW)	1158		1158		
(B) Period Hours	8760		8760		-
(C) Net Gen (mWh) and Capacity Factor (%)	10,359,250	102.12	9,502,818	93.68	
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	791,628	7.80	• • • • • • • • • • • • • • • • • • •
* (E) Net mWh Not Gen due to Partial Scheduled Outages	796	0.01	28,506	0.28	
(F) Net mWh Not Gen due to Full Forced Outages	34,991	0.34	0	0.00	
* (G) Net mWh Not Gen due to Partial Forced Outages	-250,957	-2.47	-178,872	-1.76	The second secon
* (H) Net mWh Not Gen due to Economic Dispatch	· · · · · · · · · · · · · · · · · · ·	0.00	0	0.00	
* (I) Core Conservation	0	0.00	0	0.00	
(J) Net mWh Possible in Period	10,144,080	100.00%	10,144,080	100.00%	and the second of the second o
(K) Equivalent Availability (%)		99.56	•	91.80	
(L) Output Factor (%)		102.47		101.61	
Heat Rate (BTU/NkWh)		9,957		10,015	

January 2018 - December 2018 Catawba Nuclear Station

•	Unit	1	Unit	: 2	
(A) MDC (mW)	1160		1150		
(B) Period Hours	0		8760		-
(C) Net Gen (mWh) and Capacity Factor (%)	9,510,487	102.28	9,269,228	92.01	
(D) Net mWh Not Gen due to Full Schedule Outages	0	0.00	777,783	7.72	
* (E) Net mWh Not Gen due to Partial Scheduled Outages	Ö	0.00	76,740	0.76	
(F) Net mWh Not Gen due to Full Forced Outages	0	0.00	0	0.00	<i>" · · · · · · · · · · · · · · · · · · ·</i>
* (G) Net mWh Not Gen due to Partial Forced Outages	0	0.00	-49,751	-0,49	*
* (H) Net mWh Not Gen due to Economic Dispatch	0	0.00	0	0.00	The second se
* (I) Core Conservation	0	0.00	0	0.00	
(J) Net mWh Possible in Period	0	100.00%	10,074,000	100.00%	
(K) Equivalent Availability (%)		95.52	-	91.84	
(L) Output Factor (%)		100.33		99.71	
Heat Rate (BTU/NkWh)		10,098		10,048	- M

Belews Creek Station

	Unit I	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	4,793,474	3,227,943
(D) Capacity Factor (%)	49.30	33.20
(E) Net mWh Not Generated due to Full Scheduled Outages	747,659	2,689,881
(F) Scheduled Outages: percent of Period Hrs	7.69	27.66
(G) Net mWh Not Generated due to Partial Scheduled Outages	1,040	740
(H) Scheduled Derates: percent of Period Hrs	0.01	0.01
(I) Net mWh Not Generated due to Full Forced Outages	311,892	173,216
(J) Forced Outages: percent of Period Hrs	3.21	1.78
(K) Net mWh Not Generated due to Partial Forced Outages	100,192	86,443
(L) Forced Derates: percent of Period Hrs	1.03	0.89
(M) Net mWh Not Generated due to Economic Dispatch	3,769,344	3,545,377
(N) Economic Dispatch: percent of Period Hrs	38.76	36.46
(O) Net mWh Possible in Period	9,723,600	9,723,600
(P) Equivalent Availability (%)	88.06	69.66
(Q) Output Factor (%)	73.99	67.36
(R) Heat Rate (BTU/NkWh)	9,305	9,599

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Buck Combined Cycle Station

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	312	724
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,463,456	1,471,968	2,237,637	5,173,061
(D) Capacity Factor (%)	81.10	81.57	81.87	81.57
(E) Net mWh Not Generated due to Full Scheduled Outages	61,021	56,502	58,692	176,215
(F) Scheduled Outages: percent of Period Hrs	3.38	3.13	2.15	2.78
(G) Net mWh Not Generated due to Partial Scheduled Outages	139,166	139,968	28,219	307,353
(H) Scheduled Derates: percent of Period Hrs	7.71	7.76	1.03	4.85
(I) Net mWh Not Generated due to Full Forced Outages	4,003	354	806	5,163
(J) Forced Outages: percent of Period Hrs	0.22	0.02	0.03	0.08
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	277	277
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.01	0.00
(M) Net mWh Not Generated due to Economic Dispatch	136,914	135,768	407,489	680,170
(N) Economic Dispatch: percent of Period Hrs	7.59	7.52	14.91	10.72
(O) Net mWh Possible in Period	1,804,560	1,804,560	2,733,120	6,342,240
(P) Equivalent Availability (%)	88.68	89.09	96.78	92.29
(Q) Output Factor (%)	84.66	84.85	84.14	84.49
(R) Heat Rate (BTU/NkWh)	10,221	9,937	2,440	6,774

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Dan River Combined Cycle Station

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	199	199	320	718
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,433,925	1,410,200	2,118,133	4,962,258
(D) Capacity Factor (%)	82.26	80.90	75.56	78.90
(E) Net mWh Not Generated due to Full Scheduled Outages	97,347	105,218	156,480	359,045
(F) Scheduled Outages: percent of Period Hrs	5.58	6.04	5.58	5.71
(G) Net mWh Not Generated due to Partial Scheduled Outages	132,928	132,170	5,760	270,858
(H) Scheduled Derates: percent of Period Hrs	7.63	7.58	0.21	4.31
(I) Net mWh Not Generated due to Full Forced Outages	7,068	9,462	11,920	28,450
(J) Forced Outages: percent of Period Hrs	0.41	0.54	0.43	0.45
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	67,418	67,418
(L) Forced Derates: percent of Period Hrs	0.00	0.00	2.41	1.07
(M) Net mWh Not Generated due to Economic Dispatch	71,972	86,190	443,489	601,650
(N) Economic Dispatch: percent of Period Hrs	4.13	4.94	15.82	9.57
(O) Net mWh Possible in Period	1,743,240	1,743,240	2,803,200	6,289,680
(P) Equivalent Availability (%)	86.38	85.84	91.38	88.46
(Q) Output Factor (%)	87.94	87.41	80.83	84.62
(R) Heat Rate (BTU/NkWh)	10,614	10,673	2,397	7,123

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

Marshall Station

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	3,176,205	3,675,692
(D) Capacity Factor (%)	55.10	63.58
(E) Net mWh Not Generated due to Full Scheduled Outages	372,746	501,545
(F) Scheduled Outages: percent of Period Hrs	6.47	8.67
(G) Net mWh Not Generated due to Partial Scheduled Outages	2,091	12,896
(H) Scheduled Derates: percent of Period Hrs	0.04	0.22
(I) Net mWh Not Generated due to Full Forced Outages	95,739	81,433
(J) Forced Outages: percent of Period Hrs	1.66	1.41
(K) Net mWh Not Generated due to Partial Forced Outages	145,499	69,994
(L) Forced Derates: percent of Period Hrs	2.52	1.21
(M) Net mWh Not Generated due to Economic Dispatch	1,971,800	1,440,040
(N) Economic Dispatch: percent of Period Hrs	34.21	24.91
(O) Net mWh Possible in Period	5,764,080	5,781,600
(P) Equivalent Availability (%)	89.31	88.48
(Q) Output Factor (%)	68.89	75.74
(R) Heat Rate (BTU/NkWh)	9,553	9,406

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

WS Lee Combined Cycle

			•	
	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	223	223	337	783
(B) Period Hrs	6,601	6,601	6,601	6,601
(C) Net Generation (mWh)	1,030,538	1,090,492	1,402,639	3,523,669
(D) Capacity Factor (%)	70.01	74.08	63.05	68.17
(E) Net mWh Not Generated due to Full Scheduled Outages	200,652	187,320	291,168	679,140
(F) Scheduled Outages: percent of Period Hrs	13.63	12.73	13.09	13.14
(G) Net mWh Not Generated due to Partial Scheduled Outages	27,459	28,514	67,117	123,090
(H) Scheduled Derates: percent of Period Hrs	1.87	1.94	3.02	2.38
(I) Net mWh Not Generated due to Full Forced Outages	138,565	122,014	167,641	428,220
(J) Forced Outages: percent of Period Hrs	9.41	8.29	7.54	8.29
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	74,809	43,683	295,972	414,464
(N) Economic Dispatch: percent of Period Hrs	5.08	2.97	13.30	8.02
(O) Net mWh Possible in Period	1,472,023	1,472,023	2,224,537	5,168,583
(P) Equivalent Availability (%)	75.09	77.05	76.36	76.19
(Q) Output Factor (%)	96.75	98.41	85.00	92.16
(R) Heat Rate (BTU/NkWh)	10,365	10,240	1,646	6,855

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.
- Footnote: (R) Includes Light Off BTU's

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Duke Energy Carolinas Base Load Power Plant

Performance Review Plan

January 2018 through December 2018

Pre-Commercial Lee Combined Cycle Station

LCC	Combined Cyc	ie Station	
Unit 11	Unit 12	Unit ST10	Block Total
38,546	20,580	7,645	66,771
	Unit 11	Unit 11 Unit 12	

- (L) Forced Derates: percent of Period Hrs
- (M) Net mWh Not Generated due to Economic Dispatch
- (N) Economic Dispatch: percent of Period Hrs
- (O) Net mWh Possible in Period
- (P) Equivalent Availability (%)
- (Q) Output Factor (%)
- (R) Heat Rate (BTU/NkWh)

Note: The Power Plant Performance Data reports are limited to capturing data beginning the first month a station is in commercial operation. Lee CC began commercial operations April 5, 2018.

Cliffside Station

Units		Unit 6		
(A)	MDC (mW)	844		
(B)	Period Hrs	8,760		
(C)	Net Generation (mWh)	4,311,369		
(D)	Net mWh Possible in Period	7,393,440		
(E)	Equivalent Availability (%)	75.32		
(F)	Output Factor (%)	79.29		
(G)	Capacity Factor (%)	58.31		

Notes:

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

Cliffside Station

Units		Unit 5
(A)	MDC (mW)	546
(B)	Period Hrs	8,760
(C)	Net Generation (mWh)	1,243,104
(D)	Net mWh Possible in Period	4,782,960
(E)	Equivalent Availability (%)	60.18
(F)	Output Factor (%)	71.78
(G)	Capacity Factor (%)	25.99

Notes:

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

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McGee Workpaper 1 TIA

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense **Proposed Nuclear Capacity Factor** Billing Period Sept 2019 through Aug 2020 Docket E-7, Sub 1190

	C	atawba 1	Catawba 2	McGuire 1	McGuire 2	 Oconee 1	Oconee 2	Oconee 3	Total
MWhs Cost (Gross of Joint Owners)	\$	9,27 0,87 0 57,728,557	9,127,064 \$ 58,001,149	10,021,874 \$ 60,167,863	9,249,360 \$ 56,622,253	\$ 7,252,338 46,212,440	6,692,637 \$ 38,923,889	6,844,888 \$ 39,841,317	58,459,031 357,497,468
\$/MWh		6.2269	6.3549	6.0037	6,1217	6,3721	5.8159	5.8206	
Avg \$/MWh Cents per kWh			6.1154 0.6115						
				Sept 2019 -					
MDC			1	August 2020					
CATA_UN01	Catav	wha	MW	1,160.1					
CATA_UN02	Catav		MW	1,150.1					
MCGU_UN01	McGu		MW	1,158.0					
MCGU_UN02	McGu		MW	1,157.6					
OCON_UN01	Ocon		MW	847.0					
OCON_UN02	Ocon	ee	MW	848.0					
OCON_UN03	Ocen		MW	859.0					
_				7,179.8	•				
Hours in month				8,760					
Generation GWHs									
CATA_UN01	Catav	vba	GWh	9,271					
CATA_UN02	Catav	vba	GWh	9,127					
MCGU_UN01	McGu	ire	GWh	10,022					
MCGU_UN02	McGu	ire	GWh	9,249					
OCON_UN01	Ocone	ee	GWh	7,252					
OCON_UN02	Ocone	90	GWh	6,693					
OCON_UN03	Ocone	ee	GWh	6,845					
				58,459				v	
	Propo	sed Nuclear	Capacity Factor	92.95%					

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

NERC 5 Year Average Nuclear Capacity Factor

Billing Period Sept 2019 through Aug 2020

Docket E-7, Sub 1190

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs with NERC applied Hours MDC Capacity factor Cost	9,098,465 8760 1160.1 89.53% \$ 55,640,302	1150.1 89.53%	9,081,995 8760 1158.0 89.53% 55,539,582 \$	9,078,858 8760 1157.6 89.53% 55,520,397	6,785,334 8760 847.0 91.45% \$ 41,494,696 \$	6,793,345 8760 848.0 91.45% 41,543,686 \$	6,881,466 8760 859.0 91.45% 42,082,578	
Avg \$/MWh Cents per kWh		6.1154 0.6115						

2013-2017	Capacity Rating	NCF Rating	Weighted Average
Oconee 1	847.0	91.45	10.79%
Oconee 2	848.0	91.45	10.80%
Oconee 3	859.0	91.45	10.94%
McGuire 1	1158.0	89.53	14.44%
McGuire 2	1157.6	89.53	14.43%
Catawba 1	1160.1	89.53	14,47%
Catawba 2	1150.1	89.53	14.34%
<u> </u>	7179.8		90.21%

Wtd Avg on Capacity Rating

DUKE ENERGY CAROLINAS

McGee Workpaper 3

North Carolina Annual Fuel and Fuel Related Expense North Carolina Generation and Purchased Power in MWhs Billing Period Sept 2019 through Aug 2020 Docket E-7, Sub 1190

Resource Type	Sept 2019 - August 2020	
NUC Total (Gross)	58,459,031	
COAL Total Gas CT and CC total (Gross)	18,355,203 20,821,617	
Run of River Net pumped Storage Total Hydro	4,839,425 (3,874,211) 965,214	
Catawba Joint Owners Lee CC Joint Owners	(14,888,880) (878,400)	
DEC owned solar Total Generation	184,444	83,018,229
Purchases for REPS Compliance Qualifying Facility Purchases - Non-REPS compliance Other Purchases Allocated Economic Purchases Joint Dispatch Purchases	1,204,212 1,275,248 66,854 319,079 6,414,946 9,280,339	49 9 00 555
Total Generation and Purchased Power		92,298,568
Fuel Recovered Through intersystem Sales	(687,755)	

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Projected Fuel and Fuel Related Costs
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Resource Type	_	Sept 2019 - August 2020	_
Nuclear Total (Gross)	\$	357,497,468	
COAL Total		570,050,837	
Gas CT and CC total (Gross)		503,184,086	
Catawba Joint Owner costs		(91,061,695))
CC Joint Owner costs		(18,112,976)	
Reagents and gain/loss on sale of By-Products		24,959,649	Workpaper 9
Purchases for REPS Compliance - Energy		63,867,566	
Purchases for REPS Compliance Capacity		13,295,654	
Purchases of Qualifying Facilities - Energy		58,754,197	
Purchases of Qualifying Facilities - Capacity		14,874,084	
Other Purchases		2,029,948	
JDA Savings Shared		19,972,407	Workpaper 5
Allocated Economic Purchase cost		9,109,705	Workpaper 5
Joint Dispatch purchases		132,910,592	Workpaper 6
Total Purchases		314,814,153	
Fuel Expense recovered through intersystem sales		(16,986,301)	Workpaper 5
Total System Fuel and Fuel Related Costs	\$:	1,644,345,221	

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense Projected Joint Dispatch Fuel Impacts Billing Period Sept 2019 through Aug 2020 Docket E-7; Sub 1190

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 IDA Savings Payment																
		Allocated Economic	C Pu	rchase Cost	Economic Sales Cost				Fuel Transfer Payment					JDA Savings Payment			
	_	DEP DEC			DEP DEC			DEP D			DEC	Γ	DEP		DEC		
9/1/2019	<u> </u>	475,131	\$	665,890	\$	(169,265)	\$	(112,397)	\$	(10,444,194)	\$	10,444,194	\$	(1,053,331)	\$	1,053,331	
10/1/2019	_	414,456	\$	591,080	\$	(4,395)	\$	(67,808)	\$	(7,750,156)	\$	7,750,156	\$	(1,182,598)	\$	1,182,598	
11/1/2019	\$	950,625	\$	1,370,649	\$	(419,575)	\$	(61,033)	\$	(15,340,171)	\$	15,340,171	\$	(2,955,441)	\$	2,955,441	
12/1/2019	\$	479,370	\$	692,032	\$	(371,479)	\$	(59,958)	\$	(12,761,635)	\$	12,761,635	\$	(1,792,678)	\$	1,792,678	
1/1/2020	\$	730,828	\$	1,011,856	4	(1,806,953)	\$	(2,697,340)	\$	(1,005,527)	\$	1,005,527	\$	626,965	\$	(626,965)	
2/1/2020	\$	463,058	\$	655,004	\$	(1,255,361)	\$	(1,044,487)	\$	(2,708,449)	\$	2,708,449	\$	(215,029)	\$	215,029	
3/1/2020	\$	426,687	\$	608,794	\$	(409,836)	\$	(356,416)	\$	(9,719,397)	\$	9,719,397	\$	(1,442,087)	\$	1,442,087	
4/1/2020	\$	459,023	\$	693,091	\$	(291,103)	\$	(49,201)	\$	(10,408,733)	\$	10,408,733	\$	(2,336,142)	\$	2,336,142	
5/1/2020	\$	531,216	\$	804,769	\$	(483,810)	\$	(86,028)	\$	(13,269,047)	\$	13,269,047	\$	(2,608,123)	\$	2,608,123	
6/1/2020	\$	345,100	\$	504,336	\$	(265,478)	\$	(113,940)	\$	(13,397,425)	\$	13,397,425	\$	(2,137,472)	\$	2,137,472	
7/1/2020	\$	587,846	\$	827,961	\$	(399,661)	\$	(463,252)	\$	(12,439,738)	\$	12,439,738	\$	(3,016,091)	\$	3,016,091	
8/1/2020	\$	483,920	\$	684,244	\$	(327,024)	\$	(196,140)	\$	(11,987,821)	\$	11,987,821	\$	(1,860,381)	\$	1,860,381	

Sept 19 - Aug 20

\$ 9,109,705

(5,308,001)

\$ 121,232,293

19,972,407

- \$ 132,910,592 Workpaper 6 Transfer Purchases
- \$ (11,678,300) Workpaper 6 Transfer Sales
- \$ 121,232,293 Sept 19-Aug 20 Net Fuel Transfer Payment
- \$ (11,678,300) Workpaper 6 Transfer Sales
- \$ (5,308,001) Sept 19-Aug 20 Economic Sales Cost
- \$ (16,986,301) Total Fuel expense recovered through intersystem sales

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Projected Merger Payments
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

McGee Workpaper 6

_					purchase	sale						sale		purchase	
	Transfer P	rojection	Purchase Alloc	ation Delta	Adjusted Transfer		Fossil Gen Cost					Pre-Net I	ayı	ments	
	PECtoDEC	DECtoPEC	PEC	DEC	PECtoDEC	DECtoPEC		PEC		DEC	Γ	PECtoDEC		DECtoPEC	
9/1/2019	464,096	14,623	10,534	(10,534)	474,630	14,623	\$	22.64	\$	20.60	\$	301,261	\$	10,745,454	
10/1/2019	406,906	75,054	8,370	(8,370)	415,276	75,054	\$	22.10	\$	19.03	\$	1,427,980	\$	9,178,136	
11/1/2019	675,108	1,571	33,083	(33,083)	708,192	1,571	\$	21.71	\$	20.01	\$	31,436	\$	15,371,607	
12/1/2019	564,868	22,814	2,716	(2,716)	567,583	22,814	\$	23.37	\$	22.13	\$	504,795	\$	13,266,429	
1/1/2020	207,223	163,501	(7,592)	7,592	207,223	171,093	\$	25.26	\$	24.72	\$	4,228,626	\$	5,234,152	
2/1/2020	232,255	123,728	(8,963)	8,963	232,255	132,692	\$	24.98	\$	23.30	\$	3,092,324	\$	5,800,773	
3/1/2020	468,979	12,017	7,840	(7,840)	476,820	12,017	\$	20.80	\$	16.50	\$	198,232	\$	9,917,629	
4/1/2020	580,234	41,238	(4,789)	4,789	580,234	46,027	\$	19.35	\$	17.80	\$	819,312	\$	11,228,046	
5/1/2020	666,200	17,354	14,825	(14,825)	681,026	17,354	\$	19.93	\$	17.44	\$	302,581	\$	13,571,628	
6/1/2020	739,202	5,870	4,470	(4,470)	743,672	5,870	\$	18.15	\$	16.50	\$	96,828	\$	13,494,252	
7/1/2020	672,958	24,313	(279)	279	672,958	24,592	\$	19.09	\$	16.62	\$	408,669	\$	12,848,407	
8/1/2020	642,936	17,040	12,142	(12,142)	655,079	17,040	\$	18.71	\$	15.63	\$	266,256	\$	12,254,078	
Sept 19 - Aug 20	6,320,965	519,122	72,358	(72,358)	6,414,946	540,745					\$	11,678,300	\$	132,910,592	

Net Pre-Net Payments \$ 121,232,293

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
Projected Nuclear Capacity Factor of 92.95%

Billing Period Sept 2019 through Aug 2020

Docket E-7, Sub 1190

Fall 2018 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:				
	Residentia!	21,397,068		21,397,068
	General	23,127,702		23,127,702
	Industrial	12,939,285		12,939,285
	Lighting	253,942		253,942
	NC RETAIL	57,717,997	-	57,717,997
South Carolina:				
	Residential	6,427,468	78,602	6,506,070
	General	5,801,262	49,849	5,851,111
	Industrial	9,500,669	688	9,501,357
	Lighting	42,373		42,373
	SC RETAIL	21,771,772	129,139	21,900,911
Total Retail Sales				
	Residential	27,824,536	78,602	27,903,138
	General	28,928,964	49,849	28,978,813
	Industrial	22,439,954	688	22,440,642
	Lighting	296,315	-	296,315
	Retail Sales	79,489,769	129,139	79,618,908
	Wholesale	7,624,936	-	7,624,936
	Projected System MWH Sales for Fuel Factor	87,114,705	129,139	87,243,844
	NC as a percentage of total	66.26%		66.15%
	SC as a percentage of total	24.99%		25,10%
	Wholesale as a percentage of total	8.75%		8.74%
		100.00%	-	100,00%
	SC Net Metering allocation adjustment			
	Total projected SC NEM MWhs		129,139	
	Marginal fuel rate per MWh for SC NEM		\$ 32.50	
	Fuel benefit to be directly assigned to SC Retail		\$ 4,197,018	

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

		NC Retail		South Carolina	
Reconciliation	System	Customers	Wholesale	Retall	
Total system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	\$ 1,644,345,221				
QF and REPS Compliance Purchased Power - Capacity	\$ 28,169,738				
Other fuel costs	\$ 1,616,175,484				
SC Net Metering Fuel Allocation adjustment	\$ 4,197,018				
Jurisdictional fuel costs after adj.	\$ 1,620,372,501				
Allocation to states/classes		66.16%	8.74%	25.10%	
Jurisdictional fuel costs	\$ 1,620,372,501	\$ 1,072,038,447	\$ 141,620,557	\$ 406,713,498	67.04% Capacity
Direct Assignment of Fuel benefit to SC Retail	\$ (4,197,018)		\$ -	\$ (4,197,018)	
Total system actual fuel costs	\$ 1,616,175,484	\$ 1,072,038,447	\$ 141,620,557	\$ 402,516,480	
QF and REPS Compliance Purchased Power - Capacity	28,169,738	18,884,001			
Total system fuel expense from McGee Exhibit 2 Schedule 1 Page 1	\$ 1,644,345,221	\$ 1,090,922,448			
		Exh. 2, Sch. 1 page 3	3		

\$ 1,644,345,221 McGee Exhibit 2 Schdule 1 Page 1 of 3 \$ 4,197,018 \$ 1,648,542,239 DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Fall 2018 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: South Carolina:	NC RETAIL SC RETAIL	59,480,703	- 242,974	(1,649,623)		58,074,054
	Wholesale	9,088,393	96,319	(250,198)	•	21,636,656 8,918,598
	Normalized System MWH Sales for Fuel Factor NC as a percentage of total SC as a percentage of total Wholesale as a percentage of total	90,487,628 65.73% 24.22% 10.04%	419,697	(2,407,155)	129,139	88,629,309 65.52% 24.41% 10.06%
	SC Net Metering allocation adjustment Total projected SC NEM MWhs Marginal fuel rate per MWh for SC NEM Fuel benefit to be directly assigned to SC Retail		129,139 \$ 32.50 \$ 4,197,018		·	99.99%
	System Fuel Expense Fuel benefit to be directly assigned to SC Retail Total Fuel Costs for Allocation	١ _	\$ 1,683,362,477 \$ 4,197,018 \$ 1,687,559,495	McGee Exhibit 2 Schedu	le 2 Page 1 of 3	

Reconciliation	System	NC Retail Custon	iers	Wholesale	South Carolina Retall
Total system fuel expense from McGee Exhibit 2 Schedule 2 Page 1	\$ 1,683,362,477				
QF and REPS Compliance Purchased Power - Capacity	\$ 28,169,738				
Other fuel costs	\$ 1,655,192,739				
SC Net Metering Fuel Allocation adjustment	\$ 4,197,018				
Jurisdictional fuel costs after adj.	\$ 1,659,389,757				
Allocation to states/classes		65	.52%	10.06%	24.41%
Jurisdictional fuel costs	\$ 1,659,389,757	\$ 1,087,232	169 S	166,934,610	\$ 405,057,040
Direct Assignment of Fuel benefit to SC Retail	\$ (4,197,018)		Ś	-	\$ (4,197,018)
Total system actual fuel costs	\$ 1,655,192,739	\$ 1,087,232,	169 \$	166,934,610	\$ 400,860,022
QF and REPS Compliance Purchased Power - Capacity	28,169,738	18,884	001		,,,
Total system fuel expense from McGee Exhibit 2 Schedule 2 Page 1	\$ 1,683,362,477	\$ 1,106,116,	170		
		Exh. 2, Sch 2 page			

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Projected and Adjusted Projected Sales and Costs
NERC 5 Year Average Nuclear Capacity Factor of 90.21%
Billing Period Sept 2019 through Aug 2020
Docket E-7, Sub 1190

Fall 2018 Forecast Billed Sales Forecast Sales Forecast - MWhs (000)

cGee	Workpaper 7b	
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			Remove impact of		
		Projected sales	SC DERP Net		
		for the Billing	Metered		
		Period	generation	Adjusted Sales	
North Carolina:					
North Carolina;	Residential	21,397,068		** ***	
	General	23,127,702		21,397,068	
	Industrial	12,939,285		23,127,702	
	Lighting			12,939,285	
	NC RETAIL	253,942 57,717,997		253,942	
	TO TELEME	37,717,337	•	57,717,997	
South Carolina:					
	Residential	6,427,468	76,502	6,506,070	
	General	5,801,262	49,849	5,851,111	
	Industrial	9,500,669	688	9,501,357	
	Lighting	42,373	0	42,373	
	SC RETAIL	21,771,772	129,139	21,900,911	
Total Retail Sales					
Fotol Netall Sales	Residential	27,824,536	70.603	27 802 420	
	General	28,928,964	78,602	27,903,138	
	Industrial	22,439,954	49,849	28,978,813	
	Lighting	22,435,534 296,315	688	22,440,642	
	Retail Sales	79,489,769	130 130	296,315 79,618,908	
	Francis	/3,403,/03	129,139	75,618,908	
	Wholesale	7,624,936	-	7,624,936	
	Projected System MWh Sales for Fuel Factor	87,114,70\$	129,139	87,243,844	
	NC as a percentage of total	66.26%		66,16%	
	SC as a percentage of total	24.99%		25.10%	•
	Wholesale as a percentage of total	8.75%		8.74%	
	,	100.00%	_	100.00%	
	SC Net Metering allocation adjustment				
	Total projected SC NEM MWhs		129,139		
	Marginal fuel rate per MWh for SC NEM				
	Fuel benefit to be directly assigned to SC Retail	7	4,197,018		
	System Fuel Expense	•	1.676.309.949 M	fcGee Exhibit 2 Schedule 3 Pa	ge 1 of 3
	Fuel benefit to be directly assigned to SC Retail	,	4,197,018		,
	Total Fuel Costs for Allocation	-		VicGee Exhibit 2 Schedule 3 Pa	age 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	\$ 1,676,309,949			
QF and REPS Compliance Purchased Power - Capacity	\$ 28,169,738			
Other fuel costs	5 1,648,140,211	•		
SC Net Metering Fuel Allocation adjustment	\$ 4,197,018			
Jurisdictional fuel costs after adj.	\$ 1,652,337,229	1		
Allocation to states/classes		66.16%	8.74%	25.10%
Jurisdictional fuel costs	\$ 1,652,337,229	\$ 1,093,186,310		
Direct Assignment of Fuel benefit to SC Retail	\$ (4,197,018)		\$ -	\$ (4,197,018)
Total system actual fuel costs	\$ 1,648,140,211	5 1,093,186,310	S 144,414,274	
QF and REPS Compliance Purchased Power - Capacity	28,169,738	18,884,001	,	
Total system fuel expense from McGee Exhibit 2 Schedule 3 Page 1	\$ 1,676,309,949	\$ 1,112,070,311	•	-
		Exh. 2, Sch.3 page 3		

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
Annualized Revenue

Billing Period Sept 2019 through Aug 2020

Docket E-7, Sub 1190

	Normalized
January 2019 Actuals	Sales

	Revenue	KWH Sales	Cents/ kwh	McGee EX 4	Total Annualized Revenues
	(a)	(b)	(a) / (b) *100 = (c)	(d)	(c)*(d)*10
Residential	\$ 217,323,443.93	2,194,230,798	9.9043	22,043,791	\$ 2,183,285,633
General	\$ 143,353,269.17	1,936,498,544	7.4027	23,487,580	\$ 1,738,716,194
Industrial	\$ 49,109,115.03	890,320,580	5.5159	12,454,944	\$ 687,001,167
Total	\$ 409,785,828.13	5,021,049,922	-	57,986,315	\$ 4,609,002,994

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
Projected Reagents and ByProducts
Billing Period Sept 2019 through Aug 2020

Docket E-7, Sub 1190

Reagent and ByProduct projections

				Magnesium					Gypsum			Sale of By-Produ	ucts
Date	Ammonia	Urea	Limestone	hydroxide	Calc	ium Carbonate	Reagent Cost	(Gain)/ Loss	As	h (Gain)/Loss	(Gain)/Loss	
9/1/2019 \$	342,265	\$ 77,914 \$	1,644,941	\$ 215,442	\$	119,083	\$ 2,399,645	\$	347,807	\$	(20,361)		
10/1/2019 \$	203,263	\$ 46,271 \$	976,890	\$ 96,653	\$	59,479	\$ 1,382,556	\$	222,691	\$	(500)	\$ 222	.191
11/1/2019 \$	295,673	\$ 67,308 \$	1,421,021	\$ 141,587	\$	80,226	\$ 2,005,816	\$	307,158	\$	(14,173)		-
12/1/2019 \$	280,685	\$ 63,896 \$	1,348,984	\$ 200,980	\$	105,495	\$ 2,000,040	\$	253,684	\$	(31,440)		
1/1/2020 \$	480,295	\$ 109,336 \$	2,308,323	\$ 235,514	\$	119,285	\$ 3,252,753	\$	448,822	S	(51,070)		
2/1/2020 \$	455,643	\$ 103,724 \$	2,189,841	\$ 224,812	\$	115,218	\$ 3,089,236	\$	426,261	\$	(54,924)		
3/1/2020 \$	280,833	\$ 63,929 \$	1,349,695	\$ 197,989	\$	96,692	\$ 1,989,138	\$	249,549	\$	(49,646)		
4/1/2020 \$	112,329	\$ 25,571 \$	539,858	\$ 73,146	Ś	41,882	792,786		114,210		(7,717)		
5/1/2020 \$	127,830	\$ 29,100 \$	614,359	\$ 89,834	\$	50,633	\$ 911,756	\$	128,869	s	(9,205)		
6/1/2020 \$	116,620	\$ 26,548 \$	560,481	\$ 93,291	\$	51,598	\$ 848,537	\$	114,157	S	(8,031)		
7/1/2020 \$	252,434	\$ 57,465 \$	1,213,211	\$ 193,957	\$	105,887	\$ 1,823,954	\$	246,905		(18,748)	•	
8/1/2020_\$	228,139	\$ 51,934 \$	1,096,445	\$ 180,818	\$	101,250	\$ 1,658,586	\$	225,313		(14,765)	•	
\$	3,176,009	\$ 722,995 \$	15,264,049	\$ 1,944,022	\$	1,047,728	\$ 22,154,802	\$	3,085,428	\$	(280,581)	\$ 2,804,	847

Total Reagent cost and Sale of By-products \$ 24,959,649

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

2.5% calculation test

Twelve Months Ended December 31, 2017

Billing Period Sept 2019 through Aug 2020

Docket E-7, Sub 1190

Line No.		F	(over)/under	
110.	Description	Forecast \$	Collection \$	Total \$
	1 Amount in current docket	107,380,554	72,488,427	179,868,981
	2 Amount in Sub 1163, prior year docket	129,739,014	25,206,674	154,945,688
	3 Increase/(Decrease)	(22,358,461)	47,281,753	24,923,292
	4 2.5% of 2018 NC revenue of \$4,895,869,250.56			122,396,731
	Excess of purchased power growth over 2.5% of Revenue			0
	E-7 Sub 1190			
WP4	Purchases for REPS Compliance - Energy	63,867,566	66.16%	42,254,782
WP4	Purchases for REPS Compliance Capacity	13,295,654	67.04%	8,912,938
WP 4	Purchases	2,029,948	66.16%	1,343,014
WP 4	QF Energy	58,754,197	66.1 6 %	38,871,777
WP 4	QF Capacity	14,874,084	67.04%	9,971,063
WP4	Allocated Economic Purchase cost	9,109,705	66.16%	6,026,981
		161,931,154		107,380,554
			•	
_	E-7 Sub 1163			
	Purchases for REPS Compliance	76,265,967	65.58%	50,015,221
	Purchases for REPS Compliance Capacity	16,389,786	66.39%	10,881,179
	Purchases	1,354,014	65.58%	887,962
	QF Energy	59,741,306	65.58%	39,178,348
	QF Capacity	13,954,158	66.39%	9,264,165
	Allocated Economic Purchase cost	29,753,184	65.58%	19,512,138
		197,458,415		129,739,014

McGee Workpaper 10a

DUKE ENERGY CAROLINAS
North Carolina Annual Fuel and Fuel Related Expense
2.5% calculation test
Twelve Months Ended December 31, 2018
Docket E-7,5 sub 1190

2018 System KWH Sales - Sch 4, Adjusted NC Retall XWH Sales - Sch 4 NC Retall X of Sales, Adjusted (Calc)	Jen18 8,703,43 5,733,8	9,931 7,4		Maria 8,449,998,012 4,160,094,169 64.96%	Apr18 6,590,329,093 4,416,566,036 67.02%	Mey18 6,591,233,338 4,252,750,024 64,52%	June 18 8,009,317,385 5,245,688,511 65,49%	Jul18 8,486,873,480 5,639,360,853 66,45%	Aug 18 8,207,669,991 5,409,621,248 65,43%	5ep18 9,507,983,860 6,212,763,717 65.34%	Oct18 6,345,056,567 4,141,211,581 65,27%	Nov18 6,681,164,890 4,514,713,247 64,58%	Dec18 7,500,839,824 4,892,732,160 65,23%	12 ME 90,593,766,989 59,480,702,586 65.66%
NC retail production plant %		7.56%	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 5 - Sch 3 Fuels: System Actual 5 - Sch 3 Fuel-relateds; Economic Purchases System Actual 5 - Sch 3 Fuel-relateds; Purchased Power for REPS Compliance System Actual 5 - Sch 3 Fuel-relateds; SC DERP System Actual 5 - Sch 3 Fuel-relateds; H3589 purpa Purchases	18,3 3,0	51,829 \$ 0,781 7,332 122 2,902	19,768,561 \$ 2,407,886 3,239,022 125 2,049,413	11,751,953 1,331,655 2,726,561 134 2,053,505	\$ 8,971,622 9 1,356,382 3,894,992 163 2,591,173	7,588,225 1,684,418 4,543,762 218 2,424,811	7,853,735 1,881,586 4,545,750 223 2,829,385	\$ 25,151,873 2,920,154 4,893,476 232 2,716,750	\$ 24,971,461 3,759,304 4,813,048 223 2,487,659	\$ 21,908,434 5 6,703,809 4,818,507 213 2,471,326	\$ 27,821,901 4,827,502 3,635,758 203 2,042,872	\$ 26,826,328 \$ 6,105,374 4,331,202 157 2,089,973	40,057,563 \$ 13,849,586 \$ 3,811,118 \$ 136 \$ 1,712,356 \$	277,523,485 65,128,437 48,310,528 2,149 27,102,125
Total System Economic & QF\$	77,9	2,966	27,465,007	17,863,808	16,754,932	16,241,434	17,110,679	35,682,485	36,031,695	35,902,289	38,328,236	59,359,034	59,430,759	418,066,724
<u>Less:</u> Native Load Transfers, Native Load Transfer Banefit & DE - Progress fees	\$ 30,8	7,067 \$	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	\$ 47,00	5,899 \$ 1	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 \$	50,477,292 \$	211,261,324
NC Actual \$ (Calc)	\$ 30,96	7,487 \$	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	12,125,559 \$	19,880,072 \$	138,553,178
Billed rate (C/kWh):		.0868	8380.0	0.0858	0.0268	0.0868	0.0866	0.0868	8830.0	0.1631	0.1921	0.1922	0.1922	
BUIed \$:	\$ 4,97	9,550 \$	4,569,342 \$	3,638,897 \$	3,835,577 \$	3,693,311 \$	4,555,631 \$	4,897,517	\$ 4,698,172	\$ 10,132,031 \$	~ 7,954,367 5	8,291,468 \$	9,402,231 \$	70,448,093
(Over)/ Under \$:	\$ 25,98	7,937 \$	3,804,155 \$	3,176,444 \$	2,339,278 \$	8,085,029 \$	2,503,779 \$	3,149,247	\$ 4,717,908	3,250,015 \$	1,779,366	9,834,085 \$	10,477,841 \$	68,105,086
Capacity component of purchased power	_													
System Actual 5 - Capacity component of Cherokee County Cogen Purchases System Actual 5 - Capacity component of Purchased Power for REPS Compilance System Actual 5 - Capacity component of HB589 Purpa QF purchases System Actual 5 - Capacity component of SC DERP	3:	2,948 \$ 5,469 5,410 57	422,948 \$ 465,590 362,951 37	211,474 \$ 421,064 415,622 64	517,448 397,921 28	\$17,211 \$ 539,749 232,512 13	1,374,591 \$ 567,326 271,686 21	2,279,476 1,225,424 78	3,116,270 : 2,238,065 1,199,451 84	2,451,979 1,251,154 72	211,474 \$ 1,549,703 924,601 79	211,474 \$ 659,013 242,932 19	211,474 \$ 594,902 \$ 159,399 \$ 13 \$	10,514,290 12,870,784 7,000,074 565
System Actual \$ - Sch 2 pg 1 ANNUAL VIEW		5,884 \$	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 \$	50,385,713
NC Actual \$ (Cale) (3)	\$ 82	3,210 \$	845,534 \$	708,183 \$	761,317 \$	736,059 \$	1,495,523 \$	4,511,056	4,427,817	2,928,099 \$	1,887,131 \$	752,241 \$	652,488 \$	20,528,657
Billed rate (C/kWh):	1	.0241	0,0241	0.0241	0.0241	0.0241	0.0241	0.0241	0.0241	0,0289	0.0353	0.0353	0.0353	
Büled \$:	\$ 1,36	,962 \$	1,214,368 \$	1,011,356 \$	1,066,019 \$	1,026,479 \$	1,265,143 \$	1,361,163	1,305,759	1,795,614 \$	1,462,023 \$	1,524,125 \$	1,728,504 \$	16,145,316
(Over)/Under S:	\$ (55	i,752) \$	(368,834) \$	(303,173) \$	(304,702) \$	(290,420) \$	229,380 \$	9,149,893	3,122,057	1,132,485 \$	420,108 \$	(771,884) \$	(1,073,816) \$	4,383,341
TGTAL (Over)/ Under \$:	\$ 25,43	,185 \$	5,435,322 \$	2,873,271 \$	2,034,\$77 \$	2,794,608 \$	2,733,159 \$	6,299,140	7,839,965	4,382,500 \$	2,199,474 \$	9,062,201 \$	9,402,025 _\$	72,488,427

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, 2017
Docket E-7, Sub 1190

McGee Workpaper 10b

2017 System KWH Sales - Sch 4, Adjusted NC Retall KWH Sales - Sch 4 NC Retall % of Sales, Adjusted (Calc)		7 708,015 781,160 66.00%	Feb17 6,554,206,632 4,409,516,555 67.28%	Mar17 6,358,740,783 4,161,725,776 65.45%	Apr17 7,141,766,120 4,712,572,814 65.99%	May17 5,899,728,291 3,804,926,476 64,49%	June 17 7,385,182,605 4,858,493,561 65,78%	Jul17 8,217,318,035 5,393,164,464 65,63%	Aug17 8,246,956,880 5,434,256,910 65,90%	Sep17 7,636,553,967 5,082,625,773 66.56%	Oct17 6,672,440,753 4,373,336,154 65.54%	Nov17 6,414,671,902 4,193,859,450 65.38%	Dec17 7,062,789,900 4,623,039,595 65,32%	12 ME 85,127,463,884 55,012,298,688 65,80%
NC retail production plant %		67.09%	67.09%	67.09%	67.09%	67,09%	67.09%	67.09%	67.09%	67.0 9%	67.09%	67.09%	67.09%	67.09%
Fuel and Fuel related component of purchased power	_													
System Actual S - Sch 3 FuelS: System Actual S - Sch 3 Fuel-relatedS; Economic Purchases System Actual S - Sch 3 Fuel-relatedS; Purchased Power for REPS Compliance System Actual S - Sch 3 Fuel-relatedS; CDERP System Actual S - Sch 3 Fuel-relatedS; CDERP System Acutal S - Sch 3 Fuel-relatedS; HISS89 purpa Purchases	2,0	,477,669 : 015,378 453,055	16,876,907 1,988,183 2,550,377	\$ 10,096,048 1,423,270 3,307,695	\$ 8,192,583 \$ 946,815 4,043,976	9,721,355 1,094,013 3,816,768	1,071,142 1 1,076,835 4,301,618	\$ 12,026,892 1,880,095 4,300,868	\$ 14,840,029 2,503,480 4,332,085 (8,513) 2,942,527	\$ 18,993,838 .1,906,962 3,902,317 242 2,459,473	\$ 17,656,690 \$ 2,121,832 3,805,061 225 2,447,053	22,489,529 \$ 2,815,382 3,655,861 208 2,984,629	25,927,577 \$ 3,654,363 \$ 2,991,972 \$ 147 \$ 2,150,732 \$	181,370,259 23,425,608 43,461,653 (7,691) 12,384,414
Total System Economic & QF\$	18,5	946,102	21,415,467	14,827,013	13,183,374	14,632,135	15,449,595	18,207,855	24,609,60B	27,262,832	26,030,861	31,345,609 \$	34,724,791	260,635,243
<u>Less:</u> Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	\$ 1D,	063,655	13,734,418	\$ 7,330,149	\$ 6,099,895 \$	7,828,909	6,973,202	§ 9,283,031	\$ 11,761,966	\$ 17,022,958 \$	\$ 15,515,603 \$	18,675,689 \$	20,326,204 \$	144,615,679
Total System Economic \$ without Native Load Transfers	\$ 8,8	382,447 \$	7,681,049 \$	7,496,864 \$	7,083,479_\$	6,803,227 \$	8,476,393 \$	8,924,824	12,847,642	10,239,874 \$	10,515,258 \$	12,669,920 \$	14,398,587 \$	116,019,564
NC Actual \$ (Cale)	\$ 5,8	362,290 \$	5,167,630 \$	4,906,615 \$	4,674,111 \$	4,387,622 \$	5,575,614 \$	5,857,513	B,466,452	6,815,306 \$	6,892,044 \$	8,283,489 \$	9,405,725 \$	76,294,410
Billed rate (c/kWh):		0.1074	0.1074	0.1074	0.1074	0.1074	0.1074	0.1074	0.1074	0.0868	0.0868	0.0868	0.0868	
Billed \$:	\$ 5,3	143,741 S	4,736,553 \$	4,470,385 \$	5,062,086 \$	4,087,123 \$	5,218,829 \$	5,793,154	5,837,295	4,414,019 \$	3,798,034 \$	3,642,167 \$	4,006,205 \$	56,409,592
(Over)/ Under \$:	\$ 5	18,549 \$	431,076 \$	436,230 \$	(887,975) \$	300,499 \$	356,785 \$	64,358 \$	2,629,158	2,401,287 \$	3,094,010 \$	4,641,322 \$	5,399,519 \$	19,884,818
Capacity component of purchased power	_													
System Actual 5 - Capacity component of Cherokee County Cogen Purchases System Actual 5 - Capacity component of Purchased Power for REPS Compilance System Actual 5 - Capacity component of RBS89 Purpa QF purchases System Actual 5 - Capacity component of SC DERP		119,234 \$ 392,592	419,233 \$ 412,586	209,616 \$ 456,453	209,616 \$ 533,339	314,425 \$ 443,290	1,362,507 \$ 522,270	3,144,246 \$ 2,084,627	3,144,246 (2,035,395 1,341,938 (4,510)	628,850 \$ 1,896,602 1,167,715 99	209,616 \$ 1,684,518 1,069,000 101	209,616 \$ 519,390 325,098 37	209,516 \$ 374,434 \$ 234,918 \$ 22 \$	10,480,821 12,355,496 4,139,669 (4,251)
System Actual S - Sch 2 pg 1 ANNUAL VIEW	\$ 8	11,826 \$	831,819 \$	666,069 \$	742,955 \$	757,715 \$	1,884,777 \$	5,228,873	6,517,069	3,693 , 266 \$	2,963,235 \$	1,055,141 \$	818,990 \$	25,971,735
NC Actual \$ (Calc)	\$ 5	44,694 \$	558,108 \$	446,898 \$	498,485 \$	508,388 \$	1,264,590 \$	3,508,30B \$	4,372,622	2,477,994 \$	1,988,180 \$	707,946 \$	549,501 \$	17,425,714
Billed rate (c/kWh):		0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0204	0.0241	0.0241	0.0241	0.0241	
Billed \$:	\$ 1,0	14,183 \$	898,945 \$	848,429 \$	960,728 \$	775,691 \$	990,476 \$	1,099,476 \$	1,107,854	1,226,785 \$	1,055,585 \$	1,012,265 S	1,113,442 \$	12,103,858
(Over)/Under\$:	\$ (4	69,469) \$	(340,837) \$	(401,531) \$	(462,243) \$	(267,302) \$	274,114 \$	2,408,832 \$	3,264,768	1,251,209 \$	932,595 \$	(304,319) \$	(563,941) \$	5,321,856
TOTAL [Over]/ Under \$:													\$	25,206,674

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense Actual Sales by Jursidication - Subject to Weather Twelve Months Ended December 31, 2018 Docket E-7, Sub 1190 MWhs

Line #	<u>Description</u>	Reference	NORTH CAROLINA	SOUTH CAROLINA	Retail TOTAL COMPANY	<u>% NC</u>	<u>% SC</u>
1	Residential	Company Records	22,763,029	6,953,474	29,716,503	76.60	23.40
2 3 4	Total General Service less Lighting and Traffic Signals General Service subject to weather	Company Records	24,162,007 261,740 23,900,267	5,800,354 44,385 5,755,969	29,962,361 306,125 29,656,236	80.59	19.41
5	Industrial	Company Records	12,555,667	9,164,704	21,720,370	57.81	42.19
6 7	Total Retail Sales Total Retail Sales subject to weather	1+2+5 1+4+5	59,480,703 59,218,963	21,918,532 21,874,146	81,399,234 81,093,109	73.03	26.97

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, 2018
Docket E-7, Sub 1190

REVISED McGee Workpaper 12 Page 1

			Total	NO	RETAIL	SC	SC RETAIL	
Line			Company	% To		% To		
#	Description	REFERENCE	MWh	Total	MWh	Total	MWh	
	Residential							
1	Total Residential		(1,185,150)	76.60	(907,825)	23.40	(277,325)	
	General Service							
2	Total General Service		(790,151)	80.59	(636,783)	19.41	(153,368)	
	<u>Industrial</u>							
3	Total Industrial		(181,656)	57.81	(105,015)	42.19	(76,641)	
4	Total Retail	L1+ L2+ L3	(2,156,957)		(1,649,623)		(507,334)	
5	Wholesale		(250,198)					
6	Total Company	L4 + L5	(2,407,155)	==	(1,649,623)	=	(507,334)	

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense Weather Normalization Adjustment by Class by Month Twelve Months Ended December 31, 2018 Docket E-7, Sub 1190

REVISED McGee Workpaper 12 Page 2

	Residential	Commercial	Industrial
2018	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT
JAN	(218,136)	(35,856)	-
FEB	(21,771)	(2,405)	(1,317)
MAR	297,124		
APR	(74,206)	(16,924)	41,146
MAY	7,286	(10,553)	3,908
JUN	(349,703)	(195,436)	(108,358)
JUL	(226,914)	(108,742)	(35,233)
AUG	51,266	25,765	13,164
SEP	(130,432)	(533,537)	(522,476)
ОСТ	(295,132)	119,399	432,355
NOV	(13,417)	(2,573)	(4,846)
DEC	(211,114)	(29,290)	
Total	(1,185,150)	(790,151)	(181,656)

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		11110169016	
2018	TOTAL MWH ADJUSTMENT	Nata	The Resale customers include:
		Note:	i ne kesale customers include:
JAN	(85,191)	1	Concord
FEB	29,047	2	Dallas
MAR	(49,586)	3	Forest City
APR	(3,762)	4	Kings Mountain
MAY	(27,157)	5	Due West
JUN	(32,305)	6	Prosperity
JUL	(10,478)	7	Lockhart
AUG	(1,285)	8	Western Carolina University
SEP	(48,942)	9	City of Highlands
ОСТ	(5,595)	10	Haywood
NOV	1,645	11	Piedmont
DEC	(16,590)	12	Rutherford
		13	Blue Ridge
Total	(250,198)	14	Greenwood

Revised McGee Workpaper 13
Page 1

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense
Customer Growth Adjustment to kWh Sales
Twelve Months Ended December 31, 2018
Docket E-7, Sub 1190

	F-11 11		NC Proposed KWH ¹	SC Proposed KWH	Wholesale Proposed KWH	
<u>Line</u>	Estimation Method ¹	Rate Schedule	Adjustment	Adjustment	Adjustment	Total Company
			najastinent	Aujustillett	Aujustilient	Total Company
1	Regression	Residential	188,586,837	68,285,920		
2						
3		General Service (excluding lighting):				
4	Customer	General Service Small and Large	40,462,204	27,381,444		
5	Regression	Miscellaneous	(127,805)	272,435		
6		Total General	40,334,399	27,653,879		
7						
8		Lighting:				
9	Regression	T & T2 (GL/FL/PL/OL)2	(1,092,054)	1,005,314		
10	Regression	TS	(4,424)	(8,749)		
11		Total Lighting	(1,096,478)	996,565		
12						
13	•	Industrial:				
14	Customer	I - Textile	2,832,784	(1,947,494)		
15	Customer	I - Nontextile	12,316,671	1,330,441		
16		Total Industrial	15,149,455	(617,052)		
17						
18						
19		Total	242,974,212	96,319,312	80,403,406 WP 13-2	419,696,93

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

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

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

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

Revised McGee Workpaper 13 Page 2

North Carolina Annual Fuel and Fuel Related Expense Customer Growth Adjustment to kWh Sales-Wholesale Twelve Months Ended December 31, 2018 Docket E-7, Sub 1190

Calculation of Customer Growth Adjustment to KWH Sales - Wholesale

Line <u>No.</u>		<u>Reference</u>	
1	Total System Resale (kWh Sales)	Company Records	11,246,967,907
2	Less Intersystem Sales	Schedule 1	1,945,444,289
3	Total KWH Sales Excluding Intersystem Sales	L1 - L2	9,301,523,618
4	Residential Growth Factor	Line 8	0.8644
5	Adjustment to KWH's - Wholesale	L3 * L4 / 100	80,403,406
6	Total System Retail Residential kWh Sales	Company Records	29,716,502,591
7	2018 Proposed Adjustment KWH - Residential (NC+SC)	WP 13 1	256,872,757
8	Percent Adjustment	L7 / L6 * 100	0.8644

[&]quot;RAC001": CarolinasOperating Revenue Report

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense Coal Inventory Rider True-up Calculation Docket E-7, Sub 1190

Workpaper 14

			2018	2018		2018	2018	2018	2019		
Line No.			 August	September		October	November	December	January	Tot	al to Date
1	Full Load Burn 35 day supply Beginning Actual tons on hand	Input	2,209,515	2,209,	15	2,209,515					
2	(including Terminals and in-transit) - actual Ending Actual tons on hand	Input	2,349,694	2,356,	42	2,244,622					
3	(including Terminals and in-transit) - actual	Input	2,356,042	2,244,0	22	2,347,399					
4	Average tons on hand	(L2 + L3)/2	2,352,868	2,300,		2,296,010					
5	Coal tons in excess of 35 days	14-11	143,353	90,8		85.495					
6	Prîce per ton	laput	\$ 73.23		23 \$	73.23					
7	Dollars in excess of 35 day supply	L5 * L6	\$ 10,497,741	\$ 6,650,9	37 S	6,334,064					
8	Number of days supply Carrying cost percentage	L4 / 63,129 tons	37		36	36					
9	8/1/2018-12/31/2018 (a) (b)		0.745623%	0.7456	3%	0.745623%					
10	Total system amount to recover	L7 * L9	\$ 78,274	\$ 49,5	88 \$	47,228				\$	175,090
11	NC allocation percentage	Input	66.6244%	66.624	4%	66.6244%				•	66.6244%
12	Total NC retail amount to recover	L10 * L11	\$ 52,149	\$ 33,0	38 \$	31,466				\$	116,653
13	NC Actual \$ Collected	Input	\$ 8,997	5 24,9	38 \$	18,962	S 17.250 S	11.647	\$ 33	•	81,827
14	GRT & Reg. Fee percentage	Input	0.14%	0.1	4%	0.14%	0,14%	0,14%	0.14		0.14%
15	GRT and Reg Fee \$'s To Back Out	113 ° L14	\$ 13	\$	35 \$	26		16		Ś	114
16	Rider Excluding GRT & Reg Fee	113 - 115	\$ 8,984	\$ 24,5	03 \$	18,936			•	\$ \$	81,712
17	(Over)/Under Collected - at current tax rate	L12 - L16	\$ 43,165	\$ 8,1	35 \$	12,530	\$ (17,226) \$	(11,631)	\$ (33	3) \$	34,940
18	(Over)/Under Collected - at future tax rate	L19*(1-CTR)/(1-FTR)	\$ 43,016	\$ 8,1	O7 \$	12,486	(17,166) \$	(11,590)	\$ (33	1) \$	34,820

⁽ a) Carrying costs exclude gross receipts tax and regulatory fee.

Rate Case	(OVER)/UNDER BALANCE	CUMULATIVE BASIS FOR COMPUTING RETURN	MONTHLY DEFERRED INCOME TAX 0410.11 - (Current Tax Rete) 0.236686	CUMULATIVE DEFERRED INCOME TAX	NET DEFERRED BALANCE AFTER- TAX	MONTHLY AFTER- TAX RETURN ON DEFERRAL (Interest) 0.005691	CUMULATIVE AFTER-TAX INTEREST INCOME	GROSS UP OF "AFTER-TAX RETURN ON DEFERRAL" TO PRETAX STATUS 0421.64 0.763314	CUMULATIVE GROSS PRETAX RETURN
Rales 1/01/2018 - 12/31/18			0.236149			0.005692		0.763851	
Rates 1/1/19 - current			0.233503			0.005697		0.766498	
BEGINNING BAL.	0	0	0			0	0	0.100430	
	_				-	<u>-</u> -			<u>`</u>
Aug-18	43,165	43,165	10,193	10,193	32,972	94	94	123	123
Sep-18	8,135	51,300	1,921	12,114	39,186	205	299	267	390
Oct-18	12,530	63,830	2,959	15,073	48,757	250	549	326	715
Nov-18	(17,226)	46,604	(4,068)	11,005	35,599	240	789	313	1,029
Dec-18	(11,631)	34,973	(2,747)	8,258	26,715	177	966	231	1,260
Jan-19	(33)	34,940	(8)	8,250	26,690	152	1,118	198	1,459
Feb-19	0	34,940	0	8,250	26,690	152	1,270	198	1,657
Mar-19	0	34,940	0	8,250	26,690	152	1,422	198	1,855
Apr-19	0	34,940	0	8,250	26,690	152	1,574	198	2,054
May-19	0	34,940	0	8,250	26,690	152	1,726	198	2,252
Jun-19	0	34,940	0	6,250	26,690	152	1,878	198	2,451
Jul-19	0	34,940	0	8,250	26,690	152	2,030	198	2,649
Aug-19		34,940		8,250	26,690	152	2,182	198	2,847
ENDING BALANCE	34,940	34,940	8,250	8,250	26,690	2,192	2,182	2,847	2,847

⁽b) Revised to reflect current state income tax apportionment percentages.

Secret Supplemental

REVISED McGee Exhibit 1 T/A

T/A

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, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

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 1163)					
1	Approved Fuel and Fuel Related Costs Factors	Input	1.7003	1.8314	1.8020	1.7769
2	EMF Increment	Input	0.0980	0.1068	0.2213	0.1290
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	1.7983	1.9382	2.0233	1.9059
	Fuel and Fuel Related Cost Factors Required by Rule R8-55					
5	Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales	Exh 2 Sch 2 pg 2	1.9648	2.0622	2.1159	2.0393
6	NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales	Exh 2 Sch 3 pg 2	1.9969	2.0829	2.1266	2.0613
	Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of 92.95%					
7	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	Exh 2 Sch 1 pg 2	1,7643	1.9310	1.8726	1.8574
8	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Exh 2 Sch 1 pg 2	0.0483	0.0251	0.0208	0.0327
9	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum	1.8126	1.9561	1.8934	1.8901
10	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1375	0.0927	0.2089	0.1346
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	1.9501	2.0488	2.1023	2.0247

Note: Fuel factors exclude regulatory fee

McGee Exhibit 2
Schedule 1

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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 92.95% Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

Line#	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D*E=F
1	Total Nuclear	Workpaper 1	58,459,031	0.6115	357,497,468
2	Coal	Workpaper 3 & 4	18,355,203	3.1057	570,050,837
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9			24,959,649
5	Total Fossil	Sum	39,176,820	_	1,098,194,572
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation	Workpaper 3	184,444		-
		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Line 9	98,785,509		1,455,692,040
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
<u> </u>	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)		(91,061,695)
13	Net Generation	Sum Lines 10-12	83,018,229		1,346,517,369
14	Purchased Power	Workpaper 3 & 4	9,280,339	3.1771	294,841,746
15	JDA Savings Shared	Workpaper 5			19,972,407
16	Total Purchased Power		9,280,339	_	314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	92,298,568	1.8000	1,661,331,522
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)	2.4698	(16,986,301)
19	Line losses and Company use	Line 21-Line 17-Line 18	(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,644,345,221
21	Projected System MWh Sales for Fuel Factor	Workpaper 7	87,243,844		87,243,844
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.8848

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.95%
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

REVISED McGee Exhibit 2 Schedule 1 Page 2 of 3

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7	21,397,068	23,381,644	12,939,285	57,717,997
Calcula	tion of Renewable and Cogeneration Purchased Power Capacity Rate by Class					Amount
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				14,874,084
4 5	Total of Renewable and QF Purchased Power Capacity NC Portion - Jursidicational % based on Production Plant Allocator	Line 2 + Line 3				\$ 28,169,738 67.04%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				\$ 18,884,001
7	Production Plant Allocation Factors	Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 10,325,952 \$			\$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0483	0.0251	0.0208	0.0327
<u>Summa</u>	ry 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	1.7643	1.9310	1.8726	1.8574
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0483	0.0251	0.0208	0.0327
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.8126	1.9561	1.8934	1.8901
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1375	0.0927	0.2089	0.1346
14	EMF Interest (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	-	-	-	5.15-10
15	Net Fuel and Fuel Related Costs Factors cents/kWh	Exh 2 Sch 1 Page 3	1.9501	2.0488	2.1023	2.0247

Note: Rounding differences may occur

Note: Rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense Calculation of Uniform Percentage Average Bill Adjustment by Customer Class Proposed Nuclear Capacity Factor of 92.95% Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

REVISED McGee Exhibit 2 Schedule 1 Page 3 of 3

Line #	Rate Class	Projected Billing Period MWh Sales A	Аг	nnual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/(Decrease) as % of Annual Revenue at Current Rates D	Total Fuel Rate Increase/(Decrease) E	Current Total Fuel Rate (Including Capacity and EMF) E-7, Sub 1163	Proposed Total Fuel Rate (Including Capacity and EMF)
		••			•	J	If D=0 then 0 if not then	r	G
		Workpaper 7		Workpaper 8	Line 25 as a % of Column B	C/B	(C*100)/(A*1000)	McGee Exhibit 1	E+F=G
1	Residential	21,397,068	\$	2,183,285,633	\$ 32,481,139	1.49%	0.1518	1.7983	1.9501
2	General Service/Lighting	23,381,644		1,738,716,194	25,867,199	1,49%	0.1106	1.9382	2.0488
3	Industrial	12,939,285		687,001,167	10,220,642	1.49%	0,0790	2.0233	2.1023
4	NC Retail	57,717,997	\$	4,609,002,994	\$ 68,568,980	1.49%			2.3722
	Total Proposed Composite Fuel Rate:								
5	Total Fuel Costs for Allocation	Workpaper 7	\$	1,648,542,239					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 1, Page 2		28,169,738					
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,620,372,501					
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7		87,243,844					
9	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
10	Allocation %	Line 9 / Line 8		66.16%				•	
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	1,072,038,447					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 1, Page 2		18,884,001					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	1,090,922,448					
14	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.8901					
	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.1346					
	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000					
18	Total Proposed Composite Fuel Rate	Sum		2.0247					
	Total Current Composite Fuel Rate - Docket E-7 Sub 1163:								
	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.7769					
	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1290					
	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000					
22	Total Current Composite Fuel Rate	Sum		1.9059					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		0.1188					
24	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	Ś	68,568,980					

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Fuel and Fuel Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 2 Page 1 of 3

_ Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Total Nuclear	Workpaper 1	58,459,031	0.6115	357,497,468
2	Coal	Calculated	19,611,529	3.1057	609,068,093
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4166	503,184,086
4	Reagents and Byproducts	Workpaper 9	•		24,959,649
5	Total Fossil	Sum	40,433,146	_	1,137,211,828
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation		184,444		
		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Line 9	100,041,835		1,494,709,296
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
/ 12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)		(91,061,695)
13	Net Generation	Sum	84,274,555		1,385,534,625
14	Purchased Power	Workpaper 3 & 4	9,280,339		294,841,746
15	JDA Savings Shared	Workpaper 5	-		19,972,407
16	Total Purchased Power	Sum	9,280,339	_	314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	93,554,894		1,700,348,778
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)		(16,986,301)
19	Line losses and Company use		(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,683,362,477
21	Normalized Test Period MWh Sales	Exhibit 4	88,500,170		88,500,170
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.9021

North Carolina Annual Fuel and Fuel Related Expense Calculation of Fuel and Fuel Related Cost Factors Using: Proposed Nuclear Capacity Factor of 92.95% and Normalized Test Period Sales Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

REVISED McGee Exhibit 2 Schedule 2 Page 2 of 3

Line#	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Normalized Test Period MWh Sales	Exhibit 4	22,043,791	23,564,462	12,465,801	58,074,054
<u>Calcula</u>	tion of Renewable Purchased Power Capacity Rate by Class					Amount
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				14,874,084
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				\$ 28,169,738
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input				67.04%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				\$ 18,884,001
7	Production Plant Allocation Factors	Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 10,325,952 \$	5,864,785	2,693,265	\$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0468	0.0249	0.0216	0.0325
Summa	ry 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	1.7805	1.9446	1.8854	1.8722
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0468	0.0249	0.0216	0.0325
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.8273	1.9695	1.9070	1.9047
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1375	0.0927	0.2089	0.1346
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	1.9648	2.0622	2.1159	2.0393

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 92.95% and Normalized Test Period Sales

Test Period Ended December 31, 2018

Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

Note: Rounding differences may occur

REVISED McGee Exhibit 2 Schedule 2 Page 3 of 3

Line #	Rate Class	Normalized Test Period MWh Sales A Exhibit 4	C	ual Revenue at urrent rates B Workpaper 8	Allocate Fuel Costs Increase/(Decrease) to Customer Class C Line 25 as a % of Column	Increase/(Decrease) as % of Annual Revenue at Current Rates D C/B	Total Fuel Rate Increase/(Decrease) E If D=0 then 0 if not then (C*100)/(A*1000)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1163 F McGee Exhibit 1	Proposed Total Fuel Rate (Including Capacity and EMF) G E+F=G
		CXIIIDIC		evolkhehet p		C/ B	(C 100)/(A 1000)	WICGES EXTERNET	E41-Q
1	Residential	22,043,791	. \$	2,183,285,633	\$ 36,697,928	1.68%	0.1665	1.7983	1.9648
2	General Service/Lighting	23,564,462	\$	1,738,716,194	29,225,347	1.68%	0,1240	1.9382	2.0622
3	Industrial .	12,465,801	. \$	687,001,167	11,547,513	1,68%	0.0926	2.0233	2.1159
4	NC Retail	58,074,054	\$	4,609,002,994	\$ 77,470,788	•			
	Total Proposed Composite Fuel Rate:								
5	Total Fuel Costs for Allocation	Workpaper 7a	\$	1,687,559,495					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 2, Page 2	•	28,169,738					
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,659,389,757					
8	Normalized Test Period System MWh Sales for Fuel Factor	Workpaper 7a		88,629,309					
9	NC Retail Normalized Test Period MWh Sales	Exhibit 4		58,074,054					
10	Allocation %	Line 9 / Line 8		65.52%					
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	1,087,232,168					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 2, Page 2		18,884,001					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	1,106,116,170					
14	NC Retail Normalized Test Period MWh Sales	Line 4		58,074,054					
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.9047					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.1346					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1		0.0000					
18	Total Proposed Composite Fuel Rate	Sum		2.0393					
	Total Current Composite Fuel Rate - Docket E-7 Sub 1163:								
19	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.7769					
20	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1290					
21	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000					
22	Total Current Composite Fuel Rate	Sum		1.9059					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22		0.1334					
24	NC Retail Normalized Test Period MWh Sales	Exhibit 4		58,074,054					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	77,470,788					

DUKE ENERGY CAROLINAS

North Carolina Annual Fuel and Fuel Related Expense

NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales
Test Period Ended December 31, 2018

Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

McGee Exhibit 2 Schedule 3 Page 1 of 3

Line#	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
	-		D	E	D * E = F
1	Total Nuclear	Workpaper 2	56,739,499	0.6115	346,981,926
2	Coal	Calculated	19,636,789	3.1057	609,852,590
3	Gas CT and CC	Workpaper 3 & 4	20,821,617	2.4 16 6	503,184,086
4	Reagents and Byproducts	Workpaper 9	-		24,959,649
5	Total Fossil	Sum	40,458,406	_	1,137,996,325
6	Hydro	Workpaper 3	4,839,425		
7	Net Pumped Storage	Workpaper 3	(3,874,211)		
8	Total Hydro	Sum	965,214		
9	Solar Distributed Generation	Workpaper 3	184,444		
خ		Line 1 + Line 5 + Line 8 +			
10	Total Generation	Line 9	98,347,563		1,484,978,251
′ 11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(18,112,976)
12	Less Catawba Joint Owners	Calculated	(14,450,934)	_	(88,383,179)
13	Net Generation	Sum	83,018,229	_	1,378,482,097
14	Purchased Power	Workpaper 3 & 4	9,280,339	•	294,841,746
15	JDA Savings Shared	Workpaper 5		_	19,972,407
16	Total Purchased Power	Sum	9,280,339	_	314,814,153
17	Total Generation and Purchased Power	Line 13 + Line 16	92,298,568		1,693,296,250
18	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(687,755)		(16,986,301)
19	Line losses and Company use		(4,366,969)		-
20	System Fuel Expense for Fuel Factor	Lines 17 + 18 + 19			1,676,309,949
21	Projected System MWh Sales for Fuel Factor	Workpaper 7b	87,243,844		87,243,844
22	Fuel and Fuel Related Costs cents/kWh	Line 20 / Line 21 / 10			1.9214

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 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Revised McGee Exhibit 2 Schedule 3 Page 2 of 3

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7b	21,397,068	23,381,644	12,939,285	57,717,997
<u>Calcula</u>	tion of Renewable Purchased Power Capacity Rate by Class					<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 13,295,654
3	QF Purchased Power - Capacity	Workpaper 4				\$ 14,874,084
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3			•	\$ 28,169,738
5	NC Portion - Jursidicational % based on Production Plant Allocator	Input			•	67.04%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5			•	\$ 18,884,001
7	Production Plant Allocation Factors	Input	54.68%	31.06%	14.26%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 10,325,952 \$	5,864,785	2,693,265	\$ 18,884,001
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0483	0.0251	0.0208	0.0327
Summa	ry 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	1.8111	1.9651	1.8969	1.8940
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0483	0.0251	0.0208	0.0327
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	1.8594	1.9902	1.9177	1.9267
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	0.1375	0.0927	0.2089	0.1346
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	1.9969	2.0829	2.1266	2.0613

Note: Rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Uniform Percentage Average Bill Adjustment by Customer Class
NERC 5 Year Average Nuclear Capacity Factor of 90.21% and Projected Period Sales
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Revised McGee Exhibit 2 Schedule 3 Page 3 of 3

Line #	Rate Class	Projected Billing Period MWh Sales		Current rates_	Incre	ease/(Decrease) Eustomer Class	at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1163	Proposed Total Fuel Rate (including Capacity and EMF)
		A		В		С	C/B≠D	E	F	G
		Workpaper 7b		Workpaper 8	1 Ine 2	5 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	21,397,068		2,183,285,633		42,487,955	1.95%	0.1986	1.7983	1.9969
2	General Service/Lighting	23,381,644		1,738,716,194		33,836,386		0.1447	1.9382	2.0829
3	Industrial NC Retail	12,939,285	_	687,001,167		13,369,426		0.1033	2.0233	2.1266
4	NC Retail	57,717,997	\$	4,609,002,994	5	89,693,767	-			
	Total Proposed Composite Fuel Rate:									
5	Total Fuel Costs for Allocation	Workpaper 7b	Ś	1,680,506,956						
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 3, Page 2	-	28,169,738						
7	System Other Fuel Costs	Line 5 - Line 6	\$	1,652,337,228	•					
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7b		87,243,844						
9	NC Retail Projected Billing Period MWh Sales	Line 4		57,7 17,997						
10	Allocation %	Line 9 / Line 8	_	66.16%						
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$	1,093,186,310						
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 3, Page 2		18,884,001						
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$	1,112,070,311						
14	NC Retail Projected Billing Period MWh Sales	Line 4		57,717,997						
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10		1.9267						
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1		0.1346						
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	_	0.0000						
18	Total Proposed Composite Fuel Rate	Şum		2.0613						
	Total Current Composite Fuel Rate - Docket F-7 Sub 1163:									
	Current composite Fuel Rate cents/kWh	McGee Exhibit 1		1.7769						
	Current composite EMF Rate cents/kWh	McGee Exhibit 1		0.1290						•
	Current composite EMF Interest Rate cents/kWh	McGee Exhibit 1		0.0000						
22	Total Current Composite Fuel Rate	Sum		1.9059						
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		57,717,997						
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$	89,693,767						

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Revised McGee Exhibit 3
Page 1 of 4

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense Calculation of Experience Modification Factor - Proposed Composite Test Period Ended December 31, 2018

Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

Line No.	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	MW	Retail h Sales (c)	(0	Reported Over)/ Under Recovery (d)
1	January 2018	14		£ 2 }	5,733,820	\$	70,210,460
2	February	* 'p	\$	2 1	5,031,181	\$	(21,289,748)
3	March(1)	5	7 Mg	E.)	4,190,094	\$	4,767,793
4	April(1)	چانجان	4 y	,+ \	4,416,566	\$	(13,736,437)
5	May		5		4,252,750	\$	6,136,829
6	June(1)		•		5,245,689	\$	6,622,242
7	July(1)	*.		· * 4	5,639,361	\$	14,497,484
8	August	* "		. "	5,409,821	\$	13,507,110
9	Şeptember		en a .	v: •	6,212,764	\$	(5,592,874)
10	October		T 22 28 14 24 24 24 24 24 24 24 24 24 24 24 24 24	5. _2.* v	4,141,212	\$	16,417,033
11	November		4		4,314,713	\$	17,477,682
12	December		- *		4,892,732	\$	22,827,662
13	Total Test Period				59,480,703	\$	131,845,236
14	Adjustment to remove (Over) / Under	Recovery - Janua	ary - March 2018 ⁽²⁾			\$	53,688,503
15	Include Under Recovery related to Coa	l Inventory Rider				\$	37,667
16	Adjusted (Over)/ Under Recovery					\$	78,194,400
17	NC Retail Normalized Test Period MW	h Sales		Exhibit 4			58,074,054
18	Experience Modification Increment (D	ecrement) cents/	kWh				0.1346

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

⁽²⁾ January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 16. 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, 2018

Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

Revised McGee Exhibit 3 Page 2 of 4

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWH Sales (c)	(0	Reported Over)/ Under Recovery (d)
1	January 2018	2.2454	1.7919	2,747,953	\$	12,463,615
2	February	1.2214	1.7919	2,101,525	\$	(11,989,284)
3	March ⁽¹⁾	1.8936	1.7919	1,546,024	\$	1,587,096
4	April ⁽¹⁾	1.5682	1.7919	1,557,073	\$	(3,469,659)
5	May	2.2261	1.7919	1,361,386	\$	5,910,833
6	June ⁽¹⁾	1.9042	1.7919	1,940,879	\$	2,162,126
7	July ⁽¹⁾ ·	1.9028	1.7919	2,227,922	\$	2,375,059
8	August	1.9776	1.7885	2,050,040	\$	3,875,805
9	September	1.7474	1.7477	2,200,376	\$	(6,784)
10	October	2.0726	1.7004	1,554,551	\$	5,784,976
11	November	2.3435	1.7003	1,436,836	\$	9,241,689
12	December	1.9167	1.7003	2,038,462	\$	4,411,281
13	Total Test Period			22,763,029	\$	32,346,754
14	Test Period Wtd Avg. ¢/kWh	1.9096	1.7671			
15	8 August 1.9776 1.7885 2,050,040 9 September 1.7474 1.7477 2,200,376 10 October 2.0726 1.7004 1,554,551 11 November 2.3435 1.7003 1,436,836 12 December 1.9167 1.7003 2,038,462 13 Total Test Period Test Period Test Period Wtd Avg. ¢/kWh 1.9096 1.7671 15 Adjustment to remove (Over) / Under Recovery - January - March 2018 (2)					2,061,427
16	Include Under Recovery related to Coal	Inventory Rider			\$	14,415
17	Adjusted (Over)/Under Recovery				\$	30,299,742
18	NC Retail Normalized Test Period MWh	Sales	E	xhibit 4		22,043,791
19	Experience Modification Increment (Dec	crement) cents/	kWh			0.1375

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

^{. (2)} January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17. 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, 2018

Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

Revised McGee Exhibit 3
Page 3 of 4

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	(C	Reported Over)/ Under Recovery (d)
1	January 2018	3.5376	1.9253	2,053,224	\$	33,104,497
2	February	1.5865	1.9253	1,899,154	\$	(6,434,005)
3	March ⁽¹⁾	2.0122	1.9253	1,709,988	\$	1,503,768
4	April ⁽¹⁾	1.5762	1.9253	1,819,014	\$	(6,335,002)
5	May	1.9140	1.9253	1,860,965	\$	(210,465)
6	June ⁽¹⁾	1.9786	1.9253	2,190,371	\$	1,145,088
7	July ⁽¹⁾	2.1543	1.9253	2,291,796	\$	5,295,453
8	August	2.1026	1.9219	2,244,902	\$	4,054,944
9	September	1.6846	1.8801	2,660,685	\$	(5,202,149)
10	October	2.1707	1.8315	1,727,851	\$	5,860,345
11	November	2.1580	1.8314	1,824,017	\$	5,957,400
12	December	2.4310	1.8314	1,880,041	\$	11,272,678
13	Total Test Period		_	24,162,007	\$	50,012,553
14	Test Period Wtd Avg. ¢/kWh	2.1057	1.8989			
15	Adjustment remove (Over) / Under Recovery	- January - March	2018 ⁽²⁾		\$	28,174,260
16	Include Under Recovery related to Coal Inven	tory Rider			\$	15,301
17	Adjusted (Over)/ Under Recovery				\$	21,853,594
18	NC Retail Normalized Test Period MWh Sales		1	Exhibit 4		23,564,462
19	Experience Modification Increment (Decreme	nt) cents/kWh				0.0927

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

⁽²⁾ January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate.
Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17.
Rounding differences may occur

North Carolina Annual Fuel and Fuel Related Expense
Calculation of Experience Modification Factor - Industrial
Test Period Ended December 31, 2018
Billing Period September 2019 - August 2020
Docket E-7, Sub 1190

Revised McGee Exhibit 3 Page 4 of 4

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	(C	Reported Over)/ Under Recovery (d)
1	January 2018	4.6719	2.0297	932,643	\$	24,642,348
2	February	1.7515	2.0297	1,030,502	\$	(2,866,460)
3	March ⁽¹⁾	2.2081	2.0297	934,082	\$	1,676,929
4	April ⁽¹⁾	1.6509	2.0297	1,040,479	\$	(3,931,775)
5	May	2.0721	2.0297	1,030,399	\$	436,461
6	June ⁽¹⁾	2.3283	2.0297	1,114,438	\$	3,315,028
7	July ⁽¹⁾	2.6319	2.0297	1,119,643	\$	6,826,972
8	August	2.5265	2.0263	1,114,879	\$	5,576,360
9	September	1.8991	1.9275	1,351,703	\$	(383,942)
10	October	2.3580	1.8024	858,810	\$	4,771,711
11	November	2.0182	1.8020	1,053,860	\$	2,278,593
12	December	2.5353	1.8020	974,229	\$	7,143,703
13	Total Test Period			12,555,667	\$	49,485,928
14	Test Period Wtd Avg. ¢/kWh	2.3595	1.9661			
15	Adjustment to remove (Over) / Under Re	ecovery - January	- March 2018 ⁽²⁾		\$	23,452,816
16	Include Under Recovery related to Coal I	nventory Rider			\$	7,951
17	Adjusted (Over)/ Under Recovery				\$	26,041,062
18	NC Retail Normalized Test Period MWh S	iales	Ex	hibit 4		12,465,801
19	Experience Modification Increment (Deci	rement) cents/KW	/h			0.2089

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

⁽²⁾ January - March 2018 filed in fuel Docket E-7, Sub 1163 to update the EMF and included in current EMF rate. Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 17. Rounding differences may occur

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense Sales, Fuel Revenue, Fuel Expense and System Peak Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020

Docket E-7, Sub 1190

Supplinion Supplinion Revised McGee Exhibit 4

Line #	Description	Reference	т	otal Company	i	North Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
		Exhibit 6 Schedule 1 (Line 4)							
1	Test Period MWh Sales (excluding inter system sales)	and Workpaper 11 (NC retail)		90,487,628		59,480,703	22,763,029	24,162,007	12,555,667
2	Customer Growth MWh Adjustment	Workpaper 13 Pg 1		419,697		242,974	188,587	39,238	15,149
3	Weather MWh Adjustment	Workpaper 12		(2,407,155)		(1,649,623)	(907,825)	(636,783)	(105,015)
4	Total Normalized MWh Sales	Sum		88,500,170		58,074,054	22,043,791	23,564,462	12,465,801
5	Test Period Fuel and Fuel Related Revenue *		\$	1,670,560,911	\$	1,107,911,215			
6	Test Period Fuel and Fuel Related Expense *		\$	1,852,283,575	\$	1,239,756,450			
7	Test Period Unadjusted (Over)/Under Recovery		\$	181,722,664	\$	131,845,236			

		Winter Coincidental Peak (CP) kW
8	Total System Peak	18,875,799
9	NC Retail Peak	12,650,981
10	NC Residential Peak	6,917,677
11	NC General Service/Lighting Peak	3,929,002
12	NC Industrial Peak	1,804,302

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.

Succe Supplemental Book McGee Exhibit 5

DUKE ENERGY CAROLINAS North Carolina Annual Fuel and Fuel Related Expense **Nuclear Capacity Ratings** Test Period Ended December 31, 2018 Billing Period September 2019 - August 2020 Docket E-7, Sub 1190

	Rate Case Docket E-7,	Fuel Docket E-7,	Proposed Capacity
Unit	Sub 1146	Sub 1163	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

Second Supplementarion Revised McGee Exhibit 6

DECEMBER 2018 MONTHLY FUEL FILING

DUKE ENERGY CAROLINAS SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-7, Sub 1161

Line <u>No.</u>		December 2018	12 Months Ended December 2018
1	Fuel and fuel-related costs	\$ 167,457,560	\$ 1,885,269,343
_	MWH sales:		
2	Total system sales	7,718,637	92,433,072
3	Less intersystem sales	228,210	1,945,444
4	Total sales less intersystem sales	7,490,427	90,487,628
5	Total fuel and fuel-related costs (¢/KWH) (line 1/line 4)	2.2356	2.0835
_			
6	Current fuel and fuel-related cost component (¢/KWH)	1.7709	
	(per Schedule 4, Line 2a Total)	_	
	Generation Mix (MWH): Fossil (by primary fuel type):		
7	Coal	1,366,724	22,653,740
8	Fuel Oil	12,042	232,515
9	Natural Gas - Combined Cycle	1,059,332	13,695,555
10	Natural Gas - Combustion Turbine	42,178	2,550,671
11	Natural Gas - Steam	127,536	187,574
12	Biogas	3,259	30,204
13	Total fossil	2,611,071	39,350,259
14	Nuclear 100%	4,981,169	59,936,028
15	Hydro - Conventional	368,610	2,877,050
16	Hydro - Pumped storage	_ (44,946)	(529,226)
17	Total hydro .	323,664	2,347,824
18	Solar Distributed Generation	5,768	130,018
19	Total MWH generation	7,921,672	101,764,129
20	Less joint owners' portion - Nuclear	1,147,290	15,165,371
21	Less joint owners' portion - Combined Cycle	27,377	460,452
22	Adjusted total MWH generation	6,747,005	86,138,306

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

DUKE ENERGY CAROLINAS DETAILS OF FUEL AND FUEL-RELATED COSTS

Docket No. E-7, Sub 1161

Fuel and fuel-related costs:	December 2018	12 Months Ended December 2018
0501110 coal consumed - steam	\$ 46,847,568	\$ 675,888,074
0501222-0501223 biomass/test fuel consumed	φ το,οτι,οσο	Ψ 075,000,074
0501310 fuel oil consumed - steam	1,223,578	8,586,389
0501330 fuel oil light-off - steam	593,669	7,287,851
Total Steam Generation - Account 501	48,664,815	691,762,314
North Co. III A 1770		
Nuclear Generation - Account 518		
0518100 burnup of owned fuel	23,069,842	275,311,826
Other Generation - Account 547		
0547100, 0547124 - natural gas consumed - Combustion Turbine	2,272,971	98,161,049
0547100 natural gas consumed - Steam	5,696,114	8,633,545
0547101 natural gas consumed - Combined Cycle	31,773,516	373,047,230
0547106 biogas consumed - Combined Cycle	175,961	1,523,560
0547200 fuel oil consumed - Combustion Turbine	57,020	25,830,495
Total Other Generation - Account 547	39,975,582	507,195,879
· · · · · · · · · · · · · · · · · · ·		
Reagents		
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	1,549,134	27,110,200
Total Reagents	1,549,134	27,110,200
By-products		
Net proceeds from sale of by-products	502 525	C 00E 000
Total By-products	583,525 583,525	6,085,203
		6,085,203
Total Fossil and Nuclear Fuel Expenses		
Included in Base Fuel Component	113,842,898	1,507,465,422
Durchaged Device and Net Internal Account Page		
Purchased Power and Net Interchange - Account 555		
Capacity component of purchased power (economic)	211,474	10,514,290
Capacity component of purchased power (renewables)	594,915	13,300,661
Capacity component of purchased power (PURPA)	159,399	6,541,261
Fuel and fuel-related component of purchased power	<u>59,686,689</u>	434,709,945
Total Purchased Power and Net Interchange - Account 555	60,652,477	465,066,157
Less:		
Fuel and fuel-related costs recovered through intersystem sales	6.044.505	00.000.050
Fuel in loss compensation	6,944,585	86,336,253
Solar integration charge revenue	92,474	925,224
Total Fuel Credits - Accounts 447 /456	758	758
Total Fuel Oreuta - Accounts 447 /430	7,037,817	87,262,235
Total Fuel and Fuel-related Costs	<u>\$</u> 167,457,560	\$ 1,885,269,344
		·

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

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

December 2018

Purchased Power	Total		Capacity			ity	No. Frank	
Economic	\$		\$	mWh		Fuel \$	Fuel-related \$	Not Fuel \$ Not Fuel-related \$
Cherokee County Cogeneration Partners	\$ 1,287,426	\$	211,474	27,369	\$	946,407	\$ 129,545	
City of Kings Mountain	8.979	•	8,979	21,000	•	0.10,401	- 120,010	
DE Progress - Native Load Transfer	27.945.591		0,010	741,793		23,410,601	4,543,696	\$ (8,706
E Progress - Native Load Transfer Benefit	1,156,134			741,755		1,156,134		ψ (ο,ιοι
E Progress - Fees	(156,964)		•	-		1,100,104	(156,964)	
e rrogress - rees aywood Electric - Economic	40,903		20,630	336		12,367		
			20,630				7,906	
lacquarie Energy, LLC	6,826,931		=	146,439		4,164,428	2,662,503	
ICEMC - Economic	115,200		-	3,600		70,272	44,928	
CMPA Instantaneous - Economic	1,813,810		-	53,310		1,088,467	725,343	
TE Carolinas LLC	3,232,610		-	78,830		1,971,892	1,260,718	
iedmont Municipal Power Agency	307,201		•	10,960		184,355	122,846	
JM Interconnection, LLC.	11,214,935		-	313,334		6,841,110	4,373,825	
outhern Company Services, Inc.	250,370		-	9,167		152,726	97,644	
ennesse Valley Authority	96,400		-	2,600		58,804	37,596	
own of Dallas	584		584	-		-	-	
own of Forest City	19,856		19,856	<u>-</u>		-	-	
	\$ 54,159,966	\$	261,523	1,387,738	\$	40,057,563	\$ 13,849,586	\$ (8,706
Renewable Energy	_							
EPS	\$ 4,406,020	\$	594,902	77,027	\$	-	\$ 3,811,118	\$ -
ERP - Purchased Power	149_		13_	3		-	136	_
	\$ 4,406,169	\$	594,915	77,030	\$	-	\$ 3,811,254	\$
HB589 PURPA Purchases	_							
ualifying Facilities	1,936,441		159,399	37,040			1,712,356	64,686
, -	\$ 1,936,441	\$	159,399	37,040	\$	•	\$ 1,712,356	\$ 64,686
Non-dispatchable								
lue Ridge Electric Membership Corp.	\$ 1,244,696	\$	724,668	26,268	\$	317,217		\$ 202,811
laywood Electric	351,238		152,148	7,201		121,445		77,645
lacquarie Energy, LLC	957,341		•	12,433		583,978		373,363
CEMC - Other	4,398		4,398	-				
CMPA	155,400			1,110		94,794		60,606
edmont Electric Membership Corp.	592,764		346,426	11,904		150,266		96,072
eneration Imbalance	1,078,303		0.10,120	8,735		242,385		835,918
nergy Imbalance - Purchases	(277,960)		_	(11,956)		(169,556)		(108,404
nergy Imbalance - Sales	(269,174)			(11,550)		(269,534)		360
other Purchases	648			19		(205,534)		648
iner Furchases	\$ 3,837,654	\$	1,227,640	55,714	\$	1,070,995	ş -	
Total Purchased Power	\$ 64,340,230	\$	2,243,477	1,557,522	\$	41,128,558	\$ 19,373,196	\$ 1,594,999
terchanges In								
ther Catawba Joint Owners	6,629,878		-	579,425		3,870,366		2,759,512
/S Lee Joint Owner	1,406,837			43,619		1,229,697		177,140
otal Interchanges In	8,036,714			623,044		5,100,063	<u> </u>	2,936,651
terchanges Out								(1
ther Catawba Joint Owners	(7,985,890)		(134,209)	(695,363)		(4,647,804)		(3,203,877
atawba- Net Negative Generation	(66,943)		(104,200)	(2,964)		(51,150)		(3,203,67,
	(1,402,174)		•	(2,964) (42,514)		(1,216,174)		
S Lee Joint Owner			(134,209)	(740,841)		(5,915,128)		(186,000
			[134L2H9]	(740 841)			_	13 405 670
otal Interchanges Out	(9,455,007)		(104,205)	(/40,041)		(0,010,120)		(0,405,070

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

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

DECEMBER 2018

		Total	C	apacity		N	on-capacity		
Sales	<u> </u>	\$		\$	mWh		Fuel \$	1	Non-fuel \$
Utilities:									
SC Public Service Authority - Emergency	\$	19,312		-	475	\$	16,530	\$	2,782
SC Electric & Gas - Emergency		22,373		-	383	Ť	21,699	·	674
Market Based:									
NCMPA		110,344	\$	87,568	392		22,919		(143)
PJM Interconnection, LLC.		69		-	-		-		` 69 [′]
SC Electric & Gas		2,050		-	-		-		2,050
Other:									
DE Progress - Native Load Transfer Benefit		287,133		-	-		287,133		-
DE Progress - Native Load Transfer		8,259,541		_	225,840		6,529,920		1,729,621
Generation Imbalance		76,917		_	1,120		66,384		10,533
BPM Transmission		(67,517)		-	,		•		(67,517)
Total Intersystem Sales	\$	8,710,222	\$	87,568	228,210	\$	6,944,585	\$	1,678,069

^{*} 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 2018

Purchased Power		Total	·	Capacity			Non-ca	pacit	у		
Economic		\$		\$	mWh		Fuel \$	1	Fuel-related \$		Not Fuel \$ Fuel-related \$
Cherokee County Cogeneration Partners City of Kings Mountain	\$	31,713,488 107,748	\$	10,514,290 107,748	536,248	\$ \$	18,602,696	\$	2,596,502		
DE Progress - Native Load Transfer DE Progress - Native Load Transfer Benefit		194,410,960 13,751,828			5,426,920)	174,475,494 13,751,828		19,671,245	\$	264,221
DE Progress - Fees		(1,093,167)		-			10,701,020		(1,093,167)		
EDF Trading North America, LLC.		76,115		-	3,005	5	46,430		29,685		
Exelon Generation Company, LLC,		118,087			4,060		72,034		46,053		
Haywood Electric - Economic		487,779		251,870	5,097		143,904		92,005		
Macquarle Energy, LLC Morgan Stanley Capital Group		29,508,026 24,839		•	770,088		17,999,896		11,508,130		
NCEMC		169,200			1,112 5,490		15,152 103,212		9,687 65,988		
NCMPA		4,490,834		-	71,519		3,053,238		1,437,596		
NCMPA Load Following Economic		16,007,553		-	506,485		10,121,981		5,885,572		
NTE Carolinas LLC	•	7,004,810		-	195,650)	4,272,935		2,731,875		
Piedmont Municipal Power Agency		2,609,446		-	88,744		1,680,985		928,461		
PJM Interconnection, LLC. Rainbow Energy Marketing Corporation		51,171,173		-	864,902	?	31,214,417		19,956,756		
South Carolina Electric & Gas Company		87,525 212,527		-	3,285 4,600		53,390		34,135		
Southern Company Services, Inc.		1,289,556		-	45,702		127,811 786,630		94,716 502,926		
Tennesse Valley Authority		1,603,241		-	30,841		977,977		625,264		
The Energy Authority		38,483		-	1,167		23,475		15,008		
Town of Dallas		7,008		7,008			,				
Town of Forest City		238,272		238,272			· · · · · · ·				
	\$	354,035,331	_\$	11,119,188	8,564,915	\$	277,523,485	<u>\$</u>	65,128,437	\$	264,221
Renewable Energy											
REPS	\$	62,977,408	\$	13,300,096	976,170		-	\$	49,677,312	\$	-
DERP - Purchased Power DERP - Net Metered Generation		2,713		565	49		-		2,148		
DEAF • Net Wetered Generation	\$	43,550 63,023,671	-\$	7,964 13,308,625			 :	s	40.070.400	_	35,586
		00,020,011		13,300,020	<u>\$ 970,233</u>		<u> </u>	•	49,679,460	<u> </u>	35,586
HB589 PURPA Purchases Qualifying Facilities		33,208,999		0.544.004	F 40 000			_		_	
Cualifying Facilities	\$	33,208,999		6,541,261 6,541,261	549,098 549,098			\$	25,585,400 25,585,400	\$	1,082,338 1,082,338
Non-dispatchable											
Blue Ridge Electric Membership Corp.	\$	14,972,210	5	8,136,773	295,129	\$	4,169,615			\$	2,665,822
Haywood Electric		4,206,307		1,935,370	80,216		1,385,271			•	885,666
Macquaria Energy, LLC		18,266,985		-	307,544		11,142,861				7,124,124
NCEMC - Other NCMPA - Reliability		647,276		52,776	6,570		362,645				231,855
NCMPA - Reliability NTE Carolinas LLC		245,400 1,828,310		-	2,610		149,694				95,706
Piedmont Electric Membership Corp.		7,179,987		3,902,138	36,865 140,568		1,115,269 1,999,488				713,041
South Carolina Electric & Gas Company		131,734		0,502,100	1,400		80,358				1,278,361 51,376
Southern Company Services, Inc.		2,984,720		-	47,510		1,820,679				1,164,041
Generation Imbalance		3,782,664			82,265		1,893,961				1,888,703
Energy Imbalance - Purchases		2,199,376			25,123		1,350,748				848,628
Energy Imbalance - Sales Other Purchases		(1,765,005) 12,518			352		(6,529,253)				4,764,248
Other Fulchases	\$	54,692,482	\$	14,027,057	1,026,152		18,941,336	\$		\$	12,518 21,724,089
Total Purchased Power	\$	504,960,483	s	44,996,131	11,116,400		296,464,821		140,393,297		23,106,234
nterchanges in				***************************************			200,404,021		140,033,237	4	-
		91,135,514		•	7,642,809		56,961,998				34,173,516
Other Catawba Joint Owners		7,725,713		-	271,306		6,611,033				1,114,680
WS Lee Joint Owner				-	7,914,116	_	63,573,032				35,288,195
Other Catawba Joint Owners WS Lee Joint Owner Total Interchanges In		98,861,227								_	,,
WS Lee Joint Owner fotal Interchanges in oterchanges Out		98,861,227			-						
WS Lee Joint Owner fotal Interchanges in <u>nterchanges Out</u> Diher Catawba Joint Owners		(93,139,372)		(1,580,207)	(7,784,646)	_	(57,610,256)				
WS Lee Joint Owner fotal Interchanges In <u>nterchances Out</u> Sither Catawba Joint Owners Jatawba- Net Negative Generation	=	(93,139,372) (231,152)			(11,304)		(57,610,256) (180,241)				(33,948,909)
VS Lee Joint Owner fotal Interchanges In nterchanges Out Ther Catawba Joint Owners Catawba- Net Negative Generation VS Lee Joint Owner		(93,139,372) (231,152) (9,390,983)		(1,580,207)	(11,304) (327,441)		(57,610,256) (180,241) (7,930,708)				(33,948,909) (50,911) (1,460,275)
WS Lee Joint Owner fotal Interchanges in <u>nterchanges Out</u> Diher Catawba Joint Owners	<u> </u>	(93,139,372) (231,152)	=		(11,304)		(57,610,256) (180,241)				(33,948,909) (50,911) (1,460,275) (35,460,095)

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 2018

	 Total	_	Capacity			N	on-capacity		
Sales	 \$		\$		mWh		Fuel \$		Non-fuel \$
Utilities:									
DE Progress - Emergency	\$ 15,390		_		333	\$	13,113	\$	2,277
SC Public Service Authority - Emergency	2,315,135		\$ 224,000		7,527	•	2,007,790	*	83,345
SC Electric & Gas - Emergency	103,368	A	-	Α	1,974		87,826		15,542
Market Based:									
Central Electric Power Cooperative, Inc.	2,793,800	В	2,793,800	В	_		-		-
EDF Trading Company	2,600		-		50		1,976		624
Macquarie Energy, LLC	19,200		_		-		, <u>-</u>		19,200
NCMPA	1,454,481		1,050,069		5,529		368,868		35,544
PJM Interconnection, LLC.	1,502,443		-		24,365		918,000		584,443
SC Electric & Gas	317,950	Α	-	Α	4,050		268,115		49,835
Tennessee Valley Authority	49,525		-		1,025		37,501		12,024
The Energy Authority	55,545		-		604		33,101		22,444
Other:									
DE Progress - Native Load Transfer Benefit	5,666,748		-		_		5,666,748		_
DE Progress - Native Load Transfer	78,027,793		-		1,883,308		74,808,327		3,219,466
Generation Imbalance	1,760,829		-		16,679		2,124,888		(364,059)
BPM Transmission	 (245,056)		-		-,		_,,		(245,056)
Total Intersystem Sales	\$ 93,839,751	•	\$ 4,067,869	_	1,945,444	\$	86,336,253	\$	3,435,629

^{*} Sales for resale other than native load priority.

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

- A Twelve months ended December 2018 includes a correction to reclassify market sales for the month of October 2018 as an emergency sale. The October 2018 sales were as follows: Total dollars = \$24,456, Non capacity MWH = 408, Non-capacity fuel dollars = \$20,096, and Non-capacity non-fuel dollars = \$3,550.
- B Twelve months ended December 2018 includes a correction to include market capacity sales for the period January 2018 October 2018. Market capacity sales each month were as follows: Total dollars = \$279,380, and capacity dollars= \$279,380. Total market capacity sales dollars for the period January 2018 October 2018 = \$2,793,800.

REVISED Schedule 4 Page 1 of 2

Duke Energy Carolinas (Over) / Under Recovery of Fuel Costs December 2018

Line No.			Residential	Commercial	Industrial	Totai
1 2 3	Actual System kWh sales DERP Net Metered kWh generation Adjusted System kWh sales	input Input L1 + L2			-	7,490,426,895 10,412,429 7,500,839,324
4 5 6	N.C. Retail kWn sales NC kWh sales % of actual system kWh sales NC kWn sales % of adjusted system kWh sales	input L4 T / L1 L4 T / L3	2,038,461,729	1,880,040,961	974,229,470	4,892,732,160 65.32% 65.23%
7	Approved fuel and fuel-related rates (¢/kWn) 7a Billed rates by class (¢/kWh) 7b Billed fuel expense	input Annually L7a * L4 / 100	1.7003 \$34,659,965	1.8314 \$34,431,070	1.8020 \$17,555,615	1.7709 \$86,646,650
8	Incurred base fuel and fuel-related (less renewable purchased power capacity) rate 8a Docket E-7, Sub 1163 allocation factor 8b System incurred expense 8c Incurred base fuel and fuel-related expense 8d Incurred base fuel rates by class (¢/kWh)	es by class (¢/kWh) Input Input L8b * L6 * 8a L8c / L4 * 100	35.64% \$38,786,219 1.9027	41.77% \$45,458,159 2.4179	22.59% \$24,577,446 2.5228	\$166,830,104 \$108,821,824 2.2242
9	Incurred renewable purchased power capacity rates by class (¢/kWh) 9a NC retail production plant % 9b Production plant allocation factors 9c System incurred expense 9d Incurred renewable capacity expense 9e Incurred renewable capacity rates by class (¢/kWh)	Input Input Input L9a * L9b * 9c (L9a * L9c) * L9b / L4 * 100	43.68% \$285,027 0.0140	37.64% \$245,590 0.0131	18.68% \$121,872 0.0125	67.56% 100.00% \$965,788 \$652,488 0.0133
10 11 12	Difference in ¢/kWh (incurred - billed)	L8d + L9e L7c - L10 (L4 * L11) / 100	1.9167 0.2164 \$4,411,281	2.4310 0.5996 \$11,272,678	2.5353 0.7333 \$7,143,703	2.2375 0.4666 \$22,827,662
13 14		Input	\$4,411,281	\$11,272,678	\$7,143,703	\$22,827,662
15 16 17	Total system incurred expense Less: Jurisdictional allocation adjustment(s) Total Fuel and Fuel-related Costs per Schedule 2	L8b +L9c Input L15 +L16				\$167,795,892 338,332 \$167,457,560

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

			(Over)	/ Under Recovery		
	Year 2018	Total To Date	Residential	Commercial	Industrial	Total Company
	January	\$70,210,459	\$12,463,615	\$33,104,497	\$24,642,348	\$70,210,459
	February	48,920,711	(\$11,989,284)	(\$6,434,005)	(\$2,866,460)	(21,289,748)
_/1	March	53,688,504	\$1,587,096	\$1,503,768	\$1,676,929	4,767,793
_/1	April	39,952,067	(\$3,469,659)	(\$6,335,002)	(\$3,931,775)	(13,736,437)
	May	46,088,897	\$5,910,833	(\$210,465)	\$436,461	6,136,830
	June	52,711,139	\$2,162,126	\$1,145,088	\$3,315,028	6,622,242
_/2	July	67,208,623	\$2,375,059	\$5,295,453	\$6,826,972	14,497,484
	August	80,715,732	\$3,875,805	\$4,054,944	\$5,576,360	13,507,109
_/2	September	75,122,857	(\$6,784)	(\$5,202,149)	(\$383,942)	(5,592,875)
_/2	October	91,539,889	\$5,784,976	\$5,860,345	\$4,771,711	16,417,032
	November	\$109,017,571	\$9,241,689	\$5,957,400	\$2,278,593	\$17,477,682
	December	\$131,845,232	\$4,411,281	\$11,272,678	\$7,143,703	\$22,827,661
		_	\$32,346,753	\$50.012.552	\$49,485,928	\$131,845,232

Notes:

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

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

- Includes prior period adjustments.
- Reflects a prorated rate and prorated allocation factor for periods in which the approved rates changed.

DUKE ENERGY CAROLINAS FUEL AND FUEL RELATED COST REPORT DECEMBER 2018

Description	Allen	Belews Creek	Buck	Catawba	Cliffside	Dan River	Lee	Lee	Lincoln	Marshall	McGuire	Milt Creek	Oconee	Rockingham	Current Month	Total 12 ME December 2018
	Steam	Steam	CC	Nuclear	Steam - Dual Fuel	cc	CC	Steam/CT	CT	Steam	Nuclear	СТ	Nuclear	СТ		
Cost of Fuel Purchased (\$)																
Coal Oil	\$49,933 143,133	\$17,907,637 1,082,966			\$8,548,228 273,156					\$22,079,739					\$49,585,537	\$657,498,215
Gas - CC	143,133	1,082,966	\$13,103,055		2/3,106	\$12,923,682	\$6,858,257	•	•	-		-		•	1,499,256 32,884,994	48,634,501 384,692,206
Gas - CT			\$10,100,000			ψ12,020,002	40,000,231	104,195	\$110,569	•		\$158,525		\$1,899,682	2,272,971	98,161,049
Gas - Steam					5,695,205			909				• · · - · , ·		* - *	5,696,114	8,633,545
Biogas	*****	*********	**********		44.540.500	361,043									361,043	3,466,205
Total	\$193,066	\$18,990,604	\$13,103,055		\$14,516,590	\$13,284,725	\$6,858,257	\$105,103	\$110,569	\$22,079,739		\$158,525		\$1,899,682	\$91,299,914	\$1,201,085,721
Average Cost of Fuel Purchased (¢	/MBTU)															
Coal Oil	1,321.84	555.02 172.99			687.75 692,52	•				399.01					485.71 221.68	324.71 1,358.88
Gas - CC	1,021.04	172.33	442.19		032.32	442.08	455.27	-	•	•		•		-	442.14	392.80
Gas - CT								532.70	467.48			510.56		457.22	464.11	343.97
Gas - Steam					445.73											410.5B
Biogas Weighted Average	1,782.98	492.94	442.19		567.03	1,577.30	455.07	532.60	467.40	200.04		540.50		453.00	1,577.30	1,603.31
sseiduren yaarada	1,702.36	452.34	442.13		567.03	450.90	455.27	532.60	467.48	399.01		510.56		457.22	459.65	358.68
Cost of Fuel Burned (\$)	6744 000	610 605 100			*** *** ***					*** ***						
Coal Oil - CC	\$741,089	\$19,525,109	-		\$12,888,384	:	•	•		\$13,692,987					\$46,847,568	\$675,888,074
Oil - Steam/CT	163,523	1,219,227	-		286,271	-	•	25,472	\$25,788	148,226		-		_	1,874,266	41,704,735
Gas - CC		.,,	\$13,103,055			\$12,923,682	\$6,858,257	25,	420,700	140,220					32,884,994	384,692,206
Gas - CT								\$104,195	110,569			\$158,525		\$1,899,682	2,272,971	98,161,049
Gas - Steam					5,695,205	351,043		909							5,696,114	8,633,545
Biogas Nuclear			-	\$8,356,486		351,043	-				\$10,990,838		\$10,470,715		361,043 29,818,039	3,466,205 370,839,248
Total	\$904,613	\$20,744,336	\$13,103,055	\$8,356,486	\$18,869,860	\$13,284,725	\$6,858,257	\$130,575	\$136,358	\$13,841,212	\$10,990,838	\$158,525	\$10,470,715	\$1,899,682	\$119,754,995	\$1,583,385,062
Average Cost of Fuel Burned (¢/ME	T(I)															
Coal	359.55	352.99			354.20					341.94					350.11	315.40
Oil - CC															-	•
Oli - Steam/CT Gas - CC	1,564.97	1,487.41	442.19		1,505.97	442.08	455.27	12,245.96	1,521.44	1,620.84		-		•	1,530.31	1,604.54
Gas - CT			442.15			442.08	455.27	532.70	467.48			510.56		457.22	442.14 464.11	392.80 343.97
Gas - Steam					445.73			-	407,40			310.50		731.22	707.11	410.58
Biogas			-			1,577.30	-								1,577.30	1,603.31
Nuclear Weighted Average	417.71	369.55	442.19	58.63 58.63	382.33	450.90	455.27	654.77	537.96	344.86	62.46 62.46	510.56	58,28 58,28	457.00	59.86	61.43
Weighted Average	417.71	303.33	442.15	30.03	302.33	430,30	435.27	034.77	537.55	344.86	62.46	310.36	38.28	457.22	165.17	166.78
Average Cost of Generation (¢/kWh								1,287.30	632.18							
Coal Oil - CC	2.92	3.41			3.52	:	:	-	-	3.41					3.43	2.98
Oil - Steam/CT	12.43	15.65	-		14.52	:	-	128,73	63.22	16.41					15.56	17.94
Gas - CC			3.06			3.11	3.19			, ,					3.10	2.81
Gas - CT					4 -=			5.57	10.88			8.08		5.09	5.39	3.85
Gas - Steam Biogas			_		4.45	11.08			•						4.47	4.60
Nuclear			-	0.59		11.08	•				0.62		0.59		11.08 0.60	11.4B 0.62
Weighted Average	3.39	3.57	3.06	0.59	3.80	3.17	3,19	9.16	12.90	3.44	0.62	8.08	0.59	5.09	1.51	1.56
Burned MBTU's																
Coal	206,117	5,531,427			3,638,779					4,004,460					13,380,783	214,294,473
Oit - CC															. 5,555,765	21-,20-,-70
Oil - Steam/CT	10,449	81,970			19,009			208	1,695	9,145		-		•	122,476	2,599,178
Gas - CC			2,963,222			2,923,367	1,506,423	10 500	00.000			04.040		445 455	7,393,012	97,936,802
Gas - CT Gas - Steam					1,277,737		174	19,560	23,652			31,049		415,485	489,746 1,277,911	28,537,792 2,102,783
Biogas			-		1,271,743	22,890									22,890	2,102,783
Nuclear				14,252,377							17,596,869		17,965,994		49,815,240	603,676,564
Total	216,566	5,613,397	2,963,222	14,252,377	4,935,525	2,946,257	1,506,423	19,942	25,347	4,013,605	17,596,869	31,049	17,965,994	415,485	72,502,058	949,363,782

DUKE ENERGY CAROLINAS FUEL AND FUEL RELATED COST REPORT DECEMBER 2018

Description Allen																
Char		Belews Creek	Buck	Catawba	Cliffside	Dan River	1.00	å	Lincoln	Marshall	McGuire	MIII Greek	Ocorrae	Rockingham	Current	Total 12 ME December 2018
85	Steam	Steam	8	Nuclear	Steam - Dual Fuel	၁	ខ	Steam/CT	5	Steam	Nucfear	Ç	Nuclear	CŢ		
Net Generation (mWh)																
	25,397	573,052			366,421					401,855					1,366,724	22,653,740
8- 8															•	•
Oil - Steam/CT	1,315	7,791			1,972			50	4	903				•	12,042	232,515
Gas - CC			428,198			416,157	214,977								1,059,332	13,695,555
Gas - CT								1,871	1,016			1,961		37,330	42,178	2,550,67
Gas - Steam					128,002			(466)							127,536	187.57
Biogas						3,259									3,259	30,20
Nuclear 100%				1,420,722							1.778.199		1.782.248		4.981.169	59.936,028
Hydro (Total System)															323,664	2,347,624
															5.768	130,018
	26,712	580,843	428,198	1,420,722	496,394	419,416	214,977	1,425	1,057	402,758	1,778,199	1,961	1,782,248	37,330	7,921,672	101,764,129
Cost of Reagents Consumed (\$)																
Ammonia		(\$46,049)	\$14,280		\$11,119	\$8,043	\$11,630								(2252)	
Limestone \$2	\$24,711	467,587			478,632					\$374,113					1.345.043	19.594.631
Sarbents		53,543								73.539					127 081	
Urea	•									45.004					45.004	928.11
Re-emission Chemical															•	91.69
Dibasic Acid																! •
Activated Carbon 3	34,464														34.464	170,782
	\$59,175	\$475,081	\$14,280		489.751	\$8.043	\$11.630			\$492,656					\$1,550,615	\$27,193,652

Notes:
Detai anunits may not add to totals shown due to rounding.
Detai areflected at 100% ownership.
Schedule excludes in-fransit and leminal authinty.
Schedule excludes in-fransit and leminal authinty.
ComboMBTU and centra/Wh are not computed when costs and/or net generation is negative.
Re-emission chamical reagent expense is not recoverable in No.

DUKE ENERGY CAROLINAS FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT

Description	Allen	Belews Creek	Buck	Cliffside	Dan River	Les	Lee	Lincoln	Marshall	Mill Creek	Rockingham	Current Month	Total 12 ME December 2018
G1 D-4	Steam	Steam	CC	Steam - Dual Fuel	CC	CC	Steam/CT	СТ	Steam	CT	CT		
Coal Data:	400.074	744 070		505 054									
Beginning balance	196,674	741,379		565,251			•		448,731			1,952,035	2,321,844
Tons received during period	(10.000)	221,261		95,812					262,988			580,061	8,353,369
Inventory adjustments	(16,000)	(91,871)		(46,501)			•		(41,785)			(196,158)	
Tons burned during period	8,841	221,660		146,683			•		158,816			536,000	8,703,762
Ending balance	171,833 23.31	649,109		467,879			•		511,118			1,799,939	1,799,939
MBTUs per ton burned Cost of ending inventory (\$/ton)	23.31 83.82	24.95 88.09		24.81 87.87					25.21 86.22			24.96 87.09	24.62 87.09
Oil Data;													
Beginning balance	90,694	221,182	_	236,089	_		714,747	0.024.707	949.974	4 800 700	0.000.100	40 044 756	40,000,500
Gallons received during period	75,652	578,080		144,399			717,747	9,834,797	312,274	4,366,782	3,238,190		16,962,536
Miscellaneous adjustments	448	(35,415)		(11,633)	-	-	(9,425)	•	_	-	•	798,131	21,144,157
Gallons burned during period	75 ,879	596,667	-	137,943	_		1,520	12,305	66,449	-	-	(57,379)	(352,297) 18,888,297
Ending balance	90,915	167,180		230,912	- -		703,802	· ·		4 000 700	0.000.400	889,408	
Cost of ending inventory (\$/gal)	2.16	1.99	-	2.08	-		2.33	9,822,492 2.10	245,825 2.23	4,366,782 2,47	3,238,190 2.17	18,866,098 2.20	18,866,098 2.20
Natural Gas Data:													
Beginning balance													
MCF received during period			2,880,290	1,244,450	2,818,207	1,473,258	19,360	23,206		30,487	400,698	8,889,956	125,135,402
MCF burned during period			2,880,290	1,244,450	2,818,207	1,473,258	19,360	23,206		30,487	400,698	8,889,956	125,135,402
Ending balance			2,000,200	1,2 1 1,100	E,OTO,EO	1,470,230	15,000	23,200		50,467	400,050	0,009,900	125,155,402
Blogas Data:													
Beginning balance													
MCF received during period					22,062							22,062	210,727
MCF burned during period					22,062	-						22,062	210,727
Ending balance												·	·
Imestone Data:													
Beginning balance	23,869	38,673		34,190					37,083			133,815	169,322
Tons received during period	•	6,707		7,615					12,836			27,159	444,242
Inventory adjustments	(2,996)	(4,910)		-					(7,085)			(14,991)	(14,991
Tons consumed during period	527	11,600		9,514					9,187			30,828	483,419
Ending balance	20,346	28,870		32,292					33,647			115,155	115,155
Cost of ending inventory (\$/ton)	46.89	39.54		39.44					40.72			41.16	41.16
												Qtr Ending	Total 12 ME
mmonia Date:												December 2018	December 2018
Beginning balance		1,315										1,315	1.159
Tons received during period		901										901	4.715
Tons consumed during period		583										583	4,241
Ending balance		1,633										1,633	1,633
Cost of ending inventory (\$/ton)		620.44										620,44	620 44
- , , , ,												020,11	1,159 4,715 4,241 1,633 620.44
lotoes													Sche
<u>lotes:</u> Jetail amounts may not add to totals sho	own due to roundin	a											he

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.

xhibit 6 nedule 6

Schedule 7

DUKE ENERGY CAROLINAS ANALYSIS OF COAL PURCHASED DECEMBER 2018

STATION	ТҮРЕ	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ALLEN	SPOT	-	\$ -	\$ -
	CONTRACT	-	· -	· -
	ADJUSTMENTS		49,933	
	TOTAL		49,933	
BELEWS CREEK	SPOT	-	11,982	_
	CONTRACT	221,261	17,706,037	80.0
	ADJUSTMENTS		189,618	-
	TOTAL	221,261	17,907,637	80.9
CLIFFSIDE	SPOT	-	_	-
	CONTRACT	95,812	7,221,379	75.3
	ADJUSTMENTS		1,326,849	
	TOTAL	95,812_	8,548,228	89,2
MARSHALL	SPOT	96,525	8,181,703	84.7
	CONTRACT	166,463	13,355,663	80.2
	ADJUSTMENTS		542,373	-
	TOTAL	262,988	22,079,739	83.9
ALL PLANTS	SPOT	96,52 5	8,193,685	84.89
	CONTRACT ADJUSTMENTS	483,536	38,283,079 2,108,773	79.17
	TOTAL	580,061	\$ 48,585,537	\$ 83.76

Schedule 8

DUKE ENERGY CAROLINAS ANALYSIS OF COAL QUALITY RECEIVED DECEMBER 2018

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
BELEWS CREEK	6.91	10.15	12,468	1.58
CLIFFSIDE	8.48	7.60	12,603	2.35
MARSHALL	6.73	10.02	12,508	1.73

Schedule 9

DUKE ENERGY CAROLINAS ANALYSIS OF OIL PURCHASED DECEMBER 2018

		ALLEN	BEL	EWS CREEK	CI	LIFFSIDE
VENDOR	Hi	ighTowers	Н	lighTowers	Hi	ghTowers
SPOT/CONTRACT	ı	Contract		Contract	(Contract
SULFUR CONTENT %		0		0		0
GALLONS RECEIVED		75,652		578,080		144,399
TOTAL DELIVERED COST	\$	143,133	\$	1,082,966	\$	273,156
DELIVERED COST/GALLON	\$	1.89	\$	1.87	\$	1.89
BTU/GALLON		138,000		138,000		138,000

Revised McGee Exhibit 6

			uke Energy Carolinas r Plant Performance Data		Schedule 10 Page 1 of 8
			velve Month Summary uary, 2018 - December, 2018		
	Unit Name	Net	Nuclear Units Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
	Oconec 1	6,745,635	847:	90.91	89.94
	Oconee 2	7,581,168	848	102.06	100.00
	Oconee 3	6,967,442	859	92.59	92.12
1	McGuire 1	10,359,250	1,158	102,12	99.56
	McGuire 2	9,502,818	1,158	93.68	91.80
(Catawba 1	9,510,487	1,160	93.59	92.99
	Catawba 2	9,269,228	1,150	. 92.01.	91.84

Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary

January, 2018 through December, 2018
Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Buck CC	11	1,463,456	206	81.10	88.68
Buck CC	12	1,471,968	206	81.57	89.09
Buck CC	ST10	2,237,637	312	81.87	96.78
Buck CC	Block Total	5,173,061	724	81.57	92.29
Dan River CC	8	1,433,925	199	82.26	86.38
Dan River CC	9	1,410,200	199	80.90	85.84
Dan River CC	ST7	2,118,133	320	75.56	91.38
Dan River CC	Block Total	4,962,258	718	78.90	88.46
WS Lee CC	11	1,030,538	223	70.01	75.09
WS Lee CC	12	1,090,492	223	74.08	77.05
WS Lee CC	ST10	1,402,639	337	63.05	76.36
WS Lee CC	Block Total	3,523,669	783	68.17	76.19

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

Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary January, 2018 through December, 2018

Baseload Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Belews Creek 1	4,793,474	1,110	49.30	88.06
Belews Creek 2	3,227,943	1,110	33.20	69.66
Marshall 3	3,176,205	658	55.10	89.31
Marshall 4	3,675,692	660	63.58	88.48

Notes:

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

Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary January, 2018 through December, 2018

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Cliffside 6	4,311,369	844	58.31	75.32
Marshall I	958,416	380	28.79	88.74
Marshall 2	675,957	380	20.31	68.31

Notes:

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

Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary January, 2018 through December, 2018 Other Cycling Steam Units

Unit Name	e	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Allen	1	71,408	167	4.88	83.17
Allen	2	86,505	167	5.91	84.03
Allen	3	158,113	270	6.68	80.91
Allen	4	178,336	267	7.62	89.89
Allen	5	325,399	259	14.34	85.49
Cliffside	5	1,243,104	546	25.99	61.63
Lee	3	54,152	173	3.57	36.34

Notes:

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

Duke Energy Carolinas Power Plant Performance Data Twelve Month Summary January, 2018 through December, 2018 Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Lee CT	79,514	96	84.70
Lincoln CT	82,484	1,565	93.72
Mill Creek CT	201,194	735	99.23
Rockingham CT	2,325,235	895	90.19

Notes:

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

Duke Energy Carolinas Power Plant Performance Data

Revised McGee Exhibit 6 Schedule 10 Page 7 of 8

Twelve Month Summary January, 2018 through December, 2018 Hydroelectric Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%
Conventional Hydroelectric Stations:			
Bear Creek	37,232	9.5	86.90
Bridgewater	117,680	31.5	95.52
Bryson	4,632	0.9	85.69
Cedar Cliff	27,610	6.8	92.39
Cedar Creek	178,151	45.0	81.91
Cowans Ford	312,212	324.0	58.69
Dearborn	222,145	42.0	97.55
Fishing Creek	203,570	50.0	88.41
Franklin	3,726	1.0	58.90
Gaston Shoals	14,686	4.5	96.65
Great Falls	-92	12.0	100.00
Keowee	98,064	152.0	99.21
Lookout Shoals	162,927	27.0	99.26
Mission	5,388	1.8	51.83
Mountain Island	207,502	62.0	90.56
Nantahala	270,145	50.0	99.03
Ninety-Nine Islands	83,267	15.2	91.67
Oxford	107,478	40.0	38.56
Queens Creek	4,621	1.4	99.89
Rhodhiss	119,297	. 33.5	94.18
Rocky Creek	-7 3	3.0	0.00
Tennessee Creek	48,111	9.8	93.76
Thorpe	96,019	19.7	93.15
Tuckasegee	7,077	2.5	85.11
Tuxedo	33,861	6.4	96.21
Wateree	336,004	85.0	81.96
Wylie	175,810	72.0	55.96
Pumped Storage Hydroelectric Stations:			
Gross Generation			
Bad Creek	1,447,036	1,360.0	65.67
Jocassee	1,204,730	780.0	92.99
Energy for Pumping			
Bad Creek	-1,838,591		
Jocassee	-1,342,401		
Net Generation			
Bad Creek	-391,555		
Jocassee	-137,671		

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

Duke Energy Carolinas Power Plant Performance Data

Twelve Month Summary January 2018 through December 2018 Pre-commercial Combined Cycle Units

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

Unit Name	· ·	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
January 201	8				•
Lee	11	-10	n/a	n/a	n/a
Lee	12	-11	n/a	n/a	n/a
Lee	ST10	0	n/a	n/a	n/a
Lee	Block Total	-21	n/a	n/a	n/a
February 20	18				
Lee	11	-1,575	n/a	n/a	n/a
Lee	12	-1,120	n/a	n/a	n/a
Lee	ST10	0	n/a	n/a	n/a
Lee	Block Total	-2,695	n/a	n/a	n/a
March 2018					
Lee	11	25,973	n/a	n/a	n/a
Lee	12	14,939	n/a	n/a	n/a
Lee	ST10	-1,349	n/a	n/a	n/a
Lee	Block Total	39,563	n/a	n/a	n/a
April 1 - 4					
Lee	11	14,158	n/a	n/a	n/a
Lee	12	6,771	n/a	n/a	n/a
Lee	ST10	8,994	n/a	n/a	n/a
Lee	Block Total	29,923	n/a	n/a	n/a
Total		66,771			

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