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May 4, 2023

**VIA ELECTRONIC FILING**

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

**RE: Duke Energy Carolinas, LLC's Supplemental Testimony  
Docket No. E-7, Sub 1282**

Dear Ms. Dunston:

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

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

Sincerely,

A handwritten signature in blue ink that reads "Ladawn S. Toon".

Ladawn S. Toon

Enclosures

cc: Parties of Record

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May 04 2023

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

DOCKET NO. E-7, SUB 1282

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

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

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

2 A. My name is Sigourney Clark. My business address is 5413 Shearon Harris  
3 Road, New Hill, North Carolina.

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

6 A. Yes, on March 1, 2023, I caused to be pre-filed with the Commission my direct  
7 testimony and 6 exhibits and 13 supporting workpapers.

8 **Q. YOUR SUPPLEMENTAL TESTIMONY INCLUDES THREE (3)**  
9 **REVISED EXHIBITS. WERE THESE SUPPLEMENTAL EXHIBITS**  
10 **PREPARED BY YOU OR AT YOUR DIRECTION AND UNDER YOUR**  
11 **SUPERVISION?**

12 A. Yes. These exhibits were prepared by me and consist of the following:  
13 Clark Revised Exhibit 1: Summary Comparison of Fuel and Fuel-Related Costs  
14 Factors.  
15 Clark Revised Exhibit 2: Calculation of the Proposed Fuel and Fuel-Related  
16 Cost Factors.  
17 Clark Revised Exhibit 3: Calculation of the Proposed Experience Modification  
18 Factor (“EMF”) rate.

19 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY**  
20 **IN THIS PROCEEDING?**

21 A. The purpose of my supplemental testimony is to present revised rates reflecting  
22 impacts of revised net gains on the sale of by-products, which are used to reduce  
23 the cost of fuel and fuel-related costs that customers pay. During the discovery

1 process in Docket No. E-7, Sub 1263 (the Company’s 2022 annual fuel filing), the  
 2 Company became aware it had incorrectly calculated steam revenues associated  
 3 with the Clemson Combined Heat & Power facility. The Company billed and  
 4 collected those steam revenues from Clemson University during the current  
 5 proceeding’s test period. The steam revenues were recorded to an account that was  
 6 not included in the Company’s direct filing in this proceeding. Therefore, the  
 7 Company is including the steam revenues in this supplemental filing to ensure its  
 8 proposed fuel rates reflect the net gains on the sale of this by-product. The  
 9 Company has updated its procedures to ensure any steam revenue adjustments  
 10 will be recorded to the appropriate fuel account going forward.

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

12 A. The Company’s aggregate “Adjusted (Over)/Under Recovery” amount for North  
 13 Carolina Retail was decreased by \$613,775 from the amount filed in my direct  
 14 Exhibit 3, Page 1. In addition, each customer class’ proposed EMF rate was  
 15 decreased by each class’ allocation of the \$613,775. The components of the  
 16 proposed fuel and fuel-related cost factors by customer class, as shown on Clark  
 17 Revised Exhibit 1, are as follows:

Description	Residential cents/kWh	General cents/kWh	Industrial cents/kWh	Composite cents/kWh
Total adjusted Fuel and Fuel Related Costs	2.7123	2.2554	1.7131	2.3202
EMF Increment (Decrement)	1.6635	1.6638	1.7256	1.6764
EMF Interest (Decrement)	-	-	-	-
18 Net Fuel and Fuel Related Costs Factors	4.3758	3.9192	3.4387	3.9966

19 **Q. WHAT IS THE IMPACT TO CUSTOMERS’ BILLS IF THE REVISED**  
 20 **PROPOSED FUEL AND FUEL-RELATED COSTS FACTORS ARE**  
 21 **APPROVED BY THE COMMISSION?**

1 A. The revised proposed fuel and fuel-related costs factors will result in a 17.98%  
2 increase on customers' bills, as compared to the previously filed increase of  
3 17.99%.

4 **Q. DOES THIS CONCLUDE YOUR PRE-FILED SUPPLEMENTAL**  
5 **TESTIMONY?**

6 A. Yes, it does.

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Summary Comparison of Fuel and Fuel Related Cost Factors  
Test Period Ended December 31, 2022  
Billing Period September 2023 - August 2024  
Docket E-7, Sub 1282

Clark Revised Exhibit 1

Line #	Description	Reference	Residential cents/kWh	General cents/kWh	Industrial cents/kWh	Composite cents/kWh
<b><u>Current Fuel and Fuel Related Cost Factors (Approved Fuel Rider Docket No. E-7, Sub 1263)</u></b>						
1	Approved Fuel and Fuel Related Costs Factors	Input	2.0003	1.8217	1.8396	1.9010
2	EMF Increment (Decrement) cents/kWh	Input	0.4863	0.6254	0.5726	0.5597
3	EMF Interest Increment (Decrement) cents/kWh	Input	-	-	-	-
4	Approved Net Fuel and Fuel Related Costs Factors	Sum	<b>2.4866</b>	<b>2.4471</b>	<b>2.4122</b>	<b>2.4607</b>
<b><u>Fuel and Fuel Related Cost Factors Required by Rule R8-55</u></b>						
5	Proposed Nuclear Capacity Factor of 93.52% and Normalized Test Period Sales	Exh 2 Sch 2 pg 2	<b>4.3423</b>	<b>3.8357</b>	<b>3.4800</b>	<b>3.9630</b>
6	NERC 5 Year Average Nuclear Capacity Factor of 91.87% and Projected Period Sales	Exh 2 Sch 3 pg 2	<b>4.4104</b>	<b>3.9462</b>	<b>3.4575</b>	<b>4.0247</b>
<b><u>Proposed Fuel and Fuel Related Cost Factors using Proposed Nuclear Capacity Factor of 93.52%</u></b>						
7	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	Exh 2 Sch 1 pg 2	2.6761	2.2275	1.6916	2.2905
8	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Exh 2 Sch 1 pg 2	0.0362	0.0279	0.0215	0.0297
9	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum	2.7123	2.2554	1.7131	2.3202
10	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	1.6635	1.6638	1.7256	1.6764
11	EMF Interest Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	-	-	-	-
12	Net Fuel and Fuel Related Costs Factors cents/kWh	Sum	<b>4.3758</b>	<b>3.9192</b>	<b>3.4387</b>	<b>3.9966</b>

Note: Fuel factors exclude regulatory fee

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Calculation of Fuel and Fuel Related Cost Factors Using:  
Proposed Nuclear Capacity Factor of 93.52%  
Test Period Ended December 31, 2022  
Billing Period September 2023 - August 2024  
Docket E-7, Sub 1282

Clark Exhibit 2  
Schedule 1  
Page 1 of 3

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Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Total Nuclear	Workpaper 1	58,819,128	0.5613	330,162,771
2	Coal	Workpaper 3 & 4	10,320,159	3.8575	398,104,637
3	Gas CT and CC	Workpaper 3 & 4	31,212,640	3.7804	1,179,963,909
4	Reagents and Byproducts	Workpaper 9			24,944,696
5	Total Fossil	Sum	41,532,800		1,603,013,242
6	Hydro	Workpaper 3	5,600,555		
7	Net Pumped Storage	Workpaper 3	(4,083,743)		
8	Total Hydro	Sum	1,516,812		-
9	Solar Distributed Generation	Workpaper 3	358,121		-
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	102,226,860		1,933,176,012
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(25,697,152)
12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)		(83,614,236)
13	Fuel expense recovered through reimbursement	Workpaper 4			(3,687,381)
14	Net Generation	Sum Lines 10-13	86,459,580		1,820,177,243
15	Purchased Power	Workpaper 3 & 4	11,789,258	3.5185	414,804,733
16	JDA Savings Shared	Workpaper 5			(69,598,371)
17	Total Purchased Power		11,789,258		345,206,362
18	Total Generation and Purchased Power	Line 14 + Line 17	98,248,839	2.2040	2,165,383,605
19	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(1,148,043)	5.0520	(57,998,825)
20	Line losses and Company use	Line 22-Line 18-Line 19	(6,269,005)		-
21	System Fuel Expense for Fuel Factor	Lines 18 + 19 + 20			2,107,384,780
22	Projected System MWh Sales for Fuel Factor	Workpaper 7	90,831,791		90,831,791
23	Fuel and Fuel Related Costs cents/kWh	Line 21 / Line 22 / 10			2.3201

Note: Rounding differences may occur

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Projected Billing Period MWh Sales	Workpaper 7	23,477,265	24,077,007	13,270,457	60,824,730
<b>Calculation of Renewable and Cogeneration Purchased Power Capacity Rate by Class</b>						<b>Amount</b>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 14,931,581
3	QF Purchased Power - Capacity	Workpaper 4				12,176,644
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				\$ 27,108,225
5	NC Portion - Jurisdictional % based on 2021 Production Plant Allocator	Input				66.68%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				\$ 18,076,112
7	2021 Production Plant Allocation Factors	Input	47.04%	37.14%	15.81%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on 2021 Production Plant Allocator	Line 6 * Line 7	\$ 8,503,847	\$ 6,713,696	\$ 2,858,570	\$ 18,076,112
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0362	0.0279	0.0215	0.0297
<b>Summary of Total Rate by Class</b>						
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	2.6761	2.2275	1.6916	2.2905
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0362	0.0279	0.0215	0.0297
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	2.7123	2.2554	1.7131	2.3202
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	1.6635	1.6638	1.7256	1.6764
14	EMF Interest Increment (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	4.3758	3.9192	3.4387	3.9966

Note: Rounding differences may occur



Line #	Rate Class	Projected Billing Period	Annual Revenue at	Allocate Fuel Costs	Increase/(Decrease)	Total Fuel Rate	Current Total Fuel Rate	Proposed Total Fuel
		MWh Sales	Current rates	Increase/(Decrease) to	as % of Annual	Increase/(Decrease)	(including Capacity and	Rate (including Capacity
		A	B	Customer Class	Revenue at Current		EMF) E-7, Sub 1263	and EMF)
		Workpaper 7	Workpaper 8	Line 25 as a % of Column B	Rates	E	F	G
					C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Clark Exhibit 1	E + F = G
1	Residential	23,477,265	\$ 2,466,691,215	\$ 443,536,022	17.98%	1.8892	2.4866	4.3758
2	General Service/Lighting	24,077,007	1,971,226,718	354,446,496	17.98%	1.4721	2.4471	3.9192
3	Industrial	13,270,457	757,602,036	136,224,506	17.98%	1.0265	2.4122	3.4387
4	NC Retail	60,824,730	\$ 5,195,519,969	\$ 934,207,024	17.98%			
<b>Total Proposed Composite Fuel Rate:</b>								
5	Total Fuel Costs for Allocation	Workpaper 7	\$ 2,111,780,996					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 1, Page 2	27,108,225					
7	System Other Fuel Costs	Line 5 - Line 6	\$ 2,084,672,770					
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7	91,011,082					
9	NC Retail Projected Billing Period MWh Sales	Line 4	60,824,730					
10	Allocation %	Line 9 / Line 8	66.83%					
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$ 1,393,186,813					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 1, Page 2	18,076,112					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 1,411,262,925					
14	NC Retail Projected Billing Period MWh Sales	Line 4	60,824,730					
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	2.3202					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	1.6764					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000					
18	Total Proposed Composite Fuel Rate	Sum	3.9966					
<b>Total Current Composite Fuel Rate - Docket E-7 Sub 1263:</b>								
19	Current composite Fuel Rate cents/kWh	Clark Exhibit 1	1.9010					
20	Current composite EMF Rate cents/kWh	Clark Exhibit 1	0.5597					
21	Current composite EMF Interest Rate cents/kWh	Clark Exhibit 1	0.0000					
22	Total Current Composite Fuel Rate	Sum	2.4607					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22	1.5359					
24	NC Retail Projected Billing Period MWh Sales	Line 4	60,824,730					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$ 934,207,025					

Note: Rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Calculation of Fuel and Fuel Related Cost Factors Using:  
Proposed Nuclear Capacity Factor of 93.52% and Normalized Test Period Sales  
Test Period Ended December 31, 2022  
Billing Period September 2023 - August 2024  
Docket E-7, Sub 1282

Clark Exhibit 2  
Schedule 2  
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Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Total Nuclear	Workpaper 1	58,819,128	0.5613	330,162,771
2	Coal	Calculated	8,369,573	3.8575	322,859,932
3	Gas CT and CC	Workpaper 3 & 4	31,212,640	3.7804	1,179,963,909
4	Reagents and Byproducts	Workpaper 9	-		24,944,696
5	Total Fossil	Sum	39,582,214		1,527,768,538
6	Hydro	Workpaper 3	5,600,555		
7	Net Pumped Storage	Workpaper 3	(4,083,743)		
8	Total Hydro	Sum	1,516,812		
9	Solar Distributed Generation	Workpaper 3	358,121		
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	100,276,274		1,857,931,308
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(25,697,152)
12	Less Catawba Joint Owners	Workpaper 3 & 4	(14,888,880)		(83,614,236)
13	Fuel expense recovered through reimbursement	Workpaper 4			(3,687,381)
14	Net Generation	Sum	84,508,994		1,744,932,539
15	Purchased Power	Workpaper 3 & 4	11,789,258		414,804,733
16	JDA Savings Shared	Workpaper 5	-		(69,598,371)
17	Total Purchased Power	Sum	11,789,258		345,206,362
18	Total Generation and Purchased Power	Line 14 + Line 17	96,298,253		2,090,138,901
19	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(1,148,043)		(57,998,825)
20	Line losses and Company use	Line 22 - Line 19 - Line 18	(6,269,005)		-
21	System Fuel Expense for Fuel Factor	Lines 18 + 19 + 20			2,032,140,076
22	Normalized Test Period MWh Sales	Exhibit 4	88,881,205		88,881,205
23	Fuel and Fuel Related Costs cents/kWh	Line 21 / Line 22 / 10			2.2864

Note: Rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Calculation of Fuel and Fuel Related Cost Factors Using:  
Proposed Nuclear Capacity Factor of 93.52% and Normalized Test Period Sales  
Test Period Ended December 31, 2022  
Billing Period September 2023 - August 2024  
Docket E-7, Sub 1282

Line #	Description	Reference	Residential	GS/Lighting	Industrial	Total
1	NC Normalized Test Period MWh Sales	Exhibit 4	22,892,401	24,448,017	12,219,040	59,559,458
<b>Calculation of Renewable Purchased Power Capacity Rate by Class</b>						
						Amount
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 14,931,581
3	QF Purchased Power - Capacity	Workpaper 4				12,176,644
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				\$ 27,108,225
5	NC Portion - Jurisdictional % based on 2021 Production Plant Allocator	Input				66.68%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				\$ 18,076,112
7	2021 Production Plant Allocation Factors	Input	47.04%	37.14%	15.81%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on 2021 Production Plant Allocator	Line 6 * Line 7	\$ 8,503,847	\$ 6,713,696	\$ 2,858,570	\$ 18,076,112
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Normalized Test Period Sales	Line 8 / Line 1 / 10	0.0371	0.0275	0.0234	0.0303
<b>Summary of Total Rate by Class</b>						
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	2.6417	2.1444	1.7310	2.2563
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0371	0.0275	0.0234	0.0303
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	2.6788	2.1719	1.7544	2.2866
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	1.6635	1.6638	1.7256	1.6764
14	EMF Interest Increment (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	4.3423	3.8357	3.4800	3.963

Note: Rounding differences may occur

Line #	Rate Class	Normalized Test Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/(Decrease) as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1263	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	D	E	F	G
		Exhibit 4	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Clark Exhibit 1	E + F = G
1	Residential	22,892,401	\$ 2,466,691,215	\$ 424,808,475	17.22%	1.8557	2.4866	4.3423
2	General Service/Lighting	24,448,017	\$ 1,971,226,718	339,480,601	17.22%	1.3886	2.4471	3.8357
3	Industrial	12,219,040	\$ 757,602,036	130,472,661	17.22%	1.0678	2.4122	3.4800
4	NC Retail	59,559,458	\$ 5,195,519,969	\$ 894,761,737				

**Total Proposed Composite Fuel Rate:**

5	Total Fuel Costs for Allocation	Workpaper 7a	\$ 2,036,536,291					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 2, Page 2	27,108,225					
7	System Other Fuel Costs	Line 5 - Line 6	\$ 2,009,428,066					
8	Normalized Test Period System MWh Sales for Fuel Factor	Workpaper 7a	89,060,496					
9	NC Retail Normalized Test Period MWh Sales	Exhibit 4	59,559,458					
10	Allocation %	Line 9 / Line 8	66.88%					
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$ 1,343,810,646					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 2, Page 2	18,076,112					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 1,361,886,758					
14	NC Retail Normalized Test Period MWh Sales	Line 9	59,559,458					
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	2.2866					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	1.6764					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000					
18	Total Proposed Composite Fuel Rate	Sum	3.9630					

**Total Current Composite Fuel Rate - Docket E-7 Sub 1263:**

19	Current composite Fuel Rate cents/kWh	Clark Exhibit 1	1.9010					
20	Current composite EMF Rate cents/kWh	Clark Exhibit 1	0.5597					
21	Current composite EMF Interest Rate cents/kWh	Clark Exhibit 1	0.0000					
22	Total Current Composite Fuel Rate	Sum	2.4607					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22	1.5023					
24	NC Retail Normalized Test Period MWh Sales	Exhibit 4	59,559,458					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$ 894,761,737					

Note: Rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
NERC 5 Year Average Nuclear Capacity Factor of 91.87% and Projected Period Sales  
Test Period Ended December 31, 2022  
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Clark Exhibit 2  
Schedule 3  
Page 1 of 3

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Line #	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Fuel Cost (\$)
			D	E	D * E = F
1	Total Nuclear	Workpaper 2	57,782,460	0.5613	324,343,758
2	Coal	Calculated	11,094,415	3.8575	427,971,909
3	Gas CT and CC	Workpaper 3 & 4	31,212,640	3.7804	1,179,963,909
4	Reagents and Byproducts	Workpaper 9	-		24,944,696
5	Total Fossil	Sum	42,307,056		1,632,880,514
6	Hydro	Workpaper 3	5,600,555		
7	Net Pumped Storage	Workpaper 3	(4,083,743)		
8	Total Hydro	Sum	1,516,812		
9	Solar Distributed Generation	Workpaper 3	358,121		
10	Total Generation	Line 1 + Line 5 + Line 8 + Line 9	101,964,448		1,957,224,272
11	Less Lee CC Joint Owners	Workpaper 3 & 4	(878,400)		(25,697,152)
12	Less Catawba Joint Owners	Calculated	(14,626,468)		(82,140,560)
13	Fuel expense recovered through reimbursement	Workpaper 4			(3,687,381)
14	Net Generation	Sum	86,459,580		1,845,699,178
15	Purchased Power	Workpaper 3 & 4	11,789,258		414,804,733
16	JDA Savings Shared	Workpaper 5	-		(69,598,371)
17	Total Purchased Power	Sum	11,789,258		345,206,362
18	Total Generation and Purchased Power	Line 14 + Line 17	98,248,839		2,190,905,541
19	Fuel expense recovered through intersystem sales	Workpaper 3 & 4	(1,148,043)		(57,998,825)
20	Line losses and Company use	Line 22 - Line 19 - Line 18	(6,269,005)		-
21	System Fuel Expense for Fuel Factor	Lines 18 + 19 + 20			2,132,906,715
22	Projected System MWh Sales for Fuel Factor	Workpaper 7b	90,831,791		90,831,791
23	Fuel and Fuel Related Costs cents/kWh	Line 21 / Line 22 / 10			2.3482

Note: Rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
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Clark Revised Exhibit 2  
Schedule 3  
Page 2 of 3

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1	NC Projected Billing Period MWh Sales	Workpaper 7b	23,477,265	24,077,007	13,270,457	60,824,730
<b>Calculation of Renewable Purchased Power Capacity Rate by Class</b>						<u>Amount</u>
2	Purchased Power for REPS Compliance - Capacity	Workpaper 4				\$ 14,931,581
3	QF Purchased Power - Capacity	Workpaper 4				12,176,644
4	Total of Renewable and QF Purchased Power Capacity	Line 2 + Line 3				\$ 27,108,225
5	NC Portion - Jurisdictional % based on 2021 Production Plant Allocator	Input				66.68%
6	NC Renewable and QF Purchased Power - Capacity	Line 4 * Line 5				\$ 18,076,112
7	2021 Production Plant Allocation Factors	Input	47.04%	37.14%	15.81%	100.00%
8	Renewable and QF Purchased Power - Capacity allocated on 2021 Production Plant Allocator	Line 6 * Line 7	\$ 8,503,847	\$ 6,713,696	\$ 2,858,570	\$ 18,076,112
9	Renewable and QF Purchased Power - Capacity cents/kWh based on Projected Billing Period Sales	Line 8 / Line 1 / 10	0.0362	0.0279	0.0215	0.0297
<b>Summary of Total Rate by Class</b>						
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	2.7107	2.2545	1.7104	2.3186
11	REPS Compliance and QF Purchased Power - Capacity cents/kWh	Line 9	0.0362	0.0279	0.0215	0.0297
12	Total adjusted Fuel and Fuel Related Costs cents/kWh	Line 10 + Line 11	2.7469	2.2824	1.7319	2.3483
13	EMF Increment (Decrement) cents/kWh	Exh 3 pg 2, 3, 4	1.6635	1.6638	1.7256	1.6764
14	EMF Interest Increment (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	4.4104	3.9462	3.4575	4.0247

Note: Rounding differences may occur

Line #	Rate Class	Projected Billing Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/Decrease as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease)	Current Total Fuel Rate (including Capacity and EMF) E-7, Sub 1263	Proposed Total Fuel Rate (including Capacity and EMF)
		A	B	C	C / B = D	E	F	G
		Workpaper 7b	Workpaper 8	Line 25 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Clark Exhibit 1	E + F = G
1	Residential	23,477,265	\$ 2,466,691,215	\$ 451,650,719	18.31%	1.9238	2.4866	4.4104
2	General Service/Lighting	24,077,007	\$ 1,971,226,718	\$ 360,931,258	18.31%	1.4991	2.4471	3.9462
3	Industrial	13,270,457	\$ 757,602,036	\$ 138,716,797	18.31%	1.0453	2.4122	3.4575
4	NC Retail	60,824,730	\$ 5,195,519,969	\$ 951,298,774				
<b>Total Proposed Composite Fuel Rate:</b>								
5	Total Fuel Costs for Allocation	Workpaper 7b	\$ 2,137,302,931					
6	Total of Renewable and QF Purchased Power Capacity	Exhibit 2 Sch 3, Page 2	27,108,225					
7	System Other Fuel Costs	Line 5 - Line 6	\$ 2,110,194,706					
8	Adjusted Projected System MWh Sales for Fuel Factor	Workpaper 7b	91,011,082					
9	NC Retail Projected Billing Period MWh Sales	Line 4	60,824,730					
10	Allocation %	Line 9 / Line 8	66.83%					
11	NC Retail Other Fuel Costs	Line 7 * Line 10	\$ 1,410,243,122					
12	NC Renewable and QF Purchased Power - Capacity	Exhibit 2 Sch 3, Page 2	18,076,112					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 1,428,319,234					
14	NC Retail Projected Billing Period MWh Sales	Line 4	60,824,730					
15	Calculated Fuel Rate cents/kWh	Line 13 / Line 14 / 10	2.3483					
16	Proposed Composite EMF Rate cents/kWh	Exhibit 3 Page 1	1.6764					
17	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3 Page 1	0.0000					
18	Total Proposed Composite Fuel Rate	Sum	4.0247					
<b>Total Current Composite Fuel Rate - Docket E-7 Sub 1263:</b>								
19	Current composite Fuel Rate cents/kWh	Clark Exhibit 1	1.9010					
20	Current composite EMF Rate cents/kWh	Clark Exhibit 1	0.5597					
21	Current composite EMF Interest Rate cents/kWh	Clark Exhibit 1	0.0000					
22	Total Current Composite Fuel Rate	Sum	2.4607					
23	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 18 - Line 22	1.5640					
24	NC Retail Projected Billing Period MWh Sales	Line 4	60,824,730					
25	Increase/(Decrease) in Fuel Costs	Line 23 * Line 24 * 10	\$ 951,298,774					

Note: Rounding differences may occur



Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Calculation of Experience Modification Factor - Proposed Composite  
Test Period Ended December 31, 2022  
Billing Period September 2023 - August 2024  
Docket E-7, Sub 1282

Line No.	Month	Fuel Cost Incurred c/kWh (a)	Fuel Cost Billed c/kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/ Under Recovery (d)
1	January 2022			4,988,891	\$ 82,008,233
2	February <sup>(1)</sup>			5,189,525	\$ 61,224,070
3	March			4,642,682	\$ 16,628,788
4	April			4,283,375	\$ 22,131,836
5	May <sup>(1)</sup>			4,361,034	\$ 82,217,312
6	June <sup>(1)</sup>			5,223,755	\$ 115,761,737
7	July			5,560,704	\$ 146,325,916
8	August			6,010,616	\$ 185,513,643
9	September			5,369,219	\$ 84,720,701
10	October			4,315,777	\$ 27,143,393
11	November			4,103,701	\$ 71,328,379
12	December <sup>(1)</sup>			5,009,748	\$ 186,026,549
13	<b>Total Test Period</b>			<b>59,059,028</b>	<b>\$ 1,081,030,561</b>
14	<b>Adjustment to remove (Over)/Under Recovery - January 2022 <sup>(2)</sup></b>				<u>\$ 81,987,600</u>
15	<b>Adjustment for Clemson CHP Steam Revenues</b>				<u>\$ (613,775)</u>
16	<b>Adjusted (Over)/Under Recovery</b>				<b>\$ 998,429,186</b>
17	NC Retail Normalized Test Period MWh Sales			Exhibit 4	59,559,458
18	<b>Experience Modification Increment (Decrement) cents/kWh</b>				<b>1.6764</b>

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

<sup>(2)</sup> January 2022 filed in Docket E-7, Sub 1263 to update the EMF and included in the current EMF rate. Included for Commission review in accordance with NC Rule R8-55(d)(3) but deducted from total (Over)/Under on Line 15.

Rounding differences may occur



Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/ Under Recovery (d)
1	January 2022	2.6880	1.5337	2,129,408	\$ 24,579,060
2	February <sup>(1)</sup>	2.2111	1.5337	2,308,671	\$ 15,631,479
3	March	1.8234	1.5337	1,783,273	\$ 5,165,674
4	April	2.2527	1.5337	1,441,708	\$ 10,365,435
5	May <sup>(1)</sup>	3.7477	1.5337	1,441,079	\$ 31,901,319
6	June <sup>(1)</sup>	3.6847	1.5337	1,916,024	\$ 41,213,674
7	July	3.7644	1.5337	2,208,753	\$ 49,270,398
8	August	4.1426	1.5337	2,405,836	\$ 62,764,654
9	September	3.7169	1.7555	1,992,460	\$ 39,079,833
10	October	3.2667	2.0003	1,373,788	\$ 17,397,939
11	November	4.5684	2.0003	1,345,710	\$ 34,559,470
12	December <sup>(1)</sup>	5.2540	2.0003	2,073,011	\$ 73,670,397
13	<b>Total Test Period <sup>(3)</sup></b>			<b>22,419,721</b>	<b>\$ 405,599,334</b>
14	Test Period Wtd Avg. ¢/kWh	3.4346	1.6532		
15	Adjustment to remove (Over)/Under Recovery - January 2022 <sup>(2)</sup>				\$ 24,571,837
16	<b>Adjustment for Clemson CHP Steam Revenues</b>				\$ (217,439)
17	<b>Adjusted (Over)/Under Recovery</b>				<b>\$ 380,810,058</b>
18	NC Retail Normalized Test Period MWh Sales		Exhibit 4		22,892,401
19	<b>Experience Modification Increment (Decrement) cents/kWh</b>				<b>1.6635</b>

**Notes:**

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

<sup>(2)</sup> January 2022 filed in Docket E-7, Sub 1263 to update the EMF and included in the current EMF rate. Included for Commission review in accordance with NC Rule R8-55(d)(3) but deducted from total (Over)/Under on Line 16.

<sup>(3)</sup> North Carolina Residential sales on Exhibit 3, Line 13 differ from North Carolina Residential sales on Workpaper 11, due to an adjustment reported on the June 2022 monthly fuel report.

Rounding differences may occur

Line #	Month	Fuel Cost Incurred ¢/kWh (a)	Fuel Cost Billed ¢/kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/ Under Recovery (d)
1	January 2022	3.6550	1.6895	1,921,732	\$ 37,771,442
2	February <sup>(1)</sup>	3.2504	1.6895	1,927,508	\$ 30,077,232
3	March	2.2020	1.6895	1,808,909	\$ 9,269,996
4	April	2.1636	1.6895	1,840,396	\$ 8,725,608
5	May <sup>(1)</sup>	3.4774	1.6895	1,904,671	\$ 34,049,947
6	June <sup>(1)</sup>	3.9661	1.6895	2,184,316	\$ 49,730,332
7	July	4.5134	1.6895	2,260,531	\$ 63,835,167
8	August	4.9415	1.6895	2,467,241	\$ 80,234,867
9	September	2.9735	1.7523	2,309,221	\$ 28,198,709
10	October	2.1545	1.8217	1,927,666	\$ 6,414,818
11	November	3.2050	1.8217	1,777,613	\$ 24,589,863
12	December <sup>(1)</sup>	5.0399	1.8217	2,007,616	\$ 71,896,623
13	<b>Total Test Period</b>			<b>24,337,421</b>	<b>\$ 444,794,604</b>
14	Test Period Wtd Avg. ¢/kWh	3.5242	1.7265		
15	Adjustment to remove (Over)/Under Recovery - January 2022 <sup>(2)</sup>				\$ 37,762,562
16	<b>Adjustment for Clemson CHP Steam Revenues</b>				<u>\$ (263,925)</u>
17	<b>Adjusted (Over)/Under Recovery</b>				<b>\$ 406,768,116</b>
18	NC Retail Normalized Test Period MWh Sales			Exhibit 4	24,448,017
19	<b>Experience Modification Increment (Decrement) cents/kWh</b>				<b>1.6638</b>

**Notes:**

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

<sup>(2)</sup> January 2022 filed in Docket E-7, Sub 1263 to update the EMF and included in the current EMF rate. Included for Commission review in accordance with NC Rule R8-55(d)(3) but deducted from total (Over)/Under on Line 16.

Rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Calculation of Experience Modification Factor - Industrial  
Test Period Ended December 31, 2022  
Billing Period September 2023 - August 2024  
Docket E-7, Sub 1282

Line #	Month	Fuel Cost Incurred c/kWh (a)	Fuel Cost Billed c/kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/ Under Recovery (d)
1	January 2022	3.8206	1.7243	937,751	\$ 19,657,733
2	February <sup>(1)</sup>	3.3522	1.7243	953,346	\$ 15,515,360
3	March	1.9331	1.7243	1,050,500	\$ 2,193,118
4	April	2.0280	1.7243	1,001,271	\$ 3,040,792
5	May <sup>(1)</sup>	3.3268	1.7243	1,015,284	\$ 16,266,045
6	June <sup>(1)</sup>	3.9333	1.7243	1,123,416	\$ 24,817,732
7	July	4.7681	1.7243	1,091,420	\$ 33,220,351
8	August	5.4617	1.7243	1,137,540	\$ 42,514,122
9	September	3.4130	1.7791	1,067,538	\$ 17,442,158
10	October	2.1680	1.8396	1,014,322	\$ 3,330,636
11	November	3.0819	1.8396	980,378	\$ 12,179,045
12	December <sup>(1)</sup>	5.7913	1.8396	929,121	\$ 40,459,529
13	<b>Total Test Period</b>			<b>12,301,885</b>	<b>\$ 230,636,623</b>
14	Test Period Wtd Avg. c/kWh	3.6009	1.7565		
15	Adjustment to remove (Over)/Under Recovery - January 2022 <sup>(2)</sup>				\$ 19,653,201
16	<b>Adjustment for Clemson CHP Steam Revenues</b>				\$ (132,411)
17	<b>Adjusted (Over)/Under Recovery</b>				<b>\$ 210,851,011</b>
18	NC Retail Normalized Test Period MWh Sales		Exhibit 4		12,219,040
19	<b>Experience Modification Increment (Decrement) cents/KWh</b>				<b>1.7256</b>

**Notes:**

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

<sup>(2)</sup> January 2022 filed in Docket E-7, Sub 1263 to update the EMF and included in the current EMF rate. Included for Commission review in accordance with NC Rule R8-55(d)(3) but deducted from total (Over)/Under on Line 16.

Rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Sales, Fuel Revenue, Fuel Expense and System Peak  
Test Period Ended December 31, 2022  
Billing Period September 2023 - August 2024  
Docket E-7, Sub 1282

Clark Exhibit 4

Line #	Description	Reference	Total Company	North Carolina Retail	North Carolina Residential	North Carolina General Service/Lighting	North Carolina Industrial
1	Test Period MWh Sales (excluding inter system sales) <sup>(1)</sup>	Exhibit 6 Schedule 1 (Line 4) and Workpaper 11 (NC Retail)	88,284,042	59,059,117	22,419,810	24,337,421	12,301,885
2	Customer Growth MWh Adjustment	Workpaper 13 Pg 1	160,003	162,487	130,366	103,625	(71,505)
3	Weather MWh Adjustment	Workpaper 12 Pg 1	437,160	337,854	342,225	6,970	(11,341)
4	Total Normalized MWh Sales	Sum	88,881,205	59,559,458	22,892,401	24,448,017	12,219,040
5	Test Period Fuel and Fuel Related Revenue *		\$ 1,606,073,846	\$ 1,006,893,394			
6	Test Period Fuel and Fuel Related Expense *		\$ 2,966,425,990	\$ 2,087,923,955			
7	Test Period Unadjusted (Over)/Under Recovery		\$ 1,360,352,144	\$ 1,081,030,561			
			<b>2021 Summer Coincidental Peak (CP) kW</b>				
8	Total System Peak		17,241,828				
9	NC Retail Peak		11,480,608				
10	NC Residential Peak		5,400,475				
11	NC General Service/Lighting Peak		4,263,819				
12	NC Industrial Peak		1,816,314				

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

<sup>(1)</sup> North Carolina Residential sales on Exhibit 4, Line 1 differ from North Carolina Residential sales on Exhibit 3, Page 2 of 4 due to an adjustment reported on the June 2022 monthly fuel report.

Rounding differences may occur

**Duke Energy Carolinas, LLC**  
**North Carolina Annual Fuel and Fuel Related Expense**  
**Nuclear Capacity Ratings**  
**Test Period Ended December 31, 2022**  
**Billing Period September 2023 - August 2024**  
**Docket E-7, Sub 1282**

Clark Exhibit 5

Unit	Rate Case		Proposed Capacity Rating MW
	Docket E-7, Sub 1214	Fuel Docket E-7, Sub 1263	
Oconee Unit 1	847.0	847.0	847.0
Oconee Unit 2	848.0	848.0	848.0
Oconee Unit 3	859.0	859.0	859.0
McGuire Unit 1	1,158.0	1,158.0	1,158.0
McGuire Unit 2	1,157.6	1,157.6	1,157.6
Catawba Unit 1	1,160.1	1,160.0	1,160.0
Catawba Unit 2	1,150.1	1,150.1	1,150.1
Total Company	7,179.8	7,179.7	7,179.7

**DECEMBER 2022 MONTHLY FUEL FILING**

DUKE ENERGY CAROLINAS  
SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-7, Sub 1260

Line No.	12 Months Ended	
	Dec 2022	Dec 2022
1 Fuel and fuel-related costs	\$ 400,088,306	\$ 3,125,398,595
MWH sales:		
2 Total system sales	7,795,402	89,477,757
3 Less intersystem sales	205,952	1,193,715
4 Total sales less intersystem sales	<u>7,589,450</u>	<u>88,284,042</u>
5 Total fuel and fuel-related costs (¢/KWH) (line 1/line 4)	<u>5.2716</u>	<u>3.5402</u>
6 Current fuel and fuel-related cost component (¢/KWH) (per Schedule 4, Line 7a Total)	<u>1.8989</u>	
Generation Mix (MWH):		
Fossil (by primary fuel type):		
7 Coal	1,226,989	8,102,494
8 Fuel Oil	78,865	130,190
9 Natural Gas - Combined Cycle	923,129	13,612,829
10 Natural Gas - Combined Heat and Power	7,147	91,218
11 Natural Gas - Combustion Turbine	74,091	1,686,686
12 Natural Gas - Steam	1,243,316	13,557,414
13 Biogas	2,080	18,277
14 Total fossil	<u>3,555,617</u>	<u>37,199,108</u>
15 Nuclear 100%	5,486,217	59,538,303
16 Hydro - Conventional	215,484	1,696,649
17 Hydro - Pumped storage	(34,571)	(697,976)
18 Total hydro	<u>180,913</u>	<u>998,673</u>
19 Solar Distributed Generation	15,173	320,481
20 Total MWH generation	9,237,920	98,056,565
21 Less joint owners' portion - Nuclear	1,417,939	15,313,271
22 Less joint owners' portion - Combined Cycle	(160)	592,719
23 Adjusted total MWH generation	<u>7,820,141</u>	<u>82,150,575</u>

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 1260

Fuel and fuel-related costs:	12 Months Ended	
	Dec 2022	Dec 2022
0501110 coal consumed - steam	\$ 45,283,039	\$ 270,898,099
0501222-0501223 biomass/test fuel consumed	-	-
0501310 fuel oil consumed - steam	157,081	1,075,261
0501330 fuel oil light-off - steam	48,166	1,713,942
Total Steam Generation - Account 501	45,488,286	273,687,302
Nuclear Generation - Account 518		
0518100 burnup of owned fuel	21,706,902	247,614,928
Other Generation - Account 547		
0547100, 0547124 - natural gas consumed - Combustion Turbine	11,551,223	129,502,907
0547100 - Combustion Turbine - credit for inefficient fuel cost	-	(2,857,210)
0547100 natural gas consumed - Steam	139,769,907	960,513,825
0547101 natural gas consumed - Combined Cycle	78,921,823	626,119,762
0547101 natural gas consumed - Combined Heat and Power	1,290,155	8,688,719
0547106 biogas consumed - Combined Cycle	112,306	986,012
0547200 fuel oil consumed - Combustion Turbine	13,579,427	20,076,765
Total Other Generation - Account 547	245,224,841	1,743,030,780
Reagents		
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	3,579,598	19,538,566
Total Reagents	3,579,598	19,538,566
By-products		
Net proceeds from sale of by-products	451,601	2,946,324
Total By-products	451,601	2,946,324
Total Fossil and Nuclear Fuel Expenses		
Included in Base Fuel Component	316,451,228	2,286,817,900
Purchased Power and Net Interchange - Account 555		
Capacity component of purchased power (economic)	-	(215,310)
Capacity component of purchased power (renewables)	661,601	15,482,895
Capacity component of purchased power (PURPA)	414,939	9,369,817
Fuel and fuel-related component of purchased power	126,508,359	940,337,520
Total Purchased Power and Net Interchange - Account 555	127,584,899	964,974,922
Less:		
Fuel and fuel-related costs recovered through intersystem sales	43,533,664	122,923,146
Fuel in loss compensation	381,194	2,967,546
Solar Integration Charge	13,226	(4,005)
Lincoln CT marginal fuel revenue	19,737	506,640
Miscellaneous Fees Collected	-	900
Total Fuel Credits - Accounts 447 /456	43,947,821	126,394,227
Total Fuel and Fuel-related Costs	\$ 400,088,306	\$ 3,125,398,595

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

DEC 2022

Clark Exhibit 6  
Schedule 3 - Purchases  
Page 1 of 4

Purchased Power	Total	Capacity	Non-capacity			Not Fuel \$ Not Fuel-related \$
			mWh	Fuel \$	Fuel-related \$	
Economic	\$	\$				
Alcoa Power Generating Inc.	-	-	-	-	-	-
American Electric Power Serv Corp.	-	-	-	-	-	-
Associated Electric Cooperative, Inc.	153,251	-	3,154	130,264	22,988	-
Blue Ridge Electric Membership Corp.	-	-	-	-	-	-
Calpine Energy Services, LP	-	-	-	-	-	-
Cargill Power Marketers, LLC	-	-	-	-	-	-
Carolina Power Partners, LLC	\$ 220,128	-	2,924	\$ 187,109	\$ 33,019	-
Cherokee County Cogeneration Partners	-	\$ -	-	-	-	-
City of Kings Mountain	-	-	-	-	-	-
Constellation	-	-	-	-	-	-
Cube Yadkin Generation LLC	115,680	-	723	98,328	17,352	-
DE Progress	-	-	-	-	-	-
DE Progress - Native Load Transfer	70,200,387	-	466,390	70,248,967	2,377,140	(2,425,721)
DE Progress - Native Load Transfer (Prior Period Adjust)	-	-	-	-	-	-
DE Progress - Native Load Transfer Benefit	2,350,019	-	-	2,350,019	-	-
DE Progress - Fees	(25,148)	-	-	-	(25,148)	-
EDF Trading North America, LLC	-	-	-	-	-	-
Exelon Generation Company, LLC	-	-	-	-	-	-
Florida Power & Light Company	-	-	-	-	-	-
Haywood Electric - Economic	32,445	19,590	116	10,927	1,928	-
<b>LGE/KU</b>	650,620	-	11,423	553,027	97,593	-
Lockhart Power Co.	-	-	-	-	-	-
Macquarie Energy, LLC	16,474,177	-	68,687	14,003,050	2,471,127	-
Midwest Independent System Operator	-	-	-	-	-	-
Morgan Stanley Capital Group	57,600	-	800	48,960	8,640	-
NCEMC - Economic	30,628	3,317	611	23,215	4,097	-
NCMPA - Economic	1,893,200	-	18,346	1,609,220	283,980	-
NCMPA Instantaneous - Economic	7,173,244	-	48,002	4,089,467	3,083,778	-
NTE Carolinas LLC	-	-	-	-	-	-
Oglethorpe Power	-	-	-	-	-	-
Piedmont Electric Membership Corp. - Economic	-	-	-	-	-	-
Piedmont Municipal Power Agency	681,363	-	11,316	388,992	292,370	-
PJM Interconnection, LLC	498,917	-	5,150	424,080	74,838	-
Rainbow Energy Marketing Corporation	-	-	-	-	-	-
Rutherford Electric Membership Corp.	-	-	-	-	-	-
South Carolina Electric & Gas Company / Dominion Energy	13,472	-	288	11,451	2,021	-
Southern Company Services, Inc.	148,469	-	2,641	128,198	22,270	-
Tennessee Valley Authority	700,625	-	12,982	595,531	105,094	-
The Energy Authority	15,029	-	386	12,775	2,254	-
Town of Dallas	-	-	-	-	-	-
Town of Forest City	20,417	20,417	-	-	-	-
Wester Energy, Inc.	-	-	-	-	-	-
<b>\$ 101,404,524</b>	<b>\$ 43,324</b>		<b>653,941</b>	<b>\$ 94,911,581</b>	<b>\$ 8,875,341</b>	<b>\$ (2,425,721)</b>
<b>Renewable Energy</b>						
REPS	\$ 4,896,784.45	\$ 639,202	86,592	\$ -	\$ 4,257,583	-
DERP - Purchased Power	\$ 342,872.54	22,399	5,884	-	229,623	90,850
DERP - Net Metered Generation	\$ 496.80	-	18	-	-	497
<b>\$ 5,240,154</b>	<b>\$ 661,601</b>		<b>92,494</b>	<b>\$ -</b>	<b>\$ 4,487,206</b>	<b>\$ 91,347</b>
<b>HB589 PURPA Purchases</b>						
CPRE - Purchased Power	\$ 1,214,288.27	-	29,865	-	-	1,214,288
Qualifying Facilities	\$ 3,465,792.71	414,939	66,488	-	2,956,940	93,914
<b>\$ 4,680,081</b>	<b>\$ 414,939</b>		<b>96,353</b>	<b>\$ -</b>	<b>\$ 2,956,940</b>	<b>\$ 1,308,203</b>
<b>Non-dispatchable / Other</b>						
Carolina Power & Light (DE Progress) (Emergency)	-	-	-	-	-	-
South Carolina Public Service Authority - Emergency	-	-	-	-	-	-
Blue Ridge Electric Membership Corp.	1,573,673	\$ 803,142	24,891	654,951	-	115,580
Cargill Power Marketers, LLC	-	-	-	-	-	-
Carolina Power Partners, LLC	-	-	-	-	-	-
DE Progress - As Available Capacity	-	-	-	-	-	-
Enslon Generation Company, LLC	-	-	-	-	-	-
Haywood Electric	177,287	79,852	3,859	82,820	-	14,615
Macquarie Energy, LLC	15,571,770	-	35,899	13,236,005	-	2,335,766
Morgan Stanley Capital Group	-	-	-	-	-	-
NCEMC - Other	679,250	-	1,235	577,363	-	101,888
NCMPA	2,097,600	-	2,686	1,782,960	-	314,640
NTE Carolinas LLC	-	-	-	-	-	-
Piedmont Electric Membership Corp.	739,661	379,423	11,904	306,202	-	54,036
PJM Interconnection, LLC - Other	-	-	-	-	-	-
South Carolina Electric & Gas Company / Dominion Energy	-	-	-	-	-	-
Southern Company Services, Inc.	-	-	-	-	-	-
Tennessee Valley Authority	-	-	-	-	-	-
Generation Imbalance	3,118,465	-	9,905	2,559,774	-	558,691
Energy Imbalance - Purchases	1,435,304	-	469	1,175,506	-	259,798
Energy Imbalance - Sales	(4,204,965)	-	-	(3,566,988)	-	(637,977)
Qualifying Facilities - Pre HB589	-	-	-	-	-	-
Other Purchases	472	-	18	-	-	472
<b>\$ 21,188,517</b>	<b>\$ 1,262,418</b>		<b>90,876</b>	<b>\$ 16,808,592</b>	<b>\$ -</b>	<b>\$ 3,117,507</b>
<b>Total Purchased Power</b>	<b>\$ 132,513,276</b>	<b>\$ 2,382,281</b>	<b>933,664</b>	<b>\$ 111,720,172</b>	<b>\$ 16,319,487</b>	<b>\$ 2,091,335</b>
<b>Interchanges In</b>						
Other Catawba Joint Owners	6,968,385	-	710,207	4,330,916	-	2,637,471
WS Lee Joint Owner	170,714	-	2,953	158,305	-	12,409
Total Interchanges In	7,139,099	-	713,160	4,489,220	-	2,649,878
<b>Interchanges Out</b>						
Other Catawba Joint Owners	(6,832,104)	(134,209)	(693,600)	(4,230,264)	-	(2,467,631)
Catawba - Net Negative Generation	-	-	-	-	-	-
WS Lee Joint Owner	(1,942,451)	-	(33,801)	(1,790,256)	-	(152,195)
Total Interchanges Out	(8,774,555)	(134,209)	(727,400)	(6,020,520)	-	(2,619,826)
<b>Net Purchases and Interchange Power</b>	<b>\$ 130,877,820</b>	<b>\$ 2,248,072</b>	<b>919,424</b>	<b>\$ 110,188,872</b>	<b>\$ 16,319,487</b>	<b>\$ 2,121,387</b>

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

DEC 2022

Clark Exhibit 6  
 Schedule 3 - Sales  
 Page 2 of 4

Sales	Total	Capacity	Non-capacity		
	\$	\$	mWh	Fuel \$	Non-fuel \$
<b>Utilities:</b>					
Midwest Independent System Operator - Emergency	-	-	-	-	-
DE Progress - Emergency	-	-	-	-	-
SC Public Service Authority - Emergency	-	-	-	(155)	155
SC Electric & Gas / Dominion Energy - Emergency	508,666	-	2,763	2,270,933	(1,762,267)
Tennessee Valley Authority - Emergency	1,924,600	-	8,648	5,948,337	(4,023,737)
<b>Market Based:</b>					
Associated Electric Cooperative, Inc.	2,552	-	41	1,603	949
American Electric Power Services Corp.	-	-	-	-	-
Cargill-Alliant, LLC.	-	-	-	-	-
Carolina Power Partners, LLC	8,800	-	150	8,953	(153)
Central Electric Power Cooperative, Inc.	-	\$ -	-	-	-
Constellation Power Sources	-	-	-	-	-
EDF Trading Company	-	-	-	-	-
Evergy Kansas Central	-	-	-	-	-
Exelon Generation Company, LLC.	-	-	-	-	-
Macquarie Energy, LLC	-	-	-	980	(980)
Midwest Independent System Operator	-	-	-	-	-
Morgan Stanley	-	-	-	-	-
NCEMC	-	-	-	-	-
NCEMC (Balancing/Generator)	-	-	-	-	-
NCMPA	127,155	87,500	213	38,688	967
Oglethorpe Power Corporation	-	-	-	-	-
PJM Interconnection, LLC.	17,071	-	200	13,976	3,095
SC Electric & Gas / Dominion Energy	20,383	-	182	4,442	15,941
South Carolina Electric & Gas - T	(4)	-	-	-	(4)
South Carolina Public Service Authority - T	(4)	-	-	-	(4)
Southern Company	90,699	-	1,058	121,282	(30,583)
Tenaska Power Service	-	-	-	-	-
Tennessee Valley Authority	5,926	-	90	3,948	1,978
The Energy Authority	18,112	-	411	10,634	7,479
Westar Energy	-	-	-	-	-
<b>Other:</b>					
Cargill-Alliant, LLC - Mitigation sales	-	-	-	-	-
DE Progress - Native Load Transfer Benefit	1,268,405	-	-	1,268,405	-
DE Progress - Native Load Transfer	32,571,610	-	187,066	32,362,740	208,869
Generation Imbalance	1,777,596	-	5,130	1,478,897	298,699
BPM Transmission	8,535	-	-	-	8,535
<b>Total Intersystem Sales</b>	<b>\$ 38,350,103</b>	<b>\$ 87,500</b>	<b>205,952</b>	<b>\$ 43,533,664</b>	<b>\$ (5,271,061)</b>

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

Twelve Months Ended  
DEC 2022

Clark Exhibit 6  
Schedule 3 - Purchases  
Page 3 of 5

Purchased Power	Total	Capacity	Non-capacity			Not Fuel \$
			mWh	Fuel \$	Fuel-related \$	
Economic	\$	\$				
Alcoa Power Generating Inc.	-	-	-	-	-	-
American Electric Power Serv Corp.	-	-	-	-	-	-
Associated Electric Cooperative, Inc.	163,916	-	3,384	136,769	27,147	-
Blue Ridge Electric Membership Corp. - Economic	-	-	-	-	-	-
Calpine Energy Services, L.P.	-	-	-	-	-	-
Cargill Power Marketers, LLC.	\$ -	-	\$ -	\$ -	-	-
Carolina Power Partners, LLC	9,667,773	\$ -	128,879	5,950,172	3,717,601	-
Cherokee County Cogeneration Partners	(6,400,734)	(215,310)	-	22,574	(6,207,998)	-
City of Kings Mountain	-	-	-	-	-	-
Constellation	489,570	-	6,659	298,638	190,932	-
Cube Yadkin Generation LLC	221,550	-	2,810	162,909	58,641	-
DE Progress	-	-	-	-	-	-
DE Progress - Native Load Transfer	544,444,833	-	7,369,876	520,344,456	26,483,093	(2,382,715)
DE Progress - Native Load Transfer (Prior Period Adjust)	-	-	-	-	-	-
DE Progress - Native Load Transfer Benefit	54,871,210	-	-	54,871,210	-	-
DE Progress - Fees	(153,265)	-	-	-	(153,265)	-
EDF Trading North America, LLC.	-	-	-	-	-	-
Exelon Generation Company, LLC.	-	-	-	-	-	-
Florida Power & Light Company	-	-	-	-	-	-
Haywood Electric - Economic	958,305	242,809	6,962	439,537	275,958	-
LGE/KU	785,194	-	14,077	635,117	150,077	-
Lockhart Power Co.	-	-	-	-	-	-
Macquarie Energy, LLC	51,250,548	-	486,963	35,216,637	16,033,911	-
Midwest Independent System Operator	-	-	-	-	-	-
Morgan Stanley Capital Group	72,600	-	1,100	58,110	14,490	-
NCEMC	970,306	3,317	15,767	596,418	370,571	-
NCMPA	14,524,190	-	220,006	9,314,124	5,210,066	-
NCMPA Load Following Economic	37,141,682	-	465,009	21,929,915	15,211,767	-
NTE Carolinas LLC	-	-	-	-	-	-
Oglethorpe Power	-	-	-	-	-	-
Piedmont Electric Membership Corp. - Economic	-	-	-	-	-	-
Piedmont Municipal Power Agency	5,268,496	-	102,863	3,124,813	2,143,684	-
PJM Interconnection, LLC.	14,064,189	-	192,441	8,698,896	5,365,294	-
Rainbow Energy Marketing Corporation	-	-	-	-	-	-
Rutherford Electric Membership Corp.	-	-	-	-	-	-
South Carolina Electric & Gas Company / Dominion Energy	13,472	-	288	11,451	2,021	-
Southern Company Services, Inc.	557,481	-	9,748	375,696	181,785	-
Tennessee Valley Authority	5,408,020	-	84,497	3,467,042	1,940,978	-
The Energy Authority	16,905	-	424	13,919	2,986	-
Town of Dallas	-	-	-	-	-	-
<b>Town of Forest City</b>	<b>\$ 244,999</b>	<b>\$ 244,999</b>	<b>- \$</b>	<b>- \$</b>	<b>-</b>	<b>-</b>
<b>Westar Energy, Inc.</b>	<b>\$ -</b>	<b>\$ -</b>	<b>- \$</b>	<b>- \$</b>	<b>-</b>	<b>-</b>
	734581242	275815.11	9111753	665668404.2	71019738.84	-2382715.37
Renewable Energy						
REPS	71,532,035	15,214,422	1,148,827	-	56,317,611	-
DERP - Purchased Power	4,025,008	268,474	69,800	-	2,739,889	1,016,646
DERP - Purchased Power - Pre HB589	\$ -	\$ -	- \$	-	\$ -	-
DERP - Net Metered Generation	124,177,1400	0.0000	4,598,5974	0.0000	-	124,177,1400
	\$ 75,681,220	15,482,895	1223226 \$	\$ -	59,057,500	1,140,823
	ok	ok	ok	ok	ok	
HB589 PURPA Purchases						
<b>CPRE - Purchased Power</b>	<b>\$ 6,118,008</b>	<b>\$ -</b>	<b>301,278</b>	<b>\$ -</b>	<b>\$ 6,118,008</b>	<b>\$ -</b>

Qualifying Facilities	\$ 44,602,804 OK	\$ 9,369,818 OK	747,251	\$ 34,126,582	1106408.62
	\$ 50,720,812	\$ 9,369,818	1,048,529 \$	- \$ 34,126,582	7224417
<b>Non-dispatchable / Other</b>					
Carolina Power & Light (DE Progress) - Emergency	\$ 30,606	\$ -	177 \$	26,015	\$ 4,591
South Carolina Public Service Authority - Emergency	-	-	-	-	-
Blue Ridge Electric Membership Corp.	12,234,125	5,929,525	293,671	5,358,911	945,690
City of Concord	-	-	-	-	-
Cargill Power Marketers, LLC.	-	-	-	-	-
Carolina Power Partners, LLC	5,412,299	-	53,596	4,600,454	811,845
DE Progress - As Available Capacity	400,501	400,501	-	-	-
Exelon Generation Company, LLC.	-	-	-	-	-
Haywood Electric	2,184,429	978,976	45,858	1,024,635	180,818
Macquarie Energy, LLC	95,814,395	-	573,508	81,442,236	14,372,159
Morgan Stanley Capital Group	-	-	-	-	-
NCEMC - Other	9,311,412	36,488	51,330	7,883,685	1,391,239
NCMPA - Reliability	6,533,220	-	39,228	5,553,237	979,983
NTE Carolinas LLC	-	-	-	-	-
Piedmont Electric Membership Corp.	5,818,999	2,826,296	140,160	2,543,798	448,905
PJM Interconnection, LLC - Other	-	-	-	-	-
South Carolina Electric & Gas Company	-	-	-	-	-
Southern Company Services, Inc.	-	-	-	-	-
Tennessee Valley Authority	-	-	-	-	-
Generation Imbalance	9,288,793	-	69,713	6,023,880	3,264,913
Energy Imbalance - Purchases	2,954,691	-	(19,820)	2,284,580	670,111
Energy Imbalance - Sales	(7,911,557)	-	-	(7,181,724)	(729,833)
Qualifying Facilities - Pre HB589	-	-	-	-	-
Other Purchases	6,318	-	233	-	6,318
	<b>\$ 142,078,232</b>	<b>\$ 10,171,786</b>	<b>1,247,654 \$</b>	<b>109,559,706 \$</b>	<b>- \$ 22,346,739</b>
<b>Total Purchased Power</b>	<b>\$ 1,003,061,506</b>	<b>\$ 35,300,314</b>	<b>12,631,162 \$</b>	<b>775,228,110 \$</b>	<b>164,203,821 \$ 28,329,264</b>
2					
<u>Interchanges In</u>					
Other Catawba Joint Owners	73,411,183	-	7,683,448	45,957,871	27,453,312
WS Lee Joint Owner	27,399,050	-	421,179	25,673,117	1,725,933
Total Interchanges In	100,810,232	-	8,104,626	71,630,988	29,179,244
<u>Interchanges Out</u>					
Other Catawba Joint Owners	(72,945,394)	(1,580,207)	(7,598,655)	(45,548,810)	(25,816,377)
Catawba- Net Negative Generation	(452,734)	-	(13,562)	(391,439)	(61,295)
WS Lee Joint Owner	(26,616,561)	-	(411,650)	(24,785,151)	(1,831,410)
Total Interchanges Out	(100,014,689)	(1,580,207)	(8,023,867)	(70,725,400)	(27,709,082)
<b>Net Purchases and Interchange Power</b>	<b>\$ 1,003,857,049</b>	<b>\$ 33,720,107</b>	<b>12,711,921 \$</b>	<b>776,133,698 \$</b>	<b>164,203,821 \$ 29,799,426</b>

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

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

**Twelve Months Ended  
 DEC 2022**

Clark Exhibit 6  
 Schedule 3 - Sales  
 Page 5 of 5

Sales	Total	Capacity	Non-capacity		
	\$	\$	mWh	Fuel \$	Non-fuel \$
<b>Utilities:</b>					
Midwest Independent System Operator - Emergency	-	-	-	-	-
DE Progress - Emergency	\$ 106,271	-	1,150	\$ 101,064	\$ 5,207
SC Public Service Authority - Emergency	417,282	-	4,767	389,377	27,905
SC Electric & Gas / Dominion Energy - Emergency	522,805	-	3,020	2,283,300	(1,760,495)
Tennessee Valley Authority - Emergency	1,924,600	-	8,648	5,948,337	(4,023,737)
<b>Market Based:</b>					
Associated Electric Cooperative, Inc.	2,552	-	41	1,603	949
American Electric Power Services Corp.	-	-	-	-	-
Cargill-Alliant, LLC.	-	-	-	-	-
Carolina Power Partners, LLC	8,800	-	150	8,953	(153)
Central Electric Power Cooperative, Inc.	5,538,111	\$ 5,267,000	3,450	265,640	5,471
Constellation Power Sources	-	-	-	-	-
EDF Trading Company	-	-	-	-	-
Evergy Kansas Central (BPM)	-	-	-	-	-
Exelon Generation Company, LLC.	-	-	-	-	-
Macquarie Energy, LLC	1,459,360	-	20,545	1,456,745	2,615
Midwest Independent System Operator	-	-	-	-	-
Morgan Stanley	-	-	-	-	-
NCEMC	-	-	-	-	-
NCEMC (Balancing/Generator)	-	-	-	-	-
NCMPA	1,764,061	1,050,000	6,341	686,859	27,202
Oglethorpe Power Corporation	-	-	-	-	-
PJM Interconnection, LLC.	16,952	-	200	13,976	2,976
SC Electric & Gas / Dominion Energy	209,983	-	1,382	147,017	62,966
South Carolina Electric & Gas - T	(4)	-	-	-	(4)
South Carolina Public Service Authority - T	(4)	-	-	-	(4)
Southern Company	112,627	-	1,409	136,190	(23,563)
Tenaska Power Service	-	-	-	-	-
Tennessee Valley Authority	5,926	-	90	3,948	1,978
The Energy Authority	83,368	-	1,474	62,119	21,250
Westar Energy	-	-	-	-	-
<b>Other:</b>					
Cargill-Alliant, LLC - Mitigation sales	-	-	-	-	-
DE Progress - Native Load Transfer Benefit	10,826,966	-	-	10,826,966	-
DE Progress - Native Load Transfer	98,082,917	17,512	1,104,079	96,983,455	1,081,950
Generation Imbalance	4,126,628	-	36,969	3,607,599	519,029
BPM Transmission	(289,990)	-	-	-	(289,990)
<b>Total Intersystem Sales</b>	<b>\$ 124,919,210</b>	<b>\$ 6,334,512</b>	<b>1,193,715</b>	<b>\$ 122,923,146</b>	<b>\$ (4,338,447)</b>

Duke Energy Carolinas  
(Over) / Under Recovery of Fuel Costs  
Dec-22

Line No.		Residential	Commercial	Industrial	Total	
1	Actual System kWh sales				7,589,450,642	
2	DERP Net Metered kWh generation				10,675,770	
3	Adjusted System kWh sales				7,600,126,412	
4	N.C. Retail kWh sales	2,073,010,864	2,007,616,467	929,120,959	5,009,748,290	
5	NC kWh sales % of actual system kWh sales	L4 T / L1			66.01%	
6	NC kWh sales % of adjusted system kWh sales	L4 T / L3			65.92%	
7	Approved fuel and fuel related rates (¢/kWh)					
7a	Billed rates by class (¢/kWh)	L7g	2.0003	1.8217	1.8396	1.8989
7b	Billed fuel expense	L7a * L4 / 100	\$41,466,436	\$36,572,749	\$17,092,109	\$95,131,294
	<b>Rate changes:</b>	Agrees to CY Rate	Agrees to CY Rate	Agrees to CY Rate	ate with Annual Fuel Filings.	
7c	New approved rates	Input	2.0003	1.8217	1.8396	
7d	Ratio of days to rate	Input	100.00%	100.00%	100.00%	
7e	Prior approved rates	Input	1.5337	1.6895	1.7243	
7f	Ratio of days to rate	Input	\$0	\$0	\$0	
7g	Total prorated ¢/KWH	(L7c * L7d) + (L7e * L7f)	2.0003	1.8217	1.8396	
8	Incurred base fuel and fuel related (¢/kWh) (less renewable purchased power capacity)					
	<b>Allocation changes:</b>					
8a	New approved Docket E-7, Sub 1263 allocation factor	Input	41.25%	38.34%	20.40%	ate with Annual Fuel Filings.
8b	System incurred expense	Input				\$399,273,363
8c	Incurred base fuel and fuel related expense	L8b * L6 * 8a	\$108,577,957	\$100,915,104	\$53,694,541	\$263,187,602
8d	Incurred base fuel rates by class (¢/kWh)	L8c / L4 * 100	5.2377	5.0266	5.7791	5.2535
9	Incurred renewable purchased power capacity rates (¢/kWh)					
9a	NC retail production plant %	Input				0.6668
9b	Production plant allocation factors	Input	\$0	\$0	\$0	\$1
9c	System incurred expense	Input				1,076,540
9d	Incurred renewable capacity expense	L9a * L9b * L9c	337,710	266,619	113,521	717,851
9e	Incurred renewable capacity rates by class (¢/kWh)	((L9a * L9c) * L9b) / L4 * 100	\$0	\$0	\$0	\$0
10	Total incurred rates by class (¢/kWh)	L8h + 9e	\$5	\$5	\$6	\$5
11	Difference in ¢/kWh (incurred - billed)	L10 - L7a	\$3	\$3	\$4	\$3
12	(Over) / under recovery [See footnote]	(L4 * L11) / 100	\$67,449,231	\$64,608,974	\$36,715,953	\$168,774,159
13	Prior period adjustments	Input	\$ 6,221,166	\$ 7,287,649	\$ 3,743,576	\$ 17,252,391
14	Total (over) / under recovery	L12 + L13	\$ 73,670,398	\$ 71,896,623	\$ 40,459,529	\$ 186,026,550
15	Total system incurred expense	L8f + L9c			\$	400,349,903
16	Less: Jurisdictional allocation adjustment(s)	Input			\$	261,597
17	Total Fuel and Fuel-related Costs per Schedule 2	L15 + L16			\$	400,088,306

Year 2022	(Over) / Under Recovery				
	Total To Date	Residential	Commercial	Industrial	Total Company
January	\$82,008,235	\$24,579,060	\$37,771,442	\$19,657,733	\$82,008,235
February	\$143,232,306	\$15,631,479	\$30,077,232	\$15,515,360	\$61,224,071
_/1 March	\$159,861,094	\$5,165,674	\$9,269,996	\$2,193,118	\$16,628,788
April	\$181,992,930	\$10,365,435	\$8,725,608	\$3,040,792	\$22,131,835
_/1 May	\$264,210,240	\$31,901,319	\$34,049,947	\$16,266,045	\$82,217,311
June	\$379,971,976	\$41,213,673	\$49,730,332	\$24,817,731	\$115,761,736
July	\$526,297,892	\$49,270,398	\$63,835,167	\$33,220,351	\$146,325,916
August	\$711,811,535	\$62,764,654	\$80,234,867	\$42,514,122	\$185,513,643
September	796,532,236	\$39,079,834	\$28,198,709	\$17,442,158	\$84,720,701
October	823,675,629	\$17,397,939	\$6,414,818	\$3,330,636	\$27,143,393
November	\$895,004,007	34,559,470	24,589,863	12,179,045	\$71,328,378
December	\$1,081,030,557	\$73,670,398	\$71,896,623	\$40,459,529	\$186,026,550
		\$405,599,335	\$444,794,603	\$230,636,622	\$1,081,030,557

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.

\_/1 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 2022**

**Clark Exhibit 6  
Schedule 5  
Page 1 of 2**

Description	Buck CC	Dan River CC	Lee CC	Clemson CHP	Lee Steam/CT	Lincoln CT	(A) Lincoln (Unit17) CT	Mill Creek CT	Rockingham CT
<b>Cost of Fuel Purchased (\$)</b>									
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	581,554	-	-	4,046,679	4,504,834
Gas - CC	\$40,036,410	\$38,694,262	\$221,226	-	-	-	-	-	-
Gas - CHP	-	-	-	\$1,290,155	-	-	-	-	-
Gas - CT	-	-	-	-	\$339,173	\$1,752,935	\$247	\$1,301,300	\$8,157,569
Gas - Steam	-	-	-	-	-	-	-	-	-
Biogas	-	379,200	-	-	-	-	-	-	-
Total	\$40,036,410	\$39,073,462	\$221,226	\$1,290,155	\$920,726	\$1,752,935	\$247	\$5,347,979	\$12,662,402
<b>Average Cost of Fuel Purchased (¢/MBTU)</b>									
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	2,568.26	-	-	2,253.14	2,410.28
Gas - CC	1,210.54	1,211.01	2,080.56	-	-	-	-	-	-
Gas - CHP	-	-	-	1,297.62	-	-	-	-	-
Gas - CT	-	-	-	-	1,277.34	1,215.43	(1,129.41)	1,212.99	1,217.66
Gas - Steam	-	-	-	-	-	-	-	-	-
Biogas	-	2,595.49	-	-	-	-	-	-	-
Weighted Average	1,210.54	1,217.31	2,080.56	1,297.62	1,871.51	1,215.43	(1,129.41)	1,864.18	1,477.81
<b>Cost of Fuel Burned (\$)</b>									
Coal	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	-	-
Oil - Steam/CT	-	-	-	-	\$288,821	4,242,357	-	5,012,521	4,035,727
Gas - CC	\$40,036,410	\$38,694,262	\$221,226	-	-	-	-	-	-
Gas - CHP	-	-	-	\$1,290,155	-	-	-	-	-
Gas - CT	-	-	-	-	339,173	\$1,752,935	\$247	\$1,301,300	\$8,157,569
Gas - Steam	-	-	-	-	-	-	-	-	-
Biogas	-	379,200	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Total	\$40,036,410	\$39,073,462	\$221,226	\$1,290,155	\$627,994	\$5,995,292	\$247	\$6,313,821	\$12,193,296
<b>Average Cost of Fuel Burned (¢/MBTU)</b>									
Coal	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	-	-
Oil - Steam/CT	-	-	-	-	1,751.81	1,517.46	-	1,952.52	1,856.01
Gas - CC	1,210.54	1,211.01	2,080.56	-	-	-	-	-	-
Gas - CHP	-	-	-	1,297.62	-	-	-	-	-
Gas - CT	-	-	-	-	1,277.34	1,215.43	(1,129.41)	1,212.99	1,217.66
Gas - Steam	-	-	-	-	-	-	-	-	-
Biogas	-	2,595.49	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Weighted Average	1,210.54	1,217.31	2,080.56	1,297.62	1,459.09	1,414.68	(1,129.41)	1,734.56	1,374.08
<b>Average Cost of Generation (¢/kWh)</b>									
Coal	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	-	-
Oil - Steam/CT	-	-	-	-	17.56	12.13	-	23.53	20.14
Gas - CC	8.53	8.51	-	-	-	-	-	-	-
Gas - CHP	-	-	-	18.05	-	-	-	-	-
Gas - CT	-	-	-	-	12.54	291,185.15	-	14.61	12.95
Gas - Steam	-	-	-	-	-	-	-	-	-
Biogas	-	18.23	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Weighted Average	8.53	8.55	-	18.05	14.44	17.14	-	20.90	14.68
<b>Burned MBTU's</b>									
Coal	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	-	-
Oil - Steam/CT	-	-	-	-	16,487	279,569	-	256,721	217,441
Gas - CC	3,307,314	3,195,214	10,633	-	-	-	-	-	-
Gas - CHP	-	-	-	99,425	-	-	-	-	-
Gas - CT	-	-	-	-	26,553	144,223	(22)	107,280	669,936
Gas - Steam	-	-	-	-	-	-	-	-	-
Biogas	-	14,610	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Total	3,307,314	3,209,824	10,633	99,425	43,040	423,792	(22)	364,001	887,377
<b>Net Generation (mWh)</b>									
Coal	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	-	-
Oil - Steam/CT	-	-	-	-	1,644	34,986	-	21,307	20,035
Gas - CC	469,549	454,840	(1,260)	-	-	-	-	-	-
Gas - CHP	-	-	-	7,147	-	-	-	-	-
Gas - CT	-	-	-	-	2,705	1	(523)	8,908	63,001
Gas - Steam	-	-	-	-	-	-	-	-	-
Biogas	-	2,080	-	-	-	-	-	-	-
Nuclear 100%	-	-	-	-	-	-	-	-	-
Hydro (Total System)	-	-	-	-	-	-	-	-	-
Solar (Total System)	-	-	-	-	-	-	-	-	-
Total	469,549	456,920	(1,260)	7,147	4,349	34,987	(523)	30,215	83,036
<b>Cost of Reagents Consumed (\$)</b>									
Ammonia	\$48,324	\$0	\$6,766	-	-	-	-	-	-
Limestone	-	-	-	-	-	-	-	-	-
Sorbents	-	-	-	-	-	-	-	-	-
Urea	-	-	-	-	-	-	-	-	-
Re-emission Chemical	-	-	-	-	-	-	-	-	-
Dibasic Acid	-	-	-	-	-	-	-	-	-
Activated Carbon	-	-	-	-	-	-	-	-	-
Lime (water emissions)	-	-	-	-	-	-	-	-	-
Total	\$48,324	\$0	\$6,766	-	-	-	-	-	-

**Notes:**

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



**DUKE ENERGY CAROLINAS  
FUEL AND FUEL RELATED COST REPORT  
December 2022**

Clark Exhibit 6  
Schedule 5  
Page 2 of 2

Description	Allen	Marshall	Belews Creek	Cliffside	Catawba	McGuire	Retail	onee	Current Month
	Steam	Steam - Dual Fuel	Steam - Dual Fuel	Steam - Dual Fuel	Nuclear	Nuclear		Nuclear	
<b>Cost of Fuel Purchased (\$)</b>									
Coal	\$8,397	\$22,275,183	\$13,005,647	\$4,159,826					39449052.41
Oil	-	-	43,134	195,355					9371554.83
Gas - CC									78951896.85
Gas - CHP									1290154.86
Gas - CT									11551223.21
Gas - Steam		23,192,605	89,015,098	27,562,204					139769906.7
Biogas									379200.4585
<b>Total</b>	<b>\$8,397</b>	<b>\$45,467,788</b>	<b>\$102,063,879</b>	<b>\$31,917,385</b>					<b>280762989.3</b>
<b>Average Cost of Fuel Purchased (#/MBTU)</b>									
Coal	-	556.38	405.58	529.76					493.39
Oil	-	-	2,094.23	2,358.10					2345.876765
Gas - CC									1212.190124
Gas - CHP									1297.616153
Gas - CT									1218.467781
Gas - Steam		1,212.83	1,212.32	1,219.81					1213.873974
Biogas									2595.485685
<b>Weighted Average</b>	<b>-</b>	<b>768.58</b>	<b>967.31</b>	<b>1,045.42</b>					<b>1021.532064</b>
<b>Cost of Fuel Burned (\$)</b>									
Coal	\$0	\$20,049,558	\$15,376,945	\$9,856,536					45283038.68
Oil - CC									0
Oil - Steam/CT	-	2,092	-	203,154					13784673.86
Gas - CC									78951896.85
Gas - CHP									1290154.86
Gas - CT									11551223.21
Gas - Steam		23,192,605	89,015,098	27,562,204					139769906.7
Biogas									379200.4585
Nuclear					\$9,964,761	\$9,371,945			29753844.93
<b>Total</b>	<b>\$0</b>	<b>\$43,244,255</b>	<b>\$104,392,043</b>	<b>\$37,621,894</b>	<b>\$9,964,761</b>	<b>\$9,371,945</b>	<b>\$0 #</b>		<b>320763940</b>
<b>Average Cost of Fuel Burned (#/MBTU)</b>									
Coal	-	418.68	345.25	368.79					380.0415591
Oil - CC									0
Oil - Steam/CT	-	1,442.88	-	2,545.79					1771.028179
Gas - CC									1212.190124
Gas - CHP									1297.616153
Gas - CT									1218.467781
Gas - Steam		1,212.83	1,212.32	1,219.81					1213.873974
Biogas									2595.485685
Nuclear					57.13	53.27			54.49758916
<b>Weighted Average</b>	<b>-</b>	<b>645.32</b>	<b>884.95</b>	<b>761.55</b>	<b>57.13</b>	<b>53.27</b>	<b>-</b>		<b>371.3414283</b>
<b>Average Cost of Generation (#/kWh)</b>									
Coal	-	4.02	3.37	3.57					3.690582692
Oil - CC									-
Oil - Steam/CT	-	13.67	-	23.16					17.47873714
Gas - CC									8.552637244
Gas - CHP									18.05169806
Gas - CT									15.59056553
Gas - Steam		11.10	11.18	11.55					11.24170747
Biogas									18.2330654
Nuclear					0.57	0.53			0.542338098
<b>Weighted Average</b>	<b>-</b>	<b>6.11</b>	<b>8.34</b>	<b>7.29</b>	<b>0.57</b>	<b>0.53</b>	<b>-</b>		<b>3.472252469</b>
<b>Burned MBTU's</b>									
Coal	-	4,788,789	4,453,853	2,672,644					11915286
Oil - CC									0
Oil - Steam/CT	-	145	-	7,980					778343
Gas - CC									6513161.2
Gas - CHP									99425
Gas - CT									947970
Gas - Steam		1,912,266	7,342,548	2,259,553					11514367.2
Biogas									14610
Nuclear					17,441,277	17,594,902			54596626
<b>Total</b>	<b>-</b>	<b>6,701,200</b>	<b>11,796,401</b>	<b>4,940,177</b>	<b>17,441,277</b>	<b>17,594,902</b>	<b>-</b>		<b>86379788.4</b>
<b>Net Generation (mWh)</b>									
Coal	(3,652)	498,367	455,930	276,344					1226988.865
Oil - CC									0
Oil - Steam/CT	-	15	-	877					78865.388
Gas - CC									923129.2594
Gas - CHP									7147
Gas - CT									74091.111
Gas - Steam		208,863	795,860	238,593					1243315.636
Biogas									2079.740571
Nuclear 100%					1,755,875	1,777,031			5486217
Hydro (Total System)									180912.503
Solar (Total System)									15173.19
<b>Total</b>	<b>(3,652)</b>	<b>707,245</b>	<b>1,251,790</b>	<b>515,814</b>	<b>1,755,875</b>	<b>1,777,031</b>	<b>-</b>		<b>9237921</b>
<b>Cost of Reagents Consumed (\$)</b>									
Ammonia			\$1,573,130	\$112,122					1740341.44
Limestone	\$0	\$463,125	669,388	417,704					1550217.58
Sorbents	-	135,320	-	-					135319.92
Urea	-	135,168	-	-					135167.6
Re-emission Chemical	-	-	-	-					0
Dibasic Acid	-	-	-	-					0
Activated Carbon	19,413	-	-	-					19413
Lime (water emissions)	-	-	-	-					0
<b>Total</b>	<b>19,413</b>	<b>733,613</b>	<b>\$2,242,518</b>	<b>\$529,827</b>					<b>3580459.54</b>

**Notes:**

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

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May 04 2023

DUKE ENERGY CAROLINAS  
FUEL AND FUEL RELATED CONSUMPTION AND INVENTORY REPORT  
December 2022

Description	Buck CC	Dan River CC	Lee CC	Clemson CHP	Lee Steam/CT	Lincoln CT	(A)	Mill Creek CT	Rockingham CT	Allen Steam	Marshall Steam - Dual Fuel	Belews	Cliffside Steam - Dual Fuel	Current Month	Total 12 ME December 2022
							Lincoln (Unit17) CT					Creek			
<b>Coal Data:</b>															
Beginning balance										74,257	942,182	1,063,230	560,022	2,639,691	2,249,850.29
Tons received during period										-	160,876	126,317	34,519	321,712	3,321,481.00
Inventory adjustments										-	-	-	-	-	87,264.42
Tons burned during period										-	188,294	175,590	106,421	470,305	3,167,498.27
Ending balance										74,257	914,764	1,013,957	488,120	2,491,098	2,491,097.54
MBTUs per ton burned										-	25.43	25.37	25.11	25.34	25.14
Cost of ending inventory (\$/ton)										76.97	106.48	87.57	92.62	95.19	95.19
<b>Oil Data:</b>															
Beginning balance	-	-	-		676,615	8,412,634	815,389	2,345,685	2,482,428	97,085	278,522	19,411	189,712	15,317,480	17,610,506
Gallons received during period	-	-	-		164,086	-	-	1,301,461	1,354,355	-	-	14,925	60,032	2,894,859	4,430,957
Miscellaneous adjustments	-	-	-		-	-	-	-	-	-	-	(12,217)	(7,796)	(18,962)	(283,590)
Gallons burned during period	-	-	-		119,913	2,024,251	-	1,863,711	1,584,733	-	1,055	-	57,940	5,652,654	9,217,150
Ending balance	-	-	-		720,788	6,388,383	815,389	1,783,435	2,252,050	97,085	277,467	22,119	184,008	12,540,723	12,540,723
Cost of ending inventory (\$/gal)	-	-	-		2.41	2.10	2.40	2.69	2.55	3.67	1.98	2.92	3.51	2.33	2.33
<b>Natural Gas Data:</b>															
Beginning balance															
MCF received during period	3,201,724	3,078,374	10,314	96,396	25,719	139,785	(21)	103,973	645,289		1,854,024	7,076,232	2,186,597	18,418,406	245,725,869
MCF burned during period	3,201,724	3,078,374	10,314	96,396	25,719	139,785	(21)	103,973	645,289		1,854,024	7,076,232	2,186,597	18,418,406	245,725,869
Ending balance															
<b>Biogas Data:</b>															
Beginning balance															
MCF received during period	-	14,075	-											14,075	125,074
MCF burned during period	-	14,075	-											14,075	125,074
Ending balance															
<b>Limestone Data:</b>															
Beginning balance										17,697	69,262	39,265	31,093	157,316	158,739
Tons received during period										-	-	-	-	-	163,156
Inventory adjustments										-	-	-	-	-	(9,121)
Tons consumed during period										-	10,150	11,833	7,544	29,527	184,984
Ending balance										17,697	59,112	27,432	23,549	127,789	127,789
Cost of ending inventory (\$/ton)										55.11	45.63	55.25	47.15	49.29	49.29
<b>Ammonia Data: (B)</b>															
Beginning balance	3,836													3,836	2,761
Tons received during period	925													925	5,319
Tons consumed during period	1,127													1,127	4,446
Ending balance	3,634													3,634	3,634
Cost of ending inventory (\$/ton)	339.09													339.09	339.09

**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.

(A) Lincoln (Unit 17) fuel and fuel related costs represents pre-commercial generation during an extended testing and validation period.  
(B) Quarterly ammonia inventory amounts are revised to reflect a correction to June quantities, affecting the quarter ending September 2021 beginning balance. Revised amounts for quarter ending June 2021 are revised above.

**DUKE ENERGY CAROLINAS**  
**ANALYSIS OF COAL PURCHASED**  
 'December 2022

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
<b>ALLEN</b>	SPOT	-	\$ -	\$ -
	CONTRACT	-	7,786	-
	FUEL MANAGEMENT AGREEMENT	-	(7,786)	-
	FIXED TRANSPORTATION / ADJUSTMENTS	-	8,397	-
	TOTAL	<u>0</u>	<u>8,397</u>	<u>-</u>
<b>BELEWS CREEK</b>	SPOT	-	-	-
	CONTRACT	126,317	11,773,259	93.20
	FUEL MANAGEMENT AGREEMENT	-	814,231	-
	FIXED TRANSPORTATION / ADJUSTMENTS	-	418,157	-
	TOTAL	<u>126,317</u>	<u>13,005,647</u>	<u>102.96</u>
<b>BUCK CLIFFSIDE</b>	SPOT	-	-	-
	SPOT	-	-	-
	CONTRACT	34,519	3,969,974	115.01
	FUEL MANAGEMENT AGREEMENT	-	189,852	-
	FIXED TRANSPORTATION / ADJUSTMENTS	-	-	-
TOTAL	<u>34,519</u>	<u>4,159,826</u>	<u>120.51</u>	
TOTAL	<u>-</u>	<u>-</u>	<u>-</u>	
<b>MARSHALL</b>	SPOT	60,317	11,977,372	198.57
	CONTRACT	100,559	11,121,036	110.59
	FUEL MANAGEMENT AGREEMENT	-	(1,413,676)	-
	FUEL MANAGEMENT AGREEMENT	-	-	-
	FIXED TRANSPORTATION / ADJUSTMENTS	-	-	-
TOTAL	<u>-</u>	<u>(0)</u>	<u>-</u>	

**DUKE ENERGY CAROLINAS**  
**ANALYSIS OF COAL QUALITY RECEIVED**  
**December 2022**

<b>STATION</b>	<b>PERCENT MOISTURE</b>	<b>PERCENT ASH</b>	<b>HEAT VALUE</b>	<b>PERCENT SULFUR</b>
<b>ALLEN</b>	-	-	-	-
<b>BELEWS CREEK</b>	6.68	9.63	12,693	1.84
<b>CLIFFSIDE</b>	13.99	8.16	11,374	1.99
<b>LEE</b>	-	-	-	-
<b>MARSHALL</b>	7.56	9.61	12,443	1.39

**DUKE ENERGY CAROLINAS  
ANALYSIS OF OIL PURCHASED  
DECEMBER 2022**

	<b>ALLEN</b>	<b>BELEWS CREEK</b>	
<b>VENDOR</b>	HighTowers	HighTowers	
<b>SPOT/CONTRACT</b>	Contract	Contract	
<b>SULFUR CONTENT %</b>	-	-	
<b>GALLONS RECEIVED</b>	-	14,925	
<b>TOTAL DELIVERED COST</b>	\$ -	\$ 43,134	
<b>DELIVERED COST/GALLON</b>	\$ -	\$ 2.89	
<b>BTU/GALLON</b>	138,000	138,000	
	<b>CLIFFSIDE</b>	<b>MARSHALL</b>	
<b>VENDOR</b>	HighTowers	HighTowers	
<b>SPOT/CONTRACT</b>	Contract	Contract	
<b>SULFUR CONTENT %</b>	-	-	
<b>GALLONS RECEIVED</b>	60,032	-	
<b>TOTAL DELIVERED COST</b>	\$ 195,355	\$ -	
<b>DELIVERED COST/GALLON</b>	\$ 3.25	\$ -	
<b>BTU/GALLON</b>	138,000	138,000	
	<b>LEE</b>	<b>MILL CREEK</b>	<b>ROCKINGHAM</b>
<b>VENDOR</b>	HighTowers	HighTowers	HighTowers
<b>SPOT/CONTRACT</b>	Contract	Contract	Contract
<b>SULFUR CONTENT %</b>	-	-	-
<b>GALLONS RECEIVED</b>	164,086	1,301,461	1,354,355
<b>TOTAL DELIVERED COST</b>	\$ 581,554	\$ 4,046,679	\$ 4,504,834
<b>DELIVERED COST/GALLON</b>	\$ 3.54	\$ 3.11	\$ 3.33
<b>BTU/GALLON</b>	138,000	138,000	138,000

Duke Energy Carolinas Base Load Power Plant Performance Review Plan  
 Report Period: December 2022 - December 2022

Station	Unit	Date of Outage	Duration of Outage (Hours)	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Actions Taken
Oconee	1						
	2						
	3						
McGuire	1						
	2						
Catawba	1						
	2						

**Duke Energy Carolinas  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 December 2022**

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**Belews Creek Station**

No Outages at Baseload Units During the Month.

**Buck Combined Cycle Station**

No Outages at Baseload Units During the Month.

**Clemson CHP**

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
1	12/12/2022 8:13:00 AM To 12/21/2022 7:52:00 AM	Sch	3999 Other miscellaneous balance of plant problems	Planned outage to repair duct work damage.	
1	12/24/2022 7:59:00 AM To 12/24/2022 3:05:00 PM	Unsch	5041 Fuel piping and valves	Gas Turbine trip due to reduced gas pressure from Fort Hill.	

**Dan River Combined Cycle Station**

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
9	12/23/2022 11:51:00 PM To 12/24/2022 1:56:00 AM	Unsch	1740 Boiler drum gage glasses / level indicator	HRS9 9 LP Drum Level Transmitters froze and lost indication on the Drum level transmitters.	
9	12/24/2022 1:56:00 AM To 12/25/2022 12:08:00 AM	Unsch	5016 High pressure compressor bleed valves	Started the GT9 and unit failed to start due to a faulty Compressor Bleed valve switch.	

**Marshall Station**

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
4	12/2/2022 10:55:00 PM To 12/9/2022 9:53:00 PM	Sch	8140 Reaction tanks including agitators	Maintenance outage to repair leaking reaction tank agitators "A" and "E".	
4	12/30/2022 2:56:00 PM To 12/31/2022 11:59:00 PM	Sch	0920 Other slag and ash removal problems	Clinker Removal from Bottom Ash Hopper.	

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  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 December 2022**

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**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	11/3/2022 3:34:00 AM To 12/11/2022 3:07:00 AM	Sch	4640 Seal oil system and seals	Generator inspection.	
WS Lee CC ST 10	12/11/2022 3:07:00 AM To 12/31/2022 11:59:00 PM	Unsch	4410 Turning gear and motor	Fire damage discovered in the ST compartment.	
WS Lee CC GT 11	11/3/2022 3:48:00 AM To 12/10/2022 8:44:00 AM	Sch	5272 Boroscope inspection	Gas turbine 11 borscope inspection.	
WS Lee CC GT 11	12/10/2022 8:56:00 AM To 12/10/2022 7:19:00 PM	Sch	1740 Boiler drum gage glasses / level indicator	Test fired unit coming out of PO. (HRSG drum levels)	
WS Lee CC GT 11	12/11/2022 3:07:00 AM To 12/31/2022 11:59:00 PM	Unsch	4410 Turning gear and motor	Fire damage in the ST compartment.	
WS Lee CC GT 12	11/3/2022 3:47:00 AM To 12/10/2022 3:55:00 PM	Sch	5260 Major overhaul (use for non-specific overhaul only; see page B-CCGT-2)	GT12 HGP overhaul.	
WS Lee CC GT 12	12/10/2022 5:05:00 PM To 12/11/2022 3:07:00 AM	Sch	5048 Gas fuel system including controls and instrumentation	Unit testing coming out of outage - (ACDMS not available for tuning).	
WS Lee CC GT 12	12/11/2022 3:07:00 AM To 12/31/2022 11:59:00 PM	Unsch	4410 Turning gear and motor	Fire damage located in the ST compartment.	

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 Base Load Power Plant Performance Review Plan  
 Report Period: December 2022

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	Oconee 1	Oconee 2	Oconee 3	McGuire 1	McGuire 2	Catawba 1	Catawba 2
(A) MDC (MW)	847	848	859	1158	1158	1160	1150
(B) Period Hours	744	744	744	744	744	744	744
(C1) Net Gen (MWH)	647,998	651,793	653,520	889,246	887,785	880,020	875,855
(C2) Capacity Factor (%)	102.83	103.31	102.26	103.21	103.04	101.97	102.37
(D1) Net MWH Not Gen. Due to Full Schedule Outages	0	0	0	0	0	0	0
(D2) % Net MWH Not Gen. Due to Full Schedule Outages	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(E1) Net MWH Not Gen. Due to Partial Scheduled Outages	0	0	0	0	0	0	0
(E2) % Net MWH Not Gen. Due to Partial Scheduled Outages	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(F1) Net MWH Not Gen Due to Full Forced Outages	0	0	0	0	0	0	0
(F2) % Net MWH Not Gen Due to Full Forced Outages	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(G1) Net MWH Not Gen due to Partial Forced Outages	-17,830	-20,881	-14,424	-27,694	-26,233	-16,980	-20,255
(G2) % Net MWH Not Gen Due to Partial Forced Outages	-2.83	-3.31	-2.26	-3.21	-3.04	-1.97	-2.37
(H1) Net MWH Not Gen Due to Economic Dispatch	0	0	0	0	0	0	0
(H2) %Net MWH Not Gen Due to Economic Dispatch	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(I1) Core Conservation	0	0	0	0	0	0	0
(I2) % Core Conservation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(J1) Net MWH Possible in Period	630,168	630,912	639,096	861,552	861,552	863,040	855,600
(J2) % Net mwh Possible in Period	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
(K) Equivalent Availability (%)	100	100	100	100	100	100	100
(L) Output Factor (%)	102.83	103.31	102.26	103.21	103.04	101.97	102.37
(M) Heat Rate (BTU/Net KWH)	10,060	10,004	9,978	9,893	9,909	9,993	9,873

Notes:

- Fields (E1), (E2), (G1), (G2), (H1), (H2), (I1) and (I2) are estimates
  - Fields (D1), (D2), (F1) and (F2) include ramping losses
- EAF is calculated using Standard NERC calculation and excludes OMC events

**Duke Energy Carolinas  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 December 2022  
 Belews Creek Station**

	Unit 1	Unit 2
(A) MDC (mW)	1,110	1,110
(B) Period Hrs	744	744
(C) Net Generation (mWh)	595,517	656,273
(D) Capacity Factor (%)	72.11	79.47
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	61,727	44,766
(H) Scheduled Derates: percent of Period Hrs	7.47	5.42
(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	38,639	0
(L) Forced Derates: percent of Period Hrs	4.68	0.00
(M) Net mWh Not Generated due to Economic Dispatch	129,957	124,801
(N) Economic Dispatch: percent of Period Hrs	15.74	15.11
(O) Net mWh Possible in Period	825,840	825,840
(P) Equivalent Availability (%)	87.85	94.58
(Q) Output Factor (%)	72.11	79.47
(R) Heat Rate (BTU/NkWh)	9,723	9,803

Notes:

- 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

**Duke Energy Carolinas  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 December 2022  
 Buck Combined Cycle Station**

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	306	718
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	135,615	135,779	198,155	469,549
(D) Capacity Factor (%)	88.48	88.59	87.04	87.90
(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	636	636
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.28	0.12
(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	152	152	3,216	3,521
(L) Forced Derates: percent of Period Hrs	0.10	0.10	1.41	0.66
(M) Net mWh Not Generated due to Economic Dispatch	17,497	17,333	25,656	60,486
(N) Economic Dispatch: percent of Period Hrs	11.42	11.31	11.27	11.32
(O) Net mWh Possible in Period	153,264	153,264	227,664	534,192
(P) Equivalent Availability (%)	99.90	99.90	98.31	99.22
(Q) Output Factor (%)	88.48	88.59	87.04	87.90
(R) Heat Rate (BTU/NkWh)	10,371	10,176	2,649	7,056

Notes:

- 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

**Duke Energy Carolinas  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 December 2022  
 Clemson CHP**

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	Clemson CHP1
(A) MDC (mW)	16
(B) Period Hrs	744
(C) Net Generation (mWh)	7,147
(D) Capacity Factor (%)	61.98
(E) Net mWh Not Generated due to Full Scheduled Outages	3,343
(F) Scheduled Outages: percent of Period Hrs	28.99
(G) Net mWh Not Generated due to Partial Scheduled Outages	0
(H) Scheduled Derates: percent of Period Hrs	0.00
(I) Net mWh Not Generated due to Full Forced Outages	110
(J) Forced Outages: percent of Period Hrs	0.95
(K) Net mWh Not Generated due to Partial Forced Outages	0
(L) Forced Derates: percent of Period Hrs	0.00
(M) Net mWh Not Generated due to Economic Dispatch	932
(N) Economic Dispatch: percent of Period Hrs	8.09
(O) Net mWh Possible in Period	11,532
(P) Equivalent Availability (%)	70.06
(Q) Output Factor (%)	88.46
(R) Heat Rate (BTU/NkWh)	13,906

Notes:

- 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

**Duke Energy Carolinas  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 December 2022  
 Dan River Combined Cycle Station**

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	206	206	308	720
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	131,290	127,576	198,054	456,920
(D) Capacity Factor (%)	85.66	83.24	86.43	85.30
(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	5,002	0	5,002
(J) Forced Outages: percent of Period Hrs	0.00	3.26	0.00	0.93
(K) Net mWh Not Generated due to Partial Forced Outages	457	457	5,331	6,246
(L) Forced Derates: percent of Period Hrs	0.30	0.30	2.33	1.17
(M) Net mWh Not Generated due to Economic Dispatch	21,517	20,229	25,767	67,512
(N) Economic Dispatch: percent of Period Hrs	14.04	13.20	11.24	12.60
(O) Net mWh Possible in Period	153,264	153,264	229,152	535,680
(P) Equivalent Availability (%)	99.70	96.44	97.67	97.90
(Q) Output Factor (%)	85.66	86.05	86.43	86.10
(R) Heat Rate (BTU/NkWh)	10,567	10,487	2,708	7,138

Notes:

- 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

**Duke Energy Carolinas  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 December 2022  
 Marshall Station**

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	744	744
(C) Net Generation (mWh)	358,385	297,208
(D) Capacity Factor (%)	73.21	60.53
(E) Net mWh Not Generated due to Full Scheduled Outages	0	132,020
(F) Scheduled Outages: percent of Period Hrs	0.00	26.89
(G) Net mWh Not Generated due to Partial Scheduled Outages	6,231	0
(H) Scheduled Derates: percent of Period Hrs	1.27	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	5,409	0
(L) Forced Derates: percent of Period Hrs	1.10	0.00
(M) Net mWh Not Generated due to Economic Dispatch	119,527	61,812
(N) Economic Dispatch: percent of Period Hrs	24.42	12.59
(O) Net mWh Possible in Period	489,552	491,040
(P) Equivalent Availability (%)	97.62	73.11
(Q) Output Factor (%)	73.21	82.78
(R) Heat Rate (BTU/NkWh)	9,494	9,365

Notes:

- 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

**Duke Energy Carolinas**  
**Baseload Steam and CHP Units**  
**Performance Review Plan**  
**December 2022**  
**WS Lee Combined Cycle**

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	248	248	313	809
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	-376	-884	0	-1,260
(D) Capacity Factor (%)	0.00	0.00	0.00	-0.21
(E) Net mWh Not Generated due to Full Scheduled Outages	58,307	60,004	76,097	194,407
(F) Scheduled Outages: percent of Period Hrs	31.60	32.52	32.68	32.30
(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	124,218	124,218	156,775	405,212
(J) Forced Outages: percent of Period Hrs	67.32	67.32	67.32	67.32
(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	0	1,174	0	1,174
(N) Economic Dispatch: percent of Period Hrs	0.00	0.64	0.00	0.20
(O) Net mWh Possible in Period	184,512	184,512	232,872	601,896
(P) Equivalent Availability (%)	0.00	0.00	0.00	0.38
(Q) Output Factor (%)	0.00	0.00	0.00	-55.41
(R) Heat Rate (BTU/NkWh)	0	0	0	-14,135

Notes:

- 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

**Duke Energy Carolinas  
Intermediate Power Plant Performance  
Review Plan  
December 2022**

**Cliffside Station**

**Cliffside 6**

(A) MDC (mW)	849
(B) Period Hrs	744
(C) Net Generation (mWh)	427,074
(D) Net mWh Possible in Period	631,656
(E) Equivalent Availability (%)	79.65
(F) Output Factor (%)	84.32
(G) Capacity Factor (%)	67.61

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  
December 2022**

**Cliffside Station**

**Unit 5**

(A) MDC (mW)	546
(B) Period Hrs	744
(C) Net Generation (mWh)	88,740
(D) Net mWh Possible in Period	406,224
(E) Equivalent Availability (%)	95.43
(F) Output Factor (%)	68.09
(G) Capacity Factor (%)	21.85

Notes:

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

Duke Energy Carolinas Base Load Power Plant Performance Review Plan  
 Report Period: January 2022 - December 2022

	Oconee 1	Oconee 2	Oconee 3	McGuire 1	McGuire 2	Catawba 1	Catawba 2
(A) MDC (MW)	847	848	859	1158	1158	1160	1150
(B) Period Hours	8,760	8,760	8,760	8,760	8,760	8,760	8,760
(C1) Net Gen (MWH)	6,988,171	7,123,871	7,013,087	9,221,671	10,228,639	10,277,595	8,685,269
(C2) Capacity Factor (%)	94.18	95.9	93.2	90.91	100.83	101.14	86.21
(D1) Net MWH Not Gen. Due to Full Schedule Outages	544,917	0	486,752	805,968	0	0	1,159,200
(D2) % Net MWH Not Gen. Due to Full Schedule Outages	7.34	0.00	6.47	7.95	0.00	0.00	11.51
(E1) Net MWH Not Gen. Due to Partial Scheduled Outages	20,893	2,936	98,689	51,931	0	1,094	42,417
(E2) % Net MWH Not Gen. Due to Partial Scheduled Outages	0.28	0.04	1.31	0.51	0.00	0.01	0.42
(F1) Net MWH Not Gen Due to Full Forced Outages	0	443,928	0	227,682	111,593	0	259,478
(F2) % Net MWH Not Gen Due to Full Forced Outages	0.00	5.98	0.00	2.24	1.10	0.00	2.58
(G1) Net MWH Not Gen due to Partial Forced Outages	-134,261	-142,255	-73,688	-163,172	-196,152	-117,089	-72,364
(G2) % Net MWH Not Gen Due to Partial Forced Outages	-1.80	-1.92	-0.98	-1.61	-1.93	-1.15	-0.72
(H1) Net MWH Not Gen Due to Economic Dispatch	0	0	0	0	0	0	0
(H2) %Net MWH Not Gen Due to Economic Dispatch	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(I1) Core Conservation	0	0	0	0	0	0	0
(I2) % Core Conservation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(J1) Net MWH Possible in Period	7,419,720	7,428,480	7,524,840	10,144,080	10,144,080	10,161,600	10,074,000
(J2) % Net mwh Possible in Period	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
(K) Equivalent Availability (%)	92.38	93.81	92.16	89.24	98.76	99.99	85.38
(L) Output Factor (%)	101.65	101.99	99.64	101.22	101.96	101.14	100.25
(M) Heat Rate (BTU/Net KWH)	10,148	10,114	10,091	10,005	10,003	10,073	10,033

Notes:

- Fields (E1), (E2), (G1), (G2), (H1), (H2), (I1) and (I2) are estimates
  - Fields (D1), (D2), (F1) and (F2) include ramping losses
- EAF is calculated using Standard NERC calculation and excludes OMC events

**Duke Energy Carolinas  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 January, 2022 through December, 2022  
 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)	5,464,278	3,779,808
(D) Capacity Factor (%)	56.20	38.87
(E) Net mWh Not Generated due to Full Scheduled Outages	682,961	1,672,770
(F) Scheduled Outages: percent of Period Hrs	7.02	17.20
(G) Net mWh Not Generated due to Partial Scheduled Outages	82,895	84,005
(H) Scheduled Derates: percent of Period Hrs	0.85	0.86
(I) Net mWh Not Generated due to Full Forced Outages	687,179	2,163,967
(J) Forced Outages: percent of Period Hrs	7.07	22.25
(K) Net mWh Not Generated due to Partial Forced Outages	251,493	60,684
(L) Forced Derates: percent of Period Hrs	2.59	0.62
(M) Net mWh Not Generated due to Economic Dispatch	2,554,795	1,962,366
(N) Economic Dispatch: percent of Period Hrs	26.27	20.18
(O) Net mWh Possible in Period	9,723,600	9,723,600
(P) Equivalent Availability (%)	82.47	59.05
(Q) Output Factor (%)	65.99	65.86
(R) Heat Rate (BTU/NkWh)	9,021	9,783

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  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 January, 2022 through December, 2022  
 Buck Combined Cycle Station**

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	206	206	306	718
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,406,294	1,403,629	2,056,915	4,866,838
(D) Capacity Factor (%)	77.93	77.78	76.73	77.38
(E) Net mWh Not Generated due to Full Scheduled Outages	127,024	132,116	189,644	448,783
(F) Scheduled Outages: percent of Period Hrs	7.04	7.32	7.07	7.14
(G) Net mWh Not Generated due to Partial Scheduled Outages	115,863	114,594	18,320	248,777
(H) Scheduled Derates: percent of Period Hrs	6.42	6.35	0.68	3.96
(I) Net mWh Not Generated due to Full Forced Outages	0	6,355	0	6,355
(J) Forced Outages: percent of Period Hrs	0.00	0.35	0.00	0.10
(K) Net mWh Not Generated due to Partial Forced Outages	152	152	13,415	13,720
(L) Forced Derates: percent of Period Hrs	0.01	0.01	0.50	0.22
(M) Net mWh Not Generated due to Economic Dispatch	155,227	147,714	402,266	705,207
(N) Economic Dispatch: percent of Period Hrs	8.60	8.19	15.01	11.21
(O) Net mWh Possible in Period	1,804,560	1,804,560	2,680,560	6,289,680
(P) Equivalent Availability (%)	86.53	85.97	91.74	88.59
(Q) Output Factor (%)	83.83	84.35	82.58	83.44
(R) Heat Rate (BTU/NkWh)	10,472	10,245	2,388	6,990

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  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 January, 2022 through December, 2022  
 Clemson CHP**

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	Clemson CHP1
(A) MDC (mW)	15
(B) Period Hrs	8,760
(C) Net Generation (mWh)	91,218
(D) Capacity Factor (%)	67.66
(E) Net mWh Not Generated due to Full Scheduled Outages	7,454
(F) Scheduled Outages: percent of Period Hrs	5.53
(G) Net mWh Not Generated due to Partial Scheduled Outages	14,157
(H) Scheduled Derates: percent of Period Hrs	10.50
(I) Net mWh Not Generated due to Full Forced Outages	10,738
(J) Forced Outages: percent of Period Hrs	7.97
(K) Net mWh Not Generated due to Partial Forced Outages	0
(L) Forced Derates: percent of Period Hrs	0.00
(M) Net mWh Not Generated due to Economic Dispatch	11,246
(N) Economic Dispatch: percent of Period Hrs	8.34
(O) Net mWh Possible in Period	134,813
(P) Equivalent Availability (%)	76.08
(Q) Output Factor (%)	78.22
(R) Heat Rate (BTU/NkWh)	12,264

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**  
**Baseload Steam and CHP Units**  
**Performance Review Plan**  
**January, 2022 through December, 2022**  
**Dan River Combined Cycle Station**

	Unit 8	Unit 9	Unit ST07	Block Total
(A) MDC (mW)	206	206	308	720
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,158,153	1,172,815	1,779,047	4,110,015
(D) Capacity Factor (%)	64.18	64.99	65.94	65.16
(E) Net mWh Not Generated due to Full Scheduled Outages	362,259	372,530	559,938	1,294,727
(F) Scheduled Outages: percent of Period Hrs	20.07	20.64	20.75	20.53
(G) Net mWh Not Generated due to Partial Scheduled Outages	107,474	107,353	9,098	223,925
(H) Scheduled Derates: percent of Period Hrs	5.96	5.95	0.34	3.55
(I) Net mWh Not Generated due to Full Forced Outages	25,190	20,771	24,126	70,086
(J) Forced Outages: percent of Period Hrs	1.40	1.15	0.89	1.11
(K) Net mWh Not Generated due to Partial Forced Outages	457	457	5,686	6,600
(L) Forced Derates: percent of Period Hrs	0.03	0.03	0.21	0.10
(M) Net mWh Not Generated due to Economic Dispatch	151,026	130,634	320,186	601,845
(N) Economic Dispatch: percent of Period Hrs	8.37	7.24	11.87	9.54
(O) Net mWh Possible in Period	1,804,560	1,804,560	2,698,080	6,307,200
(P) Equivalent Availability (%)	72.55	72.23	77.80	74.71
(Q) Output Factor (%)	82.36	83.10	84.15	83.34
(R) Heat Rate (BTU/NkWh)	10,691	10,619	2,489	7,120

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  
 Baseload Steam and CHP Units  
 Performance Review Plan  
 January, 2022 through December, 2022  
 Marshall Station**

	Unit 3	Unit 4
(A) MDC (mW)	658	660
(B) Period Hrs	8,760	8,760
(C) Net Generation (mWh)	3,101,170	2,712,398
(D) Capacity Factor (%)	53.80	46.91
(E) Net mWh Not Generated due to Full Scheduled Outages	586,574	1,467,292
(F) Scheduled Outages: percent of Period Hrs	10.18	25.38
(G) Net mWh Not Generated due to Partial Scheduled Outages	10,850	0
(H) Scheduled Derates: percent of Period Hrs	0.19	0.00
(I) Net mWh Not Generated due to Full Forced Outages	101,148	149,140
(J) Forced Outages: percent of Period Hrs	1.75	2.58
(K) Net mWh Not Generated due to Partial Forced Outages	235,834	146,348
(L) Forced Derates: percent of Period Hrs	4.09	2.53
(M) Net mWh Not Generated due to Economic Dispatch	1,728,504	1,306,421
(N) Economic Dispatch: percent of Period Hrs	29.99	22.60
(O) Net mWh Possible in Period	5,764,080	5,781,600
(P) Equivalent Availability (%)	83.79	69.51
(Q) Output Factor (%)	61.49	65.12
(R) Heat Rate (BTU/NkWh)	10,369	9,782

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**  
**Baseload Steam and CHP Units**  
**Performance Review Plan**  
**January, 2022 through December, 2022**  
**WS Lee Combined Cycle**

	Unit 11	Unit 12	Unit ST10	Block Total
(A) MDC (mW)	248	248	313	809
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,172,874	1,533,260	1,948,119	4,654,253
(D) Capacity Factor (%)	53.99	70.58	71.05	65.67
(E) Net mWh Not Generated due to Full Scheduled Outages	306,173	307,959	392,464	1,006,597
(F) Scheduled Outages: percent of Period Hrs	14.09	14.18	14.31	14.20
(G) Net mWh Not Generated due to Partial Scheduled Outages	38,348	53,273	0	91,621
(H) Scheduled Derates: percent of Period Hrs	1.77	2.45	0.00	1.29
(I) Net mWh Not Generated due to Full Forced Outages	537,604	152,289	194,999	884,893
(J) Forced Outages: percent of Period Hrs	24.75	7.01	7.11	12.49
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	147,623	147,623
(L) Forced Derates: percent of Period Hrs	0.00	0.00	5.38	2.08
(M) Net mWh Not Generated due to Economic Dispatch	117,480	125,699	58,674	301,853
(N) Economic Dispatch: percent of Period Hrs	5.41	5.79	2.14	4.26
(O) Net mWh Possible in Period	2,172,480	2,172,480	2,741,880	7,086,840
(P) Equivalent Availability (%)	59.40	76.36	73.19	69.93
(Q) Output Factor (%)	88.31	90.01	90.42	89.75
(R) Heat Rate (BTU/NkWh)	10,787	10,488	2,522	7,229

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  
Intermediate Power Plant  
Performance Review Plan  
January, 2022 through December, 2022**

**Cliffside Station**

<b>Units</b>	<b>Unit 6</b>
(A) MDC (mW)	849
(B) Period Hrs	8,760
(C) Net Generation (mWh)	4,410,848
(D) Net mWh Possible in Period	7,437,240
(E) Equivalent Availability (%)	71.91
(F) Output Factor (%)	82.25
(G) Capacity Factor (%)	59.31

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, 2022 through December, 2022**

**Cliffside Station**

<b>Units</b>	<b>Unit 5</b>
(A) MDC (mW)	546
(B) Period Hrs	8,760
(C) Net Generation (mWh)	600,803
(D) Net mWh Possible in Period	4,782,960
(E) Equivalent Availability (%)	57.36
(F) Output Factor (%)	38.11
(G) Capacity Factor (%)	12.56

Notes:

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

Duke Energy Carolinas, LLC  
 North Carolina Annual Fuel and Fuel Related Expense  
 Proposed Nuclear Capacity Factor  
 Billing Period September 2023 through August 2024  
 Docket E-7, Sub 1282

Clark Workpaper 1

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs	10,026,652	9,119,788	8,799,414	9,938,344	7,338,135	6,713,739	6,883,057	58,819,128
Cost (Gross of Joint Owners)	\$ 62,355,885	\$ 50,162,610	\$ 46,520,487	\$ 54,060,516	\$ 41,917,165	\$ 34,438,133	\$ 40,707,973	\$ 330,162,771
\$/MWh	6.2190	5.5004	5.2868	5.4396	5.7122	5.1295	5.9142	
<b>Avg \$/MWh</b>		<b>5.6132</b>						
<b>Cents per kWh</b>		<b>0.5613</b>						

**Sept 2023 -  
August 2024**

<b>MDC</b>			
CATA_UN01	Catawba	MW	1,160.0
CATA_UN02	Catawba	MW	1,150.1
MCGU_UN01	McGuire	MW	1,158.0
MCGU_UN02	McGuire	MW	1,157.6
OCONEE_UN01	Oconee	MW	847.0
OCONEE_UN02	Oconee	MW	848.0
OCONEE_UN03	Oconee	MW	859.0
			<u>7,179.7</u>
<b>Hours In Year</b>			8,760
<b>Generation GWhs</b>			
CATA_UN01	Catawba	GWh	10,027
CATA_UN02	Catawba	GWh	9,120
MCGU_UN01	McGuire	GWh	8,799
MCGU_UN02	McGuire	GWh	9,938
OCONEE_UN01	Oconee	GWh	7,338
OCONEE_UN02	Oconee	GWh	6,714
OCONEE_UN03	Oconee	GWh	6,883
			<u>58,819</u>
<b>Proposed Nuclear Capacity Factor</b>			93.52%

rounding differences may occur

Duke Energy Carolinas, LLC  
 North Carolina Annual Fuel and Fuel Related Expense  
 NERC 5 Year Average Nuclear Capacity Factor  
 Billing Period September 2023 through August 2024  
 Docket E-7, Sub 1282

Clark Workpaper 2

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs with NERC applied	9,272,460	9,193,324	9,256,473	9,253,276	6,900,340	6,908,486	6,998,101	57,782,460
Hours	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760
MDC	1,160.0	1,150.1	1,158.0	1,157.6	847.0	848.0	859.0	7,179.7
Capacity factor	91.25%	91.25%	91.25%	91.25%	93.00%	93.00%	93.00%	91.87%
Cost	\$ 52,048,053	\$ 51,603,849	\$ 51,958,314	\$ 51,940,367	\$ 38,732,897	\$ 38,778,626	\$ 39,281,651	\$ 324,343,758

Avg \$/MWh **5.6132**  
 Cents per kWh **0.5613**

2017-2021	Capacity Rating	NCF Rating	Weighted Average
Oconee 1	847.0	93.00	10.97%
Oconee 2	848.0	93.00	10.98%
Oconee 3	859.0	93.00	11.13%
McGuire 1	1,158.0	91.25	14.72%
McGuire 2	1,157.6	91.25	14.71%
Catawba 1	1,160.0	91.25	14.74%
Catawba 2	1,150.1	91.25	14.62%
	<u>7,179.7</u>		<u>91.87%</u>

Wtd Avg on Capacity Rating

rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
North Carolina Generation and Purchased Power in MWhs  
Billing Period September 2023 through August 2024  
Docket E-7, Sub 1282

Clark Workpaper 3

Resource Type	Sept 2023 - August 2024	
NUC Total (Gross)	58,819,128	
COAL Total	10,320,159	
Gas CT and CC total (Gross)	31,212,640	
Run of River	5,600,555	
Net pumped Storage	(4,083,743)	
Total Hydro	1,516,812	
Catawba Joint Owners	(14,888,880)	
Lee CC Joint Owners	(878,400)	
DEC owned solar	358,121	
Total Generation		86,459,580
Purchases for REPS Compliance	1,438,042	
Qualifying Facility Purchases - Non-REPS compliance	2,389,958	
Other Purchases	164,878	
Allocated Economic Purchases	1,329,474	
Joint Dispatch Purchases	6,466,906	
	11,789,258	
Total Generation and Purchased Power		98,248,839
Fuel Recovered Through Intersystem Sales	(1,148,043)	

rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Projected Fuel and Fuel Related Costs  
Billing Period September 2023 through August 2024  
Docket E-7, Sub 1282

Clark Workpaper 4

Resource Type	Sept 2023 - August 2024	
Nuclear Total (Gross)	\$ 330,162,771	
COAL Total	398,104,637	
Gas CT and CC total (Gross)	1,179,963,909	
Catawba Joint Owner costs	(83,614,236)	
CC Joint Owner costs	(25,697,152)	
Non-Economic Fuel Expense Recovered through Reimbursement	(3,687,381)	
Reagents and gain/loss on sale of By-Products	24,944,696	Workpaper 9
Purchases for REPS Compliance - Energy	68,790,240	
Purchases for REPS Compliance - Capacity	14,931,581	
Purchases of Qualifying Facilities - Energy	59,039,401	
Purchases of Qualifying Facilities - Capacity	12,176,644	
Other Purchases	397,088	
JDA Savings Shared	(69,598,371)	Workpaper 5
Allocated Economic Purchase cost	52,870,968	Workpaper 5
Joint Dispatch purchases	206,598,811	Workpaper 6
<b>Total Purchases</b>	<u>345,206,362</u>	
<b>Fuel Expense recovered through intersystem sales</b>	(57,998,825)	Workpaper 5
<b>Total System Fuel and Fuel Related Costs</b>	<b>\$ 2,107,384,780</b>	

rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Projected Joint Dispatch Fuel Impacts  
Billing Period September 2023 through August 2024  
Docket E-7, Sub 1282

Clark Workpaper 5

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

	Allocated Economic Purchase Cost		Economic Sales Cost		Fuel Transfer Payment		JDA Savings Payment	
	DEP	DEC	DEP	DEC	DEP	DEC	DEP	DEC
9/1/2023	\$ 4,976,440	\$ 7,317,885	\$ (674,018)	\$ (305,418)	\$ (23,724,256)	\$ 23,724,256	\$ 6,910,581	\$ (6,910,581)
10/1/2023	\$ 5,904,520	\$ 6,517,440	\$ (69,203)	\$ (114,170)	\$ (15,802,316)	\$ 15,802,316	\$ 11,215,995	\$ (11,215,995)
11/1/2023	\$ 2,503,327	\$ 3,105,057	\$ (1,223,486)	\$ (674,629)	\$ (18,519,025)	\$ 18,519,025	\$ 10,008,333	\$ (10,008,333)
12/1/2023	\$ 762,505	\$ 1,041,966	\$ (5,872,462)	\$ (1,890,081)	\$ (15,722,366)	\$ 15,722,366	\$ 4,518,477	\$ (4,518,477)
1/1/2024	\$ 2,893,193	\$ 2,042,582	\$ (10,525,081)	\$ (11,843,518)	\$ (13,602,107)	\$ 13,602,107	\$ 4,544,884	\$ (4,544,884)
2/1/2024	\$ 315,449	\$ 384,533	\$ (10,078,466)	\$ (13,200,189)	\$ (6,837,056)	\$ 6,837,056	\$ 2,614,179	\$ (2,614,179)
3/1/2024	\$ 1,955,226	\$ 2,816,591	\$ (622,625)	\$ (648,265)	\$ (10,251,414)	\$ 10,251,414	\$ 1,341,892	\$ (1,341,892)
4/1/2024	\$ 3,952,712	\$ 6,000,661	\$ (639,409)	\$ (211,299)	\$ (12,097,213)	\$ 12,097,213	\$ 1,413,004	\$ (1,413,004)
5/1/2024	\$ 654,154	\$ 713,694	\$ (1,763,746)	\$ (237,095)	\$ (14,639,411)	\$ 14,639,411	\$ 6,435,252	\$ (6,435,252)
6/1/2024	\$ 4,153,979	\$ 5,991,152	\$ (1,260,436)	\$ (644,515)	\$ (21,582,339)	\$ 21,582,339	\$ 3,725,538	\$ (3,725,538)
7/1/2024	\$ 3,609,443	\$ 5,189,561	\$ (2,532,634)	\$ (1,768,613)	\$ (17,455,853)	\$ 17,455,853	\$ 14,114,687	\$ (14,114,687)
8/1/2024	\$ 8,014,976	\$ 11,749,845	\$ (1,306,118)	\$ (1,592,378)	\$ (11,496,801)	\$ 11,496,801	\$ 2,755,548	\$ (2,755,548)

Sept 23 - Aug 24    \$ 52,870,968    \$ (33,130,170)    \$ 181,730,155    \$ (69,598,371)

rounding differences may occur

\$ 206,598,811 Workpaper 6 - Transfer - Purchases  
\$ (24,868,655) Workpaper 6 - Transfer - Sales  
\$ 181,730,155 Sept 22-Aug 23 Net Fuel Transfer Payment

\$ (24,868,655) Workpaper 6 - Transfer - Sales  
\$ (33,130,170) Sept 23-Aug 24 Economic Sales Cost  
\$ **(57,998,825)** Total Fuel expense recovered through intersystem sales

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Projected Merger Payments  
Billing Period September 2023 through August 2024  
Docket E-7, Sub 1282

Clark Workpaper 6

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May 04 2023

	Transfer Projection		Purchase Allocation Delta		Adjusted Transfer		Fossil Gen Cost		Pre-Net Payments	
	PEctoDEC	DEctoPEC	PEC	DEC	PEctoDEC	DEctoPEC	PEC	DEC	PEctoDEC	DEctoPEC
9/1/2023	606,726	20,805	50,315	(50,315)	657,041	20,805	\$ 36.94	\$ 26.37	\$ 548,621.47	\$ 24,272,877.11
10/1/2023	619,535	32,076	95,370	(95,370)	714,904	32,076	\$ 28.43	\$ 141.02	\$ 4,523,430.43	\$ 20,325,746.34
11/1/2023	744,209	8,765	33,471	(33,471)	777,680	8,765	\$ 25.47	\$ 147.32	\$ 1,291,175.66	\$ 19,810,200.86
12/1/2023	558,288	34,315	(6,026)	6,026	558,288	40,342	\$ 33.48	\$ 73.65	\$ 2,971,154.85	\$ 18,693,520.46
1/1/2024	364,075	36,080	10,140	(10,140)	374,215	36,080	\$ 40.82	\$ 46.37	\$ 1,673,120.48	\$ 15,275,227.51
2/1/2024	261,473	47,009	(1,221)	1,221	261,473	48,231	\$ 36.72	\$ 57.30	\$ 2,763,602.82	\$ 9,600,659.02
3/1/2024	395,731	100,349	(4,372)	4,372	395,731	104,721	\$ 34.26	\$ 31.57	\$ 3,306,397.03	\$ 13,557,810.67
4/1/2024	400,208	82,708	30,753	(30,753)	430,962	82,708	\$ 33.12	\$ 26.32	\$ 2,176,581.75	\$ 14,273,794.40
5/1/2024	682,741	36,797	7,545	(7,545)	690,286	36,797	\$ 22.54	\$ 25.00	\$ 919,824.47	\$ 15,559,235.66
6/1/2024	551,409	42,848	67,925	(67,925)	619,334	42,848	\$ 36.79	\$ 28.05	\$ 1,201,775.15	\$ 22,784,113.70
7/1/2024	501,238	41,647	55,203	(55,203)	556,441	41,647	\$ 33.71	\$ 31.28	\$ 1,302,736.04	\$ 18,758,588.73
8/1/2024	328,372	64,562	102,180	(102,180)	430,552	64,562	\$ 31.79	\$ 33.92	\$ 2,190,235.09	\$ 13,687,036.24
Sept 23 - Aug 24	6,014,005	547,961	441,282	(441,282)	6,466,906	559,580			\$ 24,868,655	\$ 206,598,811
									Net Pre-Net Payments	\$ 181,730,155

rounding differences may occur



Duke Energy Carolinas, LLC  
 North Carolina Annual Fuel and Fuel Related Expense  
 Projected and Adjusted Projected Sales and Costs  
 Proposed Nuclear Capacity Factor of 93.52%  
 Billing Period September 2023 through August 2024  
 Docket E-7, Sub 1282

Clark Workpaper 7

Fall 2022 Forecast  
 Billed Sales Forecast  
 Sales Forecast - MWhs (000)

	Projected sales for the Billing Period	Remove impact of SC DERP Net Metered Generation	Adjusted Sales
North Carolina:			
Residential	23,477,265		23,477,265
General	23,838,527		23,838,527
Industrial	13,270,457		13,270,457
Lighting	238,480		238,480
NC RETAIL	60,824,730	-	60,824,729
South Carolina:			
Residential	7,223,610	136,278	7,359,888
General	5,371,691	42,584	5,414,275
Industrial	9,133,136	429	9,133,565
Lighting	51,014	-	51,014
SC RETAIL	21,779,451	179,291	21,958,742
Total Retail Sales			
Residential	30,700,876	136,278	30,837,153
General	29,210,218	42,584	29,252,802
Industrial	22,403,593	429	22,404,022
Lighting	289,494	-	289,494
Retail Sales	82,604,181	179,291	82,783,471
Wholesale	8,227,610	-	8,227,610
Projected System MWH Sales for Fuel Factor	90,831,791	179,291	91,011,082
NC as a percentage of total	66.96%		66.83%
SC as a percentage of total	23.98%		24.13%
Wholesale as a percentage of total	9.06%		9.04%
	100.00%		100.00%
<b>SC Net Metering allocation adjustment</b>			
Total projected SC NEM MWhs		179,291	
Marginal fuel rate per MWh for SC NEM	\$	24.52	
Fuel benefit to be directly assigned to SC Retail	\$	4,396,215	

System Fuel Expense	\$ 2,107,384,780	Clark Exhibit 2 Schedule 1 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	\$ 4,396,215	
Total Fuel Costs for Allocation	\$ 2,111,780,996	Clark Exhibit 2 Schedule 1 Page 3 of 3, L5

Reconciliation	System	NC Retail Customers	Wholesale	South Carolina Retail	
Total system fuel expense from Clark Exhibit 2 Schedule 1 Page 1	\$ 2,107,384,780				
QF and REPS Compliance Purchased Power - Capacity	\$ 27,108,225				
Other fuel costs	\$ 2,080,276,555				
SC Net Metering Fuel Allocation adjustment	\$ 4,396,215				
Jurisdictional fuel costs after adj.	\$ 2,084,672,770				
<b>Allocation to states/classes</b>		66.83%	9.04%	24.13%	
Jurisdictional fuel costs	\$ 2,084,672,770	\$ 1,393,186,813	\$ 188,454,418	\$ 503,031,540	66.68%
Direct Assignment of Fuel benefit to SC Retail	\$ (4,396,215)		\$ -	\$ (4,396,215)	
Total system actual fuel costs	\$ 2,080,276,555	\$ 1,393,186,813	\$ 188,454,418	\$ 498,635,324	
QF and REPS Compliance Purchased Power - Capacity	27,108,225	18,076,112			
Total system fuel expense from Clark Exhibit 2 Schedule 1 Page 1	\$ 2,107,384,780	\$ 1,411,262,925			

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

rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Projected and Adjusted Projected Sales and Costs  
Proposed Nuclear Capacity Factor of 93.52% and Normalized Test Period Sales  
Billing Period September 2023 through August 2024  
Docket E-7, Sub 1282

Clark Workpaper 7a

Fall 2022 Forecast  
Billed Sales Forecast - Normalized Test Period Sales  
Sales Forecast - MWhs (000)

	Test Period Sales	Customer Growth Adjustment	Weather Adjustment	Remove impact of SC DERP Net Metered generation	Normalized Test Period Sales
NC RETAIL	59,059,117	162,487	337,854	-	59,559,458
SC RETAIL	20,955,111	(8,320)	99,613	179,291	21,225,695
Wholesale	8,269,814	5,836	(306)	-	8,275,343
<b>Normalized System MWH Sales for Fuel Factor</b>	<b>88,284,042</b>	<b>160,003</b>	<b>437,160</b>	<b>179,291</b>	<b>89,060,496</b>
NC as a percentage of total	<b>66.90%</b>				<b>66.88%</b>
SC as a percentage of total	23.74%				23.83%
Wholesale as a percentage of total	9.37%				9.29%
	<u>100.00%</u>				<u>100.00%</u>

**SC Net Metering allocation adjustment**

Total projected SC NEM MWhs	179,291
Marginal fuel rate per MWh for SC NEM	\$ 24.52
Fuel benefit to be directly assigned to SC Retail	\$ 4,396,215

System Fuel Expense	\$ 2,032,140,076	Clark Exhibit 2 Schedule 2 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	\$ 4,396,215	
Total Fuel Costs for Allocation	\$ 2,036,536,291	Clark Exhibit 2 Schedule 2 Page 3 of 3, L5

Reconciliation	System	NC Retail Customers	Wholesale	South Carolina Retail
Total system fuel expense from Clark Exhibit 2 Schedule 2 Page 1	\$ 2,032,140,076			
QF and REPS Compliance Purchased Power - Capacity	\$ 27,108,225			
Other fuel costs	\$ 2,005,031,851			
SC Net Metering Fuel Allocation adjustment	\$ 4,396,215			
Jurisdictional fuel costs after adj.	\$ 2,009,428,066			
Allocation to states/classes		66.88%	9.29%	23.83%
Jurisdictional fuel costs	\$ 2,009,428,055	\$ 1,343,810,646	\$ 186,712,496	\$ 478,904,904
Direct Assignment of Fuel benefit to SC Retail	\$ (4,396,215)		\$ -	\$ (4,396,215)
Total system actual fuel costs	\$ 2,005,031,840	\$ 1,343,810,646	\$ 186,712,496	\$ 474,508,689
QF and REPS Compliance Purchased Power - Capacity	27,108,225	18,076,112		
Total system fuel expense from Clark Exhibit 2 Schedule 2 Page 1	\$ 2,032,140,065	\$ 1,361,886,758		

Exh. 2, Sch 2 page 3, Line 13

rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Projected and Adjusted Projected Sales and Costs  
NERC 5 Year Average Nuclear Capacity Factor of 91.87% and Projected Period Sales  
Billing Period September 2023 through August 2024  
Docket E-7, Sub 1282

Clark Workpaper 7b

Fall 2022 Forecast  
Billed Sales Forecast  
Sales Forecast - MWhs (000)

	Projected sales for the Billing Period	Remove impact of SC DERP Net Metered generation	Adjusted Sales
North Carolina:			
Residential	23,477,265		23,477,265
General	23,838,527		23,838,527
Industrial	13,270,457		13,270,457
Lighting	238,480		238,480
NC RETAIL	60,824,730	-	60,824,730
South Carolina:			
Residential	7,223,610	136,278	7,359,888
General	5,371,691	42,584	5,414,275
Industrial	9,133,136	429	9,133,565
Lighting	51,014	0	51,014
SC RETAIL	21,779,451	179,291	21,958,742
Total Retail Sales			
Residential	30,700,876	136,278	30,837,154
General	29,210,218	42,584	29,252,802
Industrial	22,403,593	429	22,404,022
Lighting	289,494	-	289,494
Retail Sales	82,604,181	179,291	82,783,472
Wholesale	8,227,610	-	8,227,610
<b>Projected System MWh Sales for Fuel Factor</b>	<b>90,831,791</b>	<b>179,291</b>	<b>91,011,082</b>
NC as a percentage of total	<b>66.96%</b>		<b>66.83%</b>
SC as a percentage of total	23.98%		24.13%
Wholesale as a percentage of total	9.06%		9.04%
	100.00%		100.00%

**SC Net Metering allocation adjustment**

Total projected SC NEM MWhs	179,291	
Marginal fuel rate per MWh for SC NEM	\$ 24.52	
Fuel benefit to be directly assigned to SC Retail	\$ 4,396,215	
System Fuel Expense	\$ 2,132,906,715	Clark Exhibit 2 Schedule 3 Page 1 of 3
Fuel benefit to be directly assigned to SC Retail	\$ 4,396,215	
Total Fuel Costs for Allocation	\$ 2,137,302,931	Clark Exhibit 2 Schedule 3 Page 3 of 3, Line 5

**Reconciliation**

	System	NC Retail Customers	Wholesale	South Carolina Retail
Total system fuel expense from Clark Exhibit 2 Schedule 3 Page 1	\$ 2,132,906,715			
QF and REPS Compliance Purchased Power - Capacity	\$ 27,108,225			
Other fuel costs	\$ 2,105,798,490			
SC Net Metering Fuel Allocation adjustment	\$ 4,396,215			
Jurisdictional fuel costs after adj.	\$ 2,110,194,706			
Allocation to states/classes		66.83%	9.04%	24.13%
Jurisdictional fuel costs	\$ 2,110,194,706	\$ 1,410,243,122	\$ 190,761,601	\$ 509,189,982
Direct Assignment of Fuel benefit to SC Retail	\$ (4,396,215)		\$ -	\$ (4,396,215)
Total system actual fuel costs	\$ 2,105,798,490	\$ 1,410,243,122	\$ 190,761,601	\$ 504,793,767
QF and REPS Compliance Purchased Power - Capacity	27,108,225	18,076,112		
Total system fuel expense from Clark Exhibit 2 Schedule 3 Page 1	\$ 2,132,906,715	\$ 1,428,319,234		

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

rounding differences may occur

Duke Energy Carolinas, LLC  
 North Carolina Annual Fuel and Fuel Related Expense  
 Annualized Revenue  
 Billing Period September 2023 through August 2024  
 Docket E-7, Sub 1282

Clark Workpaper 8

	January 2023 Actuals			Normalized Sales	Total Annualized Revenues
	Revenue	kWh Sales	Cents/ kWh	Clark Exhibit 4	
	(a)	(b)	(a)/(b) *100 = (c)	(d)	(c) * (d) * 10
Residential	\$ 259,112,943	2,404,726,417	10.7752	22,892,401	\$ 2,466,691,215
General	\$ 161,395,026	2,001,691,757	8.0629	24,448,017	\$ 1,971,226,718
Industrial	\$ 55,270,705	891,437,613	6.2002	12,219,040	\$ 757,602,036
<b>Total</b>	<b>\$ 475,778,674</b>	<b>5,297,855,787</b>		<b>59,559,458</b>	<b>\$ 5,195,519,969</b>

rounding differences may occur

Reagent and ByProduct projections

Date	Ammonia	Urea	Limestone	Magnesium		Calcium Carbonate	Lime	Reagent Cost	Gypsum (Gain)/		Sale of By-Products	
				Hydroxide					Loss	Ash (Gain)/Loss	Steam (Gain)/Loss	(Gain)/Loss
9/1/2022	\$ 215,268	\$ 20,510	\$ 258,314	\$ 37,104	\$ 22,496	\$ 13,158	\$ 566,851	\$ 72,900	\$ (11,374)	\$ (249,752)	\$ (188,226)	
10/1/2022	\$ 126,192	\$ 12,023	\$ 151,427	\$ 20,990	\$ 12,726	\$ 13,158	\$ 336,516	\$ 42,578	\$ (7,798)	\$ (249,752)	\$ (214,972)	
11/1/2022	\$ 175,908	\$ 16,760	\$ 211,084	\$ 22,395	\$ 13,578	\$ 13,158	\$ 452,884	\$ 52,334	\$ (12,578)	\$ (249,752)	\$ (209,995)	
12/1/2022	\$ 1,809,326	\$ 172,388	\$ 2,171,130	\$ 139,582	\$ 84,629	\$ 13,158	\$ 4,390,213	\$ 702,173	\$ (219,291)	\$ (249,752)	\$ 233,130	
1/1/2023	\$ 2,582,989	\$ 246,100	\$ 3,099,500	\$ 205,790	\$ 124,770	\$ 13,158	\$ 6,272,308	\$ 1,096,545	\$ (268,116)	\$ (249,752)	\$ 578,677	
2/1/2023	\$ 2,113,676	\$ 201,385	\$ 2,536,340	\$ 167,519	\$ 101,567	\$ 13,158	\$ 5,133,645	\$ 816,993	\$ (238,439)	\$ (249,752)	\$ 328,803	
3/1/2023	\$ 447,777	\$ 42,663	\$ 537,317	\$ 56,469	\$ 34,237	\$ 13,158	\$ 1,131,622	\$ 144,210	\$ (32,598)	\$ (249,752)	\$ (138,140)	
4/1/2023	\$ 245,737	\$ 23,413	\$ 294,876	\$ 33,856	\$ 20,527	\$ 13,158	\$ 631,567	\$ 69,849	\$ (12,590)	\$ (249,752)	\$ (192,493)	
5/1/2023	\$ 183,122	\$ 17,447	\$ 219,740	\$ 34,191	\$ 20,730	\$ 13,158	\$ 488,388	\$ 52,063	\$ (3,750)	\$ (249,752)	\$ (201,439)	
6/1/2023	\$ 544,468	\$ 51,875	\$ 653,343	\$ 56,548	\$ 34,285	\$ 13,158	\$ 1,353,677	\$ 163,414	\$ (51,742)	\$ (249,752)	\$ (138,080)	
7/1/2023	\$ 916,015	\$ 87,275	\$ 1,099,187	\$ 78,871	\$ 47,819	\$ 13,158	\$ 2,242,325	\$ 283,833	\$ (91,686)	\$ (260,498)	\$ (68,352)	
8/1/2023	\$ 896,206	\$ 85,388	\$ 1,075,417	\$ 92,289	\$ 55,955	\$ 13,158	\$ 2,218,412	\$ 292,195	\$ (94,322)	\$ (260,498)	\$ (62,626)	
	\$ 10,256,683	\$ 977,229	\$ 12,307,675	\$ 945,605	\$ 573,319	\$ 157,896	\$ 25,218,407	\$ 3,789,087	\$ (1,044,284)	\$ (3,018,514)	\$ (273,711)	

Total Reagent cost and Sale of By-products \$ 24,944,696

rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
2.5% Calculation Test  
Twelve Months Ended December 31, 2022  
Billing Period September 2023 through August 2024  
Docket E-7, Sub 1282

Clark Workpaper 10

Line No.	Description	Forecast \$	(Over)/Under Collection \$	Total \$
1	Amount in current docket	139,103,703	70,794,129	209,897,832
2	Amount in Sub 1263, prior year docket	100,735,755	13,526,437	114,262,192
3	Increase/(Decrease)	38,367,948	57,267,693	95,635,640
4	2.5% of 2022 NC retail revenue of \$4,944,339,147			123,608,479
	Excess of purchased power growth over 2.5% of revenue			0
<b>E-7, Sub 1282</b>				
WP 4	Purchases for REPS Compliance - Energy	68,790,240	66.83%	45,972,517
WP 4	Purchases for REPS Compliance - Capacity	14,931,581	66.68%	9,956,570
WP 4	Purchases	397,088	66.83%	265,374
WP 4	QF Energy	59,039,401	66.83%	39,456,032
WP 4	QF Capacity	12,176,644	66.68%	8,119,542
WP 4	Allocated Economic Purchase cost	52,870,968	66.83%	35,333,668
		208,205,922		139,103,703
<b>E-7, Sub 1263</b>				
	Purchases for REPS Compliance	66,782,210	66.08%	44,126,819
	Purchases for REPS Compliance Capacity	14,610,064	66.68%	9,742,178
	Purchases	7,489,994	66.08%	4,949,066
	QF Energy	40,652,503	66.08%	26,861,429
	QF Capacity	8,445,498	66.68%	5,631,567
	Allocated Economic Purchase cost	14,263,480	66.08%	9,424,695
		152,243,749		100,735,755

rounding differences may occur



2022	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	12 ME
System KWH Sales - Sch 4, Adjusted	7,587,345,694	7,631,271,992	6,790,067,074	6,455,104,305	6,544,372,277	7,852,382,055	8,386,958,942	8,886,608,895	8,009,959,106	6,516,474,006	6,148,600,623	7,600,126,412	88,409,271,381
NC Retail KWH Sales - Sch 4	4,988,913,451	5,189,555,709	4,642,701,985	4,283,391,409	4,361,033,505	5,223,755,139	5,560,704,210	6,010,616,462	5,369,219,189	4,315,776,539	4,103,701,351	5,009,748,290	59,059,117,240
NC Retail % of Sales, Adjusted (Calc)	65.75%	68.00%	68.37%	66.36%	66.64%	66.52%	66.30%	67.64%	67.03%	66.23%	66.74%	65.92%	66.80%
NC retail production plant %	66.68%	66.68%	66.68%	66.68%	66.68%	66.68%	66.68%	66.68%	66.68%	66.68%	66.68%	66.68%	66.68%
<b>Fuel and Fuel related component of purchased power</b>													
System Actual \$ - Sch 3 Fuel\$:	\$ 37,348,658	\$ 40,334,882	\$ 28,936,616	\$ 49,553,437	\$ 53,977,979	\$ 76,187,119	\$ 84,243,384	\$ 92,288,328	\$ 54,398,279	\$ 11,798,321	\$ 41,689,819	\$ 94,911,581	\$ 665,668,403
System Actual \$ - Sch 3 Fuel-related\$; Economic Purchases	7,928,235	(1,570,627)	3,557,135	4,369,558	7,286,679	6,129,379	10,685,578	9,921,881	9,510,435	1,184,100	3,142,043	8,875,341	71,019,737
System Actual \$ - Sch 3 Fuel-related\$; Purchased Power for REPS Compliance	4,142,352	3,490,134	3,995,856	3,290,332	5,192,821	5,283,840	5,430,924	5,998,047	5,270,163	5,163,446	4,802,114	4,257,583	56,317,611
System Actual\$ - Sch 3 Fuel-related\$; SC DERP	153,840	153,265	196,932	137,675	248,854	297,053	290,834	285,229	257,994	240,417	248,173	229,623	2,739,889
System Actual \$ - Sch 3 Fuel-related\$; HB589 Purpa Purchases	1,977,570	1,777,710	2,215,962	1,745,571	2,647,918	3,816,224	3,554,345	3,225,136	3,434,693	3,359,816	3,414,696	2,956,940	34,126,582
Total System Economic & QF\$	51,550,655	44,185,364	38,902,502	59,096,573	69,354,250	91,713,615	104,205,065	111,718,622	72,871,564	21,746,101	53,296,844	111,231,068	829,872,222
<b>Less:</b>													
Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	\$ 30,480,569	\$ 37,453,029	\$ 26,486,545	\$ 48,026,753	\$ 49,193,125	\$ 74,564,244	\$ 75,622,595	\$ 87,008,500	\$ 47,113,469	\$ 10,577,023	\$ 40,068,662	\$ 74,950,979	\$ 601,545,494
Total System Economic \$ without Native Load Transfers	\$ 21,070,086	\$ 6,732,335	\$ 12,415,956	\$ 11,069,820	\$ 20,161,125	\$ 17,149,371	\$ 28,582,470	\$ 24,710,121	\$ 25,758,095	\$ 11,169,078	\$ 13,228,182	\$ 36,280,089	\$ 228,326,728
NC Actual \$ (Calc)	\$ 13,854,230	\$ 4,578,244	\$ 8,489,398	\$ 7,345,562	\$ 13,434,954	\$ 11,408,527	\$ 18,950,690	\$ 16,713,131	\$ 17,266,113	\$ 7,397,136	\$ 8,828,758	\$ 23,914,617	\$ 152,181,363
Billed rate (¢/kWh):	0.1378	0.1378	0.1378	0.1378	0.1378	0.1378	0.1378	0.1378	0.1367	0.1378	0.1378	0.1378	
Billed \$:	\$ 6,874,552	\$ 7,151,030	\$ 6,397,484	\$ 5,902,367	\$ 6,009,355	\$ 7,198,156	\$ 7,662,460	\$ 8,282,423	\$ 7,340,000	\$ 5,946,992	\$ 5,654,760	\$ 6,903,261	\$ 81,322,839
(Over)/ Under \$:	\$ 6,979,678	\$ (2,572,786)	\$ 2,091,914	\$ 1,443,196	\$ 7,425,600	\$ 4,210,372	\$ 11,288,231	\$ 8,430,708	\$ 9,926,113	\$ 1,450,144	\$ 3,173,998	\$ 17,011,356	\$ 70,858,524
<b>Capacity component of purchased power</b>													
System Actual \$ - Capacity component of Cherokee County Cogen Purchases	\$ -	\$ (215,310)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (215,310)
System Actual \$ - Capacity component of Purchased Power for REPS Compliance	631,201	645,219	680,737	463,766	802,115	701,461	827,443	2,753,196	2,319,960	2,511,631	2,238,491	639,202	15,214,422
System Actual \$ - Capacity component of HB589 Purpa QF purchases	14,255	14,801	19,366	14,471	24,039	29,036	28,404	28,368	25,409	23,627	24,299	22,399	268,474
System Actual \$ - Capacity component of SC DERP	312,476	340,840	349,198	316,395	389,774	481,428	581,279	1,661,830	1,443,022	1,553,118	1,525,519	414,939	9,369,818
System Actual \$ - Sch 2 pg 1 ANNUAL VIEW	\$ 957,932	\$ 785,549	\$ 1,049,301	\$ 794,633	\$ 1,215,927	\$ 1,211,925	\$ 1,437,127	\$ 4,443,394	\$ 3,788,390	\$ 4,088,375	\$ 3,788,310	\$ 1,076,540	\$ 24,637,403
NC Actual \$ (Calc) (1)	\$ 638,761	\$ 523,814	\$ 699,688	\$ 529,871	\$ 810,796	\$ 808,127	\$ 958,294	\$ 2,962,912	\$ 2,526,147	\$ 2,726,181	\$ 2,526,093	\$ 717,851	\$ 16,428,537
Billed rate (¢/kWh):	0.0279	0.0279	0.0279	0.0279	0.0279	0.0279	0.0279	0.0279	0.0284	0.0279	0.0279	0.0279	
Billed \$:	\$ 1,390,793	\$ 1,446,727	\$ 1,294,277	\$ 1,194,110	\$ 1,215,755	\$ 1,456,261	\$ 1,550,195	\$ 1,675,620	\$ 1,525,438	\$ 1,203,138	\$ 1,144,016	\$ 1,396,601	\$ 16,492,931
(Over)/Under \$:	\$ (752,032)	\$ (922,913)	\$ (594,589)	\$ (664,238)	\$ (404,959)	\$ (648,134)	\$ (591,900)	\$ 1,287,293	\$ 1,000,709	\$ 1,523,043	\$ 1,382,077	\$ (678,751)	\$ (64,394)
<b>TOTAL (Over)/ Under \$:</b>	<b>\$ 6,227,647</b>	<b>\$ (3,495,699)</b>	<b>\$ 1,497,325</b>	<b>\$ 778,957</b>	<b>\$ 7,020,641</b>	<b>\$ 3,562,238</b>	<b>\$ 10,696,330</b>	<b>\$ 9,718,001</b>	<b>\$ 10,926,822</b>	<b>\$ 2,973,187</b>	<b>\$ 4,556,076</b>	<b>\$ 16,332,605</b>	<b>\$ 70,794,129</b>

Note: The billed rate for September and October are pro-rated based on number of billing days in cycle on new rate schedules.  
 (1) January - May NC actual capacity shown herein is adjusted to reflect use of 2021 production plant allocation factor. Actual true-up related to allocator was made as prior period adjustment in May 2022 of Schedule 4.

rounding differences may occur

2021	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	12 ME
System KWH Sales - Sch 4, Adjusted	8,623,321,816	7,033,781,083	6,170,273,584	6,357,924,869	5,750,592,351	7,218,972,840	8,473,666,049	8,688,276,000	8,107,525,420	6,609,883,548	6,537,708,709	7,191,590,664	86,763,516,933
NC Retail KWH Sales - Sch 4	5,785,766,552	4,705,197,397	4,216,101,608	4,307,482,408	3,784,759,966	4,813,117,777	5,540,576,171	5,890,178,638	5,517,650,819	4,297,619,492	4,396,624,370	4,888,703,073	58,143,778,271
NC Retail % of Sales, Adjusted (Calc)	67.09%	66.89%	68.33%	67.75%	65.82%	66.67%	65.39%	67.79%	68.06%	65.02%	67.25%	67.98%	67.01%
NC retail production plant %	66.98%	66.98%	66.98%	66.98%	66.98%	66.98%	66.98%	66.98%	66.98%	66.98%	66.98%	66.98%	66.98%
<b>Fuel and Fuel related component of purchased power</b>													
System Actual \$ - Sch 3 Fuel\$:	\$ 14,110,987	\$ 21,997,962	\$ 7,288,155	\$ 1,159,999	\$ 6,909,766	\$ 19,650,947	\$ 27,256,372	\$ 22,941,922	\$ 20,301,410	\$ 27,877,777	\$ 27,842,536	\$ 26,295,173	\$ 223,633,006
System Actual \$ - Sch 3 Fuel-related\$; Economic Purchases	1,908,455	2,653,190	897,843	1,159,946	1,043,015	1,716,177	3,233,998	2,658,287	1,580,193	2,101,644	2,163,509	2,417,594	23,533,851
System Actual \$ - Sch 3 Fuel-related\$; Purchased Power for REPS Compliance	3,836,471	3,851,010	3,578,469	1,634,328	5,557,142	6,244,501	5,777,306	6,144,771	5,617,037	5,684,750	4,972,836	4,406,882	57,305,503
System Actual\$ - Sch 3 Fuel-related\$; SC DERP	148,221	63,773	117,353	217,851	155,453	263,492	427,484	260,031	242,117	236,248	246,176	205,494	2,583,692
System Actual \$ - Sch 3 Fuel-related\$; HB589 purpa Purchases	2,756,782	2,455,383	2,198,548	2,656,105	2,051,181	3,609,263	3,393,224	3,761,968	2,668,737	2,679,082	2,593,637	2,343,504	33,167,413
Total System Economic & QF\$	22,760,916	31,021,318	14,080,368	6,828,229	15,716,557	31,484,380	40,088,384	35,766,979	30,409,494	38,579,500	37,818,693	35,668,647	340,223,465
<b>Less:</b>													
Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	\$ 13,085,320	\$ 20,311,355	\$ 6,186,575	\$ 12,225	\$ 6,203,819	\$ 19,379,239	\$ 26,072,774	\$ 21,770,863	\$ 19,434,801	\$ 26,816,502	\$ 23,378,784	\$ 23,491,467	\$ 206,143,723
Total System Economic \$ without Native Load Transfers	\$ 9,675,596	\$ 10,709,964	\$ 7,893,793	\$ 6,816,004	\$ 7,306,104	\$ 8,232,386	\$ 14,015,610	\$ 13,996,116	\$ 10,974,693	\$ 11,762,998	\$ 14,439,909	\$ 12,177,179	\$ 128,000,354
NC Actual \$ (Calc)	\$ 6,491,783	\$ 7,164,353	\$ 5,393,769	\$ 4,617,830	\$ 4,808,522	\$ 5,488,793	\$ 9,164,222	\$ 9,488,606	\$ 7,468,928	\$ 7,648,076	\$ 9,710,873	\$ 8,277,809	\$ 85,723,565
Billed rate (¢/kWh):	0.1367	0.1367	0.1367	0.1367	0.1367	0.1367	0.1367	0.1367	0.1363	0.1357	0.1357	0.1357	
Billed \$:	\$ 7,911,008	\$ 6,433,522	\$ 5,764,770	\$ 5,889,717	\$ 5,174,987	\$ 6,581,084	\$ 7,575,754	\$ 8,053,773	\$ 7,518,618	\$ 5,832,583	\$ 5,966,949	\$ 6,634,781	\$ 79,337,545
(Over)/ Under \$:	\$ (1,419,225)	\$ 730,832	\$ (371,001)	\$ (1,271,887)	\$ (366,465)	\$ (1,092,291)	\$ 1,588,468	\$ 1,434,833	\$ (49,690)	\$ 1,815,493	\$ 3,743,924	\$ 1,643,028	\$ 6,386,020
<b>Capacity component of purchased power</b>													
System Actual \$ - Capacity component of Cherokee County Cogen Purchases	\$ 430,619	\$ 430,619	\$ 215,311	\$ 215,310	\$ 322,964	\$ 1,399,512	\$ 3,229,644	\$ 3,229,644	\$ 645,929	\$ 215,310	\$ 215,310	\$ 215,310	\$ 10,765,481
System Actual \$ - Capacity component of Purchased Power for REPS Compliance	679,198	657,904	611,495	370,864	1,021,112	874,770	880,403	2,930,150	2,610,093	2,651,828	2,162,592	642,188	16,092,597
System Actual \$ - Capacity component of HB589 Purpa QF purchases	401,588	376,607	536,828	347,396	110,548	427,589	1,222,705	1,697,840	1,371,802	1,324,805	834,474	281,956	8,934,138
System Actual \$ - Capacity component of SC DERP	14,999	7,491	12,697	15,442	14,837	24,880	38,885	24,278	22,766	22,049	24,646	19,907	242,878
System Actual \$ - Sch 2 pg 1 ANNUAL VIEW	\$ 1,526,405	\$ 1,472,621	\$ 1,376,331	\$ 949,012	\$ 1,469,461	\$ 2,726,751	\$ 5,371,637	\$ 7,881,912	\$ 4,650,590	\$ 4,213,992	\$ 3,237,022	\$ 1,159,361	\$ 36,035,094
NC Actual \$ (Calc) (1)	\$ 1,022,340	\$ 986,317	\$ 921,825	\$ 635,619	\$ 984,201	\$ 1,826,295	\$ 3,597,760	\$ 5,279,066	\$ 3,114,825	\$ 2,822,404	\$ 2,168,059	\$ 776,504	\$ 24,135,214
Billed rate (¢/kWh):	0.0294	0.0294	0.0294	0.0294	0.0294	0.0294	0.0294	0.0294	0.0291	0.0289	0.0289	0.0289	
Billed \$:	\$ 1,698,557	\$ 1,381,329	\$ 1,237,743	\$ 1,264,570	\$ 1,111,112	\$ 1,413,012	\$ 1,626,576	\$ 1,729,210	\$ 1,608,069	\$ 1,241,743	\$ 1,270,349	\$ 1,412,529	\$ 16,994,798
(Over)/Under \$:	\$ (676,218)	\$ (395,012)	\$ (315,918)	\$ (628,950)	\$ (126,911)	\$ 413,283	\$ 1,971,184	\$ 3,549,856	\$ 1,506,756	\$ 1,580,661	\$ 897,710	\$ (636,025)	\$ 7,140,416
<b>TOTAL (Over)/ Under \$:</b>	<b>\$ (2,095,442)</b>	<b>\$ 335,820</b>	<b>\$ (686,918)</b>	<b>\$ (1,900,837)</b>	<b>\$ (493,375)</b>	<b>\$ (679,008)</b>	<b>\$ 3,559,653</b>	<b>\$ 4,984,689</b>	<b>\$ 1,457,065</b>	<b>\$ 3,396,154</b>	<b>\$ 4,641,634</b>	<b>\$ 1,007,003</b>	<b>\$ 13,526,437</b>

Note: The billed rate for September and October are pro-rated based on number of billing days in cycle on new rate schedules.  
 (1) January - May NC actual capacity shown herein is adjusted to reflect use of 2020 production plant allocation factor. Actual true-up related to allocator was made as prior period adjustment in May 2021 of Schedule 4.

rounding differences may occur



Duke Energy Carolinas, LLC  
 North Carolina Annual Fuel and Fuel Related Expense  
 Actual Sales by Jurisdiction - Subject to Weather  
 Twelve Months Ended December 31, 2022  
 Docket E-7, Sub 1282

Clark Workpaper 11

Line #	Description	Reference	MWhs			% NC	% SC
			NORTH CAROLINA	SOUTH CAROLINA	TOTAL COMPANY		
1	Residential	Company Records	22,419,810	6,932,595	29,352,406	76.38	23.62
2	Total General Service	Company Records	24,337,421	5,555,439	29,892,860		
3	less Lighting and Traffic Signals		326,292	83,069	409,361		
4	General Service subject to weather		24,011,129	5,472,369	29,483,499	81.44	18.56
5	Industrial	Company Records	12,301,885	8,467,077	20,768,963	59.23	40.77
6	Total Retail Sales	1+2+5	59,059,117	20,955,111	80,014,228		
7	Total Retail Sales subject to weather	1+4+5	58,732,825	20,872,042	79,604,867	73.78	26.22

This does not exclude Greenwood and includes the impact of SC DERP net metering generation rounding differences may occur

Duke Energy Carolinas, LLC  
North Carolina Annual Fuel and Fuel Related Expense  
Weather Normalization Adjustment  
Twelve Months Ended December 31, 2022  
Docket E-7, Sub 1282

Line #	Description	REFERENCE	Total Company MWh	NC RETAIL		SC RETAIL	
				% To Total	MWh	% To Total	MWh
	<u>Residential</u>						
1	Total Residential		448,056	76.38	342,225	23.62	105,831
	<u>General Service</u>						
2	Total General Service		8,558	81.44	6,970	18.56	1,588
	<u>Industrial</u>						
3	Total Industrial		(19,147)	59.23	(11,341)	40.77	(7,806)
4	Total Retail	L1+ L2+ L3	437,466		337,854		99,613
5	Wholesale		(306)				
6	Total Company	L4 + L5	<u>437,160</u>		<u>337,854</u>		<u>99,613</u>

rounding differences may occur

2022	Residential	Commercial	Industrial	
	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT	
JAN	430,826	41,682	(6,770)	
FEB	26,706	3,498	334	
MAR	196,589	16,797	229	
APR	57,319	1,598	(581)	
MAY	(79,111)	(16,277)	(3,799)	
JUN	(157,659)	(57,717)	(13,625)	
JUL	(87,489)	(31,423)	(6,855)	
AUG	7,117	4,384	604	
SEP	9,348	5,285	898	
OCT	-	26,141	6,943	
NOV	23,449	17,862	5,321	
DEC	20,961	(3,272)	(1,847)	
Total	<b>448,056</b>	<b>8,558</b>	<b>(19,147)</b>	<b>437,466</b>

Wholesale

2022	TOTAL MWH ADJUSTMENT	Note:	The Resale customers include:
JAN	(2,917)	1	Concord <sup>1</sup>
FEB	8,132	2	Dallas
MAR	12,387	3	Forest City
APR	7	4	Kings Mountain <sup>1</sup>
MAY	(4,538)	5	Due West
JUN	(8,323)	6	Prosperity <sup>2</sup>
JUL	(3,594)	7	Lockhart
AUG	2,515	8	Western Carolina University
SEP	1,554	9	City of Highlands
OCT	(8,702)	10	Haywood
NOV	11,971	11	Piedmont
DEC	(8,800)	12	Rutherford
		13	Blue Ridge
Total	<b>(306)</b>	14	Greenwood <sup>1</sup>

<sup>1</sup>Wholesale load is no longer being served by Duke as of December 2018.

<sup>2</sup>Wholesale load is no longer being served by Duke as of December 2019.

rounding differences may occur

Line	Estimation Method <sup>1</sup>	Rate Schedule	NC	SC	Wholesale	Total Company
			Proposed kWh <sup>1</sup> Adjustment	Proposed kWh Adjustment	Proposed kWh Adjustment	
1	<i>Regression</i>	Residential	130,366,123	72,505,791		
2						
3		<b>General Service (Excluding Lighting):</b>				
4	<i>Customer</i>	General Service Small and Large	109,009,655	1,179,199		
5	<i>Regression</i>	Miscellaneous	(2,444,761)	(1,131,149)		
6		Total General	106,564,894	48,050		
7						
8		<b>Lighting:</b>				
9	<i>Regression</i>	T & T2 (GL/FL/PL/OL) <sup>2</sup>	(2,957,804)	(1,879,960)		
10	<i>Regression</i>	TS	18,088	(14,903)		
11		Total Lighting	(2,939,716)	(1,894,862)		
12						
13		<b>Industrial:</b>				
14	<i>Customer</i>	I - Textile	(28,808,158)	(776,997)		
15	<i>Customer</i>	I - Nontextile	(42,696,403)	(78,201,535)		
16		Total Industrial	(71,504,561)	(78,978,532)		
17						
18						
19		Total	162,486,740	(8,319,553)	5,835,657	160,002,845
					WP 13-2	

Notes:

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

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

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

<sup>2</sup>T and T2 were combined due to North Carolina's FL & GL schedules being merged into OL & PL.

rounding differences may occur

Calculation of Customer Growth Adjustment to kWh Sales - Wholesale

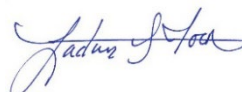
<u>Line No.</u>	<u>Reference</u>	
1	Total System Resale (kWh Sales)	Company Records 9,637,002,447
2	Less Intersystem Sales	Exhibit 6, Sch 1 <u>1,193,715,448</u>
3	Total kWh Sales Excluding Intersystem Sales	L1 - L2 8,443,286,999
4	Residential Growth Factor	Line 8 <u>0.6912</u>
5	Adjustment to kWhs - Wholesale	L3 * L4 / 100 <u><u>5,835,657</u></u>
6	Total System Retail Residential kWh Sales	Company Records 29,352,405,508
7	2022 Proposed Adjustment kWh - Residential (NC+SC)	WP 13-1 202,871,914
8	Percent Adjustment	L7 / L6 * 100 0.6912

rounding differences may occur

## CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC's Supplemental Testimony and Exhibits, in Docket No. E-7, Sub 1282, has been served by electronic mail, hand delivery or by depositing a copy in the United States mail, postage prepaid to the parties of record.

This the 4<sup>th</sup> day of May, 2023.



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