

Duke Energy Carolinas, LLC

Sykes Workpaper 1

North Carolina Annual Fuel and Fuel Related Expense

Proposed Nuclear Capacity Factor

Billing Period September 2025 through August 2026

Docket E-7, Sub 1313

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs	9,499,693	9,306,560	10,120,920	9,384,328	7,482,000	6,881,306	6,987,570	59,662,376
Cost (Gross of Joint Owners)	\$ 57,637,532	\$ 58,397,922	\$ 50,242,189	\$ 55,419,575	\$ 31,942,620	\$ 38,609,073	\$ 42,776,628	\$ 335,025,539
\$/MWh	6.0673	6.2749	4.9642	5.9055	4.2693	5.6107	6.1218	
Avg \$/MWh		5.6154						
Cents per kWh		0.5615						

Sep 2025 - Aug
2026**MDC**

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

Hours In Year 8,760

Generation GWhs

CATA_UN01	Catawba	GWh	9,500
CATA_UN02	Catawba	GWh	9,307
MCGU_UN01	McGuire	GWh	10,121
MCGU_UN02	McGuire	GWh	9,384
OCON_UN01	Oconee	GWh	7,482
OCON_UN02	Oconee	GWh	6,881
OCON_UN03	Oconee	GWh	6,988
			59,662

Proposed Nuclear Capacity Factor 94.86%

rounding differences may occur

Duke Energy Carolinas, LLC

Sykes Workpaper 2

North Carolina Annual Fuel and Fuel Related Expense

NERC 5 Year Average Nuclear Capacity Factor

Billing Period September 2025 through August 2026

Docket E-7, Sub 1313

	Catawba 1	Catawba 2	McGuire 1	McGuire 2	Oconee 1	Oconee 2	Oconee 3	Total
MWhs with NERC applied	9,263,315	9,184,257	9,247,343	9,244,149	6,909,985	6,918,143	7,007,883	57,775,076
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	91.16%	91.16%	91.16%	91.16%	93.13%	93.13%	93.13%	91.86%
Cost	\$ 52,016,818	\$ 51,572,881	\$ 51,927,134	\$ 51,909,197	\$ 38,802,034	\$ 38,847,845	\$ 39,351,767	\$ 324,427,675

Avg \$/MWh **5.6154**
Cents per kWh **0.5615**

2019-2023	Capacity Rating	NCF Rating	Weighted Average
Oconee 1	847.0	93.13	10.99%
Oconee 2	848.0	93.13	11.00%
Oconee 3	859.0	93.13	11.14%
McGuire 1	1,158.0	91.16	14.70%
McGuire 2	1,157.6	91.16	14.70%
Catawba 1	1,160.0	91.16	14.73%
Catawba 2	1,150.1	91.16	14.60%
	7,179.7	91.86%	Wtd Avg on Capacity Rating

rounding differences may occur

Duke Energy Carolinas, LLC

Sykes Workpaper 3

North Carolina Annual Fuel and Fuel Related Expense

North Carolina Generation and Purchased Power in MWhs

Billing Period September 2025 through August 2026

Docket E-7, Sub 1313

Resource Type	Sep 2025 - Aug 2026
Nuclear Total (Gross)	59,662,376
Coal Total	14,307,355
Gas CT and CC total (Gross)	25,567,466
Run of River	4,523,947
Net pumped Storage	<u>(3,570,339)</u>
Total Hydro	953,607
Catawba Joint Owners	(14,176,018)
Lee CC Joint Owners	(633,428)
DEC owned solar	429,671
Total Generation	86,111,029
Purchases for CEPS Compliance	986,639
Qualifying Facility Purchases - Non-CEPS compliance	2,225,993
Other Purchases	327,139
Allocated Economic Purchases	1,646,157
Joint Dispatch Purchases	<u>9,657,959</u>
Total Generation and Purchased Power	14,843,887
Fuel Recovered Through Intersystem Sales	100,954,916
rounding differences may occur	(768,318)

Duke Energy Carolinas, LLC

Sykes Workpaper 4

North Carolina Annual Fuel and Fuel Related Expense

Projected Fuel and Fuel Related Costs

Billing Period September 2025 through August 2026

Docket E-7, Sub 1313

Resource Type	Sep 2025 - Aug 2026	
Nuclear Total (Gross)	\$ 335,025,539	
COAL Total	587,288,769	
Gas CT and CC total (Gross)	1,029,500,771	
Catawba Joint Owner costs	(79,613,301)	
CC Joint Owner costs	(21,998,745)	
Reagents and gain/loss on sale of By-Products	22,726,090	Workpaper 8
Purchases for CEPS Compliance - Energy	49,712,874	
Purchases for CEPS Compliance - Capacity	10,804,860	
Purchases of Qualifying Facilities - Energy	86,815,509	
Purchases of Qualifying Facilities - Capacity	17,936,573	
Other Purchases	7,261,090	
JDA Savings Shared	47,340,021	Workpaper 5
Allocated Economic Purchase cost	54,040,579	Workpaper 5
Joint Dispatch purchases	331,279,606	Workpaper 6
Total Purchases	605,191,113	
Fuel Expense recovered through intersystem sales	(30,093,336)	Workpaper 5
Total System Fuel and Fuel Related Costs	\$ 2,448,026,899	

rounding differences may occur

Duke Energy Carolinas, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Projected Joint Dispatch Fuel Impacts
 Billing Period September 2025 through August 2026
 Docket E-7, Sub 1313

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
9/1/2025	\$ 1,744,084	\$ 2,676,214	\$ (504,583)	\$ (505,872)	\$ (21,598,535)	\$ 21,598,535	\$ (2,715,150)	\$ 2,715,150
10/1/2025	\$ 2,365,080	\$ 3,773,084	\$ (544,392)	\$ (616,807)	\$ (4,641,845)	\$ 4,641,845	\$ (350,536)	\$ 350,536
11/1/2025	\$ 2,707,899	\$ 4,099,991	\$ (487,256)	\$ (548,388)	\$ (24,331,873)	\$ 24,331,873	\$ (2,689,346)	\$ 2,689,346
12/1/2025	\$ 2,238,202	\$ 3,393,373	\$ (1,217,789)	\$ (1,371,848)	\$ (25,463,030)	\$ 25,463,030	\$ (4,142,844)	\$ 4,142,844
1/1/2026	\$ 4,190,227	\$ 6,254,869	\$ (1,973,574)	\$ (2,281,693)	\$ (27,771,901)	\$ 27,771,901	\$ (3,891,624)	\$ 3,891,624
2/1/2026	\$ 3,170,985	\$ 4,878,989	\$ (1,485,811)	\$ (1,835,219)	\$ (25,607,178)	\$ 25,607,178	\$ (3,318,699)	\$ 3,318,699
3/1/2026	\$ 2,912,137	\$ 4,390,337	\$ (646,853)	\$ (803,701)	\$ (37,205,349)	\$ 37,205,349	\$ (9,619,281)	\$ 9,619,281
4/1/2026	\$ 3,597,831	\$ 5,707,211	\$ (369,102)	\$ (557,338)	\$ (42,235,772)	\$ 42,235,772	\$ (9,158,510)	\$ 9,158,510
5/1/2026	\$ 3,279,760	\$ 4,985,805	\$ (561,640)	\$ (763,314)	\$ (24,214,328)	\$ 24,214,328	\$ (6,468,531)	\$ 6,468,531
6/1/2026	\$ 3,875,766	\$ 5,921,959	\$ (637,969)	\$ (707,783)	\$ (24,714,707)	\$ 24,714,707	\$ (2,204,372)	\$ 2,204,372
7/1/2026	\$ 2,877,541	\$ 4,189,453	\$ (1,329,558)	\$ (1,420,297)	\$ (28,876,243)	\$ 28,876,243	\$ (1,049,725)	\$ 1,049,725
8/1/2026	\$ 2,529,542	\$ 3,769,295	\$ (1,191,332)	\$ (1,260,815)	\$ (27,198,582)	\$ 27,198,582	\$ (1,731,405)	\$ 1,731,405

Sept 25 - Aug 26	\$ 54,040,579	\$ (12,673,075)	\$ 313,859,345	\$ 47,340,021
------------------	---------------	-----------------	----------------	---------------

rounding differences may occur

\$ 331,279,606	Workpaper 6 - Transfer - Purchases
\$ (17,420,261)	Workpaper 6 - Transfer - Sales
\$ 313,859,345	Sept 25 - Aug 26 Net Fuel Transfer Payment
\$ (17,420,261)	Workpaper 6 - Transfer - Sales
\$ (12,673,075)	Sept 25 - Aug 26 Economic Sales Cost
\$ (30,093,336)	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 2025 through August 2026
 Docket E-7, Sub 1313

Sykes Workpaper 6

OFFICIAL COPY

Feb 25 2025

	Transfer Projection		Purchase Allocation Delta		Purchase		Sale		Sale		Purchase	
	PECToDEC		DECtoPEC		PEC		DEC		Adjusted Transfer		Fossil Gen Cost	
	PECToDEC	DECtoPEC	PEC	DEC	PECToDEC	DECtoPEC	PEC	DEC	PECToDEC	DECtoPEC	Pre-Net Payments	
9/1/2025	703,005	13,428	(9,695)	9,695	703,005	23,124	31.76	31.67	732,269	22,330,804		
10/1/2025	307,688	125,689	(21,748)	21,748	307,688	147,437	30.24	31.62	4,661,710	9,303,554		
11/1/2025	800,990	18,532	(10,628)	10,628	800,990	29,160	31.59	33.38	973,350	25,305,223		
12/1/2025	758,415	27,566	(7,215)	7,215	758,415	34,782	35.27	37.00	1,286,748	26,749,779		
1/1/2026	726,673	39,816	(17,266)	17,266	726,673	57,083	41.46	41.24	2,354,226	30,126,127		
2/1/2026	704,762	25,346	(17,448)	17,448	704,762	42,794	38.74	39.66	1,697,088	27,304,267		
3/1/2026	1,160,102	2,033	(10,983)	10,983	1,160,102	13,016	32.44	33.34	433,977	37,639,326		
4/1/2026	1,354,611	617	(21,071)	21,071	1,354,611	21,688	31.70	32.28	700,043	42,935,816		
5/1/2026	781,890	12,405	(20,819)	20,819	781,890	33,223	32.43	34.27	1,138,684	25,353,012		
6/1/2026	773,078	14,844	(24,257)	24,257	773,078	39,101	33.72	34.67	1,355,807	26,070,514		
7/1/2026	815,614	11,600	(14,582)	14,582	815,614	26,182	36.58	36.49	955,436	29,831,680		
8/1/2026	771,133	13,509	(17,358)	17,358	771,133	30,867	36.74	36.64	1,130,923	28,329,505		

Sept 25 - Aug 26 9,657,959 305,385 (193,072) 193,072 9,657,959 498,457 \$ 17,420,261 \$ 331,279,606

Net Pre-Net Payments \$ 313,859,345

rounding differences may occur

Duke Energy Carolinas, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Proposed Nuclear Capacity Factor of 94.86%
 Billing Period September 2025 through August 2026
 Docket E-7, Sub 1313

Sykes Workpaper 7

Fall 2024 Forecast
 Billed Sales Forecast
 Sales Forecast - MWhs (000)

		Projected sales At Meter for the Billing Period	Remove impact of SC DERP Net Metered Generation	2023 Cost of Service	Adjusted Projected Sales at Generation
			Adjusted Sales	Line Loss Factors	
North Carolina	Residential	23,441,177	23,441,177	6.8220%	25,157,416
	General Service	25,178,992	25,178,992	6.2670%	26,862,463
	Industrial	12,742,130	12,742,130	5.9910%	13,554,160
	Lighting	250,926	250,926	6.2670%	267,703
	NC RETAIL	61,613,224	-	61,613,225	65,841,741
South Carolina	Residential	7,355,105	7,355,105		
	General Service	6,169,355	6,169,355		
	Industrial	8,880,354	8,880,354		
	Lighting	37,285	37,285		
	SC RETAIL	22,442,099	148,366	22,590,465	6.5360% 24,170,231
Total Retail Sales	Residential	30,796,282	-	30,796,282	
	General Service	31,348,347	-	31,348,347	
	Industrial	21,622,485	-	21,622,484	
	Lighting	288,210	-	288,211	
	Retail Sales	84,055,324	148,366	84,203,690	90,011,972
	Wholesale	9,734,731	-	9,734,731	2.2260% 9,956,360
	Projected System MWH Sales for Fuel Factor	93,790,054	148,366	93,938,420	99,968,332
	NC as a percentage of total	65.69%		65.59%	65.86%
	SC as a percentage of total	23.93%		24.05%	24.18%
	Wholesale as a percentage of total	10.38%		10.36%	9.96%
		100.00%		100.00%	100.00%
<u>SC Net Metering allocation adjustment</u>					
	Total projected SC NEM MWhs		148,366		
	Marginal fuel rate per MWh for SC NEM	\$ 38.63			
	Fuel benefit to be directly assigned to SC Retail	\$ 5,731,379			
	System Fuel Expense	\$ 2,448,026,899		Sykes Exhibit 2 Schedule 1 Page 1	
	Fuel benefit to be directly assigned to SC Retail	\$ 5,731,379			
	Total Fuel Costs for Allocation	\$ 2,453,758,277		Sykes Exhibit 2 Schedule 1 Page 2	

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 94.86%
 Billing Period September 2025 through August 2026
 Docket E-7, Sub 1313

Sykes Workpaper 7a

Fall 2024 Forecast
 Billed Sales Forecast - Normalized Test Period Sales
 Sales Forecast - MWhs (000)

	Customer Growth	Remove impact of SC			Normalized Test Period Sales	2023 Cost of Service Line Loss Factors	Normalized Test Period Sales MWhs at Generation
		Test Period Sales	Adjustment	Weather Adjustment			
North Carolina							
Residential	22,502,849	256,383	461,404		23,220,636	6.8220%	24,920,728
General Service & Lighting	24,578,693	(118,046)	18,465		24,479,112	6.2670%	26,115,789
Industrial	11,744,488	2,343	(2,110)		11,744,721	5.9910%	12,493,188
North Carolina Retail	58,826,030	140,680	477,759	-	59,444,469		63,529,705
South Carolina Retail	21,373,874	58,927	147,920	148,366	21,729,087	6.5360%	23,248,617
Wholesale	9,274,709	100,326	16,939	-	9,391,974	2.2260%	9,605,799
Normalized System MWH Sales for Fuel Factor	89,474,613	299,933	642,617	148,366	90,565,531		96,384,120
North Carolina as a percentage of total	65.75%				65.64%		65.91%
South Carolina as a percentage of total	23.89%				23.99%		24.12%
Wholesale as a percentage of total	10.37%				10.37%		9.97%
	100.00%				100.00%		100.00%
SC Net Metering allocation adjustment							
Total projected SC NEM MWhs		148,366					
Marginal fuel rate per MWh for SC NEM	\$	38.63					
Fuel benefit to be directly assigned to SC Retail	\$	5,731,379					
System Fuel Expense	\$	2,315,666,512	Sykes Exhibit 2 Schedule 2 Page 1				
Fuel benefit to be directly assigned to SC Retail	\$	5,731,379					
Total Fuel Costs for Allocation	\$	2,321,397,890	Sykes Exhibit 2 Schedule 2 Page2				

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 91.86% and Projected Period Sales
 Billing Period September 2025 through August 2026
 Docket E-7, Sub 1313

Sykes Workpaper 7b

Fall 2024 Forecast
 Billed Sales Forecast
 Sales Forecast - MWhs (000)

		Projected sales for the Billing Period	Remove impact of SC DERP Net Metered generation	Adjusted Sales	2023 Cost of Service Line Loss Factors	Adjusted Projected Sales at Generation
North Carolina	Residential	23,441,177	23,441,177		6.8220%	25,157,416
	General Service	25,178,992	25,178,992		6.2670%	26,862,463
	Industrial	12,742,130	12,742,130		5.9910%	13,554,160
	Lighting	250,926	250,926		6.2670%	267,703
	NC RETAIL	61,613,224	-	61,613,224		65,841,741
South Carolina	Residential	7,355,105	7,355,105			
	General Service	6,169,355	6,169,355			
	Industrial	8,880,354	8,880,354			
	Lighting	37,285	37,285			
	SC RETAIL	22,442,099	148,366	22,590,465	6.5360%	24,170,231
Total Retail Sales	Residential	30,796,282	-	30,796,282		
	General Service	31,348,347	-	31,348,347		
	Industrial	21,622,485	-	21,622,485		
	Lighting	288,210	-	288,210		
	Retail Sales	84,055,323	148,366	84,203,689		90,011,972
	Wholesale	9,734,731	-	9,734,731	2.2260%	9,956,359
	Projected System MWh Sales for Fuel Factor	93,790,054	148,366	93,938,420		99,968,332
	North Carolina as a percentage of total	65.69%		65.59%		65.86%
	South Carolina as a percentage of total	23.93%		24.05%		24.18%
	Wholesale as a percentage of total	10.38%		10.36%		9.96%
		100.00%		100.00%		100.00%

SC Net Metering allocation adjustment

Total projected SC NEM MWhs	148,366
Marginal fuel rate per MWh for SC NEM	\$ 38.63
Fuel benefit to be directly assigned to SC Retail	\$ 5,731,379

System Fuel Expense	\$ 2,499,010,229	Sykes Exhibit 2 Schedule 3 Page 1
Fuel benefit to be directly assigned to SC Retail	\$ 5,731,379	
Total Fuel Costs for Allocation	\$ 2,504,741,608	Sykes Exhibit 2 Schedule 3 Page 2

rounding differences may occur

Duke Energy Carolinas, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Line Loss Calculation Factors - 12 Months Ending December 31, 2023
 Billing Period September 2025 through August 2026
 Docket E-7, Sub 1313

Sykes Workpaper 7c

OFFICIAL COPY

Feb 25 2025

	MWh at Meter	MWh at Meter Allocation	MWh at Generation (high side of GSU)	MWh at Generation Allocation	Losses	Cost of Service Data Summarized		
						MWh @ Meter	MWh @ Generator	Losses (MWh)
North Carolina								
Residential	21,544,402	25.00%	23,014,070	25.18%	1,469,667	Residential	21,544,402	23,014,070
General Service/Lighting	24,310,338	28.21%	25,833,802	28.27%	1,523,464	GS/Lighting	24,310,338	25,833,802
Industrial	11,674,957	13.55%	12,374,449	13.54%	699,492	Industrial	11,674,957	12,374,449
Total NC Retail	57,529,697	66.77%	61,222,321	66.99%	3,692,623	Total NC Retail	57,529,697	61,222,321
NCWHS incl. NCEMPA	3,129,541	3.63%	3,200,922	3.50%	71,381	Total NC Retail	57,529,697	61,222,321
Total NC	60,659,239	70.40%	64,423,243	70.50%	3,764,004	SC Retail	20,604,920	21,951,564
South Carolina								
Residential	6,660,612	7.73%	7,114,971	7.79%	454,359	12ME NEM Generation	148,366	158,063
General Service/Lighting	5,906,779	6.86%	6,291,348	6.88%	384,569	Total SC Retail	20,753,286	22,109,628
Industrial	8,037,528	9.33%	8,545,246	9.35%	507,718	Wholesale	7,878,394	8,053,776
Total SC Retail	20,604,920	23.91%	21,951,564	24.02%	1,346,645	Total System	86,161,377	91,385,724
SC Greenwood	44,181	0.05%	47,189	0.05%	3,007	Line Loss Calculations for Projected Fuel Costs		
SCWHS	4,853,037	5.63%	4,963,728	5.43%	110,691	MWh @ Meter	MWh @ Generator	
Total SC	25,502,138	29.60%	26,962,481	29.50%	1,460,343	Residential	23,441,177	25,157,416
Total System	86,161,377	100.00%	91,385,724	100.00%	5,224,347	Gen Svc/Lighting	25,429,918	27,130,165
						Industrial	12,742,130	13,554,160
						Total NC Retail	61,613,225	65,841,741
						Total SC Retail	22,590,465	24,170,231
						Wholesale	9,734,731	9,956,360
						Total System	93,938,421	99,968,332
						Allocation percent - NC retail	65.59%	65.86%

Line Loss Calculations for Normalized Test Period Sales	MWh @ Meter	MWh @ Generator
Residential	23,220,636	24,920,728
GS/Lighting	24,479,112	26,115,789
Industrial	11,744,721	12,493,188
Total NC Retail	59,444,469	63,529,705
Total SC Retail	21,729,087	23,248,617
Wholesale	9,391,974	9,605,799
Total System	90,565,530	96,384,120
Allocation percent - NC retail	65.64%	65.91%

Duke Energy Carolinas, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Projected Reagents and ByProducts
 Billing Period September 2025 through August 2026
 Docket E-7, Sub 1313

Sykes Workpaper 8

Reagent and ByProduct projections

Date	Ammonia	Urea	Limestone	Magnesium Hydroxide	Calcium Carbonate	Lime	Gypsum (Gain)/Loss			Sale of By-Products	
							Reagent Cost	Ash (Gain)/Loss	Steam (Gain)/Loss	(Gain)/Loss	(Gain)/Loss
9/1/2025 \$	377,393 \$	34,811 \$	1,063,297 \$	84,256 \$	51,560 \$	3,420 \$	1,614,737 \$	299,879 \$	(104,734) \$	(226,995) \$	(31,850)
10/1/2025 \$	305,410 \$	28,171 \$	860,486 \$	55,821 \$	34,159 \$	3,420 \$	1,287,467 \$	222,947 \$	(101,372) \$	(226,995) \$	(105,419)
11/1/2025 \$	432,468 \$	39,891 \$	1,218,471 \$	88,221 \$	53,986 \$	3,420 \$	1,836,458 \$	332,872 \$	(125,992) \$	(226,995) \$	(20,115)
12/1/2025 \$	581,486 \$	53,636 \$	1,638,325 \$	147,927 \$	90,523 \$	3,420 \$	2,515,318 \$	477,370 \$	(139,414) \$	(226,995) \$	110,961
1/1/2026 \$	727,638 \$	67,117 \$	2,050,105 \$	190,983 \$	116,870 \$	3,420 \$	3,156,134 \$	610,995 \$	(166,544) \$	(226,995) \$	217,456
2/1/2026 \$	630,852 \$	58,190 \$	1,777,412 \$	165,424 \$	101,230 \$	3,420 \$	2,736,527 \$	536,491 \$	(149,092) \$	(226,995) \$	160,404
3/1/2026 \$	187,259 \$	17,273 \$	527,597 \$	57,635 \$	35,269 \$	3,420 \$	828,453 \$	149,034 \$	(47,684) \$	(226,995) \$	(125,645)
4/1/2026 \$	144,598 \$	13,338 \$	407,403 \$	67,115 \$	41,070 \$	3,420 \$	676,944 \$	95,259 \$	(28,610) \$	(226,995) \$	(160,346)
5/1/2026 \$	338,181 \$	31,194 \$	952,819 \$	72,319 \$	44,255 \$	3,420 \$	1,442,188 \$	200,329 \$	(132,329) \$	(226,995) \$	(158,995)
6/1/2026 \$	426,794 \$	39,367 \$	1,202,484 \$	85,900 \$	52,566 \$	3,420 \$	1,810,532 \$	324,240 \$	(138,466) \$	(226,995) \$	(41,221)
7/1/2026 \$	568,286 \$	52,419 \$	1,601,133 \$	126,320 \$	77,300 \$	3,420 \$	2,428,877 \$	460,419 \$	(164,234) \$	(240,044) \$	56,141
8/1/2026 \$	567,462 \$	52,343 \$	1,598,812 \$	120,196 \$	73,553 \$	3,420 \$	2,415,786 \$	479,057 \$	(163,717) \$	(240,044) \$	75,297
	\$ 5,287,828 \$	487,748 \$	14,898,345 \$	1,262,116 \$	720,780 \$	41,044 \$	22,749,421 \$	4,188,891 \$	(1,462,189) \$	(2,750,033) \$	(23,331)

rounding differences may occur

Total Reagent cost and Sale of By-products \$ 22,726,090

Duke Energy Carolinas, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 2.5% Calculation Test
 Twelve Months Ended December 31, 2024
 Billing Period September 2025 through August 2026
 Docket E-7, Sub 1313

Sykes Workpaper 9

Line No.	Description	Forecast \$	(Over)/Under Collection \$	Total \$
1	Amount in current docket	149,137,214	16,231,966	165,369,180
2	Amount in Sub 1304, prior year docket	105,739,021	7,838,585	113,577,607
3	Increase/(Decrease)	43,398,193	8,393,380	51,791,573
4	2.5% of 2024 NC retail revenue of \$6,467,464,895			161,686,622
	Excess of purchased power growth over 2.5% of revenue			0
E-7, Sub 1313				
WP 4	Purchases for CEPS Compliance - Energy	49,712,874	65.59%	32,606,674
WP 4	Purchases for CEPS Compliance - Capacity	10,804,860	67.43%	7,285,768
WP 4	Purchases	7,261,090	65.59%	4,762,549
WP 4	QF Energy	86,815,509	65.59%	56,942,292
WP 4	QF Capacity	17,936,573	67.43%	12,094,715
WP 4	Allocated Economic Purchase cost	54,040,579	65.59%	35,445,216
		226,571,485		149,137,214
E-7, Sub 1304				
	Purchases for CEPS Compliance	51,648,652	65.90%	34,036,462
	Purchases for CEPS Compliance Capacity	11,295,326	66.68%	7,531,868
	Purchases	5,544,352	65.90%	3,653,728
	QF Energy	51,796,696	65.90%	34,134,023
	QF Capacity	10,762,375	66.68%	7,176,490
	Allocated Economic Purchase cost	29,144,842	65.90%	19,206,451
		160,192,243		105,739,021

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, 2024
Docket E-7, Sub 1313

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

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, 2024
 Docket E-7, Sub 1313

	2023	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	12 ME
System kWh Sales - Sch 4, Adjusted		7,854,287,999	6,934,846,782	6,641,557,020	6,514,366,828	6,146,930,258	7,019,586,081	7,980,161,318	8,668,518,310	8,276,682,129	6,736,893,311	6,257,253,723	7,454,787,248	86,485,871,009
NC Retail kWh Sales - Sch 4		5,297,871,075	4,651,448,264	4,457,422,794	4,384,886,138	4,081,225,729	4,645,595,587	5,265,835,034	5,747,161,460	5,553,369,282	4,434,404,716	4,239,284,678	4,771,175,352	57,529,680,110
NC Retail % of Sales, Actuals (Calc)		67.45%	67.07%	67.11%	67.31%	66.39%	66.18%	65.99%	66.30%	67.10%	65.82%	67.75%	64.00%	66.52%
NC Retail % of Sales, Adjusted (Calc)		67.45%	67.07%	67.11%	67.31%	66.39%	66.18%	65.99%	66.30%	67.10%	65.82%	67.75%	64.00%	64.00%
NC retail production plant%		66.68%	66.68%	66.68%	66.68%	67.59%	67.59%	67.59%	67.59%	67.59%	67.59%	67.59%	67.59%	67.40%
Fuel and Fuel related component of purchased power														
System Actual \$ - Sch 3 Fuel\$:	\$	16,094,191	\$ 3,933,514	\$ 11,713,010	\$ 8,938,848	\$ 12,094,329	\$ 11,531,053	\$ 16,165,913	\$ 20,551,811	\$ 19,251,830	\$ 24,023,842	\$ 23,932,793	\$ 9,961,878	\$ 178,193,012
System Actual \$ - Sch 3 Fuel-related\$; Economic Purchases	\$	4,490,389	\$ 695,666	\$ 1,243,143	\$ 916,124	\$ 952,826	\$ 1,326,377	\$ 1,881,336	\$ 2,622,880	\$ 1,602,457	\$ 1,568,493	\$ 1,720,196	\$ 2,480,693	\$ 21,500,580
System Actual \$ - Sch 3 Fuel-related\$; Purchased Power for CEPS Compliance	\$	3,611,490	\$ 7,870,147	\$ 3,867,355	\$ 5,211,256	\$ 5,135,046	\$ 5,506,547	\$ 5,557,340	\$ 5,455,614	\$ 5,098,575	\$ 4,206,666	\$ 3,924,590	\$ 3,303,809	\$ 58,748,435
System Actual \$ - Sch 3 Fuel-related\$; SC DERP	\$	150,010	\$ 263,513	\$ 161,232	\$ 259,030	\$ 244,568	\$ 242,598	\$ 269,439	\$ 270,334	\$ 237,447	\$ 261,069	\$ 232,453	\$ 169,028	\$ 2,760,721
System Actual \$ - Sch 3 Fuel-related\$; SC ACT 62 (Solar Choice)	\$	2,294,533	\$ 3,127,298	\$ 2,300,057	\$ 3,268,409	\$ 3,390,357	\$ 3,491,315	\$ 3,450,044	\$ 3,587,125	\$ 3,238,065	\$ 3,440,066	\$ 2,976,354	\$ 2,281,872	\$ 36,845,496
Total System Economic & QF\$		26,640,613	15,890,138	19,284,797	18,593,667	21,817,127	22,097,890	27,324,072	32,487,764	29,428,373	33,602,789	32,789,431	18,210,518	298,167,179
<u>Less:</u>														
Native Load Transfers, Native Load Transfer Benefit & DE - Progress fees	\$	12,596,278	\$ 2,192,181	\$ 11,669,944	\$ 8,737,817	\$ 12,131,496	\$ 11,592,645	\$ 16,561,057	\$ 21,669,458	\$ 19,697,648	\$ 23,609,791	\$ 22,989,786	\$ 9,378,130	\$ 172,826,231
Total System Economic \$ without Native Load Transfers	\$	14,044,335	\$ 13,697,957	\$ 7,614,853	\$ 9,855,850	\$ 9,685,631	\$ 10,505,245	\$ 10,763,016	\$ 10,818,306	\$ 9,730,725	\$ 9,992,998	\$ 9,799,646	\$ 8,832,388	\$ 125,340,948
NC Actual \$ (Calc)	\$	9,473,179	\$ 9,187,707	\$ 5,110,642	\$ 6,634,072	\$ 6,430,730	\$ 6,952,421	\$ 7,102,145	\$ 7,172,454	\$ 6,528,982	\$ 6,577,661	\$ 6,639,253	\$ 5,652,860	\$ 83,462,105
Billed rate (¢/kWh):		0.1310	0.1310	0.1310	0.1310	0.1310	0.1310	0.1310	0.1310	0.1310	0.1355	0.1409	0.1409	0.1409
Billed \$:	\$	6,940,173	\$ 6,093,363	\$ 5,839,192	\$ 5,744,169	\$ 5,346,376	\$ 6,085,697	\$ 6,898,206	\$ 7,528,740	\$ 7,522,049	\$ 6,247,484	\$ 5,972,586	\$ 6,721,949	\$ 76,939,983
(Over)/ Under \$:	\$	2,533,006	\$ 3,094,344	\$ (728,550)	\$ 889,903	\$ 1,084,353	\$ 866,725	\$ 203,940	\$ (356,286)	\$ (993,067)	\$ 330,177	\$ 666,666	\$ (1,069,089)	\$ 6,522,122
Capacity component of purchased power														
System Actual \$ - Capacity component of Cherokee County Cogen Purchases	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
System Actual \$ - Capacity component of Purchased Power for CEPS Compliance	\$	563,042	\$ 1,526,511	\$ 652,726	\$ 802,906	\$ 714,202	\$ 872,972	\$ 2,529,735	\$ 2,398,512	\$ 2,301,403	\$ 2,088,004	\$ 565,199	\$ 525,161	\$ 15,540,372
System Actual \$ - Capacity component of SC DERP	\$	14,465	\$ 25,269	\$ 15,564	\$ 24,547	\$ 24,652	\$ 22,927	\$ 26,605	\$ 26,529	\$ 23,759	\$ 25,124	\$ 22,450	\$ 16,201	\$ 268,091
System Actual \$ - Capacity component of 5889 PURPA Purchases	\$	350,921	\$ 371,971	\$ 360,503	\$ 458,527	\$ 390,711	\$ 654,705	\$ 1,628,121	\$ 1,569,122	\$ 1,497,533	\$ 1,372,274	\$ 539,208	\$ 350,819	\$ 9,544,415
System Actual \$ - Sch 2 pg 1 ANNUAL VIEW	\$	928,428	\$ 1,923,752	\$ 1,028,793	\$ 1,285,979	\$ 1,129,564	\$ 1,550,603	\$ 4,184,461	\$ 3,994,163	\$ 3,822,694	\$ 3,485,402	\$ 1,126,858	\$ 892,181	\$ 25,352,878
NC Actual \$ (Calc) (1)	\$	619,088	\$ 1,282,782	\$ 686,012	\$ 857,507	\$ 763,429	\$ 1,047,993	\$ 2,828,114	\$ 2,699,499	\$ 2,583,610	\$ 2,355,647	\$ 761,599	\$ 602,990	\$ 17,088,272
Billed rate (¢/kWh):		0.0265	0.0265	0.0265	0.0265	0.0265	0.0265	0.0265	0.0265	0.0280	0.0297	0.0297	0.0297	0.0297
Billed \$:	\$	1,405,059	\$ 1,233,620	\$ 1,182,162	\$ 1,162,925	\$ 1,082,390	\$ 1,232,068	\$ 1,396,563	\$ 1,524,217	\$ 1,557,210	\$ 1,317,832	\$ 1,259,846	\$ 1,417,915	\$ 15,771,809
(Over)/Under \$:	\$	(785,972)	\$ 49,162	\$ (496,150)	\$ (305,417)	\$ (318,962)	\$ (184,076)	\$ 1,431,551	\$ 1,175,283	\$ 1,026,400	\$ 1,037,815	\$ (498,247)	\$ (814,925)	\$ 1,316,463
TOTAL (Over)/ Under \$:	\$	1,747,035	\$ 3,143,505	\$ (1,224,700)	\$ 584,485	\$ 765,392	\$ 682,649	\$ 1,635,491	\$ 818,997	\$ 33,333	\$ 1,367,992	\$ 168,420	\$ (1,884,014)	\$ 7,838,585

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 - April NC actual capacity shown herein is adjusted to reflect use of 2022 production plant allocation factor. Actual true-up related to allocator was made as prior period adjustment in May 2023 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, 2024
Docket E-7, Sub 1313

Sykes Workpaper 10

OFFICIAL COPY

Feb 25 2025

Line #	Description	Reference	MWhs				
			North Carolina	South Carolina	Total Company	% NC	% SC
1	Residential	Company Records	22,502,849	7,058,282	29,561,131	76.12	23.88
2	Total General Service	Company Records	24,578,693	6,186,972	30,765,665		
3	less Lighting and Traffic Signals		548,479	160,145	708,625		
4	General Service subject to weather		24,030,214	6,026,827	30,057,041	79.95	20.05
5	Industrial	Company Records	11,744,488	8,128,620	19,873,108	59.10	40.90
6	Total Retail Sales	Lines 1+2+5	58,826,030	21,373,874	80,199,904		
7	Total Retail Sales subject to weather	Lines 1+4+5	58,277,551	21,213,729	79,491,280	73.31	26.69

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, 2024
Docket E-7, Sub 1313

Sykes Workpaper 11

Page 1

OFFICIAL COPY

Feb 25 2025

Line #	Description	REFERENCE	Total Company MWh	NC RETAIL		SC RETAIL	
				% To Total	MWh	% To Total	MWh
<u>Residential</u>							
1	Total Residential		606,153	76.12	461,404	23.88	144,749
<u>General Service</u>							
2	Total General Service		23,096	79.95	18,465	20.05	4,631
<u>Industrial</u>							
3	Total Industrial		(3,570)	59.10	(2,110)	40.90	(1,460)
4	Total Retail	L1+ L2+ L3	625,679		477,759		147,920
5	Wholesale		16,939				
6	Total Company	L4 + L5	<u>642,618</u>		<u>477,759</u>		<u>147,920</u>

rounding differences may occur

Duke Energy Carolinas, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Weather Normalization Adjustment by Class by Month
 Twelve Months Ended December 31, 2024
 Docket E-7, Sub 1313

Sykes Workpaper 11
 Page 2

OFFICIAL COPY

Feb 25 2025

	Residential	Commercial	Industrial
2024	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT	TOTAL MWH ADJUSTMENT
JAN	47,598	3,568	(1,248)
FEB	438,857	55,808	(2,849)
MAR	275,904	26,030	-
APR	9,065	(21,388)	(5,612)
MAY	(83,666)	(34,895)	(7,206)
JUN	(67,299)	(27,943)	(6,821)
JUL	(255,448)	(89,094)	(17,889)
AUG	62,242	20,196	3,592
SEP	194,200	131,569	51,595
OCT	(80,219)	(24,139)	(9,005)
NOV	92,929	(7,704)	(8,176)
DEC	(28,009)	(8,914)	50
Total	606,153	23,096	(3,570)
			625,679

Wholesale			
2024	TOTAL MWH ADJUSTMENT	Note:	The Resale customers include:
JAN	4,235	1	Concord ¹
FEB	15,625	2	Dallas
MAR	15,123	3	Forest City
APR	(32)	4	Kings Mountain ¹
MAY	(5,340)	5	Due West
JUN	(13,745)	6	Prosperity ²
JUL	(11,550)	7	Lockhart
AUG	772	8	Western Carolina University
SEP	2,186	9	City of Highlands
OCT	(1,935)	10	Haywood
NOV	14,828	11	Piedmont
DEC	(3,227)	12	Rutherford
		13	Blue Ridge
Total	16,939	14	Greenwood ¹

¹Wholesale load is no longer being served by Duke as of December 2018.

²Wholesale load is no longer being served by Duke as of December 2019.

Line	Estimation Method ¹	Rate Schedule	NC	SC	Wholesale	
			Proposed kWh ¹	Proposed kWh	Proposed kWh	Total Company
1	Regression	Residential	256,382,598	56,303,100		
2						
3		General Service (Excluding Lighting):				
4	Customer	General Service Small and Large	(114,331,581)	9,338,188		
5	Regression	Miscellaneous	(766,695)	651,608		
6		Total General	(115,098,276)	9,989,796		
7						
8		Lighting:				
9	Regression	T & T2 (GL/FL/PL/OL) ²	(2,938,060)	(1,083,028)		
10	Regression	TS	(9,302)	(3,501)		
11		Total Lighting	(2,947,362)	(1,086,529)		
12						
13		Industrial:				
14	Customer	I - Textile	11,173,803	(4,113,323)		
15	Customer	I - Nontextile	(8,830,669)	(2,166,048)		
16		Total Industrial	2,343,134	(6,279,371)		
17						
18						
19		Total	140,680,094	58,926,996	100,325,526	299,932,616
					WP 12-2	

Notes:

¹Two 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.

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

rounding differences may occur

Duke Energy Carolinas, LLC
North Carolina Annual Fuel and Fuel Related Expense
Customer Growth Adjustment to kWh Sales-Wholesale
Twelve Months Ended December 31, 2024
Docket E-7, Sub 1313

Sykes Workpaper 12
Page 2

Calculation of Customer Growth Adjustment to kWh Sales - Wholesale

Line <u>No.</u>	<u>Reference</u>	
1 Total System Resale (kWh Sales)	Company Records	10,884,991,675
2 Less Intersystem Sales	Exhibit 6, Sch 1	<u>1,400,272,533</u>
3 Total kWh Sales Excluding Intersystem Sales	L1 - L2	9,484,719,142
4 Residential Growth Factor	Line 8	<u>1.0578</u>
5 Adjustment to kWhs - Wholesale	L3 * L4 / 100	<u>100,325,526</u>
6 Total System Retail Residential kWh Sales	Company Records	29,561,131,178
7 2024 Proposed Adjustment kWh - Residential (NC+SC)	WP 12-1	312,685,698
8 Percent Adjustment	L7 / L6 * 100	1.0578

rounding differences may occur