

Duke Energy Progress, LLC
North Carolina Annual Fuel and Fuel-Related Expense
Calculation of Fuel and Fuel-Related Cost Factors Using:
NERC Capacity Factor of 93.92% with Projected Billing Period MWh Sales
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Harrington Exhibit 7A

Line No.	Unit	Reference	Generation (MWh)	Unit Cost (cents/kWh)	Total System Cost (\$)	Remove impact of SC DERP Net Metered Generation Impact on System Avg Fuel (\$)	System Capacity Cost (\$)	System Fuel (Non-Capacity) Cost (\$)
			A	C/A/10=B	C	D	E	F = C + D - E
1	Total Nuclear	Workpaper 2	29,641,810	0.6113	\$ 181,186,626			\$ 181,186,626
2	Coal	Workpaper 14	5,709,613	4.3261	247,003,629			247,003,629
3	Gas - CT and CC	Workpaper 3 - 4	24,747,254	3.7763	934,531,959			934,531,959
4	Reagents & Byproducts	Workpaper 5	-		43,993,340			43,993,340
5	SC DERP Net Metering Impact on System Avg Fuel	Workpaper 10				\$ 851,357		851,357
6	Total Fossil	Sum of Lines 2 - 5	30,456,867		1,225,528,928	851,357		1,226,380,285
7	Hydro	Workpaper 3	720,836		-			-
8	Net Pumped Storage		-		-			-
9	Total Hydro	Sum of Lines 7-8	720,836		-			-
10	Utility Owned Solar Generation	Workpaper 3	270,472		-			-
11	Total Generation	Line 1 + Line 6 + Line 9 + Line 10	61,089,985		1,406,715,554	851,357		1,407,566,911
12	Purchases	Workpaper 3 - 4	11,928,598		563,779,105		\$ 68,745,569	495,033,536
13	JDA Savings Shared	Workpaper 4	-		(114,205,606)			(114,205,606)
14	Total Purchases	Sum of Lines 12 - 13	11,928,598		449,573,499		68,745,569	380,827,930
15	Total Generation and Purchases	Line 11 + Line 14	73,018,583		1,856,289,053	851,357	68,745,569	1,788,394,841
16	Fuel expense recovered through intersystem sales	Workpaper 3 - 4	(7,601,020)		(204,822,948)			(204,822,948)
17	Line losses and Company use	Line 19 - Line 15 - Line 16	(2,185,868)		-			-
18	System Fuel Expense for Fuel Factor	Line 15 + Line 16	-		\$ 1,651,466,105	\$ 851,357	\$ 68,745,569	\$ 1,583,571,893
19	Projected System MWh Sales at Meter for Fuel Factor	Workpaper 3	63,231,695		63,231,695			
20	Fuel and Fuel-Related Costs cents/kWh	Line 18 / Line 19 / 10			2.612			

Note: Rounding differences may occur

Duke Energy Progress, LLC
North Carolina Annual Fuel and Fuel-Related Expense
Calculation of Fuel and Fuel-Related Cost Factors Using:
NERC Capacity Factor of 93.92% with Projected Billing Period MWh Sales
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Harrington Exhibit 7B

Line No.	Description		Residential	General Service Small	General Service Medium	General Service Large	Lighting	Total
1	NC Retail Projected Billing Period MWh Sales at Meter	Workpaper 10	17,326,377	1,816,847	10,471,370	9,239,420	384,646	39,238,661
Calculation of Renewable and Qualifying Facilities Purchased Power Capacity Rate by Class								
								<u>Amount</u>
2	Renewable Purchased Power Capacity	Workpaper 4						\$ 21,846,114
3	Purchases from Qualifying Facilities Capacity	Workpaper 4						46,899,456
4	Total of Renewable and Qualifying Facilities Purchased Power Capacity	Line 2 + Line 3						\$ 68,745,569
5	NC Portion - Jurisdictional % based on Production Plant Allocator	Workpaper 13						61.15%
6	NC Renewable and Qualifying Facilities Purchased Power Capacity	Line 4 * Line 5						\$ 42,039,686
7	Production Plant Allocation Factors	Workpaper 13	54.15%	5.98%	25.19%	14.69%	0.00%	100.00%
8	Renewable and Qualifying Facilities Purchased Power Capacity allocated on Production Plant %	Line 6 * Line 7	\$ 22,765,363	\$ 2,511,908	\$ 10,587,865	\$ 6,174,549	\$ -	\$ 42,039,686
9	Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh based on Projected Billing Period Sales at Meter	Line 8 / Line 1 / 10	0.131	0.138	0.101	0.067	-	0.107
Summary of Total Rate by Class								
			cents/kWh	cents/kWh	cents/kWh	cents/kWh	cents/kWh	
10	Fuel and Fuel-Related Costs excluding Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh	Line 15 - Line 11 - Line 13 - Line 14	2.720	3.111	2.445	2.033	3.964	
11	Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh	Line 9	0.131	0.138	0.101	0.067	-	
12	Total adjusted Fuel and Fuel-Related Costs cents/kWh	Line 10 + Line 11	2.851	3.249	2.546	2.100	3.964	
13	EMF Increment/(Decrement) cents/kWh	Exh 3B, 3C, 3D, 3E, 3F	1.187	1.040	1.080	1.243	1.681	
14	EMF Interest Increment/(Decrement) cents/kWh	Exh 3B, 3C, 3D, 3E, 3F	-	-	-	-	-	
15	Net Fuel and Fuel-Related Costs Factors cents/kWh	Exh 7C	4.038	4.289	3.626	3.343	5.645	

Note: Rounding differences may occur

Calculation of Uniform Percentage Average Bill Adjustment by Customer Class

Line No.	Rate Class	NC Retail Projected Billing Period MWh Sales at Meter A	Annual Revenue at Current rates B	Allocate Fuel Costs Increase/(Decrease) to Customer Class C	Increase/Decrease as % of Annual Revenue at Current Rates D	Total Fuel Rate Increase/(Decrease) cents/kWh E	Current Total Fuel Rate (including renewables and EMF) E-2, Sub 1292 cents/kWh F	Proposed Total Fuel Rate (including renewables and EMF) cents/kWh G
		Workpaper 10	Workpaper 12	Line 27 as a % of Column B	C / B	If D=0 then 0 if not then (C*100)/(A*1000)	Exhibit 1, Line 4	E + F = H
1	Residential	17,326,377	\$ 2,086,401,509	\$ 100,695,423	4.8%	0.581	3.457	4.038
2	Small General Service	1,816,847	279,731,721	13,500,615	4.8%	0.743	3.546	4.289
3	Medium General Service	10,471,370	997,768,827	48,155,043	4.8%	0.460	3.166	3.626
4	Large General Service	9,239,420	586,849,332	28,322,948	4.8%	0.307	3.036	3.343
5	Lighting	384,646	114,358,945	5,519,274	4.8%	1.435	4.210	5.645
6	NC Retail	39,238,661	\$ 4,065,110,334	\$ 196,193,303				
Total Proposed Composite Fuel Rate:								
7	Adjusted System Total Fuel Costs	Workpaper 10	\$ 1,652,317,462					
8	System Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 7B	68,745,569					
9	System Other Fuel Costs	Line 7 - Line 8	\$ 1,583,571,893					
10	NC Retail Allocation % - sales at generation	Workpaper 10	62.17%					
11	NC Retail Other Fuel Costs	Line 9 * Line 10	\$ 984,480,673					
12	NC Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 7B	42,039,686					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 1,026,520,359					
14	NC Retail Reduction due to 2.5% Purchased Power Test	Workpaper 15	\$ -					
15	NC Retail Total Fuel Costs	Line 13 + Line 14	\$ 1,026,520,359					
16	NC Projected Billing Period MWh Sales - at meter	Line 6, col A	39,238,661					
17	Calculated Fuel Rate cents/kWh	Line 15 / Line 16 / 10	2.616					
18	Proposed Composite EMF Rate cents/kWh	Exhibit 3A	1.167					
19	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3A	0.000					
20	Total Proposed Composite Fuel Rate	Sum of Lines 17-19	3.783					
Total Current Composite Fuel Rate - Docket E-2 Sub 1292:								
21	Current composite Fuel Rate cents/kWh	2022 Revised Harrington Exh 2, Sch 1, Pg 3, Ln 17	2.606					
22	Current composite EMF Rate cents/kWh	2022 Revised Harrington Exh 2, Sch 1, Pg 3, Ln 18	0.677					
23	Current composite EMF Interest cents/kWh	2022 Revised Harrington Exh 2, Sch 1, Pg 3, Ln 19	0.000					
24	Total Current Composite Fuel Rate	Sum of Lines 21 - 23	3.283					
25	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 20 - Line 24	0.500					
26	NC Projected Billing Period MWh Sales - at meter	Line 6, col A	39,238,661					
27	Increase/(Decrease) in Fuel Costs	Line 25* Line 26 * 10	\$ 196,193,303					

Note: Rounding differences may occur