Duke Energy Progress, LLC

North Carolina Annual Fuel and Fuel-Related Expense
Calculation of Fuel and Fuel-Related Cost Factors Using:
Proposed Nuclear Capacity Factor of 92.27% with Projected Billing Period MWh Sales
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

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 (\$)
			Α	C/A/10=B	С	D	E	F = C + D - F
1	Total Nuclear	Workpaper 3-4	29,122,107	0.6113 \$	178,009,922			\$ 178,009,922
2	Coal	Workpaper 3 - 4	6,229,316	4.3261	269,486,511			269,486,511
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	30,976,570		1,248,011,810	851,357		1,248,863,167
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		1,426,021,732	851,357		1,426,873,089
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	_	1,875,595,231	851,357	68,745,569	1,807,701,019
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		\$	1,670,772,283	\$ 851,357	\$ 68,745,569	\$ 1,602,878,071
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			2.642			

Note: Rounding differences may occur

Harrington Exhibit 2B

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Docket No.	E-2, Sub 1321								
					General Service	General Service	General Service		
Line No.	Description	<u> </u>	Residential		Small	Medium	Large	Lighting	Total
1	NC Retail Projected Billing Period MWh Sales at Meter	Workpaper 8	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								Amount
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%	100.000%
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
Billed Rates			cents/kWh		cents/kWh	cents/kWh	cents/kWh	cents/kWh	
10	Fuel and Fuel-Related Costs excluding Renewable and Qualifying Facilities Purchased Power Capacity	Line 15 - Line 11 - Line 13 -							
10	cents/kWh	Line 14	2.	756	3.157	2.473	2.052	4.053	
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	2.8	887	3.295	2.574	2.119	4.053	
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 2C	4.0	074	4.335	3.654	3.362	5.734	

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Calculation of Uniform Percentage Average Bill Adjustment by Customer Class

Line No	Rate Class	NC Retail Projected Billing Period MWh Sales a Meter	i <b>t</b>	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Uniform Percentage Increase/Decrease as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease) cents/kWh	Current Total Fuel Rate (including renewables and EMF) E-2, Sub 1292 cents/kWh	Proposed Total Fuel Rate (including renewables and EMF) cents/kWh
		A		В	С	D	E	F	G
		Workpaper 8		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 = G
		Workpaper 8		Workpaper 12	Line 27 as a 76 Of Column B	С/В	(C 100)/(A 1000)	Exhibit 1, Line 4	ETF-G
1	Residential	17,326,37	77 \$	2,086,401,509	\$ 106,938,539	5.1%	0.617	3.457	4.074
2	Small General Service	1,816,84	17	279,731,721	14,337,653	5.1%	0.789	3.546	4.335
3	Medium General Service	10,471,37	/0	997,768,827	51,140,655	5.1%	0.488	3.166	3.654
4	Large General Service	9,239,42	10	586,849,332	30,078,971	5.1%	0.326	3.036	3.362
5	Lighting	384,64	16	114,358,945	5,861,469	5.1%	1.524	4.210	5.734
6	NC Retail	39,238,66	1 \$	4,065,110,334	\$ 208,357,288	- -			
	Total Proposed Composite Fuel Rate:								
7	Adjusted System Total Fuel Costs	Workpaper 8	\$	1,671,623,640					
8	System Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 2B	-	68,745,569					
9	Adjusted System Other Fuel Costs	Line 7 - Line 8	\$	1,602,878,071					
10	NC Retail Allocation % - sales at generation	Workpaper 8		62.17%					
11	NC Retail Other Fuel Costs	Line 9 * Line 10	\$	996,483,007					
12	NC Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 2B	,	42,039,686					
13	NC Retail Total Fuel Costs before 2.5% Purchase Power Test	Line 11 + Line 12	\$	1,038,522,693					
14	NC Retail Reduction due to 2.5% Purchased Power Test	Workpaper 15							
15	NC Retail Total Fuel Costs	Line 13 + Line 14	\$	1,038,522,693					
4.5	Non-transfer of the state of th			20 222 554					
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		2.647					
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		3.814					
	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		0.531					
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	\$	208,357,288					
	Notes:								

Rounding differences may occur