



Ladawn S. Toon
Associate General Counsel

NCRH 20 / P.O. Box 1551
Raleigh, NC 27602

o: 919.546.7971

Ladawn.Toon@duke-energy.com

August 28, 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 Progress, LLC's Supplemental Testimony
Docket No. E-2, Sub 1321**

Dear Ms. Dunston:

Please find enclosed Duke Energy Progress, LLC's Supplemental Testimony, Revised Exhibits and Workpapers of Dana M. Harrington, 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

OFFICIAL COPY

AUG 28 2023

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Progress, LLC's Supplemental Testimony, Revised Exhibits and Workpapers, in Docket No. E-2, Sub 1321, 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 28th day of August, 2023.



Ladawn S. Toon
Associate General Counsel
Duke Energy Corporation
P.O. Box 1551/NCRH 20
Raleigh, North Carolina 27602
Tel: 919.546.7971
ladawn.toon@duke-energy.com

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-2, SUB 1321

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
Application of Duke Energy Progress, LLC)	SUPPLEMENTAL TESTIMONY
Pursuant to G.S. 62-133.2 and NCUC Rule)	OF DANA M. HARRINGTON FOR
R8-55 Relating to Fuel and Fuel-Related)	DUKE ENERGY PROGRESS, LLC
Charge Adjustments for Electric Utilities)	

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

2 A. My name is Dana M. Harrington and my business address is 525 South Tryon
3 Street, Charlotte, North Carolina (“NC”).

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

6 A. Yes, on June 13, 2023, I caused to be pre-filed with the Commission direct
7 testimony including eight exhibits and seventeen supporting workpapers on
8 behalf of Duke Energy Progress, LLC’s (“DEP” or “the Company”).

9 **Q. YOUR SUPPLEMENTAL TESTIMONY INCLUDES SIX REVISED**
10 **EXHIBITS AND NINE REVISED WORKPAPERS. WERE THESE**
11 **SUPPLEMENTAL EXHIBITS AND WORKPAPERS PREPARED BY**
12 **YOU?**

13 A. Yes. These revised exhibits and workpapers were prepared by me and consist of
14 the following:

- 15 • Revised Harrington Exhibit 1: Summary Comparison of Fuel and Fuel-Related
16 Costs Factors.
- 17 • Revised Harrington Exhibits 2A, 2B, and 2C: Fuel and Fuel-Related Costs Factors
18 - reflecting a 92.27% proposed nuclear capacity factor and projected billing period
19 megawatt hour (“MWh”) sales.
- 20 • Revised Harrington Exhibit 3A: Calculation of Proposed Composite Experience
21 Modification Factor (“EMF”).
- 22 • Revised Harrington Exhibit 3B: Calculation of Proposed EMF for Residential

- 1 customers.
- 2 • Revised Harrington Exhibit 3C: Calculation of Proposed EMF for Small General
- 3 Service customers.
- 4 • Revised Harrington Exhibit 3D: Calculation of Proposed EMF for Medium
- 5 General Service customers.
- 6 • Revised Harrington Exhibit 3E: Calculation of Proposed EMF for Large General
- 7 Service customers.
- 8 • Revised Harrington Exhibit 3F: Calculation of Proposed EMF for Lighting
- 9 customers.
- 10 • Revised Harrington Exhibit 4: Normalized Test Period MWh Sales, Fuel and
- 11 Fuel-Related Revenue, Fuel and Fuel-Related Expense, and System Peak.
- 12 • Revised Harrington Exhibits 6A, 6B, and 6C: Fuel and Fuel-Related Costs Factors
- 13 - reflecting a 92.27% proposed nuclear capacity factor and normalized test period
- 14 MWh sales.
- 15 • Revised Harrington Exhibits 7A, 7B, and 7C: Fuel and Fuel-Related Costs Factors
- 16 - reflecting a 93.92% North American Electric Reliability Corporation (“NERC”)
- 17 five-year national weighted average nuclear capacity factor for comparable units
- 18 and projected billing period MWh sales.
- 19 • Revised Harrington Workpaper 3: North Carolina Generation in MWhs for the
- 20 Billing Period.
- 21 • Revised Harrington Workpaper 4: North Carolina Fuel Costs for the Billing Period
- 22 • Revised Harrington Workpaper 8: Projected Billing Period MWh Sales at Meter
- 23 and at Generation

- 1 • Revised Harrington Workpaper 9: Normalized MWh Sales at Meter and at
- 2 Generation for the Billing Period
- 3 • Revised Harrington Workpaper 9a: Weather Adjustment – MWh
- 4 • Revised Harrington Workpaper 10: Projected MWh Sales at Meter and Generation
- 5 – NERC 5-year Average
- 6 • Revised Harrington Workpaper 13: 2022 Production Demand Allocation Factors
- 7 • Revised Harrington Workpaper 14: Scenario Differences for the Billing Period
- 8 • Revised Harrington Workpaper 15: 2.5% Calculation Test – Projected Sales
- 9 • Revised Harrington Workpaper 16: 2.5% Calculation Test – Normalized Sales

10 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY**
11 **IN THIS PROCEEDING?**

12 A. The purpose of my testimony is to make four adjustments to the proposed rates in this
13 proceeding. The four adjustments are as follows: (1) adjust the weather normalization
14 computation to be consistent with the methodology adopted by the Commission in the
15 Company’s most recent general rate case, (2) allocate purchase power capacity costs
16 as ordered by the Commission in the Company’s most recent general rate case, (3)
17 adjust billing period projections consistently with an update in the pending Renewable
18 Energy Portfolio Standard (“REPS”) docket, and (4) adjust the North Carolina retail
19 share of replacement power costs associated with a Robinson Nuclear Station outage.
20 These updates have a net impact of reducing the proposed rates in this proceeding.

21 **Weather Normalization Adjustment:**

22 To eliminate duplicative work, the Company implemented improvements to

1 the weather normalization computation; however, the new methodology has not yet
2 been adopted by the Commission in a general rate case. The adjustment in this
3 supplemental filing simply returns to the methodology to that approved in DEP's
4 general base rates Order in Docket E-2, Sub 1300. This update is reflected on Revised
5 Harrington Exhibits 1, 2B, 2C, 3A-3F, 4, 6B, 6C, 7B, and 7C, and Revised Harrington
6 Workpapers 9, 9a, 14, and 16.

7 **Production Demand Allocation Factor Adjustment:**

8 In the DEP's previous general rate case Order in Docket E-2, Sub 1219, the
9 parties agreed on production plant as an appropriate allocation factor for purchased
10 power capacity costs. The DEP general rate case Order in Docket E-2, Sub 1300 filed
11 on August 18, 2023 ruled differently stating, "the Commission finds and concludes
12 that the same production demand allocation method approved for production demand
13 costs in this case using the 12 CP [coincident peak] methodology at NC retail and the
14 Modified A&E [Average & Excess] methodology for NC retail classes is the most
15 appropriate methodology for allocating purchased power capacity costs in DEP's
16 annual fuel proceeding." Replacing the 2022 production plant allocation factor with
17 the 2022 production demand allocation factor is reflected on Revised Harrington
18 Exhibits 1, 2B, 2C, 6B, 6C, 7B, and 7C, and Revised Harrington Workpapers 13, 15,
19 and 16.

20 **REPS Adjustment:**

21 The supplemental testimony of Company Witness Veronica I. Williams, filed
22 on August 24, 2023 in REPS Rider Docket E-2, Sub 1320, states, "The second update
23 comprises adjustments to estimated avoided costs related to three energy/capacity and

1 renewable energy certificate contracts included in the December 1, 2023 through
2 November 30, 2024 billing period (“Billing Period”) cost projections. The Company
3 corrected estimated avoided cost rates assumed in the projected avoided and
4 incremental cost totals and replaced them with the accurate avoided cost rates related
5 to the underlying power purchase agreements. The result is an increase in projected
6 avoided cost and an equal and offsetting decrease in incremental REPS compliance
7 cost included for recovery in the proposed riders...”. In alignment with this update,
8 the REPS purchase power projected megawatt-hours (“MWhs”) and avoided costs for
9 the billing period are updated in this supplemental filing. Adopting the REPS updated
10 projection in the fuel rider filing results in a billing period increase in projected REPS
11 purchased power MWhs and a respective decrease in projected coal MWhs. The
12 higher price per MWh coal cost compared to the price per MWh for equivalent REPS
13 energy results in a net decrease in total projected billing period fuel costs. This update
14 is reflected on Revised Harrington Exhibits 1, 2A, 2B, 2C, 6A, 6B, 6C, 7A, 7B, and
15 7C, and Revised Harrington Workpapers 3, 4, 8, 9, 10, 14, 15, and 16.

16 **Replacement Power Cost Adjustment:**

17 After discussions with the Public Staff on a Robinson Nuclear Station outage, which
18 spanned 12/30/2022 – 1/1/2023, the Company and Public Staff agree that a \$300,000 credit
19 to the North Carolina retail share of system fuel expense in this case is a reasonable adjustment
20 to the replacement power costs incurred as a result of the outage. This adjustment is reflected
21 on Revised Harrington Exhibits 1, 2B, 2C, 3A, 6B, 6C, 7B and 7C and is further itemized by
22 customer class according to December 2022 MWh sales on Revised Harrington Exhibits 3B-
23 3F.

1 **Q. WHAT IS THE RATE IMPACT OF THESE UPDATES TO NORTH**
 2 **CAROLINA RETAIL CUSTOMERS?**

3 A. The decrease reflected in the supplemental proposed rates from rates proposed in the
 4 initial filing ranges from .02% to .05%. The impact of each update by customer class
 5 is presented on the table below:

		Small	Medium	Large	
		General	General	General	
	Residential	Service	Service	Service	Lighting
	cents/kWh	cents/kWh	cents/kWh	cents/kWh	cents/kWh
Proposed rates per the Company application	4.074	4.335	3.654	3.362	5.734
Weather normalization update	0.008	0.011	0.007	0.004	0.020
Production demand allocation factor update	0.001	0.001	0.001	0.000	0.003
REPS projection update - impact to purchased power	0.012	0.015	0.009	0.007	0.029
REPS projection update - impact to coal	-0.021	-0.027	-0.017	-0.011	-0.052
Replacement power adjustment	-0.001	-0.001	-0.001	-0.001	-0.003
Supplemental proposed rates after updates	4.073	4.334	3.653	3.361	5.731
Proposed rate decrease from initial filing	-0.02%	-0.02%	-0.03%	-0.03%	-0.05%

6
 7 **Q. WHAT ARE THE UPDATED FUEL AND FUEL-RELATED COST**
 8 **FACTORS DEP IS PROPOSING FOR INCLUSION IN RATES FOR THE**
 9 **BILLING PERIOD?**

10 A. The components of the updated proposed fuel and fuel-related cost factors by customer
 11 class, as shown on Revised Harrington Exhibit 1 in cents per kWh, are:

		Small	Medium	Large	
		General	General	General	
	Residential	Service	Service	Service	Lighting
Description	cents/kWh	cents/kWh	cents/kWh	cents/kWh	cents/kWh
Total adjusted Fuel and Fuel-Related Costs Factors	2.882	3.284	2.563	2.112	4.051
EMF Increment/(Decrement)	1.191	1.050	1.090	1.249	1.680
Proposed Net Fuel and Fuel-Related Costs Factors	4.073	4.334	3.653	3.361	5.731

12

1 Q. DOES THIS CONCLUDE YOUR PRE-FILED SUPPLEMENTAL
2 TESTIMONY?

3 A. Yes, it does.

Duke Energy Progress, LLC
North Carolina Annual Fuel and Fuel-Related Expense
Summary Comparison of Fuel and Fuel-Related Cost Factors
Twelve Months Ended March 31, 2023
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Revised Harrington Exhibit 1

Line No.	Description	Reference	Residential cents/kWh	Small General Service cents/kWh	Medium General Service cents/kWh	Large General Service cents/kWh	Lighting cents/kWh
<u>Current Fuel and Fuel-Related Cost Factors (Approved Fuel Rider Docket No. E-2, Sub 1292)</u>							
1	Approved Fuel and Fuel-Related Costs Factors	Input	2.808	3.097	2.580	2.138	3.376
2	EMF Increment / (Decrement)	Input	0.649	0.449	0.586	0.898	0.834
3	EMF Interest Decrement cents/kWh, if applicable	n/a	-	-	-	-	-
4	Approved Net Fuel and Fuel-Related Costs Factors	Sum	3.457	3.546	3.166	3.036	4.210
<u>Other Fuel and Fuel-Related Cost Factors</u>							
5	Proposed Nuclear Capacity Factor of 92.27% with Normalized Test Period MWh Sales	Exh 6C	4.050	4.239	3.614	3.365	5.793
6	NERC Capacity Factor of 93.92% with Projected Billing Period MWh Sales	Exh 7C	4.037	4.288	3.625	3.342	5.642
<u>Proposed Fuel and Fuel-Related Cost Factors using Proposed Nuclear Capacity Factor of 92.27% with Projected Billing Period MWh Sales</u>							
7	Fuel and Fuel-Related Costs excluding Purchased Capacity	Exh 2B	2.740	2.779	2.532	2.048	3.940
8	Renewable and Qualifying Facilities Purchased Power Capacity	Exh 2B	0.142	0.505	0.031	0.064	0.111
9	Total adjusted Fuel and Fuel-Related Costs Factors	Sum	2.882	3.284	2.563	2.112	4.051
10	EMF Increment/(Decrement)	Exh 3B, 3C, 3D, 3E, 3F	1.191	1.050	1.090	1.249	1.680
11	EMF Interest Decrement, if applicable	n/a	-	-	-	-	-
12	Proposed Net Fuel and Fuel-Related Costs Factors	Sum Lines 9:11	4.073	4.334	3.653	3.361	5.731

Note: The above rates do not include state regulatory fees.

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

Revised Harrington Exhibit 2A

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 3-4	29,122,107	0.6113	\$ 178,009,922			\$ 178,009,922
2	Coal	Workpaper 3 - 4	5,967,395	4.3261	258,155,544			258,155,544
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	30,714,649		1,236,680,843	851,357		1,237,532,200
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	60,828,064		1,414,690,765	851,357		1,415,542,122
12	Purchases	Workpaper 3 - 4	12,190,519		569,693,792		\$ 69,735,560	499,958,232
13	JDA Savings Shared	Workpaper 4	-		(114,205,606)			(114,205,606)
14	Total Purchases	Sum of Lines 12 - 13	12,190,519		455,488,186		69,735,560	385,752,626
15	Total Generation and Purchases	Line 11 + Line 14	73,018,583		1,870,178,951	851,357	69,735,560	1,801,294,748
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			\$ 1,665,356,003	\$ 851,357	\$ 69,735,560	\$ 1,596,471,800
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			2.634			

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:
 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

Revised Harrington Exhibit 2B

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 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						\$ 22,836,104
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						\$ 69,735,560
5	NC Portion - Jurisdictional % based on Production Demand Allocator	Workpaper 13						62.12%
6	NC Renewable and Qualifying Facilities Purchased Power Capacity	Line 4 * Line 5						\$ 43,318,886
7	Production Demand Allocation Factors	Workpaper 13	56.63%	21.17%	7.49%	13.72%	0.99%	100.000%
8	Renewable and Qualifying Facilities Purchased Power Capacity allocated on Production Demand %	Line 6 * Line 7	\$ 24,533,134	\$ 9,172,105	\$ 3,243,912	\$ 5,942,165	\$ 427,570	\$ 43,318,886
9	Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh based on Projected Billing Period Sales at Meter	Line 8 / Line 1 / 10	0.142	0.505	0.031	0.064	0.111	0.110
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 cents/kWh	Line 15 - Line 11 - Line 13 -	2.740	2.779	2.532	2.048	3.940	
11	Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh	Line 9	0.142	0.505	0.031	0.064	0.111	
12	Total adjusted Fuel and Fuel-Related Costs cents/kWh	Line 10 + Line 11	2.882	3.284	2.563	2.112	4.051	
13	EMF Increment/(Decrement) cents/kWh	Exh 3B, 3C, 3D, 3E, 3F	1.191	1.050	1.090	1.249	1.680	
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	4.073	4.334	3.653	3.361	5.731	

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	Annual Revenue at	Allocate Fuel Costs	Uniform Percentage	Total Fuel Rate	Current Total Fuel Rate	Proposed Total Fuel
		Meter	Current rates	Increase/(Decrease) to Customer Class	Increase/Decrease as % of Annual Revenue at Current Rates	Increase/(Decrease) cents/kWh	(including renewables and EMF) E-2, Sub 1292 cents/kWh	Rate (including renewables and EMF) cents/kWh
		A	B	C	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
1	Residential	17,326,377	\$ 2,086,401,509	\$ 106,737,148	5.1%	0.616	3.457	4.073
2	Small General Service	1,816,847	279,731,721	14,310,652	5.1%	0.788	3.546	4.334
3	Medium General Service	10,471,370	997,768,827	51,044,345	5.1%	0.487	3.166	3.653
4	Large General Service	9,239,420	586,849,332	30,022,325	5.1%	0.325	3.036	3.361
5	Lighting	384,646	114,358,945	5,850,431	5.1%	1.521	4.210	5.731
6	NC Retail	39,238,661	\$ 4,065,110,334	\$ 207,964,901				
Total Proposed Composite Fuel Rate:								
7	Adjusted System Total Fuel Costs	Workpaper 8	\$ 1,666,207,360					
8	System Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 2B	69,735,560					
9	Adjusted System Other Fuel Costs	Line 7 - Line 8	\$ 1,596,471,800					
10	NC Retail Allocation % - sales at generation	Workpaper 8	62.17%					
11	NC Retail Other Fuel Costs	Line 9 * Line 10	\$ 992,500,334					
12	NC Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 2B	43,318,886					
13	NC Retail Total Fuel Costs before 2.5% Purchase Power Test	Line 11 + Line 12	\$ 1,035,819,220					
14	NC Retail Reduction due to 2.5% Purchased Power Test	Workpaper 15	-					
15	NC Retail Total Fuel Costs	Line 13 + Line 14	\$ 1,035,819,220					
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	2.640					
18	Proposed Composite EMF Rate cents/kWh	Exhibit 3A	1.173					
19	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3A	0.000					
20	Total Proposed Composite Fuel Rate	Sum of Lines 17-19	3.813					
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	0.530					
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	\$ 207,964,901					

Notes:
Rounding differences may occur

Duke Energy Progress, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Calculation of Proposed Composite Experience Modification Factor
 Twelve Months Ended March 31, 2023
 Docket No. E-2, Sub 1321

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/Under Recovery (d)	Reported Adjustments (e)	Reported Adjusted (Over)/Under Recovery (f)
1	April 2022 (Sub 1272) Note [1]	1.810	2.107	2,706,029	\$ (8,047,596)	-	\$ (8,047,596)
2	May Note [1]	2.934	2.108	2,812,712	23,246,955	-	23,246,955
3	June Note [1]	3.009	2.112	3,321,951	29,811,103	-	29,811,103
4	July	3.645	2.115	3,419,268	52,301,731	-	52,301,731
5	August	4.198	2.106	4,099,684	85,736,446	-	85,736,446
6	September	3.675	2.111	3,183,783	49,781,668	-	49,781,668
7	October	2.850	2.105	3,041,548	22,667,074	-	22,667,074
8	November	3.415	2.105	2,503,196	32,790,468	\$ 5,698,688	38,489,156
9	December (New Rates - Sub 1292)	5.918	2.351	3,149,379	112,312,466	539,142	112,851,608
10	January 2023	3.911	2.630	3,521,586	45,139,143	-	45,139,143
11	February	3.451	2.617	2,938,692	24,505,813	-	24,505,813
12	March	2.875	2.605	2,872,764	7,750,065	1,740,010	9,490,075
13	Total Test Period Note [1]			37,570,593	477,995,334	\$ 7,977,840	\$ 485,973,174
14	Booked 12-month (Over) / Under Recovery						\$ 485,973,174
15	Adjustment to exclude Under Recovery - April - June 2022 Note [1]						(45,010,462)
16	Total 9-month (Over) / Under Recovery						\$ 440,962,712
17	Adjustment to exclude test period by-product net gain/loss accrued expense per Docket No. E-2 Sub 1204 Order						(1,187,755)
18	Adjustment to include test period by-product net gain/loss cash payments per Docket No. E-2 Sub 1204 Order						5,304,883
19	Replacement power cost adjustment						(300,000)
20	Total Adjusted (Over) / Under Recovery Request						\$ 444,779,840
21	Normalized Test Period MWh Sales at Meter		Exhibit 4				37,911,173
22	Experience Modification Increment / (Decrement) cents/KWh						1.173

Notes:

Totals may not foot due to rounding.

[1] April - June 2022 were remitted in fuel Docket E-2, Sub 1292 are included in current EMF rate.

Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 15.

Duke Energy Progress, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Proposed Experience Modification Factor - Residential
Twelve Months Ended March 31, 2023
Docket No. E-2, Sub 1321

Revised Harrington Exhibit 3B

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/Under Recovery (d)	Reported Adjustments (e)	Reported Adjusted (Over)/Under Recovery (f)
1	April 2022 (Sub 1272) Note [1]	2.075	2.126	1,034,632	\$ (523,263)		\$ (523,263)
2	May Note [1]	3.431	2.126	1,053,526	13,749,962		13,749,962
3	June Note [1]	3.083	2.126	1,421,829	13,609,122		13,609,122
4	July	3.448	2.126	1,578,435	20,868,153		20,868,153
5	August	4.271	2.126	1,759,983	37,756,691		37,756,691
6	September	3.514	2.126	1,458,490	20,250,974		20,250,974
7	October	3.792	2.126	996,814	16,611,094		16,611,094
8	November	3.900	2.126	954,716	16,934,016	\$ 2,473,099	19,407,115
9	December (New Rates - Sub 1292)	5.817	2.467	1,491,632	49,980,728	1,518,154	51,498,882
10	January 2023	3.694	2.807	1,736,497	15,397,228		15,397,228
11	February	3.516	2.808	1,345,286	9,520,003		9,520,003
12	March	3.208	2.808	1,203,095	4,810,688	755,125	5,565,813
13	Total Test Period Note [1]			16,034,936	\$ 218,965,396	\$ 4,746,378	\$ 223,711,774
14	Booked 12-month (Over) / Under Recovery						\$ 223,711,774
15	Adjustment to exclude Under Recovery - April - June 2022 Note [1]						(26,835,821)
16	Total 9-month (Over) / Under Recovery						\$ 196,875,953
17	Adjustment to exclude test period by-product net gain/loss accrued expense per Docket No. E-2 Sub 1204 Order						(497,424)
18	Adjustment to include test period by-product net gain/loss cash payments per Docket No. E-2 Sub 1204 Order						2,221,651
19	Replacement power cost adjustment						(142,088)
20	Total Adjusted (Over) / Under Recovery Request						\$ 198,458,092
21	Normalized Test Period MWh Sales at Meter		Exhibit 4				16,660,473
22	Experience Modification Increment (Decrement) cents/KWh						1.191

Notes:

Totals may not foot due to rounding.

[1] April - June 2022 were remitted in fuel Docket E-2, Sub 1292 are included in current EMF rate.

Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 15.

Duke Energy Progress, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Calculation of Proposed Experience Modification Factor - Small General Service
 Twelve Months Ended March 31, 2023
 Docket No. E-2, Sub 1321

OFFICIAL COPY
 Aug 28 2023

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/Under Recovery (d)	Reported Adjustments (e)	Reported Adjusted (Over)/Under Recovery (f)
1	April 2022 (Sub 1272) Note [1]	1.773	2.111	130,126	\$ (439,416)		\$ (439,416)
2	May Note [1]	2.795	2.111	138,851	949,126		949,126
3	June Note [1]	2.688	2.111	175,258	1,011,379		1,011,379
4	July	3.179	2.111	183,338	1,958,161		1,958,161
5	August	3.852	2.111	209,058	3,639,102		3,639,102
6	September	2.983	2.111	184,495	1,609,481		1,609,481
7	October	2.871	2.111	140,859	1,069,890		1,069,890
8	November	3.246	2.111	122,551	1,391,235	\$ 263,449	1,654,684
9	December (New Rates - Sub 1292)	6.527	2.566	158,674	6,286,105	79,541	6,365,645
10	January 2023	4.344	3.087	176,248	2,216,080		2,216,080
11	February	3.876	3.097	145,547	1,134,318		1,134,318
12	March	3.209	3.095	143,355	162,472	80,438	242,910
13	Total Test Period Note [1]			1,908,360	\$ 20,987,933	\$ 423,428	\$ 21,411,361
14	Booked 12-month (Over) / Under Recovery						\$ 21,411,361
15	Adjustment to exclude Under Recovery - April - June 2022 Note [1]						(1,521,089)
16	Total 9-month (Over) / Under Recovery						\$ 19,890,272
17	Adjustment to exclude test period by-product net gain/loss accrued expense per Docket No. E-2 Sub 1204 Order						(59,271)
18	Adjustment to include test period by-product net gain/loss cash payments per Docket No. E-2 Sub 1204 Order						264,721
19	Replacement power cost adjustment						(15,115)
20	Total Adjusted (Over) / Under Recovery Request						\$ 20,080,608
21	Normalized Test Period MWh Sales at Meter		Exhibit 4				1,911,733
22	Experience Modification Increment (Decrement) cents/KWh						1.050

Notes:

Totals may not foot due to rounding.

[1] April - June 2022 were remitted in fuel Docket E-2, Sub 1292 are included in current EMF rate.

Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 15.

Duke Energy Progress, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Calculation of Proposed Experience Modification Factor - Medium General Service
 Twelve Months Ended March 31, 2023
 Docket No. E-2, Sub 1321

Revised Harrington Exhibit 3D

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/Under Recovery (d)	Reported Adjustments (e)	Reported Adjusted (Over)/Under Recovery (f)
1	April 2022 (Sub 1272) Note [1]	1.596	2.169	852,188	\$ (4,886,973)		\$ (4,886,973)
2	May Note [1]	2.535	2.169	903,745	3,303,812		3,303,812
3	June Note [1]	2.815	2.169	986,113	6,365,331		6,365,331
4	July	3.410	2.169	1,013,671	12,574,655		12,574,655
5	August	4.480	2.169	1,065,441	24,618,962		24,618,962
6	September	3.776	2.169	860,146	13,819,336		13,819,336
7	October	2.383	2.169	1,008,398	2,158,330		2,158,330
8	November	3.215	2.169	736,666	7,709,657	\$ 1,577,442	9,287,099
9	December (New Rates - Sub 1292)	5.719	2.330	872,819	29,576,756	(1,255,353)	28,321,403
10	January 2023	4.225	2.567	873,111	14,480,275		14,480,275
11	February	3.586	2.579	756,941	7,618,878		7,618,878
12	March	2.638	2.572	837,366	550,329	481,646	1,031,975
13	Total Test Period Note [1]			10,766,603	\$ 117,889,348	\$ 803,735	\$ 118,693,083
14	Booked 12-month (Over) / Under Recovery						\$ 118,693,083
15	Adjustment to exclude Under Recovery - April - June 2022 Note [1]						(4,782,171)
16	Total 9-month (Over) / Under Recovery						\$ 113,910,912
17	Adjustment to exclude test period by-product net gain/loss accrued expense per Docket No. E-2 Sub 1204 Order						(346,212)
18	Adjustment to include test period by-product net gain/loss cash payments per Docket No. E-2 Sub 1204 Order						1,546,290
19	Replacement power cost adjustment						(83,142)
20	Total Adjusted (Over) / Under Recovery Request						\$ 115,027,848
21	Normalized Test Period MWh Sales at Meter	Exhibit 4					10,553,483
22	Experience Modification Increment (Decrement) cents/KWh						1.090

Notes:

Totals may not foot due to rounding.

[1] April - June 2022 were remitted in fuel Docket E-2, Sub 1292 are included in current EMF rate.

Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 15.

Duke Energy Progress, LLC
North Carolina Annual Fuel and Fuel Related Expense
Calculation of Proposed Experience Modification Factor - Large General Service
Twelve Months Ended March 31, 2023
Docket No. E-2, Sub 1321

Revised Harrington Exhibit 3E

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/Under Recovery (d)	Reported Adjustments (e)	Reported Adjusted (Over)/Under Recovery (f)
1	April 2022 (Sub 1272) Note [1]	1.715	2.020	654,388	\$ (1,995,062)		\$ (1,995,062)
2	May Note [1]	2.775	2.019	683,231	5,159,754		5,159,754
3	June Note [1]	3.219	2.020	710,869	8,520,806		8,520,806
4	July	4.669	2.019	617,224	16,353,710		16,353,710
5	August	3.834	2.019	1,037,130	18,823,604		18,823,604
6	September	4.104	2.019	654,074	13,637,324		13,637,324
7	October	2.319	2.019	867,417	2,600,733		2,600,733
8	November	3.000	2.019	662,919	6,503,717	\$ 1,337,182	7,840,899
9	December (New Rates - Sub 1292)	6.162	2.041	598,217	24,649,313	196,156	24,845,469
10	January 2023	3.845	2.130	708,394	12,146,095		12,146,095
11	February	3.010	2.138	664,581	5,798,561		5,798,561
12	March	2.458	2.138	660,695	2,118,552	408,290	2,526,842
13	Total Test Period Note [1]			8,519,137	\$ 114,317,107	\$ 1,941,628	\$ 116,258,735
14	Booked 12-month (Over) / Under Recovery						\$ 116,258,735
15	Adjustment to exclude Under Recovery - April - June 2022 Note [1]						(11,685,498)
16	Total 9-month (Over) / Under Recovery						\$ 104,573,237
17	Adjustment to exclude test period by-product net gain/loss accrued expense per Docket No. E-2 Sub 1204 Order						(273,167)
18	Adjustment to include test period by-product net gain/loss cash payments per Docket No. E-2 Sub 1204 Order						1,220,048
19	Replacement power cost adjustment						(56,984)
20	Total Adjusted (Over) / Under Recovery Request						\$ 105,463,134
21	Normalized Test Period MWh Sales at Meter		Exhibit 4				8,443,198
22	Experience Modification Increment (Decrement) cents/kWh						1.249

Notes:

Totals may not foot due to rounding.

[1] April - June 2022 were remitted in fuel Docket E-2, Sub 1292 are included in current EMF rate.

Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 15.

Duke Energy Progress, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Calculation of Proposed Experience Modification Factor - Lighting
 Twelve Months Ended March 31, 2023
 Docket No. E-2, Sub 1321

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/Under Recovery (d)	Reported Adjustments (e)	Reported Adjusted (Over)/Under Recovery (f)
1	April 2022 (Sub 1272) Note [1]	1.095	1.680	34,695	\$ (202,882)		\$ (202,882)
2	May Note [1]	1.934	1.681	33,360	84,301		84,301
3	June Note [1]	2.773	1.682	27,883	304,465		304,465
4	July	3.739	1.682	26,600	547,052		547,052
5	August	4.881	1.682	28,072	898,086		898,086
6	September	3.430	1.682	26,580	464,553		464,553
7	October	2.491	1.682	28,060	227,027		227,027
8	November	2.638	1.682	26,345	251,844	\$ 47,516	299,360
9	December (New Rates - Sub 1292)	8.787	2.297	28,037	1,819,564	645	1,820,209
10	January 2023	6.652	3.361	27,335	899,465		899,465
11	February	5.024	3.376	26,338	434,052		434,052
12	March	3.757	3.374	28,253	108,024	14,511	122,535
13	Total Test Period Note [1]			341,557	\$ 5,835,549	\$ 62,672	\$ 5,898,221
14	Booked 15-month (Over) / Under Recovery						\$ 5,898,221
15	Adjustment to exclude Under Recovery - April - June 2022 Note [5]						(185,883)
16	Total 12-month (Over) / Under Recovery						\$ 5,712,338
17	Adjustment to exclude test period by-product net gain/loss accrued expense per Docket No. E-2 Sub 1204 Order						(11,681)
18	Adjustment to include test period by-product net gain/loss cash payments per Docket No. E-2 Sub 1204 Order						52,173
19	Replacement power cost adjustment						(2,671)
20	Total Adjusted (Over) / Under Recovery Request						\$ 5,750,159
21	Normalized Test Period MWh Sales at Meter		Exhibit 4				342,287
22	Experience Modification Increment (Decrement) cents/KWh						1.680

Notes:

Totals may not foot due to rounding.

[5] April - June 2021 were remitted in fuel Docket E-2, Sub 1272 are included in current EMF rate.

Included for Commission review in accordance with NC Rule R8-55 (d)(3) but deducted from total (O)/ U on Line 18.

Duke Energy Progress, LLC
North Carolina Annual Fuel and Fuel-Related Expense
Normalized Test Period MWh Sales, Fuel and Fuel-Related Revenue, Fuel and Fuel-Related Expense, and System Peak
Twelve Months Ended March 31, 2023
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Revised Harrington Exhibit 4

OFFICIAL COPY
Aug 28 2023

Line No.	Description	Reference	Total Company	North Carolina Retail	North Carolina Residential	North Carolina Small General Service	North Carolina Medium General Service	North Carolina Large General Service	North Carolina Lighting
1	Test Period MWh Sales	Workpaper 9	60,895,867	37,570,593	16,034,936	1,908,360	10,766,603	8,519,137	341,557
2	Weather MWh Adjustment	Workpaper 9	633,292	260,581	457,221	(20,274)	(109,387)	(66,978)	0
3	Customer Growth MWh Adjustment	Workpaper 9	232,513	80,000	168,316	23,647	(103,732)	(8,961)	730
4	Remove Impact of SC DERP Net Metered MWh	Workpaper 9	33,600						
5	Total Normalized Test Period MWh Sales at Meter	Sum Lines 1-4	61,795,272	37,911,173	16,660,473	1,911,733	10,553,483	8,443,198	342,287
6	Total Normalized Test Period MWh Sales at Generation	Workpaper 9	63,155,578	38,840,283	17,088,541	1,960,812	10,817,096	8,622,811	351,024
7	Test Period Fuel and Fuel-Related Revenue *		\$ 1,372,192,920	\$ 847,469,453					
8	Test Period Fuel and Fuel-Related Expense *		\$ 2,169,458,131	\$ 1,333,442,627					
9	Test Period Unadjusted (Over)/Under Recovery	Line 8 - Line 7	\$ 797,265,211	\$ 485,973,174					
			2022 12CP (Coincident Peak) Firm KW						
10	Total System Peak		11,065,080						
11	NC Retail		6,873,494						
12	NC Residential **		3,892,721						
13	NC Small General Service **		1,455,356						
14	NC Medium General Service **		514,718						
15	NC Large General Service **		942,855						
16	NC Lighting **		67,843						

Notes:

- * Total Company Fuel and Fuel-Related Revenue and Fuel and Fuel-Related Expense are quantified based on NC Retail's known share of revenues and expenses grossed up to also include the percentage of sales not belonging to NC Retail.
- ** NC Retail peak KW at the customer class level is determined using the Modified Average & Excess (A&E) Method as approved in E-2 Sub 1300.

Rounding differences may occur.

Duke Energy Progress, LLC
 North Carolina Annual Fuel and Fuel-Related Expense
 Nuclear Capacity Ratings - MWs
 Twelve Months Ended March 31, 2023
 Billing Period December 1, 2023 - November 30, 2024
 Docket No. E-2, Sub 1321

Harrington Exhibit 5

Unit	Approved	Pending	Prior	Proposed Capacity Rating MW
	Rate Case Docket E-2, Sub 1219	Rate Case Docket E-2, Sub 1300	Fuel Docket E-2, Sub 1292	
Brunswick 1	938	938	938	938
Brunswick 2	932	932	932	932
Harris 1	964	964	964	964
Robinson 2	741	759	759	759
Total Company	3,575	3,593	3,593	3,593

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 Normalized Test Period MWh Sales
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Revised Harrington Exhibit 6A

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 3-4	29,122,107	0.6113	\$ 178,009,922			\$ 178,009,922
2	Coal	Workpaper 14	4,741,275	4.3261	205,112,352			205,112,352
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	29,488,529		1,183,637,651	851,357		1,184,489,008
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	59,601,944		1,361,647,573	851,357		1,362,498,930
12	Purchases	Workpaper 3 - 4	12,190,519		569,693,792		\$ 69,735,560	499,958,232
13	JDA Savings Shared	Workpaper 4	-		(114,205,606)			(114,205,606)
14	Total Purchases	Sum of Lines 12 - 13	12,190,519		455,488,186		69,735,560	385,752,626
15	Total Generation and Purchases	Line 11 + Line 14	71,792,463		1,817,135,759	851,357	69,735,560	1,748,251,556
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	(2,396,171)		-			-
18	System Fuel Expense for Fuel Factor	Line 15 + Line 16			\$ 1,612,312,811	\$ 851,357	\$ 69,735,560	\$ 1,543,428,608
19	Projected System MWh Sales at Meter for Fuel Factor	Exhibit 4	61,795,272		61,795,272			
20	Fuel and Fuel-Related Costs cents/kWh	Line 18 /Line 19 / 10			2.609			

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:
Proposed Nuclear Capacity Factor of 92.27% with Normalized Test Period MWh Sales
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Revised Harrington Exhibit 6B

Line No.	Description		Residential	General Service Small	General Service Medium	General Service Large	Lighting	Total
1	NC Retail Normalized Test Period MWh Sales at Meter	Workpaper 9	16,660,473	1,911,733	10,553,483	8,443,198	342,287	37,911,173
Calculation of Renewable and Qualifying Facilities Purchased Power Capacity Rate by Class								
2	Renewable Purchased Power Capacity	Workpaper 4						Amount \$ 22,836,104
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						\$ 69,735,560
5	NC Portion - Jurisdictional % based on Production Demand Allocator	Workpaper 13						62.12%
6	NC Renewable and Qualifying Facilities Purchased Power Capacity	Line 4 * Line 5						\$ 43,318,886
7	Production Demand Allocation Factors	Workpaper 13	56.63%	21.17%	7.49%	13.72%	0.99%	100.000%
8	Renewable and Qualifying Facilities Purchased Power Capacity allocated on Production Demand %	Line 6 * Line 7	\$ 24,533,134	\$ 9,172,105	\$ 3,243,912	\$ 5,942,165	\$ 427,570	\$ 43,318,886
9	Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh based on Projected Billing Period Sales at Meter	Line 8 / Line 1 / 10	0.147	0.480	0.031	0.070	0.125	0.114
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	2.712	2.709	2.493	2.046	3.988	
11	Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh	Line 9	0.147	0.480	0.031	0.070	0.125	
12	Total adjusted Fuel and Fuel-Related Costs cents/kWh	Line 10 + Line 11	2.859	3.189	2.524	2.116	4.113	
13	EMF Increment/(Decrement) cents/kWh	Exh 3B, 3C, 3D, 3E, 3F	1.191	1.050	1.090	1.249	1.680	
14	EMF Interest Increment/(Decrement) cents/kWh	Exh 3B, 3C, 3D, 3E, 3F	-	-	-	-	-	
15	Net Fuel and Fuel-Related Costs Factors cents/kWh	Exh 6C	4.050	4.239	3.614	3.365	5.793	

Note: Rounding differences may occur

Calculation of Uniform Percentage Average Bill Adjustment by Customer Class

Line No.	Rate Class	NC Retail Normalized Test 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 If D=0 then 0 if not then (C*100)/(A*1000)	Current Total Fuel Rate (including renewables and EMF) E-2, Sub 1292 cents/kWh F Exhibit 1, Line 4	Proposed Total Fuel Rate (including renewables and EMF) cents/kWh G E + F = G
		Worksheet 9	Worksheet 12	Line 27 as a % of Column B	C / B			
1	Residential	16,660,473	\$ 2,086,401,509	\$ 98,845,406	4.7%	0.593	3.457	4.050
2	Small General Service	1,911,733	279,731,721	13,252,576	4.7%	0.693	3.546	4.239
3	Medium General Service	10,553,483	997,768,827	47,270,319	4.7%	0.448	3.166	3.614
4	Large General Service	8,443,198	586,849,332	27,802,588	4.7%	0.329	3.036	3.365
5	Lighting	342,287	114,358,945	5,417,872	4.7%	1.583	4.210	5.793
6	NC Retail	37,911,173	\$ 4,065,110,334	\$ 192,588,761				
Total Proposed Composite Fuel Rate:								
7	Adjusted System Total Fuel Costs	Worksheet 9	\$ 1,613,164,168					
8	System Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 6B	69,735,560					
9	System Other Fuel Costs	Line 7 - Line 8	\$ 1,543,428,608					
10	NC Retail Allocation % - sales at generation	Worksheet 9	61.50%					
11	NC Retail Other Fuel Costs	Line 9 * Line 10	\$ 949,198,892					
12	NC Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 6B	43,318,886					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 992,517,778					
14	NC Retail Reduction due to 2.5% Purchased Power Test	Worksheet 16	\$ -					
15	NC Retail Total Fuel Costs	Line 13 + Line 14	\$ 992,517,778					
16	Adjusted NC Normalized Test Period MWh Sales - at meter	Line 6, col A	37,911,173					
17	Calculated Fuel Rate cents/kWh	Line 15 / Line 16 /10	2.618					
18	Proposed Composite EMF Rate cents/kWh	Exhibit 3A	1.173					
19	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3A	0.000					
20	Total Proposed Composite Fuel Rate	Sum of Lines 17-19	3.791					
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	0.508					
26	Adjusted NC Normalized Test Period MWh Sales - at meter	Line 6, col A	37,911,173					
27	Increase/(Decrease) in Fuel Costs	Line 25 * Line 26 * 10	\$ 192,588,761					

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

Revised 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	5,447,692	4.3261	235,672,661			235,672,661
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	30,194,946		1,214,197,960	851,357		1,215,049,317
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	60,828,064		1,395,384,586	851,357		1,396,235,943
12	Purchases	Workpaper 3 - 4	12,190,519		569,693,792		\$ 69,735,560	499,958,232
13	JDA Savings Shared	Workpaper 4	-		(114,205,606)			(114,205,606)
14	Total Purchases	Sum of Lines 12 - 13	12,190,519		455,488,186		69,735,560	385,752,626
15	Total Generation and Purchases	Line 11 + Line 14	73,018,583		1,850,872,772	851,357	69,735,560	1,781,988,569
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	-		\$ 1,646,049,824	\$ 851,357	\$ 69,735,560	\$ 1,577,165,621
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			2.603			

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

Revised 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								
2	Renewable Purchased Power Capacity	Workpaper 4						Amount \$ 22,836,104
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						\$ 69,735,560
5	NC Portion - Jurisdictional % based on Production Demand Allocator	Workpaper 13						62.12%
6	NC Renewable and Qualifying Facilities Purchased Power Capacity	Line 4 * Line 5						\$ 43,318,886
7	Production Demand Allocation Factors	Workpaper 13	56.63%	21.17%	7.49%	13.72%	0.99%	100.000%
8	Renewable and Qualifying Facilities Purchased Power Capacity allocated on Production Demand %	Line 6 * Line 7	\$ 24,533,134	\$ 9,172,105	\$ 3,243,912	\$ 5,942,165	\$ 427,570	\$ 43,318,886
9	Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh based on Projected Billing Period Sales at Meter	Line 8 / Line 1 / 10	0.142	0.505	0.031	0.064	0.111	0.110
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	2.704	2.733	2.504	2.029	3.851	
11	Renewable and Qualifying Facilities Purchased Power Capacity cents/kWh	Line 9	0.142	0.505	0.031	0.064	0.111	
12	Total adjusted Fuel and Fuel-Related Costs cents/kWh	Line 10 + Line 11	2.846	3.238	2.535	2.093	3.962	
13	EMF Increment/(Decrement) cents/kWh	Exh 3B, 3C, 3D, 3E, 3F	1.191	1.050	1.090	1.249	1.680	
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	4.037	4.288	3.625	3.342	5.642	

Note: Rounding differences may occur

OFFICIAL COPY
Aug 28 2023

Calculation of Uniform Percentage Average Bill Adjustment by Customer Class

Line No.	Rate Class	NC Retail Projected Billing Period MWh Sales at	Annual Revenue at	Allocate Fuel Costs	Increase/Decrease	Total Fuel Rate	Current Total Fuel Rate	Proposed Total Fuel
		Meter	Current rates	Increase/(Decrease) to	Revenue at Current	Increase/(Decrease)	(including renewables	Rate (including
		A	B	Customer Class	Rates	cents/kWh	and EMF) E-2, Sub	Rate (including
				C	D	E	1292 cents/kWh	renewables and EMF)
						If D=0 then 0 if not	F	G
						then		
		Workpaper 10	Workpaper 12	Line 27 as a % of Column B	C / B	(C*100)/(A*1000)	Exhibit 1, Line 4	E + F = H
1	Residential	17,326,377	\$ 2,086,401,509	\$ 100,494,032	4.8%	0.580	3.457	4.037
2	Small General Service	1,816,847	279,731,721	13,473,614	4.8%	0.742	3.546	4.288
3	Medium General Service	10,471,370	997,768,827	48,058,733	4.8%	0.459	3.166	3.625
4	Large General Service	9,239,420	586,849,332	28,266,302	4.8%	0.306	3.036	3.342
5	Lighting	384,646	114,358,945	5,508,236	4.8%	1.432	4.210	5.642
6	NC Retail	39,238,661	\$ 4,065,110,334	\$ 195,800,917				
Total Proposed Composite Fuel Rate:								
7	Adjusted System Total Fuel Costs	Workpaper 10	\$ 1,646,901,181					
8	System Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 7B	69,735,560					
9	System Other Fuel Costs	Line 7 - Line 8	\$ 1,577,165,621					
10	NC Retail Allocation % - sales at generation	Workpaper 10	62.17%					
11	NC Retail Other Fuel Costs	Line 9 * Line 10	\$ 980,497,999					
12	NC Renewable and Qualifying Facilities Purchased Power Capacity	Exhibit 7B	43,318,886					
13	NC Retail Total Fuel Costs	Line 11 + Line 12	\$ 1,023,816,886					
14	NC Retail Reduction due to 2.5% Purchased Power Test	Workpaper 15	\$ -					
15	NC Retail Total Fuel Costs	Line 13 + Line 14	\$ 1,023,816,886					
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	2.609					
18	Proposed Composite EMF Rate cents/kWh	Exhibit 3A	1.173					
19	Proposed Composite EMF Rate Interest cents/kWh	Exhibit 3A	0.000					
20	Total Proposed Composite Fuel Rate	Sum of Lines 17-19	3.782					
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	0.499					
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	\$ 195,800,916					

Note: Rounding differences may occur

Duke Energy Progress, LLC
North Carolina Annual Fuel and Fuel-Related Expense
Monthly Fuel and Baseload Report for March 2023
Twelve Months Ended March 31, 2023
Docket No. E-2, Sub 1321

Harrington Exhibit 8

March 2023
Monthly Fuel Filing and Baseload Report Cover Sheet

OFFICIAL COPY

Aug 28 2023

**DUKE ENERGY PROGRESS
SUMMARY OF MONTHLY FUEL REPORT**

Docket No. E-2, Sub 1310

Line No.	Fuel Expenses:	March 2023	12 Months Ended March 2023
1	Total Fuel and Fuel-Related Costs	\$ 128,915,185	\$ 2,134,728,979
	MWH sales:		
2	Total System Sales	5,079,825	67,925,042
3	Less intersystem sales	530,956	7,029,175
4	Total sales less intersystem sales	4,548,869	60,895,867
5	Total fuel and fuel-related costs (¢/KWH) (Line 1/Line 4)	2.834	3.506
6	Current fuel & fuel-related cost component (¢/KWH) (per Schedule 4, Line 5a Total)	2.605	
	Generation Mix (MWH):		
	Fossil (By Primary Fuel Type):		
7	Coal	419,045	5,489,198
8	Oil	9,282	141,416
9	Natural Gas - Combustion Turbine	127,225	2,766,398
10	Natural Gas - Combined Cycle	1,321,720	20,645,425
11	Biogas	320	11,483
12	Total Fossil	1,877,593	29,053,920
13	Nuclear	2,464,611	28,995,015
14	Hydro - Conventional	81,131	600,694
15	Solar Distributed Generation	22,728	250,713
16	Total MWH generation	4,446,063	58,900,342

Notes:

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

* Current 12ME includes a fuel proxy adjustment increasing fuel costs by \$121,556 in the month of December 2022.

**DUKE ENERGY PROGRESS
DETAILS OF FUEL AND FUEL-RELATED COSTS**

Docket No. E-2, Sub 1310

Description	March 2023	12 Months Ended March 2023
Fuel and Fuel-Related Costs:		
Steam Generation - Account 501		
0501110 coal consumed - steam	\$ 17,192,671	\$ 204,189,853
0501310 fuel oil consumed - steam	1,457,253	12,441,216
Total Steam Generation - Account 501	18,649,924	216,631,069
Nuclear Generation - Account 518		
0518100 burnup of owned fuel	15,359,370	177,505,221
Other Generation - Account 547		
0547000 natural gas consumed - Combustion Turbine	3,581,975	223,742,962
0547000 natural gas consumed - Combined Cycle	64,690,000	1,239,836,668
0547106 biogas consumed - Combined Cycle	16,883	545,306
0547200 fuel oil consumed	543,117	22,825,989
Total Other Generation - Account 547	68,831,975	1,486,950,925
Reagents		
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	1,034,319	14,049,227
Total Reagents	1,034,319	14,049,227
By-products		
Net proceeds from sale of by-products	945,215	15,795,773
Total By-products	945,215	15,795,773
Total Fossil and Nuclear Fuel Expenses		
Included in Base Fuel Component	104,820,803	1,910,932,215
Purchased Power and Net Interchange - Account 555		
Capacity component of purchased power (PURPA)	3,317,400	53,502,395
Capacity component of purchased power (renewables)	2,120,424	31,718,898
* Fuel and fuel-related component of purchased power	30,164,581	675,873,648
* Total Purchased Power and Net Interchange - Account 555	35,602,405	761,094,941
Less:		
Fuel and fuel-related costs recovered through intersystem sales	11,505,901	536,626,007
Solar Integration Charge	20	169
Miscellaneous Fees Collected	2,100	672,000
Total Fuel Credits - Accounts 447/456	11,508,021	537,298,176
* Total Fuel and Fuel-Related Costs	\$ 128,915,185	\$ 2,134,728,979

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

* Current 12ME includes a fuel proxy adjustment increasing fuel costs by \$121,556 in the month of December 2022.

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

March 2023

Purchased Power	Total	Capacity	Non-capacity			
			mWh	Fuel \$	Fuel-related \$	Not Fuel \$ Not Fuel-related \$
Economic Purchases	\$	\$				
Broad River Energy, LLC	\$ 5,758,510	\$ 5,138,625	6,626	\$ 409,853	\$ 210,032	-
City of Fayetteville	1,331,074	695,500	4,437	453,100	182,474	-
DE Carolinas - Native Load Transfer	2,274,417	-	81,589	1,954,634	304,720	\$ 15,063
DE Carolinas - Native Load Transfer Benefit	591,276	-	-	591,276	-	-
DE Carolinas - Fees	(17,378)	-	-	-	(17,378)	-
Haywood EMC	27,750	27,750	-	-	-	-
NCEMC	3,490,550	2,897,025	10,344	553,093	40,432	-
PJM Interconnection, LLC	5,316	-	-	-	5,316	-
Southern Company Services	5,931,965	2,051,205	119,196	3,297,848	582,912	-
	\$ 19,393,480	\$ 10,810,105	222,192	\$ 7,259,804	\$ 1,308,508	\$ 15,063
Renewable Energy Purchases						
NC REPS	\$ 9,506,187	-	144,844	-	\$ 9,506,187	-
SC DERP Qualifying Facilities	95,024	-	2,075	-	91,844	\$ 3,180
SC DERP Net Metering Excess Generation	21,009	\$ 5,127	625	-	-	15,882
SC Act 62 Net Metering Excess Generation	683	-	25	-	-	683
	\$ 9,622,903	\$ 5,127	147,569	\$ -	\$ 9,598,031	\$ 19,745
HB589 PURPA Purchases						
NC Other Qualifying Facilities	\$ 16,126,328	-	279,991	-	\$ 16,126,328	-
NC CPRE - Purchased Power	394,591	-	9,256	-	-	\$ 394,591
	\$ 16,520,919	\$ -	289,247	\$ -	\$ 16,126,328	\$ 394,591
Non-dispatchable Purchases						
DE Carolinas - Emergency	-	-	-	-	-	-
DE Carolinas - Reliability	\$ 1,321,502	\$ 4,500	29,367	\$ 1,119,452	-	\$ 197,550
Dominion Energy South Carolina - Emergency	-	-	-	-	-	-
PJM Interconnection, LLC - Reliability	183,294	-	2,900	155,799	-	27,495
Virginia Electric and Power Company - Emergenc	-	-	-	-	-	-
Energy Imbalance	10,802	-	421	9,653	-	1,149
Generation Imbalance	30,225	-	1,805	24,830	-	5,395
	\$ 1,545,823	\$ 4,500	34,493	\$ 1,309,734	\$ -	\$ 231,589
Total Purchased Power	\$ 47,083,125	\$ 10,819,732	693,501	\$ 8,569,538	\$ 27,032,867	\$ 660,988

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

CPRE purchased power amounts are recovered through the CPRE Rider.

"Not Fuel \$/Not Fuel-related \$" amounts are based on estimates and are subject to change.

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

March 2023

Sales	Total	Capacity	Non-capacity		
	\$	\$	mWh	Fuel \$	Non-fuel \$
Utilities:					
DE Carolinas - As Available Capacity	\$ -	\$ -	-	-	-
DE Carolinas - Emergency	-	-	-	-	-
Dominion Energy South Carolina, Inc. - Emergency	-	-	-	-	-
South Carolina Public Service Authority - Emergency	-	-	-	-	-
Market Based:					
NCEMC Purchase Power Agreement	\$ 1,127,484	\$ 652,500	15,439	\$ 391,083	\$ 83,901
PJM Interconnection, LLC	169,443	-	6,625	141,800	27,643
Other:					
DE Carolinas - Native Load Transfer	9,267,936	-	508,869	8,478,707	789,229
DE Carolinas - Native Load Transfer Benefit	2,494,272	-	-	2,494,272	-
Generation Imbalance	46	-	23	39	7
Total Intersystem Sales	\$ 13,059,181	\$ 652,500	530,956	\$ 11,505,901	\$ 900,780

* Sales for resale other than native load priority.

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

DUKE ENERGY PROGRESS
PURCHASED POWER AND INTERCHANGE
SYSTEM REPORT - NORTH CAROLINA VIEWTwelve Months Ended
March 2023

Purchased Power	Total	Capacity	Non-capacity			
			mWh	Fuel \$	Fuel-related \$	Not Fuel \$ Not Fuel-related \$
Economic Purchases	\$	\$				
Broad River Energy, LLC	\$ 142,052,621	\$ 35,085,832	1,141,008	\$ 97,820,266	\$ 9,146,523	-
City of Fayetteville	20,698,530	12,296,500	55,363	6,812,367	1,589,663	-
DE Carolinas - Native Load Transfer	78,188,779	-	1,163,032	66,855,603	11,426,244	\$ (93,068)
DE Carolinas - Native Load Transfer Benefit	7,983,289	-	-	7,983,289	-	-
DE Carolinas - Fees	147,664	-	-	-	147,664	-
Haywood EMC	356,886	356,886	-	-	-	-
NCEMC	84,574,516	40,477,903	462,174	43,298,766	797,847	-
PJM Interconnection, LLC	740,040	-	6,098	601,266	138,774	-
Southern Company Services	160,513,446	25,775,936	1,944,300	125,253,037	9,484,473	-
	\$ 495,255,771	\$ 113,993,057	4,771,975	\$ 348,624,594	\$ 32,731,188	\$ (93,068)
Renewable Energy Purchases						
NC REPS	\$ 141,144,285	-	2,147,096	-	\$ 141,144,285	-
SC DERP Qualifying Facilities	1,287,549	-	31,142	-	1,230,609	\$ 56,940
SC DERP Net Metering Excess Generation	38,146	\$ 9,309	1,135	-	-	28,837
SC Act 62 Net Metering Excess Generation	5,223	-	219	-	-	5,223
	\$ 142,475,203	\$ 9,309	2,179,592	-	\$ 142,374,894	\$ 91,000
HB589 PURPA Purchases						
NC Other Qualifying Facilities	\$ 229,468,951	-	3,877,418	-	\$ 229,468,951	-
NC CPRE - Purchased Power	5,645,408	-	168,972	-	-	\$ 5,645,408
	\$ 235,114,359	-	4,046,390	-	\$ 229,468,951	5,645,408
Non-dispatchable Purchases						
DE Carolinas - Emergency	\$ 106,271	-	1,150	\$ 64,826	-	\$ 41,445
* DE Carolinas - Reliability	8,958,385	\$ 8,013	48,546	7,532,522	-	1,417,850
Dominion Energy South Carolina - Emergency	-	-	-	-	-	-
* PJM Interconnection, LLC - Reliability	663,608	-	6,438	564,066	-	99,542
Virginia Electric and Power Company - Emergenc	-	-	-	-	-	-
Energy Imbalance	(597,912)	-	3,670	(458,262)	-	(139,650)
Generation Imbalance	199,216	-	3,463	192,163	-	7,053
	\$ 9,329,568	8,013	63,267	\$ 7,895,315	-	\$ 1,426,240
Total Purchased Power	\$ 882,174,901	\$ 114,010,379	11,061,224	\$ 356,519,909	\$ 404,575,033	\$ 7,069,580

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

CPRE purchased power amounts are recovered through the CPRE Rider.

"Not Fuel \$/Not Fuel-related \$" amounts are based on estimates and are subject to change.

*Current 12ME includes a fuel proxy adjustment increasing fuel costs and decreasing non-fuel costs by \$121,556 in the month of December 2022.

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

Twelve Months Ended
March 2023

Sales	Total \$	Capacity \$	mWh	Non-capacity	
				Fuel \$	Non-fuel \$
Utilities:					
DE Carolinas - As Available Capacity	\$ 383,030	\$ 383,030	-	-	-
DE Carolinas - Emergency	30,606	-	177	-	\$ 30,606
Dominion Energy South Carolina, Inc. - Emergency	1,510,523	-	2,125	\$ 1,185,665	324,858
South Carolina Public Service Authority - Emergency	-	-	-	-	-
Market Based:					
NCEMC Purchase Power Agreement	16,070,106	7,830,000	125,447	12,785,038	(4,544,932)
PJM Interconnection, LLC	2,351,301	-	57,749	2,432,513	(81,212)
Other:					
DE Carolinas - Native Load Transfer	486,736,113	-	6,842,230	472,478,958	14,257,155
DE Carolinas - Native Load Transfer Benefit	47,584,165	-	-	47,584,165	-
Generation Imbalance	131,445	-	1,447	159,668	(28,223)
Total Intersystem Sales	\$ 554,797,289	\$ 8,213,030	7,029,175	\$ 536,626,007	\$ 9,958,252

* Sales for resale other than native load priority.

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

**DUKE ENERGY PROGRESS
(OVER) / UNDER RECOVERY OF FUEL COSTS
MARCH 2023**

OFFICIAL COPY

Aug 28 2023

Line No.		Residential	Small General Service	Medium General Service	Large General Service	Lighting	Total	
1	1a. System Retail kWh sales						4,548,869,323	
	1b. System kWh Sales at generation						4,806,690,373	
2	2a. DERP Net Metered kWh generation						2,614,560	
	2b. Line loss percentage from Cost of Service						6.314%	
	2c. DERP Net Metered kWh at generation						2,790,769	
3	Adjusted System kWh sales						4,809,481,141	
4	4a. N.C. Retail kWh sales	1,203,095,469	143,355,081	837,365,588	660,695,135	28,253,210	2,872,764,484	
	4b. Line loss percentage from Cost of Service	7.665%	7.663%	7.281%	4.667%	7.656%		
	4c. NC kWh Sales at generation	1,302,967,964	155,252,046	903,121,893	693,039,278	30,595,610	3,084,976,791	
	4d. NC allocation % by customer class	42.236%	5.033%	29.275%	22.465%	0.992%		
	4e. NC retail % of actual system total	L4c NC Total / L1b Total System						64.181%
	4f. NC retail % of adjusted system total	L4c NC Total / L3 Total System						64.144%
5	Approved fuel and fuel-related rates (¢/kWh)							
	5a Billed rates by class (¢/kWh)	Input Annually	2.808	3.095	2.572	2.138	3.374	2.605
	5b Billed fuel expense	L4a * L5a / 100	\$33,783,724	\$4,437,127	\$21,539,642	\$14,123,531	\$953,347	\$74,837,371
	Rate changes:							
	5c New approved rates	Input Annually	2.808	3.097	2.580	2.138	3.376	
	5d Ratio of days to new rate	Input	100.01%	99.82%	98.13%	99.73%	99.90%	
	5e Prior approved rates	Input Annually	2.126	2.111	2.169	2.019	1.682	
	5f Ratio of days to old rate	Input	-0.01%	0.18%	1.87%	0.27%	0.10%	
	5g Total prorated ¢/KWH	(L5c * L5d) + (L5e * L5f)	2.808	3.095	2.572	2.138	3.374	
6	Incurred base fuel and fuel-related (less renewable purchased power capacity) rates by class (¢/kWh)							
	6a NC Docket E-2, Sub 1292 allocation factor	Input Annually	46.478%	5.552%	26.799%	19.831%	1.339%	100.000%
	6b System incurred expense	Input					\$123,536,062	
	6c NC incurred expense by class	L4f * L6a * L6b	\$36,829,969	\$4,399,250	\$21,236,026	\$15,714,355	\$1,061,370	\$79,240,971
	6d NC Incurred base fuel rates (¢/kWh)	L6c / L4a * 100	3.061	3.069	2.536	2.378	3.757	2.758
7	Incurred renewable purchased power capacity rates (¢/kWh)							
	7a NC retail production plant %	Input Annually					61.540%	
	7b Production plant allocation factors	Input Annually	52.73%	5.99%	25.52%	15.77%	0.00%	100.000%
	7c System incurred expense	Input					5,437,824	
	7d NC incurred renewable capacity expense	L7a * L7b * L7c	\$1,764,444	\$200,349	\$853,944	\$527,727	\$0	\$3,346,464
	7e NC incurred rates by class	L7d / L4a * 100	0.147	0.140	0.102	0.080	-	0.116
8	Total incurred rates by class (¢/kWh)	L6h + 7e	3.208	3.209	2.638	2.458	3.757	
9	Difference in ¢/kWh (incurred - billed)	L8 - L5a	0.400	0.113	0.066	0.321	0.382	
10	(Over) / under recovery [See footnote]	L9 * L4a / 100	\$4,810,688	\$162,472	\$550,329	\$2,118,552	\$108,024	\$7,750,065
11	Adjustments	Input	\$ 755,125	\$ 80,438	\$ 481,646	\$ 408,290	\$ 14,511	\$ 1,740,010
12	Total (over) / under recovery [See footnote]	L10 + L11	\$5,565,813	\$242,910	\$1,031,975	\$2,526,842	\$122,535	\$9,490,075
13	Total System Incurred Expenses						\$128,973,885	
14	Less: Jurisdictional allocation adjustment	Input					58,700	
15	Total Fuel and Fuel-related Costs per Schedule 2						\$128,915,185	
16	(Over) / under recovery for each month of the current test period [See footnote]							

	(Over) / Under Recovery						Total Company
	Total To Date	Residential	Small General Service	Medium General Service	Large General Service	Lighting	
April 2022	(\$8,047,596)	(623,263)	(439,416)	(4,886,973)	(1,995,062)	(202,882)	(\$8,047,596)
May 2022	\$15,199,359	13,749,962	949,126	3,303,812	5,159,754	84,301	\$23,246,955
June 2022	\$45,010,462	13,609,122	1,011,379	6,365,331	8,520,806	304,465	\$29,811,103
July 2022	\$97,312,193	20,868,153	1,958,161	12,574,655	16,353,710	547,052	\$52,301,731
August 2022	\$183,048,638	37,756,691	3,639,102	24,618,962	18,823,604	898,086	\$85,736,445
September 2022	\$232,830,306	20,250,974	1,609,481	13,819,336	13,637,324	464,553	\$49,781,668
October 2022	\$255,497,380	16,611,094	1,069,890	2,158,330	2,600,733	227,027	\$22,667,074
November 2022	\$293,986,537	19,407,115	1,654,684	9,287,099	7,840,899	299,360	\$38,489,157
December 2022	\$406,838,145	51,498,882	6,365,645	28,321,403	24,845,469	1,820,209	\$112,851,608
January 2023	\$451,977,288	15,397,228	2,216,080	14,480,275	12,146,095	899,465	\$45,139,143
February 2023	\$476,483,100	9,520,003	1,134,318	7,618,878	5,798,561	434,052	\$24,505,812
March 2023	\$485,973,175	5,565,813	242,910	1,031,975	2,526,842	122,535	\$9,490,075
Total		\$223,711,774	\$21,411,360	\$118,693,083	\$116,258,735	\$5,898,223	\$485,973,175

Notes:

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

Presentation of (over)/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.

Duke Energy Progress
Fuel and Fuel Related Cost Report
MARCH 2023

Description	Mayo		Roxboro		Asheville		Smith Energy Complex		Sutton		Lee		Blewett	
	Steam	Steam	CC/CT	CC/CT	CC/CT	CC/CT	CC/CT	CC	CC	CT	CT	CT	CT	
Cost of Fuel Purchased (\$)														
Coal	\$ 2,887,041	\$ 12,595,795	-	-	-	-	-	-	-	-	-	-	-	-
Oil	200,032	770,004	-	-	-	-	-	-	-	-	-	-	-	-
Gas - CC	-	-	\$ 16,913,024	\$ 22,009,576	\$ 4,408,539	\$ 21,358,861	-	-	-	-	-	-	-	-
Gas - CT	-	-	383,557	3,046,044	148,231	-	-	-	-	-	-	-	-	-
Biogas	-	-	-	118,507	-	-	-	-	-	-	-	-	-	-
Total	\$ 3,087,073	\$ 13,365,799	\$ 17,296,581	\$ 25,174,127	\$ 4,556,770	\$ 21,358,861	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Cost of Fuel Purchased (¢/MBTU)														
Coal	477.00	448.51	-	-	-	-	-	-	-	-	-	-	-	-
Oil	2,759.82	2,755.62	-	-	-	-	-	-	-	-	-	-	-	-
Gas - CC	-	-	640.90	581.61	1,838.98	619.79	-	-	-	-	-	-	-	-
Gas - CT	-	-	683.69	541.06	8,403.12	-	-	-	-	-	-	-	-	-
Biogas	-	-	-	4,089.27	-	-	-	-	-	-	-	-	-	-
Weighted Average	504.01	471.24	641.79	578.70	1,886.92	619.79	-	-	-	-	-	-	-	-
Cost of Fuel Burned (\$)														
Coal	\$ 3,417,478	\$ 13,775,193	-	-	-	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	\$ 1,457	-	-	-	-	-	-
Oil - Steam/CT	602,072	855,181	\$ 3,712	\$ 227,207	\$ 8,935	\$ 23,225	-	-	-	-	-	-	-	-
Gas - CC	-	-	16,913,024	22,009,576	4,408,539	21,358,861	-	-	-	-	-	-	-	-
Gas - CT	-	-	383,557	3,046,044	148,231	-	-	-	-	-	-	-	-	-
Biogas	-	-	-	118,507	-	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	\$ 4,019,550	\$ 14,630,374	\$ 17,300,293	\$ 25,401,334	\$ 4,565,705	\$ 21,360,318	\$ 23,225	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Cost of Fuel Burned (¢/MBTU)														
Coal	364.89	377.66	-	-	-	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	2,111.59	-	-	-	-	-	-
Oil - Steam/CT	2,788.14	2,800.57	2,364.33	1,921.41	2,003.36	1,841.79	-	-	-	-	-	-	-	-
Gas - CC	-	-	640.90	581.61	1,838.98	619.79	-	-	-	-	-	-	-	-
Gas - CT	-	-	683.69	541.06	8,403.12	-	-	-	-	-	-	-	-	-
Biogas	-	-	-	4,089.27	-	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Weighted Average	419.50	397.78	641.89	582.34	1,887.14	619.82	1,841.79	-	-	-	-	-	-	-
Average Cost of Generation (¢/kWh)														
Coal	3.67	4.23	-	-	-	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	18.30	-	-	-	-	-	-
Oil - Steam/CT	28.07	31.17	29.55	6.84	61.74	92.90	-	-	-	-	-	-	-	-
Gas - CC	-	-	4.33	5.43	11.50	4.38	-	-	-	-	-	-	-	-
Gas - CT	-	-	8.56	2.48	210.18	-	-	-	-	-	-	-	-	-
Biogas	-	-	-	37.04	-	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Weighted Average	4.22	4.45	4.38	4.77	11.88	4.38	92.90	-	-	-	-	-	-	-
Burned MBTU's														
Coal	936,579	3,647,482	-	-	-	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	69	-	-	-	-	-	-
Oil - Steam/CT	21,594	30,536	157	11,825	446	1,261	-	-	-	-	-	-	-	-
Gas - CC	-	-	2,638,968	3,784,247	239,728	3,446,162	-	-	-	-	-	-	-	-
Gas - CT	-	-	56,101	562,982	1,764	-	-	-	-	-	-	-	-	-
Biogas	-	-	-	2,898	-	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	958,173	3,678,018	2,695,226	4,361,952	241,938	3,446,231	1,261	-	-	-	-	-	-	-
Net Generation (mWh)														
Coal	93,040	326,006	-	-	-	-	-	-	-	-	-	-	-	-
Oil - CC	-	-	-	-	-	-	-	8	-	-	-	-	-	-
Oil - Steam/CT	2,145	2,743	13	3,323	14	25	-	-	-	-	-	-	-	-
Gas - CC	-	-	390,474	405,679	38,342	487,225	-	-	-	-	-	-	-	-
Gas - CT	-	-	4,478	122,798	71	-	-	-	-	-	-	-	-	-
Biogas	-	-	-	320	-	-	-	-	-	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydro (Total System)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Solar (Total System)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	95,185	328,749	394,965	532,120	38,427	487,233	25	-	-	-	-	-	-	-
Cost of Reagents Consumed (\$)														
Ammonia	\$ 48,825	\$ 99,167	-	\$ 30,144	-	-	-	-	-	-	-	-	-	-
Limestone	130,779	539,576	-	-	-	-	-	-	-	-	-	-	-	-
Re-emission Chemical	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sorbents	42,032	143,796	-	-	-	-	-	-	-	-	-	-	-	-
Urea	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	\$ 221,636	\$ 782,539	\$ -	\$ 30,144	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes:

Detail amounts may not add to totals shown due to rounding.
 Schedule excludes in-transit, terminal and tolling agreement activity.
 Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.
 Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.
 Re-emission chemical reagent expense is not recoverable in NC.

OFFICIAL COPY

Aug 28 2023

Duke Energy Progress
 Fuel and Fuel Related Cost Report
 MARCH 2023

Description	Darlington CT	Wayne County CT	Weatherspoon CT	Brunswick Nuclear	Harris Nuclear	Robinson Nuclear	Current Month	Total 12 ME MARCH 2023
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	-	-	\$15,482,836	\$242,690,414
Oil	-	\$ 6,187	-	-	-	-	976,223	48,066,807
Gas - CC	-	-	-	-	-	-	64,690,000	1,239,836,668
Gas - CT	-	4,119	\$ 24	-	-	-	3,581,975	223,742,962
Biogas	-	-	-	-	-	-	118,507	3,280,456
Total	\$ -	\$ 10,306	\$ 24	\$ -	\$ -	\$ -	\$84,849,541	\$1,757,617,307
Average Cost of Fuel Purchased (¢/MBTU)								
Coal	-	-	-	-	-	-	453.56	421.68
Oil	-	-	-	-	-	-	2,774.07	2,702.21
Gas - CC	-	-	-	-	-	-	639.92	829.60
Gas - CT	-	1,350.49	-	-	-	-	576.67	744.80
Biogas	-	-	-	-	-	-	4,089.27	3,753.08
Weighted Average	-	3,379.02	-	-	-	-	598.29	732.35
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	-	-	\$17,192,671	\$204,189,853
Oil - CC	-	-	-	-	-	-	1,457	754,535
Oil - Steam/CT	\$ 230,831	-	\$ 47,750	-	-	-	1,998,913	34,512,670
Gas - CC	-	-	-	-	-	-	64,690,000	1,239,836,668
Gas - CT	-	\$ 4,119	24	-	-	-	3,581,975	223,742,962
Biogas	-	-	-	-	-	-	118,507	3,280,456
Nuclear	-	-	-	\$ 7,492,681	\$ 4,219,946	\$ 3,646,742	15,359,369	177,505,223
Total	\$ 230,831	\$ 4,119	\$ 47,774	\$ 7,492,681	\$ 4,219,946	\$ 3,646,742	\$102,942,892	\$1,883,822,367
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	-	-	375.05	334.02
Oil - CC	-	-	-	-	-	-	2,111.59	2,070.45
Oil - Steam/CT	1,720.44	-	2,067.99	-	-	-	2,451.30	2,110.84
Gas - CC	-	-	-	-	-	-	639.92	829.60
Gas - CT	-	1,350.49	-	-	-	-	576.67	744.80
Biogas	-	-	-	-	-	-	4,089.27	3,753.08
Nuclear	-	-	-	62.27	56.48	61.50	60.39	58.89
Weighted Average	1,720.44	1,350.49	2,069.03	62.27	56.48	61.50	252.11	346.41
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	-	-	4.10	3.72
Oil - CC	-	-	-	-	-	-	18.30	24.10
Oil - Steam/CT	23.97	-	82.33	-	-	-	21.53	24.96
Gas - CC	-	-	-	-	-	-	4.89	6.01
Gas - CT	-	-	-	-	-	-	2.82	8.09
Biogas	-	-	-	-	-	-	37.04	28.57
Nuclear	-	-	-	0.65	0.57	0.63	0.62	0.61
Weighted Average	23.97	-	82.37	0.65	0.57	0.63	2.32	3.20
Burned MBTU's								
Coal	-	-	-	-	-	-	4,584,061	61,131,374
Oil - CC	-	-	-	-	-	-	69	36,443
Oil - Steam/CT	13,417	-	2,309	-	-	-	81,545	1,635,020
Gas - CC	-	-	-	-	-	-	10,109,105	149,449,181
Gas - CT	-	305	-	-	-	-	621,152	30,040,606
Biogas	-	-	-	-	-	-	2,898	87,407
Nuclear	-	-	-	12,032,712	7,471,457	5,929,996	25,434,165	301,436,079
Total	13,417	305	2,309	12,032,712	7,471,457	5,929,996	40,832,995	543,816,110
Net Generation (mWh)								
Coal	-	-	-	-	-	-	419,045	5,489,198
Oil - CC	-	-	-	-	-	-	8	3,131
Oil - Steam/CT	963	-	58	-	-	-	9,285	138,295
Gas - CC	-	-	-	-	-	-	1,321,720	20,645,425
Gas - CT	-	(132)	-	-	-	-	127,215	2,766,387
Biogas	-	-	-	-	-	-	320	11,483
Nuclear	-	-	-	1,148,366	734,224	582,021	2,464,611	28,995,015
Hydro (Total System)	-	-	-	-	-	-	81,131	600,694
Solar (Total System)	-	-	-	-	-	-	22,728	250,713
Total	963	(132)	58	1,148,366	734,224	582,021	4,446,063	58,900,342
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	-	-	\$178,136	\$3,753,443
Limestone	-	-	-	-	-	-	670,355	7,995,151
Re-emission Chemical	-	-	-	-	-	-	-	0
Sorbents	-	-	-	-	-	-	185,828	2,300,629
Urea	-	-	-	-	-	-	0	0
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$1,034,319	\$14,049,223

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
MARCH 2023

Schedule 6

Page 1 of 2

Description	Mayo	Roxboro	Asheville	Smith Energy Complex	Sutton	Lee	Blewett
Coal Data:							
Beginning balance	343,864	1,011,887	-	-	-	-	-
Tons received during period	24,268	110,714	-	-	-	-	-
Inventory adjustments	-	-	-	-	-	-	-
Tons burned during period	37,016	142,474	-	-	-	-	-
Ending balance	331,116	980,127	-	-	-	-	-
MBTUs per ton burned	25.30	25.60	-	-	-	-	-
Cost of ending inventory (\$/ton)	92.32	96.66	-	-	-	-	-
Oil Data:							
Beginning balance	280,064	400,567	4,710,720	7,983,345	1,963,097	-	793,789
Gallons received during period	52,519	202,486	-	-	-	-	-
Miscellaneous use and adjustments	(1,419)	(7,502)	-	-	-	-	-
Gallons burned during period	156,878	221,978	1,152	84,463	3,186	-	9,007
Ending balance	174,286	373,573	4,709,568	7,898,882	1,959,911	-	784,782
Cost of ending inventory (\$/gal)	3.84	3.85	3.22	2.69	2.80	-	2.58
Natural Gas Data:							
Beginning balance	-	-	-	-	-	-	-
MCF received during period	-	-	2,612,955	4,201,340	233,675	3,330,559	-
MCF burned during period	-	-	2,612,955	4,201,340	233,675	3,330,559	-
Ending balance	-	-	-	-	-	-	-
Biogas Data:							
Beginning balance	-	-	-	-	-	-	-
MCF received during period	-	-	-	2,800	-	-	-
MCF burned during period	-	-	-	2,800	-	-	-
Ending balance	-	-	-	-	-	-	-
Limestone/Lime Data:							
Beginning balance	17,472	60,207	-	-	-	-	-
Tons received during period	1,586	5,526	-	-	-	-	-
Inventory adjustments	-	-	-	-	-	-	-
Tons consumed during period	2,189	11,026	-	-	-	-	-
Ending balance	16,868	54,707	-	-	-	-	-
Cost of ending inventory (\$/ton)	60.07	46.99	-	-	-	-	-

Notes:

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

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
MARCH 2023

Schedule 6
Page 2 of 2

Description	Darlington	Wayne County	Weatherspoon	Brunswick	Harris	Robinson	Current Month	Total 12 ME March 2023
Coal Data:								
Beginning balance	-	-	-	-	-	-	1,355,751	1,108,374
Tons received during period	-	-	-	-	-	-	134,982	2,551,239
Inventory adjustments	-	-	-	-	-	-	-	59,158
Tons burned during period	-	-	-	-	-	-	179,490	2,407,532
Ending balance	-	-	-	-	-	-	1,311,243	1,311,243
MBTUs per ton burned	-	-	-	-	-	-	25.54	25.39
Cost of ending inventory (\$/ton)	-	-	-	-	-	-	95.57	95.57
Oil Data:								
Beginning balance	7,373,788	10,048,902	606,046	-	125,879	-	34,286,197	33,306,362
Gallons received during period	-	-	-	-	-	-	255,005	12,889,846
Miscellaneous use and adjustments	-	-	-	-	-	-	(8,921)	(106,042)
Gallons burned during period	96,442	503	16,498	-	-	-	590,107	12,147,990
Ending balance	7,277,346	10,048,399	589,548	-	125,879	-	33,942,174	33,942,174
Cost of ending inventory (\$/gal)	2.39	2.90	2.89	-	2.31	-	2.79	2.79
Natural Gas Data:								
Beginning balance	-	-	-	-	-	-	-	-
MCF received during period	-	295	-	-	-	-	10,378,824	173,925,356
MCF burned during period	-	295	-	-	-	-	10,378,824	173,925,356
Ending balance	-	-	-	-	-	-	-	-
Biogas Data:								
Beginning balance	-	-	-	-	-	-	-	-
MCF received during period	-	-	-	-	-	-	2,800	84,722
MCF burned during period	-	-	-	-	-	-	2,800	84,722
Ending balance	-	-	-	-	-	-	-	-
Limestone/Lime Data:								
Beginning balance	-	-	-	-	-	-	77,679	93,661
Tons received during period	-	-	-	-	-	-	7,112	124,295
Inventory adjustments	-	-	-	-	-	-	-	2,399
Tons consumed during period	-	-	-	-	-	-	13,215	148,780
Ending balance	-	-	-	-	-	-	71,575	71,575
Cost of ending inventory (\$/ton)	-	-	-	-	-	-	50.07	50.07

Schedule 7

**DUKE ENERGY PROGRESS
ANALYSIS OF COAL PURCHASED
MARCH 2023**

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
MAYO	SPOT	-	\$ -	-
	CONTRACT	24,268	2,454,073	\$ 101.12
	FUEL MANAGEMENT AGREEMENT	-	430,114	
	FIXED TRANSPORTATION/ADJUSTMENTS	-	2,854	-
	TOTAL	24,268	\$ 2,887,041	\$ 118.96
ROXBORO	SPOT	-	\$ -	-
	CONTRACT	110,714	11,519,611	\$ 104.05
	FUEL MANAGEMENT AGREEMENT	-	477,106	
	FIXED TRANSPORTATION/ADJUSTMENTS	-	599,077	-
	TOTAL	110,714	\$ 12,595,795	\$ 113.77
ALL PLANTS	SPOT	-	\$ -	-
	CONTRACT	134,982	13,973,684	\$ 103.52
	FUEL MANAGEMENT AGREEMENT	-	907,220	
	FIXED TRANSPORTATION/ADJUSTMENTS	-	601,931	-
	TOTAL	134,982	\$ 15,482,836	\$ 114.70

Schedule 8

**DUKE ENERGY PROGRESS
ANALYSIS OF COAL QUALITY RECEIVED
MARCH 2023**

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
MAYO	6.95	10.28	12,470	1.59
ROXBORO	6.52	9.43	12,683	1.84

**DUKE ENERGY PROGRESS
ANALYSIS OF OIL PURCHASED
MARCH 2023**

	<u>MAYO</u>	<u>ROXBORO</u>
VENDOR	Greensboro Tank Farm	Greensboro Tank Farm
SPOT/CONTRACT	Contract	Contract
SULFUR CONTENT %	0	0
GALLONS RECEIVED	52,519	202,486
TOTAL DELIVERED COST	\$ 200,032	\$ 770,004
DELIVERED COST/GALLON	\$ 3.81	\$ 3.80
BTU/GALLON	138,000	138,000

Notes:

Sampling Charges of \$6187 at Wayne County are excluded.

Duke Energy Progress Power Plant Performance Data Twelve Month Summary
Report Period: April 2022 - March 2023

Unit	Net Generation (MWH)	Capacity Rating (MW)	Capacity Factor (%)	Equivalent Availability (%)
Brunswick 1	8,203,908	938	99.84	97.36
Brunswick 2	7,344,357	932	89.96	89.67
Harris 1	7,796,371	964	92.32	90.83
Robinson 2	5,650,379	759	84.98	83.15

EAF is calculated using Standard NERC calculation and excludes OMC events

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
April, 2022 through March, 2023
Combined Cycle Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	1,181,280	225	59.93	72.84
Lee Energy Complex	1B	1,165,624	227	58.62	73.69
Lee Energy Complex	1C	1,313,993	228	65.79	81.29
Lee Energy Complex	ST1	2,208,791	379	66.53	73.95
Lee Energy Complex	Block Total	5,869,688	1,059	63.27	75.24
Smith Energy Complex	7	1,000,818	193	59.20	66.12
Smith Energy Complex	8	1,005,112	193	59.45	67.02
Smith Energy Complex	ST4	1,130,297	184	70.12	73.04
Smith Energy Complex	9	1,296,243	215	68.82	77.35
Smith Energy Complex	10	1,305,894	215	69.34	78.11
Smith Energy Complex	ST5	1,812,878	252	82.12	84.83
Smith Energy Complex	Block Total	7,551,242	1,252	68.85	75.03
Sutton Energy Complex	1A	1,100,184	224	56.07	64.54
Sutton Energy Complex	1B	1,085,252	224	55.31	66.19
Sutton Energy Complex	ST1	1,347,652	271	56.77	73.65
Sutton Energy Complex	Block Total	3,533,088	719	56.09	68.49
Asheville CC	ACC CT5	1,194,795	190	71.79	72.26
Asheville CC	ACC CT7	1,264,966	190	76.00	79.73
Asheville CC	ACC ST6	599,466	90	76.04	76.06
Asheville CC	ACC ST8	646,794	90	82.04	81.05
Asheville CC	Block Total	3,706,021	560	75.55	76.82

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 Progress
Power Plant Performance Data
Twelve Month Summary
April, 2022 through March, 2023
Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Mayo 1	983,775	713	15.75	56.04
Roxboro 2	1,906,115	673	32.33	78.55
Roxboro 3	1,361,025	698	22.26	73.09
Roxboro 4	610,304	711	9.80	41.34

Notes:

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

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
April, 2022 through March, 2023
Other Cycling Steam Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Roxboro	1	657,914	389	19.30	77.56

OFFICIAL COPY

Aug 28 2023

Notes:

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

Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
April, 2022 through March, 2023
Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Asheville CT	359,074	370	95.55
Blewett CT	141	68	94.64
Darlington CT	92,768	264	93.23
Smith Energy Complex CT	1,892,412	960	79.78
Sutton Fast Start CT	9,231	98	97.53
Wayne County	520,136	966	79.35
Weatherspoon CT	986	164	90.41

Notes:

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

**Duke Energy Progress
Power Plant Performance Data**

**Twelve Month Summary
April, 2022 through March, 2023
Hydroelectric Stations**

Harrington Exhibit 8A

Schedule 10

Page 6 of 6

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Blewett	112,305	27.0	93.93
Marshall	591	4.0	92.36
Tillery	165,666	85.0	83.95
Walters	322,131	113.0	51.08

OFFICIAL COPY

Aug 28 2023

Notes:

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

Duke Energy Progress Base Load Power Plant Performance Review Plan
 Report Period: March 2023

Station	Unit	Date of Outage	Duration of Outage (Hours)	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Actions Taken
Brunswick	1						
	2	02/07/2023 - 03/08/2023	173.65	Scheduled	B2R26 Refueling Outage	N/A normally scheduled refueling outage.	N/A normally scheduled refueling outage.
Harris	1						
Robinson	2						

**Duke Energy Progress
Baseload Steam and CHP Units
Performance Review Plan
March 2023**

DEP Asheville CC

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
ST6	3/30/2023 11:55:00 PM To 3/31/2023 12:00:00 AM	Sch	8700 CEMS Certification and Recertification	Unit 6 Steam Turbine offline to perform RATA test on Unit 5 bypass stack.	

Lee Energy Complex

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
1A	3/31/2023 12:23:00 PM To 3/31/2023 12:30:00 PM	Unsch	5049 Other fuel system problems	Unit tripped during fuel swap to liquid fuel	
1B	3/7/2023 11:59:00 PM To 4/16/2023 4:24:00 AM	Sch	5012 High pressure blades/buckets	Planned outage to replace compressor blades on rows 10-13	
1C	3/31/2023 3:37:00 PM To 3/31/2023 3:45:00 PM	Unsch	5049 Other fuel system problems	Unit tripped during fuel swap to liquid fuel.	
ST1	3/31/2023 11:41:00 AM To 4/16/2023 10:23:00 AM	Sch	4401 Inspection	GMS Outage	

Mayo Station

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
1	3/7/2023 7:10:00 PM To 3/8/2023 1:00:00 PM	Unsch	4309 Other turbine instrument and control problems	Forced outage due to #3 Throttle Valve erratic behavior. Valve is opening when it should be shut.	
1	3/20/2023 10:29:00 PM To 3/31/2023 12:00:00 AM	Sch	4261 Control valves	GMS Outage for work on the turbine Throttle valves, Governor valves. We will also rebuild A&D AR pump suction valves and the associated pump. Drone inspection of the boiler burners and FGD suction and discharge piping.	

Roxboro Station

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
3	3/28/2023 5:00:00 PM To 3/30/2023 3:00:00 PM	Sch	3622 Station service startup transformer	3A Start Up Transformer blown PT fuses. Replacement fuses ordered and installed.	
4	2/20/2023 7:00:00 AM To 3/16/2023 9:00:00 AM	Sch	8580 Mechanical precipitator problems	Precip/DFA System Work	

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

OFFICIAL COPY

Aug 28 2023

**Duke Energy Progress
Baseload Steam and CHP Units
Performance Review Plan
March 2023**

Smith Energy Complex

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
7	3/17/2023 5:01:00 AM To 3/31/2023 12:00:00 AM	Sch	4400 Major turbine overhaul (720 hours or longer) (use for non-specific overhaul only; see page B-CCGT-2)	Full Block, ST4 Major, BOP.	
8	3/17/2023 5:01:00 AM To 3/31/2023 12:00:00 AM	Sch	4400 Major turbine overhaul (720 hours or longer) (use for non-specific overhaul only; see page B-CCGT-2)	Full Block, ST4 Major, BOP.	
9	2/24/2023 3:41:00 AM To 3/14/2023 12:43:00 AM	Sch	5035 Compressor washing	Fall GMS Outage, Borescope, Air Separator inspection, BOP.	
9	3/14/2023 11:18:00 AM To 3/15/2023 1:38:00 AM	Sch	4700 Generator voltage control	Initial AVR testing complete, waiting for engineering confirmation.	
10	2/24/2023 4:24:00 AM To 3/14/2023 9:44:00 PM	Sch	5035 Compressor washing	Fall GMS Outage, Borescope, Air Separator inspection, BOP.	
10	3/23/2023 9:42:00 PM To 3/24/2023 2:01:00 PM	Sch	5052 Pilot fuel nozzles/vanes	Repair gas leak on Pilot nozzle	
10	3/29/2023 11:50:00 AM To 3/30/2023 5:05:00 AM	Unsch	5049 Other fuel system problems	Gas leak developed on the C stage gas tubing on combustion can #9.	
ST4	3/17/2023 4:07:00 AM To 3/31/2023 12:00:00 AM	Sch	4400 Major turbine overhaul (720 hours or longer) (use for non-specific overhaul only; see page B-CCGT-2)	Full Block, ST4 Major, BOP.	
ST5	2/24/2023 3:01:00 AM To 3/15/2023 3:40:00 AM	Sch	5035 Compressor washing	Fall GMS Outage, Borescope, Air Separator inspection, BOP.	

Sutton Energy Complex

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
1A	3/4/2023 1:20:00 AM To 4/3/2023 7:18:00 PM	Sch	3998 Balance of plant overhaul/outage	Planned BOP, CT, and Steam Turbine Valve Outage.	
1B	3/4/2023 1:23:00 AM To 4/6/2023 12:01:00 PM	Sch	3998 Balance of plant overhaul/outage	Planned BOP, CT, and Steam Turbine Valve Outage.	
ST1	3/4/2023 12:55:00 AM To 4/5/2023 11:24:00 PM	Sch	3998 Balance of plant overhaul/outage	Planned BOP, CT, and Steam Turbine Valve Outage.	

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

OFFICIAL COPY

Aug 28 2023

Duke Energy Progress Base Load Power Plant Performance Review Plan
Report Period: March 2023

	Brunswick 1	Brunswick 2	Harris 1	Robinson 2
(A) MDC (MW)	938	932	964	759
(B) Period Hours	743	743	743	743
(C1) Net Gen (MWH)	709,295	439,071	734,224	582,021
(C2) Capacity Factor (%)	101.77	63.41	102.51	103.21
(D1) Net MWH Not Gen. Due to Full Schedule Outages	0	161,842	0	0
(D2) % Net MWH Not Gen. Due to Full Schedule Outages	0	23.37	0	0
(E1) Net MWH Not Gen. Due to Partial Scheduled Outages	6,541	57,152	0	0
(E2) % Net MWH Not Gen. Due to Partial Scheduled Outages	0.94	8.25	0	0
(F1) Net MWH Not Gen Due to Full Forced Outages	0	0	0	0
(F2) % Net MWH Not Gen Due to Full Forced Outages	0	0	0	0
(G1) Net MWH Not Gen due to Partial Forced Outages	-18,902	34,411	-17,972	-18,084
(G2) % Net MWH Not Gen Due to Partial Forced Outages	-2.71	4.97	-2.51	-3.21
(H1) Net MWH Not Gen Due to Economic Dispatch	0	0	0	0
(H2) %Net MWH Not Gen Due to Economic Dispatch	0	0	0	0
(I1) Core Conservation	0	0	0	0
(I2) % Core Conservation	0	0	0	0
(J1) Net MWH Possible in Period	696,934	692,476	716,252	563,937
(J2) % Net mwh Possible in Period	100.00%	100.00%	100.00%	100.00%
(K) Equivalent Availability (%)	99.06	62.9	99.89	100
(L) Output Factor (%)	101.77	82.74	102.51	103.21
(M) Heat Rate (BTU/Net KWH)	10,312	10,747	10,176	10,189

Notes:

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

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
March 2023**

DEP Asheville CC

	ACC CT5	ACC ST6	Block Total
(A) MDC (mW)	190	90	280
(B) Period Hrs	743	743	743
(C) Net Generation (mWh)	129,253	66,092	195,345
(D) Capacity Factor (%)	91.56	98.84	93.90
(E) Net mWh Not Generated due to Full Scheduled Outages	0	2,167	2,167
(F) Scheduled Outages: percent of Period Hrs	0.00	3.24	1.04
(G) Net mWh Not Generated due to Partial Scheduled Outages	10,030	1,797	11,828
(H) Scheduled Derates: percent of Period Hrs	7.11	2.69	5.69
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	1,887	0	1,887
(N) Economic Dispatch: percent of Period Hrs	1.34	0.00	0.91
(O) Net mWh Possible in Period	141,170	66,870	208,040
(P) Equivalent Availability (%)	92.89	94.07	93.27
(Q) Output Factor (%)	91.56	102.15	94.89
(R) Heat Rate (BTU/NkWh)	10,214	0	6,758

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
- Data is reflected at 100% ownership.

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
March 2023**

DEP Asheville CC

	ACC CT7	ACC ST8	Block Total
(A) MDC (mW)	190	90	280
(B) Period Hrs	743	743	743
(C) Net Generation (mWh)	129,454	65,675	195,129
(D) Capacity Factor (%)	91.70	98.21	93.79
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	10,773	1,857	12,631
(H) Scheduled Derates: percent of Period Hrs	7.63	2.78	6.07
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	943	0	943
(N) Economic Dispatch: percent of Period Hrs	0.67	0.00	0.45
(O) Net mWh Possible in Period	141,170	66,870	208,040
(P) Equivalent Availability (%)	92.37	97.22	93.93
(Q) Output Factor (%)	91.70	98.21	93.79
(R) Heat Rate (BTU/NkWh)	10,198	0	6,766

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
- Data is reflected at 100% ownership.

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
March 2023**

Lee Energy Complex

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	743	743	743	743	743
(C) Net Generation (mWh)	132,729	26,335	132,455	195,714	487,233
(D) Capacity Factor (%)	79.40	15.61	78.19	69.50	61.92
(E) Net mWh Not Generated due to Full Scheduled Outages	225	130,529	228	4,668	135,650
(F) Scheduled Outages: percent of Period Hrs	0.13	77.39	0.13	1.66	17.24
(G) Net mWh Not Generated due to Partial Scheduled Outages	20,402	4,955	22,627	58,660	106,644
(H) Scheduled Derates: percent of Period Hrs	12.20	2.94	13.36	20.83	13.55
(I) Net mWh Not Generated due to Full Forced Outages	26	0	30	0	57
(J) Forced Outages: percent of Period Hrs	0.02	0.00	0.02	0.00	0.01
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	13,793	6,842	14,064	22,555	57,253
(N) Economic Dispatch: percent of Period Hrs	8.25	4.06	8.30	8.01	7.28
(O) Net mWh Possible in Period	167,175	168,661	169,404	281,597	786,837
(P) Equivalent Availability (%)	87.65	19.67	86.49	77.51	69.20
(Q) Output Factor (%)	80.66	69.06	79.08	70.67	75.29
(R) Heat Rate (BTU/NkWh)	8,718	9,045	8,659	4,624	7,075

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
- Data is reflected at 100% ownership.

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
March 2023**

Smith Energy Complex

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	193	193	184	570
(B) Period Hrs	743	743	743	743
(C) Net Generation (mWh)	57,773	57,602	65,845	181,220
(D) Capacity Factor (%)	40.29	40.17	48.16	42.79
(E) Net mWh Not Generated due to Full Scheduled Outages	68,512	68,512	65,482	202,506
(F) Scheduled Outages: percent of Period Hrs	47.78	47.78	47.90	47.82
(G) Net mWh Not Generated due to Partial Scheduled Outages	7,954	7,954	2,516	18,425
(H) Scheduled Derates: percent of Period Hrs	5.55	5.55	1.84	4.35
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	9,160	9,331	2,868	21,359
(N) Economic Dispatch: percent of Period Hrs	6.39	6.51	2.10	5.04
(O) Net mWh Possible in Period	143,399	143,399	136,712	423,510
(P) Equivalent Availability (%)	46.68	46.68	50.26	47.83
(Q) Output Factor (%)	77.15	76.92	92.44	82.00
(R) Heat Rate (BTU/NkWh)	14,413	14,432	0	9,182

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
- Data is reflected at 100% ownership.

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
March 2023**

Smith Energy Complex

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	215	215	252	682
(B) Period Hrs	743	743	743	743
(C) Net Generation (mWh)	71,856	63,787	89,136	224,779
(D) Capacity Factor (%)	44.98	39.93	47.61	44.36
(E) Net mWh Not Generated due to Full Scheduled Outages	70,101	75,046	85,344	230,491
(F) Scheduled Outages: percent of Period Hrs	43.88	46.98	45.58	45.49
(G) Net mWh Not Generated due to Partial Scheduled Outages	7,714	6,969	2,379	17,061
(H) Scheduled Derates: percent of Period Hrs	4.83	4.36	1.27	3.37
(I) Net mWh Not Generated due to Full Forced Outages	0	3,709	0	3,709
(J) Forced Outages: percent of Period Hrs	0.00	2.32	0.00	0.73
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	2,888	2,888
(L) Forced Derates: percent of Period Hrs	0.00	0.00	1.54	0.57
(M) Net mWh Not Generated due to Economic Dispatch	10,075	10,235	7,489	27,799
(N) Economic Dispatch: percent of Period Hrs	6.31	6.41	4.00	5.49
(O) Net mWh Possible in Period	159,745	159,745	187,236	506,726
(P) Equivalent Availability (%)	51.29	46.34	51.61	49.84
(Q) Output Factor (%)	80.16	79.04	87.48	82.57
(R) Heat Rate (BTU/NkWh)	1,015	14,891	1,568	5,172

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
- Data is reflected at 100% ownership.

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
March 2023**

Sutton Energy Complex

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	743	743	743	743
(C) Net Generation (mWh)	11,985	11,982	14,375	38,342
(D) Capacity Factor (%)	7.20	7.20	7.14	7.18
(E) Net mWh Not Generated due to Full Scheduled Outages	150,005	149,994	181,592	481,592
(F) Scheduled Outages: percent of Period Hrs	90.13	90.12	90.19	90.15
(G) Net mWh Not Generated due to Partial Scheduled Outages	1,870	1,871	109	3,851
(H) Scheduled Derates: percent of Period Hrs	1.12	1.12	0.05	0.72
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	2,572	2,585	5,276	10,432
(N) Economic Dispatch: percent of Period Hrs	1.55	1.55	2.62	1.95
(O) Net mWh Possible in Period	166,432	166,432	201,353	534,217
(P) Equivalent Availability (%)	8.75	8.75	9.76	9.13
(Q) Output Factor (%)	72.96	72.90	72.74	72.86
(R) Heat Rate (BTU/NkWh)	9,998	9,998	0	6,250

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
- Data is reflected at 100% ownership.

**Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
March 2023**

Mayo Station

Unit 1

(A) MDC (mW)	713
(B) Period Hrs	743
(C) Net Generation (mWh)	95,185
(D) Net mWh Possible in Period	529,759
(E) Equivalent Availability (%)	61.86
(F) Output Factor (%)	47.14
(G) Capacity Factor (%)	17.97

Notes:

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

**Duke Energy Progress
Intermediate Power Plant Performance
Review Plan
March 2023**

	Roxboro Station		
	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	743	743	743
(C) Net Generation (mWh)	199,858	99,058	30,556
(D) Net mWh Possible in Period	500,039	518,614	528,273
(E) Equivalent Availability (%)	100.00	65.51	32.35
(F) Output Factor (%)	44.76	38.48	40.74
(G) Capacity Factor (%)	39.97	19.10	5.78

OFFICIAL COPY

Aug 28 2023

Notes:

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

Duke Energy Progress Base Load Power Plant Performance Review Plan
Report Period: April 2022 - March 2023

	Brunswick 1	Brunswick 2	Harris 1	Robinson 2
(A) MDC (MW)	938	932	964	759
(B) Period Hours	8,760	8,760	8,760	8,760
(C1) Net Gen (MWH)	8,203,908	7,344,357	7,796,371	5,650,379
(C2) Capacity Factor (%)	99.84	89.96	92.32	84.98
(D1) Net MWH Not Gen. Due to Full Schedule Outages	82,654	633,077	512,542	546,480
(D2) % Net MWH Not Gen. Due to Full Schedule Outages	1.01	7.75	6.07	8.22
(E1) Net MWH Not Gen. Due to Partial Scheduled Outages	112,616	107,431	52,927	-917
(E2) % Net MWH Not Gen. Due to Partial Scheduled Outages	1.37	1.32	0.63	-0.01
(F1) Net MWH Not Gen Due to Full Forced Outages	0	0	145,195	543,014
(F2) % Net MWH Not Gen Due to Full Forced Outages	0	0	1.72	8.17
(G1) Net MWH Not Gen due to Partial Forced Outages	-182,298	79,455	-62,395	-90,116
(G2) % Net MWH Not Gen Due to Partial Forced Outages	-2.22	0.97	-0.74	-1.36
(H1) Net MWH Not Gen Due to Economic Dispatch	0	0	0	0
(H2) %Net MWH Not Gen Due to Economic Dispatch	0	0	0	0
(I1) Core Conservation	0	0	0	0
(I2) % Core Conservation	0	0	0	0
(J1) Net MWH Possible in Period	8,216,880	8,164,320	8,444,640	6,648,840
(J2) % Net mwh Possible in Period	100.00%	100.00%	100.00%	100.00%
(K) Equivalent Availability (%)	97.36	89.67	90.83	83.15
(L) Output Factor (%)	100.86	97.52	100.12	101.64
(M) Heat Rate (BTU/Net KWH)	10,345	10,640	10,284	10,297

Notes:

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

**Duke Energy Progress
Base Load Power Plant
Performance Review Plan
April, 2022 through March, 2023
DEP Asheville CC**

	ACC CT5	ACC ST6	Block Total
(A) MDC (mW)	190	90	280
(B) Period Hrs	8,760	8,760	8,760
(C) Net Generation (mWh)	1,194,795	599,466	1,794,261
(D) Capacity Factor (%)	71.79	76.04	73.15
(E) Net mWh Not Generated due to Full Scheduled Outages	320,046	154,704	474,749
(F) Scheduled Outages: percent of Period Hrs	19.23	19.62	19.36
(G) Net mWh Not Generated due to Partial Scheduled Outages	141,710	18,727	160,437
(H) Scheduled Derates: percent of Period Hrs	8.51	2.38	6.54
(I) Net mWh Not Generated due to Full Forced Outages	0	15,320	15,320
(J) Forced Outages: percent of Period Hrs	0.00	1.94	0.62
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	7,206	0	7,206
(N) Economic Dispatch: percent of Period Hrs	0.43	0.00	0.29
(O) Net mWh Possible in Period	1,664,400	788,400	2,452,800
(P) Equivalent Availability (%)	72.26	76.06	73.48
(Q) Output Factor (%)	88.90	96.94	91.44
(R) Heat Rate (BTU/NkWh)	9,914	0	6,602

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 Progress
Base Load Power Plant
Performance Review Plan
April, 2022 through March, 2023
DEP Asheville CC**

	ACC CT7	ACC ST8	Block Total
(A) MDC (mW)	190	90	280
(B) Period Hrs	8,760	8,760	8,760
(C) Net Generation (mWh)	1,264,966	646,794	1,911,760
(D) Capacity Factor (%)	76.00	82.04	77.94
(E) Net mWh Not Generated due to Full Scheduled Outages	158,063	116,025	274,088
(F) Scheduled Outages: percent of Period Hrs	9.50	14.72	11.17
(G) Net mWh Not Generated due to Partial Scheduled Outages	163,136	21,057	184,193
(H) Scheduled Derates: percent of Period Hrs	9.80	2.67	7.51
(I) Net mWh Not Generated due to Full Forced Outages	16,127	10,775	26,902
(J) Forced Outages: percent of Period Hrs	0.97	1.37	1.10
(K) Net mWh Not Generated due to Partial Forced Outages	0	1,522	1,522
(L) Forced Derates: percent of Period Hrs	0.00	0.19	0.06
(M) Net mWh Not Generated due to Economic Dispatch	62,108	-7,773	54,335
(N) Economic Dispatch: percent of Period Hrs	3.73	-0.99	2.22
(O) Net mWh Possible in Period	1,664,400	788,400	2,452,800
(P) Equivalent Availability (%)	79.73	81.05	80.16
(Q) Output Factor (%)	89.72	97.76	92.29
(R) Heat Rate (BTU/NkWh)	10,111	0	6,690

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 Progress
Base Load Power Plant
Performance Review Plan
April, 2022 through March, 2023
Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,181,280	1,165,624	1,313,993	2,208,791	5,869,688
(D) Capacity Factor (%)	59.93	58.62	65.79	66.53	63.27
(E) Net mWh Not Generated due to Full Scheduled Outages	317,563	257,584	74,982	765,027	1,415,155
(F) Scheduled Outages: percent of Period Hrs	16.11	12.95	3.75	23.04	15.25
(G) Net mWh Not Generated due to Partial Scheduled Outages	224,453	262,777	298,721	80,124	866,076
(H) Scheduled Derates: percent of Period Hrs	11.39	13.21	14.96	2.41	9.34
(I) Net mWh Not Generated due to Full Forced Outages	853	16,226	57	17,461	34,596
(J) Forced Outages: percent of Period Hrs	0.04	0.82	0.00	0.53	0.37
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	7,140	7,140
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.22	0.08
(M) Net mWh Not Generated due to Economic Dispatch	246,851	286,309	309,527	240,766	1,083,453
(N) Economic Dispatch: percent of Period Hrs	12.52	14.40	15.50	7.25	11.68
(O) Net mWh Possible in Period	1,971,000	1,988,520	1,997,280	3,320,040	9,276,840
(P) Equivalent Availability (%)	72.46	73.02	81.29	73.80	74.96
(Q) Output Factor (%)	75.47	72.12	73.14	87.27	78.17
(R) Heat Rate (BTU/NkWh)	9,233	9,616	9,482	4,435	7,559

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 Progress
Base Load Power Plant
Performance Review Plan
April, 2022 through March, 2023
Smith Energy Complex**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	193	193	184	570
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,000,818	1,005,112	1,130,297	3,136,227
(D) Capacity Factor (%)	59.20	59.45	70.12	62.81
(E) Net mWh Not Generated due to Full Scheduled Outages	405,085	388,738	363,581	1,157,403
(F) Scheduled Outages: percent of Period Hrs	23.96	22.99	22.56	23.18
(G) Net mWh Not Generated due to Partial Scheduled Outages	159,969	164,459	65,338	389,765
(H) Scheduled Derates: percent of Period Hrs	9.46	9.73	4.05	7.81
(I) Net mWh Not Generated due to Full Forced Outages	7,675	4,339	3,401	15,415
(J) Forced Outages: percent of Period Hrs	0.45	0.26	0.21	0.31
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	2,300	2,300
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.14	0.05
(M) Net mWh Not Generated due to Economic Dispatch	116,843	127,738	46,923	291,504
(N) Economic Dispatch: percent of Period Hrs	6.91	7.56	2.91	5.84
(O) Net mWh Possible in Period	1,690,680	1,690,680	1,611,840	4,993,200
(P) Equivalent Availability (%)	66.12	67.02	73.04	68.66
(Q) Output Factor (%)	78.73	78.23	90.80	82.51
(R) Heat Rate (BTU/NkWh)	11,291	11,315	0	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 Progress
Base Load Power Plant
Performance Review Plan
April, 2022 through March, 2023
Smith Energy Complex**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	193	193	184	570
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,000,818	1,005,112	1,130,297	3,136,227
(D) Capacity Factor (%)	59.20	59.45	70.12	62.81
(E) Net mWh Not Generated due to Full Scheduled Outages	405,086	388,741	363,582	1,157,409
(F) Scheduled Outages: percent of Period Hrs	23.96	22.99	22.56	23.18
(G) Net mWh Not Generated due to Partial Scheduled Outages	159,968	164,457	65,342	389,767
(H) Scheduled Derates: percent of Period Hrs	9.46	9.73	4.05	7.81
(I) Net mWh Not Generated due to Full Forced Outages	7,676	4,341	3,400	15,417
(J) Forced Outages: percent of Period Hrs	0.45	0.26	0.21	0.31
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	2,302	2,302
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.14	0.05
(M) Net mWh Not Generated due to Economic Dispatch	116,842	127,736	46,917	291,494
(N) Economic Dispatch: percent of Period Hrs	6.91	7.56	2.91	5.84
(O) Net mWh Possible in Period	1,690,680	1,690,680	1,611,840	4,993,200
(P) Equivalent Availability (%)	66.12	67.02	73.04	68.66
(Q) Output Factor (%)	78.73	78.23	90.80	82.51
(R) Heat Rate (BTU/NkWh)	11,291	11,315	0	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 Progress
Base Load Power Plant
Performance Review Plan
April, 2022 through March, 2023
Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	215	215	252	682
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,296,243	1,305,894	1,812,878	4,415,015
(D) Capacity Factor (%)	68.82	69.34	82.12	73.90
(E) Net mWh Not Generated due to Full Scheduled Outages	261,419	244,489	288,008	793,916
(F) Scheduled Outages: percent of Period Hrs	13.88	12.98	13.05	13.29
(G) Net mWh Not Generated due to Partial Scheduled Outages	164,344	163,327	27,347	355,018
(H) Scheduled Derates: percent of Period Hrs	8.73	8.67	1.24	5.94
(I) Net mWh Not Generated due to Full Forced Outages	9,449	13,195	28,128	50,772
(J) Forced Outages: percent of Period Hrs	0.50	0.70	1.27	0.85
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	2,888	2,888
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.13	0.05
(M) Net mWh Not Generated due to Economic Dispatch	151,945	156,495	48,271	356,711
(N) Economic Dispatch: percent of Period Hrs	8.07	8.31	2.19	5.97
(O) Net mWh Possible in Period	1,883,400	1,883,400	2,207,520	5,974,320
(P) Equivalent Availability (%)	76.89	77.65	84.31	79.87
(Q) Output Factor (%)	81.08	81.03	95.85	86.54
(R) Heat Rate (BTU/NkWh)	10,984	11,606	1,396	7,231

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 Progress
Intermediate Power Plant
Performance Review Plan
April, 2022 through March, 2023
Mayo Station**

Units	Unit 1
(A) MDC (mW)	713
(B) Period Hrs	8,760
(C) Net Generation (mWh)	983,775
(D) Net mWh Possible in Period	6,245,880
(E) Equivalent Availability (%)	56.04
(F) Output Factor (%)	39.06
(G) Capacity Factor (%)	15.75

Notes:

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

**Duke Energy Progress
Intermediate Power Plant
Performance Review Plan
April, 2022 through March, 2023**

Roxboro Station

Units	Unit 2	Unit 3	Unit 4
(A) MDC (mW)	673	698	711
(B) Period Hrs	8,760	8,760	8,760
(C) Net Generation (mWh)	1,906,115	1,361,025	610,304
(D) Net mWh Possible in Period	5,895,480	6,114,480	6,228,360
(E) Equivalent Availability (%)	78.55	73.09	41.34
(F) Output Factor (%)	54.15	43.55	49.53
(G) Capacity Factor (%)	32.33	22.26	9.80

Notes:

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

DUKE ENERGY PROGRESS, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Proposed Nuclear Capacity Factor
 Billing Period December 1, 2023 - November 30, 2024
 Docket No. E-2, Sub 1321

Harrington Workpaper 1

OFFICIAL COPY
 Aug 28 2023

	Brunswick 1	Brunswick 2	Harris 1	Robinson 1	Total
MWhs	7,377,502	7,864,560	7,711,865	6,168,179	29,122,107
Cost	\$ 47,277,805	\$ 49,458,984	\$ 44,350,770	\$ 36,922,363	\$ 178,009,922
\$/MWhs	\$ 6.41	\$ 6.29	\$ 5.75	\$ 5.99	
Avg. \$/MWhs					\$ 6.11
Cents per kWh					0.6113

	GWs	Capacity Rating MDC	Hours	Proposed Nuclear Capacity Factor
Brunswick 1	7,378	938	8,784	89.54%
Brunswick 2	7,865	932	8,784	96.07%
Harris 1	7,712	964	8,784	91.07%
Robinson 1	6,168	759	8,784	92.52%
	29,122	3,593	8,784	92.27%

Note: Totals may not sum due to rounding

DUKE ENERGY PROGRESS, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 NERC 5 Year Average Nuclear Capacity Factor
 Billing Period December 1, 2023 - November 30, 2024
 Docket No. E-2, Sub 1321

Harrington Workpaper 2

	Brunswick 1	Brunswick 2	Harris 1	Robinson 1	Total
MWhs with NERC applied	7,828,246	7,778,172	7,875,032	6,160,360	29,641,810
Hours in Year	8,784	8,784	8,784	8,784	8,784
MDC	938	932	964	759	3,593
Capacity Factor-NERC 5yr Avg	0.9501	0.9501	0.9300	0.9240	
Cost (\$)	\$ 47,850,436	\$ 47,544,357	\$ 48,136,413	\$ 37,655,420	\$ 181,186,626
\$/MWhs	\$ 6.11	\$ 6.11	\$ 6.11	\$ 6.11	
Avg. \$/MWhs					\$ 6.11
Cents per kWh					0.6113

	Capacity Rating MDC	NCF Rating	Weighted Average
Brunswick 1	938	95.01%	24.80%
Brunswick 2	932	95.01%	24.64%
Harris 1	964	93.00%	24.95%
Robinson 1	759	92.40%	19.52%
	3,593		93.92%

Note: Totals may not sum due to rounding

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
North Carolina Generation in MWhs
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Revised Harrington Workpaper 3

Resource Type	MWh Dec'23-Nov'24	
Nuclear		29,122,107
Coal		5,967,395
Gas CT and CC Total		24,747,254
Total Hydro		720,836
Utility Owned Solar Generation		270,472
Total Net Generation		60,828,064
Purchases for REPS Compliance	2,331,495	
Purchases from Qualifying Facilities	5,269,962	
Purchases from Dispatchable Units	3,506,560	
Emergency & DSM Purchases	1,503	
Allocated Economic Purchases	508,928	
Joint Dispatch Fuel Transfer Purchases	572,071	12,190,519
Total Net Generation and Purchases		73,018,583
Sales Totals (intersystem sales)	(120,510)	
Fuel Transfer Sales (JDA & economic sales)	(7,480,510)	(7,601,020)
Line Losses and Company Use		(2,185,868)
Total NC System Sales at Meter		63,231,695

Note: Totals may not sum due to rounding

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
Fuel Costs (\$)
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Revised Harrington Workpaper 4

Resource Type	Costs \$	
	Dec'23-Nov'24	
Nuclear	\$	178,009,922
Coal		258,155,544
Reagent and By-Product Costs		43,993,340
Gas CT and CC Total		934,531,959
Total Hydro		-
Utility Owned Solar Generation		-
Total Generation Costs		<u>1,414,690,765</u>
Purchases for REPS Compliance Energy	\$	113,597,923
Purchases for REPS Compliance Capacity		22,836,104
Purchases from Qualifying Facilities Energy		228,895,936
Purchases from Qualifying Facilities Capacity		46,899,456
Purchases from Dispatchable Units Energy		122,200,054
Emergency & DSM Purchases		43,522
Allocated Economic Purchases		21,072,752
Joint Dispatch Fuel Transfer Purchases		14,148,045
Joint Dispatch Savings	(114,205,606) \$	455,488,186
Total Net Generation and Purchases		<u>1,870,178,951</u>
Sales Totals (intersystem sales)	\$	(4,257,413)
Fuel Transfer Sales (JDA & economic sales)	(200,565,535)	(204,822,948)
Total System Fuel and Related Expenses	\$	<u>1,665,356,003</u>

Note: Totals may not sum due to rounding

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
Reagents (\$)
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Harrington Workpaper 5

Month	Year	Ammonia/ Urea	Lime, Hydrated Lime & Limestone	Limestone Off-System Sales	Magnesium Hydroxide	Calcium Carbonate	Total NC System Reagent Cost	Gypsum (Gain)/Loss	Ash (Gain)/Loss	Total NC System Reagent Cost and ByProduct (Gain)/Loss
December	2023	\$ 525,144	\$ 987,773	\$ (183,074)	\$ 278,929	\$ 135,400	\$ 1,744,171	\$ (36,371)	\$ 1,807,571	\$ 3,515,371
January	2024	699,485	1,362,931	(233,037)	361,688	182,462	2,373,528	(93,197)	1,487,498	3,767,829
February	2024	521,430	1,002,013	(243,305)	266,710	136,422	1,683,269	8,345,859	2,255,040	12,284,168
March	2024	393,175	749,119	(52,755)	177,217	90,207	1,356,963	(44,019)	1,472,257	2,785,201
April	2024	109,961	211,025	(20,803)	79,253	28,185	407,622	(1,608)	2,266,830	2,672,844
May	2024	48,575	104,426	(13,614)	39,545	13,272	192,203	-	1,518,698	1,710,901
June	2024	383,617	703,940	(31,492)	226,104	98,279	1,380,448	(5,570)	2,324,732	3,699,609
July	2024	650,001	1,156,214	(66,836)	350,280	168,587	2,258,246	(40,835)	1,482,978	3,700,389
August	2024	568,876	987,020	(50,521)	314,773	145,364	1,965,512	(15,576)	1,789,181	3,739,117
September	2024	149,328	256,381	(10,261)	97,402	37,652	530,502	(167)	1,419,530	1,949,866
October	2024	9,409	10,763	-	5,117	2,430	27,719	-	1,750,943	1,778,661
November	2024	244,379	410,022	(1,044)	119,347	61,890	834,593	(1,827)	1,556,619	2,389,385
12ME Nov	2024	\$ 4,303,379	\$ 7,941,627	\$ (906,742)	\$ 2,316,364	\$ 1,100,149	\$ 14,754,777	\$ 8,106,689	\$ 21,131,874	\$ 43,993,340

Note: Totals may not sum due to rounding

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
Merger Fuel Impacts
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Harrington Workpaper 6

OFFICIAL COPY
Aug 28 2023

		Positive numbers represent expense, Negative numbers represent revenues							
Month	Year	Allocated Economic Purchase Cost		Economic Sales Cost		Fuel Transfer Payment		JDA Savings Payment	
		DEP	DEC	DEP	DEC	DEP	DEC	DEP	DEC
December	2023	\$ 1,234,637	\$ 1,823,317	\$ (6,565,637)	\$ (1,577,591)	\$ (17,362,556)	\$ 17,362,556	\$ (3,700,688)	\$ 3,700,688
January	2024	2,710,394	3,918,202	(8,902,259)	(9,199,451)	(13,075,319)	13,075,319	(12,308,043)	12,308,043
February	2024	461,528	678,216	(9,119,170)	(9,695,477)	(10,474,496)	10,474,496	(3,083,001)	3,083,001
March	2024	702,147	1,012,669	(1,229,751)	(615,762)	(3,371,359)	3,371,359	449,444	(449,444)
April	2024	3,424,152	3,700,357	(1,189,893)	(487,140)	(7,303,371)	7,303,371	(5,056,429)	5,056,429
May	2024	635,825	962,431	(1,571,140)	(465,036)	(11,184,244)	11,184,244	(3,536,847)	3,536,847
June	2024	2,825,707	4,022,008	(1,028,743)	(521,349)	(14,844,982)	14,844,982	(12,855,914)	12,855,914
July	2024	1,281,574	928,342	(3,381,926)	(2,371,343)	(16,781,326)	16,781,326	(35,473,683)	35,473,683
August	2024	829,726	1,194,776	(2,611,213)	(1,983,996)	(15,390,154)	15,390,154	(13,148,211)	13,148,211
September	2024	3,024,111	4,493,332	(613,751)	(130,572)	(21,475,832)	21,475,832	(18,659,035)	18,659,035
October	2024	1,524,921	2,227,353	(393,476)	(264,792)	(8,300,764)	8,300,764	(4,072,141)	4,072,141
November	2024	2,418,030	3,532,720	(415,016)	(266,866)	(9,831,113)	9,831,113	(2,761,058)	2,761,058
Total		\$ 21,072,752		\$ (37,021,974)		\$ (149,395,515)		\$ (114,205,606)	

Note: Totals may not sum due to rounding

Fuel Transfer Payments	
Purchases	Sales

December	2023	\$ 265,028	\$ 17,627,583
January	2024	350,028	13,425,347
February	2024	499,850	10,974,346
March	2024	5,627,246	8,998,605
April	2024	1,615,378	8,918,750
May	2024	1,106,424	12,290,668
June	2024	732,110	15,577,092
July	2024	608,571	17,389,897
August	2024	409,076	15,799,230
September	2024	250,678	21,726,510
October	2024	1,522,438	9,823,202
November	2024	1,161,217	10,992,330
		\$ 14,148,045	\$ 163,543,561

\$ (149,395,515)

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
Merger Payments
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Harrington Workpaper 7

Month	Year	MWh Transfer Projection		MWh Purchase Allocation Delta		Adjusted MWh Transfer		Fossil Gen Cost \$/MWh		Pre-Net Payments \$		Actual Payments \$	
		DEP to DEC	DEC to DEP	DEP	DEC	DEP to DEC	DEC to DEP	DEP	DEC	DEP to DEC	DEC to DEP	DEP to DEC	DEC to DEP
December	2023	668,931	8,104	(1,330)	1,330	668,931	9,435	\$ 26.35	\$ 28.09	\$ 265,028	\$ 17,627,583	\$ -	\$ 17,362,556
January	2024	440,541	10,654	7,184	(7,184)	447,724	10,654	\$ 29.99	\$ 32.85	350,028	13,425,347	-	13,075,319
February	2024	372,757	14,658	(2,015)	2,015	372,757	16,673	\$ 29.44	\$ 29.98	499,850	10,974,346	-	10,474,496
March	2024	320,748	229,436	(1,388)	1,388	320,748	230,824	\$ 28.06	\$ 24.38	5,627,246	8,998,605	-	3,371,359
April	2024	368,059	68,107	26,423	(26,423)	394,482	68,107	\$ 22.61	\$ 23.72	1,615,378	8,918,750	-	7,303,371
May	2024	599,170	44,714	3,506	(3,506)	602,676	44,714	\$ 20.39	\$ 24.74	1,106,424	12,290,668	-	11,184,244
June	2024	565,913	29,299	58,422	(58,422)	624,334	29,299	\$ 24.95	\$ 24.99	732,110	15,577,092	-	14,844,982
July	2024	613,464	22,701	16,901	(16,901)	630,366	22,701	\$ 27.59	\$ 26.81	608,571	17,389,897	-	16,781,326
August	2024	552,420	15,664	23,912	(23,912)	576,332	15,664	\$ 27.41	\$ 26.11	409,076	15,799,230	-	15,390,154
September	2024	921,011	11,044	76,147	(76,147)	997,158	11,044	\$ 21.79	\$ 22.70	250,678	21,726,510	-	21,475,832
October	2024	572,997	69,660	16,188	(16,188)	589,185	69,660	\$ 16.67	\$ 21.86	1,522,438	9,823,202	-	8,300,764
November	2024	460,604	43,295	3,477	(3,477)	464,081	43,295	\$ 23.69	\$ 26.82	1,161,217	10,992,330	-	9,831,113
Total		6,456,616	567,338	227,425	(227,425)	6,688,775	572,071			\$ 14,148,045	\$ 163,543,561	\$ -	\$ 149,395,515

Note: Totals may not sum due to rounding

DUKE ENERGY PROGRESS, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Projected Billing Period MWh Sales at Meter and at Generation
 Billing Period December 1, 2023 - November 30, 2024
 Docket No. E-2, Sub 1321

Revised Harrington Workpaper 8

	Projected Sales MWhs at Meter	Remove impact of SC DERP Net Metered MWhs	Adjusted Projected Sales MWhs at Meter	2022 Cost of Service Line Loss Factors	Adjusted Projected Sales MWhs at Generation
NC Retail					
Residential	17,326,377		17,326,377	2.505%	17,771,554
Small General Service	1,816,847		1,816,847	2.503%	1,863,491
Medium General Service	10,471,370		10,471,370	2.437%	10,732,932
Large General Service	9,239,420		9,239,420	2.083%	9,435,971
Lighting	384,646		384,646	2.489%	394,465
NC Retail	39,238,661		39,238,661		40,198,412
SC Retail	6,284,478	33,600	6,318,078	2.299%	6,466,748
Total Wholesale	17,708,557		17,708,557	1.594%	17,995,404
Total Adjusted NC System Sales	63,231,695	33,600	63,265,295		64,660,564
NC as a percentage of total	62.06%		62.02%		62.17%
SC as a percentage of total	9.94%		9.99%		10.00%
Wholesale as a percentage of total	28.01%		27.99%		27.83%
SC Net Metering allocation adjustment					
Total Projected SC NEM MWhs	33,600				
Marginal Fuel rate per MWh for SC NEM	\$ 25.34				
Fuel Benefit to be directly assigned to SC	\$ 851,357				
System Fuel Expense	\$ 1,665,356,003	Exh 2A			
Fuel benefit to be directly assigned to SC Retail	851,357				
Total Adjusted System Fuel Expense	\$ 1,666,207,360	Exh 2C			

DUKE ENERGY PROGRESS, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Normalized MWh Sales at Meter and at Generation
 Billing Period December 1, 2023 - November 30, 2024
 Docket No. E-2, Sub 1321

Revised Harrington Workpaper 9

	Test Period Sales MWhs	Weather Normalization	Customer Growth	Remove impact of SC DERP Net Metered MWhs	Normalized Test Period Sales MWhs at Meter	2022 Cost of Service Line Loss Factors	Normalized Test Period Sales MWhs at Generation
NC Retail							
Residential	16,034,936	457,221	168,316		16,660,473	2.505%	17,088,541
Small General Service	1,908,360	(20,274)	23,647		1,911,733	2.503%	1,960,812
Medium General Service	10,766,603	(109,387)	(103,732)		10,553,483	2.437%	10,817,096
Large General Service	8,519,137	(66,978)	(8,961)		8,443,198	2.083%	8,622,811
Lighting	341,557	0	730		342,287	2.489%	351,024
NC Retail	<u>37,570,593</u>	<u>260,581</u>	<u>80,000</u>		<u>37,911,173</u>		<u>38,840,283</u>
SC Retail	<u>6,002,714</u>	<u>24,050</u>	<u>(16,806)</u>	<u>33,600</u>	<u>6,043,558</u>	<u>2.299%</u>	<u>6,185,768</u>
Total Wholesale	<u>17,322,560</u>	<u>348,661</u>	<u>169,320</u>		<u>17,840,541</u>	<u>1.594%</u>	<u>18,129,526</u>
Total Adjusted NC System Sales	<u>60,895,867</u>	<u>633,292</u>	<u>232,513</u>	<u>33,600</u>	<u>61,795,272</u>		<u>63,155,578</u>
NC as a percentage of total	61.70%				61.35%		61.50%
SC as a percentage of total	9.86%				9.78%		9.79%
Wholesale as a percentage of total	28.45%				28.87%		28.71%
SC Net Metering allocation adjustment							
Total Projected SC NEM MWhs	33,600						
Marginal Fuel rate per MWh for SC NEM	\$ 25.34						
Fuel Benefit to be directly assigned to SC	\$ 851,357						
System Fuel Expense	\$ 1,612,312,811	Exh 6A					
Fuel benefit to be directly assigned to SC Retail	<u>851,357</u>						
Total Adjusted System Fuel Expense	\$ 1,613,164,168	Exh 6C					

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
Weather Adjustment - MWh
Twelve Months Ended March 31, 2023
Docket No. E-2, Sub 1321

Revised Harrington Workpaper 9a

		Residential	Small Gen Service	Medium Gen Service	Large Gen Service	NC Retail	SC Retail	Wholesale	Total
		MWH Adjustment	MWH Adjustment	MWH Adjustment	MWH Adjustment	MWH Adjustment	MWH Adjustment	MWH Adjustment	MWH Adjustment
April	2022	64,806	38	4,443	13,948	83,235	15,467	-	98,702
May	2022	(53,872)	(2,379)	(17,004)	(21,048)	(94,303)	(15,977)	(92,567)	(202,846)
June	2022	(146,918)	(9,519)	(47,136)	(20,432)	(224,006)	(30,743)	(78,356)	(333,105)
July	2022	(131,781)	(7,490)	(38,721)	(22,622)	(200,614)	(27,948)	(62,033)	(290,594)
August	2022	(115,639)	(7,384)	(40,269)	(30,460)	(193,751)	(30,500)	(35,456)	(259,707)
September	2022	(57,190)	(3,856)	(19,616)	(9,232)	(89,895)	(12,495)	(33,732)	(136,122)
October	2022	57,050	5,454	31,197	34,999	128,699	19,661	72,193	220,554
November	2022	60,964	(56)	(6,558)	(24,252)	30,098	(27)	61,891	91,962
December	2022	26,906	-	-	-	26,906	3,540	(37,420)	(6,974)
January	2023	110,908	1,948	10,496	6,604	129,956	18,361	271,926	420,243
February	2023	307,158	2,970	13,781	5,516	329,424	42,068	218,578	590,071
March	2023	334,829	-	-	-	334,829	42,642	63,638	441,109
12ME March	2023	457,221	(20,274)	(109,387)	(66,978)	260,581	24,050	348,661	633,292

OFFICIAL COPY
Aug 28 2023

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
Customer Growth Adjustment - MWh
Twelve Months Ended March 31, 2023
Docket No. E-2, Sub 1321

Harrington Workpaper 9b

Rate Schedule	Estimation Method ¹	Reference	NC Proposed MWH Adjustment ¹	SC Proposed MWH Adjustment ¹	Wholesale Proposed MWH Adjustment
Residential	Regression	RES	168,316	8,111	
General:					
General Service Small	Regression	SGS	23,647	1,393	
General Service Medium	Customer	MGS	(103,732)	(5,360)	
Total General			<u>(80,085)</u>	<u>(3,966)</u>	
Lighting:					
Street Lighting	Regression	SLS/SLR	711	29	
Sports Field Lighting	Regression	SFLS	16	-	
Traffic Signal Service	Regression	TSS/TFS	3	(7)	
Total Street Lighting			<u>730</u>	<u>22</u>	
Industrial:					
I - Textile	Customer	LGS	-	-	
I - Nontextile		LGS	(8,961)	(20,973)	
Total Industrial			<u>(8,961)</u>	<u>(20,973)</u>	
Total			<u>80,000</u>	<u>(16,806)</u>	<u>169,320</u>

Note:

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.

²Using the regression method (Residential, Lighting, SGS classes) and a customer by customer method for MGS and Industrial

DUKE ENERGY PROGRESS, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Projected MWh Sales at Meter and Generation - NERC 5-year Average
 Billing Period December 1, 2023 - November 30, 2024
 Docket No. E-2, Sub 1321

Revised Harrington Workpaper 10

	Projected Sales MWhs at Meter	Remove impact of SC DERP Net Metered MWhs	Adjusted Projected Sales MWhs at Meter	2022 Cost of Service Line Loss Factors	Adjusted Projected Sales MWhs at Generation
NC Retail					
Residential	17,326,377		17,326,377	2.505%	17,771,554
Small General Service	1,816,847		1,816,847	2.503%	1,863,491
Medium General Service	10,471,370		10,471,370	2.437%	10,732,932
Large General Service	9,239,420		9,239,420	2.083%	9,435,971
Lighting	384,646		384,646	2.489%	394,465
NC Retail	39,238,661		39,238,661		40,198,412
SC Retail	6,284,478	33,600	6,318,078	2.299%	6,466,748
Total Wholesale	17,708,557		17,708,557	1.594%	17,995,404
Total Adjusted NC System Sales	63,231,695	33,600	63,265,295		64,660,564
NC as a percentage of total	62.06%		62.02%		62.17%
SC as a percentage of total	9.94%		9.99%		10.00%
Wholesale as a percentage of total	28.01%		27.99%		27.83%
SC Net Metering allocation adjustment					
Total Projected SC NEM MWhs	33,600				
Marginal Fuel rate per MWh for SC NEM	\$ 25.34				
Fuel Benefit to be directly assigned to SC	\$ 851,357				
System Fuel Expense	\$ 1,646,049,824	Exh 7A			
Fuel benefit to be directly assigned to SC Retail	851,357				
Total Adjusted System Fuel Expense	\$ 1,646,901,181	Exh 7C			

Generator Step Up Loss % 0.1863%

	KWh at Meter	KWh at Meter Allocation	KWh at at Generation (high side of GSU)	kWh at Generation Allocation	Losses
NC RES	15,976,054,799	26.11%	16,345,805,335	26.20%	369,750,536
NC RES-TOU	383,543,385	0.63%	392,420,131	0.63%	8,876,745
NC SGS	1,865,006,873	3.05%	1,908,129,501	3.06%	43,122,628
NC SGS-CLR	51,330,516	0.08%	52,518,198	0.08%	1,187,682
NC MGS-TOU	7,809,544,914	12.76%	7,984,230,957	12.80%	174,686,043
NC MGS	2,717,094,559	4.44%	2,778,922,760	4.45%	61,828,200
NC SI	41,024,628	0.07%	41,908,539	0.07%	883,911
NC LGS	978,971,351	1.60%	999,153,948	1.60%	20,182,597
NC LGS-TOU	1,844,412,705	3.01%	1,881,044,827	3.02%	36,632,122
NC LGS-RTP	5,438,202,332	8.89%	5,537,734,684	8.88%	99,532,352
NC TSS	4,331,008	0.01%	4,431,245	0.01%	100,237
NC ALS	243,830,543	0.40%	249,423,811	0.40%	5,593,268
NC SLS	84,397,795	0.14%	86,351,102	0.14%	1,953,306
NC SFLS	1,500,922	0.00%	1,531,208	0.00%	30,285
Total NCR	37,439,246,332	61.19%	38,263,606,246	61.33%	824,359,914
NCWHS incl.					
NCEMPA	17,771,262,650	29.04%	18,021,199,919	28.89%	249,937,269
Total NC	55,210,508,983	90.23%	56,284,806,165	90.22%	1,074,297,183
SC RES	2,011,492,983	3.29%	2,058,047,067	3.30%	46,554,085
SC RES-TOU	31,032,172	0.05%	31,750,382	0.05%	718,210
SC SGS	246,932,621	0.40%	252,635,251	0.40%	5,702,630
SC SGS-CLR	5,866,842	0.01%	6,002,593	0.01%	135,751
SC MGS-TOU	1,042,954,747	1.70%	1,066,207,787	1.71%	23,253,039
SC MGS	505,964,162	0.83%	517,358,233	0.83%	11,394,071
SC SI	17,957,542	0.03%	18,347,115	0.03%	389,573
SC LGS	459,678,226	0.75%	469,092,721	0.75%	9,414,495
SC LGS-TOU	261,197,320	0.43%	265,931,672	0.43%	4,734,352
SC LGS-CRTL-TOU	670,335,735	1.10%	681,350,985	1.09%	11,015,250
SC LGS-RTP	647,358,082	1.06%	658,348,451	1.06%	10,990,369
SC TSS	1,934,090	0.00%	1,978,852	0.00%	44,763
SC ALS	56,828,988	0.09%	58,126,692	0.09%	1,297,704
SC SLS	15,145,023	0.02%	15,495,541	0.02%	350,517
SC SFLS	181,583	0.00%	185,247	0.00%	3,664
Total SCR	5,974,860,116	9.77%	6,100,858,589	9.78%	125,998,473
SCWHS		0.00%		0.00%	0
Total SC	5,974,860,116	9.77%	6,100,858,589	9.78%	125,998,473
Total System	61,185,369,099	100.00%	62,385,664,754	100.00%	1,200,295,655

Cost of Service Data Summarized				
	kWh @ Meter	kWh @ Generator	Losses (kWh)	Loss Percent
Residential	16,359,598,185	16,769,474,812	409,876,627	2.5050%
SGS	1,920,668,398	1,968,747,639	48,079,241	2.5030%
MGS	10,567,664,101	10,825,234,713	257,570,612	2.4370%
LGS	8,261,586,387	8,433,649,277	172,062,890	2.0830%
Lighting	329,729,261	337,935,853	8,206,592	2.4890%
Total NC Retail	37,439,246,332	38,335,042,294	895,795,961	2.3930%
Total NC Retail	37,439,246,332	38,335,042,294	895,795,961	2.3930%
SC Retail	5,974,860,116	6,112,248,556	137,388,440	2.2990%
12ME NEM Generation	32,273,392	33,015,357	741,965	2.2990%
Total SC Retail	6,007,133,508	6,145,263,913	138,130,405	2.2990%
Wholesale	17,738,989,258	18,021,829,151	282,839,893	1.5940%
Total System	61,185,369,099	62,502,135,358	1,316,766,259	2.1520%

Line Loss Calculations for Projected

	MWh @ Meter	MWh @ Generator
Residential	17,326,377	17,771,554
SGS	1,816,847	1,863,491
MGS	10,471,370	10,732,932
LGS	9,239,420	9,435,971
Lighting	384,646	394,465
Total NC Retail	39,238,661	40,198,412
Total SC Retail	6,318,078	6,466,748
Wholesale	17,708,557	17,995,404
Total System	63,265,295	64,660,564
Allocation percent - NC retail	62.02%	62.17% Scenario 1, Scenario 3, WP 15

Line Loss Calculations for Normalized

	MWh @ Meter	MWh @ Generator
Residential	16,660,473	17,088,541
SGS	1,911,733	1,960,812
MGS	10,553,483	10,817,096
LGS	8,443,198	8,622,811
Lighting	342,287	351,024
Total NC Retail	37,911,173	38,840,283
Total SC Retail	6,043,558	6,185,768
Wholesale	17,840,541	18,129,526
Total System	61,795,272	63,155,578
Allocation percent - NC retail	61.35%	61.50% Scenario 2, WP 16

DUKE ENERGY PROGRESS, LLC
 North Carolina Annual Fuel and Fuel Related Expense
 Derivation of Equal Percent Increases for all Rate Classes
 Annualized Revenues at Current Rates
 Twelve Months Ended March 31, 2023
 Docket No. E-2, Sub 1321

Harrington Workpaper 12

OFFICIAL COPY
Aug 28 2023

North Carolina Retail Fuel Clause Customer Classes	February 2023		February 2023	12ME March 2023		Total Annualized Revenues	Cust Class Contribution
	Monthly Revenue	Monthly kWh Sales	Cents/ kWh	12ME Billed kWh Sales	(c) * (d) / 100		
	(a)	(b)	(a)/(b) *100 = (c)	(d)			
Residential	\$ 175,043,253	1,345,286,284	13.0116	16,034,935,864	\$ 2,086,401,509	51%	
Small General Service	21,334,569	145,546,716	14.6582	1,908,359,732	279,731,721	7%	
Medium General Service	70,147,644	756,940,707	9.2673	10,766,603,059	997,768,827	25%	
Large General Service	45,780,304	664,580,619	6.8886	8,519,137,298	586,849,332	14%	
Lighting	8,818,319	26,337,752	33.4817	341,556,885	114,358,945	3%	
Total	\$ 321,124,089	2,938,692,079		37,570,592,838	\$ 4,065,110,334	100%	

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
2022 Production Demand Allocation Factors
Docket No. E-2, Sub 1321

Revised Harrington Workpaper 13

2022 Total Production Demand	System	NC Retail	Residential	Small GS	Med GS	Lrg GS	Ltg
All - Production Demand (kW)	11,065,080	6,873,494	3,892,721	1,455,356	514,718	942,855	67,843
NC Retail % to Total System		62.12%	35.18%	13.15%	4.65%	8.52%	0.61%
Allocation of Classes to Total NC Retail		100.00%	56.63%	21.17%	7.49%	13.72%	0.99%

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
Scenario Differences
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Revised Harrington Workpaper 14

Line Loss

Line Losses & Company Use	Exh 2A	(2,185,868)
Generation	Exh 2A	<u>60,828,064</u>
	%	-3.594%
	Multiplier	1.035935

Proposed Nuclear Capacity Factor & Normalized Sales

Normalized Sales at Meter	Exh 4	61,795,272
Projected Billing Period Sales at Meter	Exh 2A	<u>63,231,695</u>
Difference		(1,436,423)
Gross up for losses	Difference x Multiplier	(1,488,041)
	MWh changes in Coal	(1,488,041)
	MWh changes in Losses	51,618

	Before Adj	Adj	Total
Total Coal MWh	6,229,316	(1,488,041)	4,741,275
Total Losses MWh	<u>(2,185,868)</u>	51,618	<u>(2,134,250)</u>
	4,043,448	(1,436,423)	2,607,025

	Before Adj	After Adj	Adjustment
Total Coal \$	\$ 269,486,511	\$ 205,112,352	\$ (64,374,159)

NERC 5 year average Capacity Factor & Projected Sales

		Nuclear-MWHs	Nuclear Costs
Nuclear	WP 1	29,122,107	\$ 178,009,922
Nuclear - NERC Average	WP 2	29,641,810	\$ 181,186,626
	Adjustment	519,703	\$ 3,176,704
		<u>59,283,617</u>	<u>\$ 362,373,252</u>
		Coal-MWH	Coal Costs
Coal MWh	WP 3, WP4	5,967,395	\$ 258,155,544
Adjustment from Above	Adjustment above	(519,703)	\$ (22,482,882) (Priced at the avg Coal \$/MWh)
		<u>5,447,692</u>	<u>\$ 235,672,661</u>

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
2.5% Calculation Test - Projected Sales
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Revised Harrington Workpaper 15

Line No.	Description	EMF (Over)/Under		
		Forecast \$	Collection \$	Total \$
1	Amount in current docket	\$ 345,312,055	\$ 74,471,825	\$ 419,783,880
2	Amount in 2022 Filing: Docket E-2 Sub 1292	325,973,737	73,732,404	399,706,141
3	Reduction in prior year docket in excess of 2.5%	(11,048,138)		(11,048,138)
4	Increase/(Decrease)	\$ 30,386,456	\$ 739,421	\$ 31,125,876
5	2.5% of 2022 NC revenue of \$3,921,941,134			98,048,528
6	Amount over 2.5%			0

	System Cost	Alloc %	NC Alloc. Forecast
WP 4 Purchases from Dispatchable Units	\$ 122,200,054	62.17%	\$ 75,969,770
WP 4 Purchases for REPS Compliance Energy	113,597,923	62.17%	70,621,965
WP 4 Purchases for REPS Compliance Capacity	22,836,104	62.12%	14,185,512
WP 4 Purchases from Qualifying Facilities Energy	228,895,936	62.17%	142,300,849
WP 4 Purchases from Qualifying Facilities Capacity	46,899,456	62.12%	29,133,375
WP 4 Allocated Economic Purchases	21,072,752	62.17%	13,100,584
Total	\$ 555,502,225		\$ 345,312,055

	System Cost	Alloc %	NC Alloc. Forecast
Prior Year Dispatchable Purchased Energy	\$ 88,434,734	62.74%	\$ 55,483,952
Prior Year Purchases for REPS Compliance Energy	116,315,118	62.74%	72,976,105
Prior Year Purchases for REPS Compliance Capacity	23,896,105	61.54%	14,705,781
Prior Year Purchases from Qualifying Facilities Energy	224,803,592	62.74%	141,041,773
Prior Year Purchases from Qualifying Facilities Capacity	46,050,571	61.54%	28,339,750
Prior Year Allocated Economic Purchases	21,400,024	62.74%	13,426,375
Prior Year Total	\$ 520,900,144		\$ 325,973,737

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
2.5% Calculation Test - Normalized Sales
Billing Period December 1, 2023 - November 30, 2024
Docket No. E-2, Sub 1321

Revised Harrington Workpaper 16

Line No.	Description	EMF (Over)/Under		
		Forecast \$	Collection \$	Total \$
1	Amount in current docket	\$ 342,062,332	\$ 74,471,825	\$ 416,534,157
2	Amount in 2022 Filing: Docket E-2 Sub 1292	319,747,373	73,732,404	393,479,777
3	Reduction in prior year docket in excess of 2.5%	(7,568,575)		(7,568,575)
4	Increase/(Decrease)	\$ 29,883,534	\$ 739,421	\$ 30,622,955
5	2.5% of 2022 NC revenue of \$3,921,941,134			98,048,528
6	Amount over 2.5%			0

	System Cost	Alloc %	NC Alloc. Forecast
WP 4 Purchases from Dispatchable Units	\$ 122,200,054	61.50%	\$ 75,152,265
WP 4 Purchases for REPS Compliance	113,597,923	61.50%	69,862,008
WP 4 Purchases for REPS Compliance Capacity	22,836,104	62.12%	14,185,512
WP 4 Purchases from Qualifying Facilities Energy	228,895,936	61.50%	140,769,562
WP 4 Purchases from Qualifying Facilities Capacity	46,899,456	62.12%	29,133,375
WP 4 Allocated Economic Purchases	21,072,752	61.50%	12,959,610
Total	\$ 555,502,225		\$ 342,062,332

	System Cost	Alloc %	NC Alloc. Forecast
Prior Year Dispatchable Purchased Energy	\$ 88,434,734	61.36%	\$ 54,262,924
Prior Year Purchases for REPS Compliance Energy	116,315,118	61.36%	71,370,129
Prior Year Purchases for REPS Compliance Capacity	23,896,105	61.54%	14,705,781
Prior Year Purchases from Qualifying Facilities Energy	224,803,592	61.36%	137,937,886
Prior Year Purchases from Qualifying Facilities Capacity	46,050,571	61.54%	28,339,750
Prior Year Allocated Economic Purchases	21,400,024	61.36%	13,130,903
Prior Year Total	\$ 520,900,144		\$ 319,747,373

DUKE ENERGY PROGRESS, LLC
North Carolina Annual Fuel and Fuel Related Expense
2.5% Calculation Test-Detail Calculation
Nine Months Ended March 31, 2023
Docket No. E-2, Sub 1321

Harrington Workpaper 17

Line No.	Reference	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	9ME
1	Adjusted System kWh Sales, at generation	6,280,264,977	6,885,022,540	5,485,737,444	4,853,247,090	4,445,813,545	5,583,584,023	5,907,460,616	4,893,563,300	4,809,481,141	49,144,174,676
2	NC Retail kWh Sales, at generation	3,677,536,175	4,399,901,465	3,421,936,676	3,259,964,097	2,685,105,983	3,386,522,236	3,785,873,438	3,156,605,781	3,084,976,791	30,858,422,642
3	NC Retail % of Sales	Line 2 / Line 1	58.56%	63.91%	62.38%	67.17%	60.40%	60.65%	64.09%	64.51%	62.79%
Applicable Purchase Power, Excl. JDA											
4	System Purchase Power, Excl. JDA	\$ 78,834,682	\$ 87,164,698	\$ 63,236,075	\$ 36,083,020	\$ 34,314,859	\$ 49,114,852	\$ 18,984,040	\$ 22,106,557	\$ 25,966,736	\$ 415,805,518
5	NC Purchase Power	Line 4 * Line 3	\$ 46,163,242	\$ 55,702,953	\$ 39,445,899	\$ 24,237,247	\$ 20,724,898	\$ 29,788,848	\$ 12,166,170	\$ 14,259,892	\$ 259,145,162
6	NC Retail kWh Sales, at delivery	3,419,268,005	4,099,684,153	3,183,783,237	3,041,548,195	2,503,196,009	3,149,378,817	3,521,586,098	2,938,692,079	2,872,764,484	28,729,901,076
7	NC Incurred Rate	Line 5 / Line 6 * 100	1.350	1.359	1.239	0.797	0.828	0.946	0.345	0.485	0.902
Capacity											
8	System Capacity	\$ 8,818,256	\$ 12,745,196	\$ 12,590,731	\$ 4,708,308	\$ 3,502,690	\$ 3,976,438	\$ 3,240,043	\$ 4,248,351	\$ 5,437,824	\$ 59,267,837
9	NC Capacity (@ Production Plant %)	61.541%	\$ 5,426,798	\$ 7,843,457	\$ 7,748,398	\$ 2,897,516	\$ 2,155,573	\$ 2,447,120	\$ 1,993,939	\$ 2,614,456	\$ 36,473,721
10	NC Incurred Rate	Line 9/Line 6*100	0.159	0.191	0.243	0.095	0.086	0.078	0.057	0.089	0.127
11	Total NC Incurred Rate	Line 7 + Line 10	1.509	1.550	1.482	0.892	0.914	1.024	0.402	0.696	1.029
12	Billed Rates Below	0.723	0.723	0.723	0.723	0.723	0.785	0.846	0.846	0.846	
13	(Over)/Under cents per kWh	Line 131- Line 12	0.786	0.827	0.759	0.169	0.191	0.239	(0.444)	(0.272)	(0.150)
14	(Over)/Under \$	Line 6 * Line 13 /100	\$ 26,873,638	\$ 33,911,574	\$ 24,180,111	\$ 5,148,732	\$ 4,785,955	\$ 7,526,974	\$ (15,642,989)	\$ (7,999,159)	\$ 74,471,825

Billed Rate from Docket E-2, Sub 1272 - Jul'22-Nov'22

*** December billed rate is based on prorated billing factors**

Billed Rate from Docket E-2, Sub 1292 - Feb'23-Jun'23

15	Purchases from Dispatchable Units & Economic Purchases	54,629,510	2021 Revised Harrington WP4	Prior Bill Rate (Sub 1272)	New Bill Rate (Sub 1292)	December Blended Rate	Purchases from Dispatchable Units & Economic Purchases	109,834,758	2022 Harrington WP4
16	Total MWH Sales	61,963,546	2021 Revised Harrington WP3	Approved Rates	0.723	0.846	Total MWH Sales	61,541,989	2022 Harrington WP3
17	Billed Rate for Purchases	0.088		Ratios of Days to rate	50.06%	49.94%	Billed Rate for Purchases	0.178	
18	Renewables (energy)	114,179,542	2021 Revised Harrington WP4	Prorated Rate	0.362	0.423	Renewables (energy)	116,315,118	2022 Harrington WP4
19	Total MWH Sales	61,963,546	2021 Revised Harrington WP3			0.785	Total MWH Sales	61,541,989	2022 Harrington WP3
20	Billed Rate for Renewables	0.184					Billed Rate for Renewables	0.189	
** January billed rate is based on prorated billing factors									
21	QF Purchases (energy)	212,217,851	2021 Revised Harrington WP4	Prior Bill Rate (Sub 1272)	New Bill Rate (Sub 1292)	January Blended Rate	QF Purchases (energy)	224,803,592	2022 Harrington WP4
22	Total MWH Sales	61,963,546	2021 Revised Harrington WP3	Approved Rates	0.723	0.846	Total MWH Sales	61,541,989	2022 Harrington WP3
23	Billed Rate for Renewables	0.342		Ratios of Days to rate	0.1%	99.9%	Billed Rate for Renewables	0.365	
24	Capacity (REPS and QF)	66,880,658	2021 Revised Harrington WP4	Prorated Rate	0.001	0.846	Capacity (REPS and QF)	69,946,676	2022 Harrington WP4
25	Total MWH Sales	61,963,546	2021 Revised Harrington WP3			0.846	Total MWH Sales	61,541,989	2022 Harrington WP3
26	Billed Rate for Capacity	0.108					Billed Rate for Capacity	0.114	
27	Total Billed Rate	0.723	To Line 12				Total Billed Rate	0.846	To Line 12

OFFICIAL COPY
Aug 28 2023