

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-2, SUB 1204

In the Matter of
Application by Duke Energy)
Progress, LLC Pursuant to G.S. 62-)
133.2 and Commission Rule R8-55)
Regarding Fuel and Fuel-Related)
Costs Adjustments for Electric)
Utilities)

TESTIMONY OF
JENNY X. LI
PUBLIC STAFF – NORTH
CAROLINA UTILITIES
COMMISSION

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS FOR THE**
2 **RECORD.**

3 A. My name is Jenny X. Li. My business address is 430 North Salisbury
4 Street, Raleigh, North Carolina.

5 **Q. WOULD YOU BRIEFLY DISCUSS YOUR EDUCATION AND**
6 **EXPERIENCE?**

7 A. Yes. My education and experience are summarized in Appendix A to
8 my testimony.

9 **Q. WHAT ARE YOUR DUTIES?**

10 A. I am responsible for the performance of the following activities: (1)
11 the examination and analysis of testimony, exhibits, books and
12 records, and other data presented by utilities and other parties under
13 the jurisdiction of the Commission or involved in Commission
14 proceedings; and (2) the preparation and presentation to the
15 Commission of testimony, exhibits, and other documents in those
16 proceedings.

17 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

18 A. The purpose of my testimony is to present the results of the Public
19 Staff's investigation of the Experience Modification Factor (EMF)
20 riders proposed by Duke Energy Progress, LLC (DEP or the
21 Company) in this proceeding. The EMF riders are utilized to "true-
22 up," by customer class, the recovery of fuel and fuel-related costs

1 incurred during the test year. DEP's test year in this fuel proceeding
2 is the twelve months ended March 31, 2019.

3 **Q. PLEASE DESCRIBE THE PUBLIC STAFF'S INVESTIGATION OF**
4 **THE FUEL EMF INCREMENT RIDERS.**

5 A. The Public Staff's investigation included procedures intended to
6 evaluate whether the Company properly determined its per books
7 fuel and fuel-related costs and revenues during the test period.
8 These procedures included a review of the Company's filing, prior
9 Commission orders, the Monthly Fuel Reports filed by the Company
10 with the Commission, and other Company data provided to the Public
11 Staff. Additionally, they included review of certain specific types of
12 expenditures impacting the Company's test year fuel and fuel-related
13 costs, including nuclear fuel disposal costs and payments to non-
14 utility generators, as well as reviews of source documentation of fuel
15 and fuel-related costs for certain selected Company generation
16 resources. Performing the Public Staff's investigation required the
17 review of numerous responses to written and verbal data requests,
18 as well as a site visit to the Company's offices and several telephone
19 conferences with Company representatives.

20 **Q. PLEASE EXPLAIN THE FUEL EMF RIDERS ORIGINALLY**
21 **PROPOSED BY DEP IN THIS PROCEEDING.**

1 A. In its application filed on June 11, 2019, DEP stated that it
 2 experienced a total under-recovery in the amount of \$109,550,954
 3 for its combined customer classes. The under-recovery of fuel for
 4 each of the North Carolina retail customer classes initially proposed
 5 was as follows:

6	Residential	(\$40,376,037)
7	Small General Service	(\$2,324,536)
8	Medium General Service	(\$18,739,830)
9	Large General Service	(\$46,571,176)
10	Lighting	(\$1,539,374)

11 The proposed riders were calculated by dividing the fuel and fuel-
 12 related cost under-recovery for each class by DEP's normalized test
 13 year North Carolina retail sales of 16,022,241 megawatt-hours
 14 (MWh) for the Residential Service class; 1,943,714 MWh for the
 15 Small General Service class; 11,007,307 MWh for the Medium
 16 General Service class; 8,368,542 MWh for the Large General
 17 Service class; and 353,965 MWh for the Lighting Service class.
 18 DEP's resulting proposed EMF increment riders (excluding the North
 19 Carolina regulatory fee) for each North Carolina retail customer class
 20 are as follows:

21	Residential	0.252 ¢ per kWh
22	Small General Service	0.120 ¢ per kWh

1	Medium General Service	0.170 ¢ per kWh
2	Large General Service	0.557 ¢ per kWh
3	Lighting	0.435 ¢ per kWh

4 In computing these initially proposed EMF riders, DEP included the
5 under-recovery related to the coal inventory rider established in
6 Ordering Paragraph 12 of the Commission's February 23, 2018
7 *Order Accepting Stipulation, Deciding Contested Issue and Granting*
8 *Partial Rate Increase* in Docket No. E-2, Sub 1142. The coal
9 inventory rider was terminated effective for service on and after
10 December 1, 2018.

11 **Q. PLEASE DESCRIBE THE COMPANY'S SUPPLEMENTAL**
12 **TESTIMONY AND REVISED EXHIBITS.**

13 A. On August 15, 2019, DEP filed the Supplemental Testimony of Dana
14 M. Harrington with Revised Harrington Exhibits and supporting
15 workpapers. Witness Harrington's supplemental testimony and
16 revised exhibits reflects the impact of three updates to numbers
17 presented in witness Harrington's direct exhibits and workpapers.
18 They are as follows:

19 (1) Update the EMF increment to incorporate the fuel and fuel-
20 related cost recovery balance for April through June 2019,
21 pursuant to Commission Rule R8-55(d)(3). The reported
22 over/under-recovery included in the update, although included

1 in this proceeding, will be reviewed as part of next year's fuel
2 and fuel-related cost proceeding.

3 (2) Update proposed rates to reflect revisions to the customer class
4 allocation of manual adjustments made to the EMF under-
5 collection balance. The impact of this correction to proposed
6 customer rates is as follows: Residential (0.015) cents per kwh,
7 Small General Service 0.019 cents per kwh, Medium General
8 Service 0.016 cents per kwh, Large General Service 0.002
9 cents per kwh, and Lighting (0.010) cents per kwh.

10 (3) Update the Customer Growth adjustment. This update results
11 in a change of (2,062) MWh to adjusted NC system sales. The
12 fuel rates proposed by the Company are not affected by this
13 update.

14 **Q. WHAT DID COMPANY WITNESS HARRINGTON PROPOSE IN**
15 **HER SUPPLEMENTAL TESTIMONY?**

16 A. DEP Witness Harrington proposed a revised under-recovery of fuel
17 for each of the North Carolina retail customer classes as follows:

18	Residential	(\$63,138,790)
19	Small General Service	(\$4,209,287)
20	Medium General Service	(\$26,020,608)
21	Large General Service	(\$55,725,485)
22	Lighting	(\$1,941,135)

1 The revised riders were calculated by dividing the updated fuel cost
2 under-recoveries by DEP's revised normalized test year N.C. retail
3 sales of 16,022,203 megawatt-hours (MWh) for the Residential
4 Service class; 1,941,728 MWh for the Small General Service class;
5 11,007,307 MWh for the Medium General Service class; 8,368,542
6 MWh for the Large General Service class; and 353,965 MWh for the
7 Lighting Service class. DEP's revised proposed EMF increment
8 riders (excluding the North Carolina regulatory fee) for each North
9 Carolina retail customer class are as follows:

10	Residential	0.394 ¢ per kWh
11	Small General Service	0.217 ¢ per kWh
12	Medium General Service	0.236 ¢ per kWh
13	Large General Service	0.666 ¢ per kWh
14	Lighting	0.548 ¢ per kWh

15 **Q. PLEASE EXPLAIN DEP'S TWO ADJUSTMENTS RELATED TO**
16 **THE NET GAIN/LOSS ON THE SALE OF BY-PRODUCTS IN THE**
17 **TEST PERIOD IN WITNESS HARRINGTON'S DIRECT**
18 **TESTIMONY.**

19 A. As explained in her initial testimony, DEP witness Harrington
20 proposes to recover liquidated damages and a judgment payment
21 related to a lawsuit involving CertainTeed Gypsum NC, Inc. included
22 in test period costs on a cash basis rather than an accrual basis.

1 Regarding the liquidated damages, witness Harrington indicated that
2 for accounting purposes, the full 10-year liability related to the
3 settlement agreement was accrued in December 2018. As a result,
4 these system costs were reflected in the monthly fuel filings as they
5 were recorded to the Company's books in FERC account 502, which
6 was incorporated into the computation of the net gain/loss on the sale
7 of by-products. The N.C. retail share of these costs is reflected in the
8 test period under-recovery balance of \$146.8 million. However, for
9 fuel cost ratemaking purposes, DEP proposes to recover these costs
10 as the amounts are paid, rather than when the liability was accrued.
11 To achieve this result, the Company made an adjustment in the
12 amount of (\$44.1) million, to remove the North Carolina retail portion
13 of the total amount recorded to the books during the test year. The
14 Company subsequently made a second adjustment in the amount of
15 \$6.6 million to recognize only the North Carolina retail portion of the
16 cash payments made during the test period.

17 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE**
18 **ADJUSTMENTS PROPOSED BY DEP?**

19 A. Based on the testimony and recommendation of Public Staff witness
20 Jay Lucas to remove all CertainTeed lawsuit-related expenses, I
21 have removed from test period costs: (1) the component of the
22 liquidated damages in the amount of \$6.6 million and, (2) the

1 judgment payment in the amount of \$619,200, both related to
2 CertainTeed. These adjustments are set forth in Li Exhibit 1.

3 I have also incorporated witness Lucas' recommendation to remove
4 the CertainTeed liquidated damages expenses that are projected be
5 made in the billing period. This recommendation is also reflected in
6 Li Exhibit 1.

7 **Q. ARE YOU PROPOSING ANY ADJUSTMENTS TO DEP'S TEST-**
8 **YEAR KWH SALES?**

9 A. No. I am not proposing any change to the revised normalized North
10 Carolina retail sales as proposed by DEP of 16,022,203 MWh for the
11 Residential class; 1,941,728 MWh for the Small General Service
12 class; 11,007,307 MWh for the Medium General Service class;
13 8,368,542 MWh for the Large General Service class; and 353,965
14 MWh for the Lighting class, as set forth in DEP witness Harrington's
15 supplemental testimony.

16 **Q. ARE THERE ANY OTHER MATTERS YOU WOULD LIKE TO**
17 **DISCUSS AS IT RELATES TO THE TEST PERIOD EMF**
18 **INVESTIGATION?**

19 A. Yes, my investigation found a Net Native Load Transfer correction
20 that was set forth on Schedule 3 of the Monthly Fuel Reports for
21 February 2019, for both DEP and Duke Energy Carolinas, LLC
22 (DEC). According to the Company, a coding error was discovered

1 related to the sharing of economic purchases between DEP and DEC
2 that are subject to the Joint Dispatch Agreement (JDA). This coding
3 error covered the period from July 2012 through December 2018.
4 This correction is a net benefit to DEP in amount of \$54.7 million on
5 a system basis. The Public Staff does not dispute that the coding
6 error occurred and that it was appropriate to make the adjustment in
7 this case. However, the Public Staff will continue to investigate the
8 reasons why the coding error occurred and reserves the right to raise
9 any other issues related to the coding error in future proceedings.

10 **Q. WHAT ARE THE EMF UNDER-RECOVERY AMOUNTS YOU ARE**
11 **PROPOSING FOR THE FIVE CUSTOMER CLASSES?**

12 A. Based on the testimony and recommendation of Public Staff witness
13 Lucas, I recommend the following under-recovery amounts for each
14 Carolina retail customer class, (excluding the North Carolina
15 regulatory fee):

16	Residential	(\$59,835,706)
17	Small General Service	(\$3,842,749)
18	Medium General Service	(\$24,006,222)
19	Large General Service	(\$54,214,580)
20	Lighting	(\$1,875,903)

1 The EMF increment riders that I am recommending (excluding the
2 North Carolina regulatory fee) for each North Carolina retail customer
3 class are as follows:

4	Residential	0.373 ¢ per kWh
5	Small General Service	0.198 ¢ per kWh
6	Medium General Service	0.218 ¢ per kWh
7	Large General Service	0.648¢ per kWh
8	Lighting	0.530 ¢ per kWh

9 I have provided these amounts to Public Staff witness Dustin R. Metz
10 for incorporation into his recommended final fuel factor.

11 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

12 **A.** Yes, it does.

QUALIFICATIONS AND EXPERIENCE

JENNY X. LI

I graduated from North Carolina State University with a Bachelor of Science degree in Accounting.

I joined the Public Staff Accounting Division in August 2016 as a Staff Accountant. I am responsible for the performance of the following activities: (1) the examination and analysis of testimony, exhibits, books and records, and other data presented by utilities and other parties under the jurisdiction of the Commission or involved in Commission proceedings; and (2) the preparation and presentation to the Commission of testimony, exhibits, and other documents in those proceedings.

Since joining the Public Staff, I have filed affidavits in Duke Energy Progress, LLC (DEP) fuel rider Dominion Energy North Carolina REPS rider. I have also assisted on several electric cases and performed reviews in Duke Energy Carolinas, LLC (DEC), Duke Energy Progress, LLC (DEP) rate cases and fuel cases. I have also performed reviews of DEC's Existing DSM Program Rider and BPM/NFPTP Rider; Western Carolina University's PPA Rider and New River Light and Power Company's PPA Factor.

Prior to joining the Public Staff, I was employed by MDU Enterprises Inc. and Neusoft America Inc. My duties there varied from examining various financial statements to supervising accounting and assisting external audits.

Duke Energy Progress, LLC
Docket No. E-2, Sub 1204
North Carolina Annual Fuel and Fuel-Related Expense
Proposed Nuclear Capacity Factor of 94.62%
SUMMARY OF PUBLIC STAFF FUEL AND FUEL RELATED COST FACTORS
Test Period Twelve Months Ended March 31, 2019
Billing Period December 1, 2019 - November 30, 2020

Li Exhibit 1
Schedule 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 1173)</u>							
1	Approved Fuel and Fuel-Related Costs Factors	Sub 1173 Order Appendix A	2.311	2.556	2.477	1.757	2.251
2	EMF Increment / (Decrement)	Sub 1173 Order Appendix A	0.575	0.363	0.343	1.038	0.885
3	EMF Interest Decrement cents/kWh, if applicable	n/a	-	-	-	-	-
4	Approved Net Fuel and Fuel-Related Costs Factors	Sum of Lines 1 through 3	2.886	2.919	2.820	2.795	3.136
<u>Company Proposed Fuel and Fuel Related Cost Factors</u>							
5	Fuel and Fuel-Related Costs excluding Purchased Capacity cents/kWh	L7 - L6 Revised Harrington Exhibit 2, Sch 1, Page 2	2.206	2.372	2.345	1.977	2.280
6	Total of Renewable and Cogeneration Purchased Power Capacity	L10 - L8 - L9	0.138	0.155	0.123	0.079	0.001
7	Total adjusted Fuel and Fuel Related Costs cents/kWh	Revised Harrington Exhibit 3, Pages 2 - 6	2.344	2.527	2.468	2.056	2.281
8	EMF Increment (Decrement) cents/kWh	n/a	0.394	0.217	0.236	0.666	0.548
9	EMF Interest Decrement cents/kWh, if applicable	n/a	-	-	-	-	-
10	Net Fuel and Fuel Related Costs Factors cents/kWh	Revised Harrington Exhibit 2, Sch 1, Page 2	2.738	2.744	2.704	2.722	2.829
<u>Public Staff Proposed Fuel and Fuel Related Cost Factors</u>							
11	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	L13 - L12 Revised Harrington Exhibit 2, Sch 1, Page 2	2.188	2.344	2.333	1.975	2.216
12	Purchased Power - Capacity cents/kWh	L16 - L14 - L15	0.138	0.155	0.123	0.079	0.001
13	Total adjusted Fuel and Fuel Related Costs cents/kWh	Li Exhibit 1, Schedules 3-1 through 3-5	2.326	2.499	2.456	2.054	2.217
14	EMF Increment (Decrement) cents/kWh	n/a	0.373	0.198	0.218	0.648	0.530
15	EMF Interest Decrement cents/kWh	n/a	-	-	-	-	-
16	Net Fuel and Fuel Related Costs Factors cents/kWh	Li Exh 1, Sch 2	2.699	2.697	2.674	2.702	2.747
<u>Differences between the Public Staff's and the Company's Proposed Fuel Related Cost Factors</u>							
17	Fuel and Fuel Related Costs excluding Purchased Capacity cents/kWh	L11 - L5	(0.018)	(0.028)	(0.012)	(0.002)	(0.064)
18	Purchased Power - Capacity cents/kWh	L12 - L6	-	-	-	-	-
19	Total adjusted Fuel and Fuel Related Costs cents/kWh	Sum of L17 & L18	(0.018)	(0.028)	(0.012)	(0.002)	(0.064)
20	EMF Increment (Decrement) cents/kWh	L14 - L8	(0.021)	(0.019)	(0.018)	(0.018)	(0.018)
21	EMF Interest Decrement cents/kWh	L15 - L9	-	-	-	-	-
22	Net Fuel and Fuel Related Costs Factors cents/kWh	Sum of Lines 19 through 21	(0.039)	(0.047)	(0.030)	(0.020)	(0.082)

Note: The above rates do not include state regulatory fees.
Effective July 1, 2019, the Regulatory Fee rate changed from 0.14% to 0.13%.

Duke Energy Progress, LLC
 Docket No. E-2, Sub 1204
 North Carolina Annual Fuel and Fuel Related Expense
PUBLIC STAFF COMPUTATION OF UNIFORM PERCENTAGE AVERAGE BILL ADJUSTMENT BY CUSTOMER CLASS
 Proposed Nuclear Capacity Factor of 94.62% and Projected Billing Period MWh Sales
 Billing Period December 1, 2019 - November 30, 2020

Li Exhibit 1
 Schedule 2

Line No.	Rate Class	Projected Billing Period MWh Sales	Annual Revenue at Current rates	Allocate Fuel Costs Increase/(Decrease) to Customer Class	Increase/Decrease as % of Annual Revenue at Current Rates	Total Fuel Rate Increase/(Decrease) cents/kwh	Current Total Fuel Rate (including renewables and EMF) E-2, Sub 1173 cents/kwh	Proposed Total Fuel Rate (including renewables and EMF) cents /kwh
		A	B	C	D	E	F	G
		Workpaper 8	Workpaper 11	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	16,265,079	\$ 1,898,488,040	\$ (30,473,562)	-1.6%	(0.187)	2.886	2.699
2	Small General Service	1,806,876	249,548,540	(4,005,626)	-1.6%	(0.222)	2.919	2.697
3	Medium General Service	10,414,506	950,513,824	(15,257,163)	-1.6%	(0.146)	2.820	2.674
4	Large General Service	9,223,825	534,744,328	(8,583,443)	-1.6%	(0.093)	2.795	2.702
5	Lighting	381,171	92,439,556	(1,483,793)	-1.6%	(0.389)	3.136	2.747
6	NC Retail	<u>38,091,457</u>	<u>\$ 3,725,734,287</u>	<u>\$ (59,803,587)</u>				
Public Staff Proposed Composite Fuel Rate for the Billing Period:								
Adjusted System Total Fuel Costs excluding system-wide \$8.4M Liquidated Damages Cost to CTG.								
7		Workpaper 8	\$ 1,424,636,845	1/				
8	System Renewable and Qualifying Facilities Purchased Power Capacity	Revised Harrington Exhibit 2 Sch 1, Page 2	74,415,842					
9	Adjusted System Other Fuel Costs	Line 7 - Line 8	\$ 1,350,221,003					
10	NC Retail Allocation % - sales at generation	Workpaper 10	61.68%					
NC Retail Other Fuel Costs excluding NC's \$5.2M Liquidated Damages Cost to CTG.								
11		Line 9 * Line 10	\$ 832,816,315	1/ 2/				
12	NC Renewable and Qualifying Facilities Purchased Power Capacity	Revised Harrington Exhibit 2 Sch 1, Page 2	45,394,250					
13	NC Retail Total Fuel Costs before 2.5% Purchase Power Test	Line 11 + Line 12	\$ 878,210,565					
14	NC Retail Reduction due to 2.5% Purchased Power Test	Workpaper 16	0					
15	NC Retail Total Fuel Costs	Line 13 + Line 14	\$ 878,210,565					
16	NC Projected Billing Period MWh Sales	Line 6, col A	38,091,457					
17	Calculated Fuel Rate cents/kWh	Line 15 / Line 16 / 10	2.306					
18	Proposed Composite EMF Rate cents/kWh		0.381					
19	Proposed Composite EMF Rate Interest cents/kWh	0	0.000					
20	Total Proposed Composite Fuel Rate	Sum of Lines 17-19	2.687					
Total Current Composite Fuel Rate - Docket E-2 Sub 1173:								
21	Current composite Fuel Rate cents/kWh	2018 Ward Exhibit 2, Sch 1, Pg 3, Ln 17	2.242					
22	Current composite EMF Rate cents/kWh	2018 Ward Exhibit 2, Sch 1, Pg 3, Ln 18	0.602					
23	Current composite EMF Interest cents/kWh	2018 Ward Exhibit 2, Sch 1, Pg 3, Ln 19	0.000					
24	Total Current Composite Fuel Rate	Sum of Lines 21-23	2.844					
25	Increase/(Decrease) in Composite Fuel rate cents/kWh	Line 20 - Line 24	(0.157)					
26	NC Projected Billing Period MWh Sales	Line 6, col A	38,091,457					
27	Increase/(Decrease) in Fuel Costs	Line 25 * Line 26 * 10	\$ (59,803,588)					

1/ Based on testimony of Public Staff witness Jay B. Lucas.
 2/ Based on the Direct Testimony of Harrington, Page 12.

Duke Energy Progress, LLC
Docket No. E-2, Sub 1204
North Carolina Annual Fuel and Fuel Related Expense
PUBLIC STAFF COMPUTATION of Experience Modification Factor - Proposed Composite
Test Period Twelve Months Ended March 31, 2019

Li Exhibit 1
Schedule 8

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	Reported (Over)/Under Recovery (d)	Adjustments (e)	Adjusted (Over)/Under Recovery (f)
1	April 2018 (Sub 1146)	2.515	2.280	2,821,410	\$ 6,616,553	-	\$ 6,616,553
2	May	2.794	2.286	2,743,729	13,930,507	-	13,930,507
3	June	2.884	2.277	3,379,527	20,501,107	-	20,501,107
4	July	2.641	2.275	3,687,027	13,504,786	-	13,504,786
5	August	2.619	2.277	3,705,569	12,651,306	-	12,651,306
6	September	2.954	2.276	3,324,420	22,555,310	-	22,555,310
7	October	2.142	2.282	3,247,434	(4,537,212)	-	(4,537,212)
8	November	2.768	2.286	2,905,623	14,008,619	-	14,008,619
9	December (New Rates - Sub 1173)	4.223	2.256	2,853,152	56,124,620	-	56,124,620
10	January 2019	2.845	2.250	3,344,813	19,890,481	\$ (33,252)	19,857,229
11	February	0.978	2.256	3,239,879	(41,422,510)	-	(41,422,510)
12	March	2.714	2.248	2,793,993	13,007,082	-	13,007,082
13	Total Test Period			38,046,575	\$ 146,830,650	\$ (33,252)	\$ 146,797,398
14	April	2.686	2.236	2,728,574	12,291,799		12,291,799
15	May	2.782	2.239	2,833,194	15,364,636		15,364,636
16	June	2.680	2.249	3,213,527	13,827,917		13,827,917
17	Total 15-month Test Period			46,821,871	188,315,002	(33,252)	188,281,750
18	Booked (Over) / Under Recovery						\$ 188,281,750
19	Coal inventory Rider (Over) / Under Recovery						257,250
20	Company Adjustment to remove by-product net gain/loss accrued expense						(44,144,639)
21	Company Adjustment to include by-product net gain/loss cash payments						6,640,945
22	Public Staff Adjustment to remove by-product net gain/loss cash payments						(6,640,945) ^{1/}
23	Public Staff Adjustment to remove by-product net gain/loss/ judgment payment						(619,200) ^{1/, 2/}
24	Total (Over) / Under Recovery						\$ 143,775,161
25	Normalized Test Period MWh Sales		Exhibit 4				37,693,746
26	Experience Modification Increment / (Decrement) cents/KWh						0.381

1/ Based on testimony of Public Staff witness Jay B. Lucas.

2/ Li Exhibit 4.

Duke Energy Progress, LLC
Docket No. E-2, Sub 1204
North Carolina Annual Fuel and Fuel Related Expense
PUBLIC STAFF COMPUTATION of Experience Modification Factor - Residential
Test Period Twelve Months Ended March 31, 2019

Li Exhibit 1
Schedule 3-1

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	(Over)/Under Recovery (d)	Adjustments (e)	Adjusted (Over)/Under Recovery (f)
1	April 2018 (Sub 1146)	2.501	2.179	1,138,012	\$ 3,660,529		\$ 3,660,529
2	May	3.023	2.179	1,016,135	8,577,706		8,577,706
3	June	2.787	2.179	1,404,775	8,539,907		8,539,907
4	July	2.467	2.179	1,586,631	4,574,733		4,574,733
5	August	2.510	2.179	1,553,969	5,138,198		5,138,198
6	September	2.811	2.179	1,404,365	8,874,465		8,874,465
7	October	2.193	2.179	1,264,650	179,201		179,201
8	November	2.995	2.179	1,072,132	8,748,809		8,748,809
9	December (New Rates - Sub 1173)	3.604	2.237	1,386,673	18,956,228		18,956,228
10	January 2019	2.682	2.311	1,552,025	5,751,516	\$ (14,440)	5,737,076
11	February	0.899	2.311	1,553,478	(21,931,387)		(21,931,387)
12	March	2.733	2.311	1,214,159	5,128,001		5,128,001
13	Total Test Period			16,147,005	\$ 56,197,905	\$ (14,440)	\$ 56,183,465
14	April	3.033	2.311	1,060,985	7,664,663		7,664,663
15	May	3.295	2.311	1,051,096	10,340,265		10,340,265
16	June	2.843	2.311	1,331,074	7,081,848		7,081,848
17	Total 15-month Test Period			19,590,161	81,284,681	(14,440)	\$ 81,270,241
18	Booked (Over) / Under Recovery						\$ 81,270,241
19	Coal inventory Rider (Over) / Under Recovery						107,665
20	Company Adjustment to remove by-product net gain/loss accrued expense						(21,280,626)
21	Company Adjustment to include by-product net gain/loss cash payments						3,041,510
22	Public Staff Adjustment to remove by-product net gain/loss cash payments						(3,041,510) 1/
23	Public Staff Adjustment to remove by-product net gain/loss/ judgment payment						(261,574) 1/, 2/
24	Total (Over) / Under Recovery						\$ 59,835,706
25	Normalized Test Period MWh Sales			Exhibit 4			16,022,203
26	Experience Modification Increment (Decrement) cents/KWh						0.373

1/ Based on testimony of Public Staff witness Jay B. Lucas.

2/ Li Exhibit 4.

Duke Energy Progress, LLC
Docket No. E-2, Sub 1204
North Carolina Annual Fuel and Fuel Related Expense
PUBLIC STAFF COMPUTATION of Experience Modification Factor - Small General Service
Test Period Twelve Months Ended March 31, 2019

Li Exhibit 1
Schedule 3-2

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	(Over)/Under Recovery (d)	Adjustments (e)	Adjusted (Over)/Under Recovery (f)
1	April 2018 (Sub 1146)	2.289	2.121	140,607	\$ 236,079		\$ 236,079
2	May	2.535	2.121	136,871	567,097		567,097
3	June	2.480	2.121	178,846	642,201		642,201
4	July	2.281	2.121	194,597	310,810		310,810
5	August	2.231	2.121	198,191	217,119		217,119
6	September	2.489	2.121	179,772	662,100		662,100
7	October	1.789	2.121	174,119	(578,233)		(578,233)
8	November	2.312	2.121	156,234	298,658		298,658
9	December (New Rates - Sub 1173)	4.862	2.313	120,842	3,080,272		3,080,272
10	January 2019	2.969	2.556	174,110	718,822	\$ (1,763)	717,059
11	February	1.095	2.556	159,655	(2,332,952)		(2,332,952)
12	March	2.847	2.556	144,886	421,865		421,865
13	Total Test Period			1,958,731	\$ 4,243,838	\$ (1,763)	\$ 4,242,075
14	April	2.930	2.556	136,059	508,889		508,889
15	May	2.974	2.556	144,225	603,324		603,324
16	June	2.793	2.556	167,849	397,399		397,399
17	Total 15-month Test Period			2,406,864	5,753,449	(1,763)	\$ 5,751,686
18	Booked (Over) / Under Recovery						\$ 5,751,686
19	Coal inventory Rider (Over) / Under Recovery						13,266
20	Company Adjustment to remove by-product net gain/loss accrued expense						(1,888,719)
21	Company Adjustment to include by-product net gain/loss cash payments						333,054
22	Public Staff Adjustment to remove by-product net gain/loss cash payments						(333,054) 1/
23	Public Staff Adjustment to remove by-product net gain/loss/ judgment payment						(33,484) 2/
24	Total (Over) / Under Recovery						\$ 3,842,749
25	Normalized Test Period MWh Sales			Exhibit 4			1,941,728
26	Experience Modification Increment (Decrement) cents/KWh						0.198

1/ Based on testimony of Public Staff witness Jay B. Lucas.

2/ Li Exhibit 4.

Duke Energy Progress, LLC
Docket No. E-2, Sub 1204
North Carolina Annual Fuel and Fuel Related Expense
PUBLIC STAFF COMPUTATION of Experience Modification Factor - Medium General Service
Test Period Twelve Months Ended March 31, 2019

Li Exhibit 1
Schedule 3-3

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	(Over)/Under Recovery (d)	Adjustments (e)	Adjusted (Over)/Under Recovery (f)
1	April 2018 (Sub 1146)	2.440	2.356	834,634	\$ 700,759		\$ 700,759
2	May	2.524	2.356	871,652	1,468,210		1,468,210
3	June	2.683	2.356	1,042,496	3,411,985		3,411,985
4	July	2.601	2.356	1,074,969	2,629,373		2,629,373
5	August	2.536	2.356	1,098,143	1,980,830		1,980,830
6	September	2.852	2.356	988,512	4,902,428		4,902,428
7	October	1.955	2.356	1,021,065	(4,091,099)		(4,091,099)
8	November	2.453	2.356	940,892	913,230		913,230
9	December (New Rates - Sub 1173)	5.035	2.409	706,334	18,544,231		18,544,231
10	January 2019	3.287	2.477	883,889	7,155,890	\$ (9,828)	7,146,062
11	February	1.127	2.477	855,202	(11,548,986)		(11,548,986)
12	March	2.927	2.477	790,364	3,557,351		3,557,351
13	Total Test Period			11,108,152	\$ 29,624,202	\$ (9,828)	\$ 29,614,374
14	April	2.697	2.477	827,811	1,817,211		1,817,211
15	May	2.639	2.477	908,898	1,474,141		1,474,141
16	June	2.710	2.477	967,184	2,251,604		2,251,604
17	Total 15-month Test Period			13,812,044	35,167,158	(9,828)	\$ 35,157,330
18	Booked (Over) / Under Recovery						\$ 35,157,330
19	Coal inventory Rider (Over) / Under Recovery						75,961
20	Company Adjustment to remove by-product net gain/loss accrued expense						(11,042,950)
21	Company Adjustment to include by-product net gain/loss cash payments						1,830,267
22	Public Staff Adjustment to remove by-product net gain/loss cash payments						(1,830,267) 1/
23	Public Staff Adjustment to remove by-product net gain/loss/ judgment payment						(184,118) 1/, 2/
24	Total (Over) / Under Recovery						\$ 24,006,222
25	Normalized Test Period MWh Sales			Exhibit 4			11,007,307
26	Experience Modification Increment (Decrement) cents/KWh						0.218

1/ Based on testimony of Public Staff witness Jay B. Lucas.

2/ Li Exhibit 4.

Duke Energy Progress, LLC
Docket No. E-2, Sub 1204
North Carolina Annual Fuel and Fuel Related Expense
PUBLIC STAFF COMPUTATION of Experience Modification Factor - Large General Service
Test Period Twelve Months Ended March 31, 2019

Li Exhibit 1
Schedule 3-4

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	(Over)/Under Recovery (d)	Adjustments (e)	Adjusted (Over)/Under Recovery (f)
1	April 2018 (Sub 1146)	2.709	2.417	678,418	\$ 1,978,810		\$ 1,978,810
2	May	2.886	2.417	689,394	3,230,432		3,230,432
3	June	3.476	2.417	723,936	7,668,586		7,668,586
4	July	3.135	2.417	801,315	5,754,642		5,754,642
5	August	3.034	2.417	825,198	5,091,306		5,091,306
6	September	3.504	2.417	723,070	7,861,222		7,861,222
7	October	2.406	2.417	757,387	(84,221)		(84,221)
8	November	2.971	2.417	707,153	3,914,585		3,914,585
9	December (New Rates - Sub 1173)	4.582	2.125	610,753	15,002,143		15,002,143
10	January 2019	2.603	1.757	704,241	5,960,860	\$ (7,072)	5,953,788
11	February	0.937	1.757	643,138	(5,275,468)		(5,275,468)
12	March	2.371	1.757	615,274	3,776,307		3,776,307
13	Total Test Period			8,479,278	\$ 54,879,204	\$ (7,072)	\$ 54,872,132
14	April	2.086	1.757	674,418	2,215,935		2,215,935
15	May	2.160	1.757	699,442	2,816,304		2,816,304
16	June	2.297	1.757	718,601	3,877,285		3,877,285
17	Total 15-month Test Period			10,571,739	63,788,728	(7,072)	\$ 63,781,656
18	Booked (Over) / Under Recovery						\$ 63,781,656
19	Coal inventory Rider (Over) / Under Recovery						57,952
20	Company Adjustment to remove by-product net gain/loss accrued expense						(9,490,349)
21	Company Adjustment to include by-product net gain/loss cash payments						1,376,227
22	Public Staff Adjustment to remove by-product net gain/loss cash payments						(1,376,227) 1/
23	Public Staff Adjustment to remove by-product net gain/loss/ judgment payment						(134,678) 1/, 2/
24	Total (Over) / Under Recovery						\$ 54,214,580
25	Normalized Test Period MWh Sales			Exhibit 4			8,368,542
26	Experience Modification Increment (Decrement) cents/KWh						0.648

1/ Based on testimony of Public Staff witness Jay B. Lucas.

2/ Li Exhibit 4.

Duke Energy Progress, LLC
Docket No. E-2, Sub 1204
North Carolina Annual Fuel and Fuel Related Expense
PUBLIC STAFF COMPUTATION of Experience Modification Factor - Lighting
Test Period Twelve Months Ended March 31, 2019

Li Exhibit 1
Schedule 3-5

Line No.	Month	Fuel Cost Incurred ¢/ kWh (a)	Fuel Cost Billed ¢/ kWh (b)	NC Retail MWh Sales (c)	(Over)/Under Recovery (d)	Adjustments (e)	Adjusted (Over)/Under Recovery (f)
1	April 2018 (Sub 1146)	1.793	1.657	29,739	\$ 40,376		\$ 40,376
2	May	1.950	1.657	29,677	87,063		87,063
3	June	2.466	1.657	29,473	238,428		238,428
4	July	2.454	1.657	29,516	235,228		235,228
5	August	2.401	1.657	30,068	223,853		223,853
6	September	2.546	1.657	28,700	255,094		255,094
7	October	1.780	1.657	30,213	37,141		37,141
8	November	2.113	1.657	29,213	133,338		133,338
9	December (New Rates - Sub 1173)	3.817	1.919	28,549	541,747		541,747
10	January 2019	3.244	2.251	30,547	303,393	\$ (149)	303,244
11	February	1.076	2.251	28,406	(333,718)		(333,718)
12	March	2.673	2.251	29,310	123,557		123,557
13	Total Test Period			353,410	\$ 1,885,501	\$ (149)	\$ 1,885,352
14	April	2.541	2.251	29,301	85,101		85,101
15	May	2.693	2.251	29,533	130,603		130,603
16	June	3.014	2.251	28,819	219,780		219,780
17	Total 15-month Test Period			441,063	2,320,986	(149)	\$ 2,320,837
18	Booked (Over) / Under Recovery						\$ 2,320,837
19	Coal inventory Rider (Over) / Under Recovery						2,406
20	Company Adjustment to remove by-product net gain/loss accrued expense						(441,994)
21	Company Adjustment to include by-product net gain/loss cash payments						59,886
22	Public Staff Adjustment to remove by-product net gain/loss cash payments						(59,886) 1/
23	Public Staff Adjustment to remove by-product net gain/loss/ judgment payment						(5,346) 1/, 2/
24	Total (Over) / Under Recovery						\$ 1,875,903
25	Normalized Test Period MWh Sales		Exhibit 4				353,965
26	Experience Modification Increment (Decrement) cents/KWh						0.530

1/ Based on testimony of Public Staff witness Jay B. Lucas.

2/ Li Exhibit 4.

**Duke Energy Progress, LLC
Docket No. E-2, Sub 1204
Public Staff Adjustment to Test Period Fuel Expenses
For the Test Period Ended March 31, 2019**

Li Exhibit 1
Schedule 4

Line No.	Item			NC Retail Amounts
1	Judgment Payment			\$ 619,200 ^{1/}
2	Total Adjustment to Decrease Fuel Expenses			\$ 619,200
<u>Rate Class Allocations:</u>				
		Percent		Amount
3	Residential	42.244%	2/	261,574
4	Small General Service	5.408%	2/	33,484
5	Medium General Service	29.735%	2/	184,118
6	Large General Service	21.750%	2/	134,678
7	Lighting	0.863%	2/	5,346
8	Total	100.000%		619,200

To Li Exhibit 1
Schedules 3-1
through 3-5.

1/ Based on the Company's response to Public Staff DR13-12.

2/ Based on the allocation of the MWH for each class for September 2018 divided by Total MWH Sales for September 2018.