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Aug 10 2021

August 10, 2021

**VIA Electronic Filing**

Ms. Antonia Dunston, Interim Chief Clerk  
North Carolina Utilities Commission  
Dobbs Building  
430 North Salisbury Street  
Raleigh, North Carolina 27603

*Re: Dominion Energy North Carolina's 2021 Fuel Charge Adjustment  
Docket No. E-22, Sub 605*

Dear Ms. Dunston:

Enclosed for filing is the *Application for a Change in Fuel Component of Electric Rates* ("Application") of Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (the "Company"), in compliance with North Carolina General Statute § 62-133.2 and North Carolina Utilities Commission ("Commission") Rule R8-55. In support of its Application, the Company is filing the Direct Testimony and Exhibits of Jeffrey D. Matzen, Ronnie T. Campbell, Dale E. Hinson, Tom A. Brookmire, and Timothy P. Stuller, as well as Commission Rule R8-55 Information and Workpapers.

Thank you for your assistance with this matter. Please call me if additional information is required.

Very truly yours,

/s/Andrea R. Kells

ARK:sjg

Enclosures

cc: Zeke Creech, Public Staff – NC Utilities Commission  
John Little, Public Staff – NC Utilities Commission  
Dianna Downey, Public Staff – NC Utilities Commission



**Dominion  
Energy<sup>®</sup>**

**Application, Testimony, and  
Exhibits of Virginia Electric and  
Power Company, d/b/a  
Dominion Energy North  
Carolina**

**Before the North Carolina Utilities  
Commission**

**In the Matter of  
Application by Virginia Electric and  
Power Company, d/b/a Dominion  
Energy North Carolina, for Authority  
to Adjust its Electric Rates and  
Charges and Revise its Fuel Factor  
Pursuant to N.C.G.S. § 62-133.2 and  
NCUC Rule R8-55**

**Docket No. E-22, Sub 605**

**Filed: August 10, 2021**

**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. E-22, SUB 605

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of  
Application by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina, for Authority to Adjust its Electric Rates and Charges and Revise its Fuel Factor Pursuant to N.C. Gen. Stat. § 62-133.2 and NCUC Rule R8-55 )  
 ) APPLICATION FOR A CHANGE  
 ) IN FUEL COMPONENT OF  
 ) ELECTRIC RATES  
 )

Pursuant to North Carolina General Statutes (“N.C. Gen. Stat.”) § 62-133.2 and Rule R8-55 of the Rules and Regulations of the North Carolina Utilities Commission (“Commission”), Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (“DENC” or the “Company”), by counsel, hereby applies to the Commission to adjust the fuel component of its electric rates to become effective February 1, 2022, and remain in effect through January 31, 2023. In support thereof, the Company respectfully demonstrates as follows:

1. The Company is a public utility operating in the State of North Carolina as Dominion Energy North Carolina and is engaged in the business of generating, transmitting, distributing, and selling electric power and energy to the public for compensation. As such, the Company’s operations in the State are subject to the jurisdiction of the Commission. The Company is also a public utility under the Federal Power Act, and certain of its operations are subject to the jurisdiction of the Federal Energy Regulatory Commission. The Company is a wholly-owned operating subsidiary of Dominion Energy, Inc. DENC serves approximately 120,000 customers in North Carolina, with a service territory of about 2,600 square miles in northeastern North

Carolina, including Roanoke Rapids, Albemarle, Ahoskie, Williamston, Elizabeth City, and the Outer Banks. The Company serves major industrial facilities like Nucor Steel, Kapstone, Enviva, and Hospira, as well as commercial and residential customers. The Company's headquarters are located at 120 Tredegar Street, Richmond, Virginia 23219. The post office address of DENC is P.O. Box 26666, Richmond, Virginia 23261.

2. The attorneys for the Company are:

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Copies of all pleadings, testimony, orders, and correspondence in this proceeding should be served upon the attorneys listed above.

3. Pursuant to Rule R8-55(f), the Company is to file its direct testimony, exhibits, and workpapers supporting its fuel adjustment 98 days prior to the hearing. Accordingly, DENC hereby files the direct testimony, exhibits, and workpapers of the following witnesses in support of its proposed fuel adjustment: Jeffrey D. Matzen, Ronnie T. Campbell, Dale E. Hinson, Tom A. Brookmire, and Timothy P. Stuller.

4. Pursuant to Rule R8-55(c), DENC's test period for this proceeding is the 12-month period ending June 30, 2021 ("Test Period").

5. Consistent with the Company's 2020 Fuel Case (Docket No. E-22, Sub 590), Updated Rider A and Rider B will be in effect for the twelve-month period from February 1, 2022, through January 31, 2023, the proposed "Rate Period."

6. The last general rate case order for the Company was issued by the Commission on February 24, 2020, in Docket No. E-22, Sub 562 ("2019 Base Rate Case Order"). In the 2019 Base Rate Case Order, the Commission reset the Company's system average base fuel factor applicable to the North Carolina jurisdiction to \$0.02092/kWh, including regulatory fee (\$0.02089/kWh without the fee). The Commission's last fuel adjustment proceeding order for the Company was issued on January 22, 2021, in Docket No. E-22, Sub 590 ("2020 Fuel Order"). The 2020 Fuel Order approved the current Rider A and an updated Experience Modification Factor ("EMF") Rider B. The 2019 Base Rate Case Order and the 2020 Fuel Order also set the marketer's percentage at 71% (to be reviewed during this proceeding or during the Company's next general rate case, whichever came first).

7. As explained by the direct testimony of Company Witness Matzen, consistent with the methodology applied in the Company's fuel adjustment proceedings dating back to 2008, the Company's cost of fuel calculations are based on the 12-month historical average for fuel prices incurred during the Test Period. As Company Witness Matzen explains, this methodology is a fair representation of the expected expense rates during the February 1, 2022 through January 31, 2023 Rate Period.

8. For the Test Period, the normalized system fuel expense is \$1,820,197,534, which is then divided by system sales of 85,281,501,429 kWh, which reflect the normalization adjustments for change in usage, weather, and customer growth. The result is a normalized system average fuel factor of \$0.021371/kWh, which is an increase of \$0.002991/kWh, applicable to the North Carolina jurisdiction.

9. DENC has under-recovered its fuel costs for the Test Period by \$4,011,772. The total under-recovered fuel expense as of June 30, 2021, based on the current 71% marketer percentage, is provided in the direct testimony and exhibits of Company Witness Ronnie T. Campbell. This fuel under-recovery was driven by commodity price spikes and a slight upward movement in all commodity prices, in addition to certain additional costs addressed below.

10. As set forth in the testimony of Company Witness Campbell, the Virginia General Assembly enacted legislation in 2020 to regulate CO2 emissions from electric generation facilities and Virginia joined the Regional Greenhouse Gas Initiative (“RGGI”). The Company is seeking to recover costs related to the emittance of tons and usage of allowances purchased under RGGI through a rate adjustment clause in Virginia. The Company has filed an application with the Commission in Docket No. E-22, Sub 601, seeking to recover RGGI costs through its fuel factor. The Company’s application is currently pending.

11. The Company calculated the EMF Rider B applicable to the North Carolina jurisdiction and to each customer class using the methodology approved in the 2020 Fuel Order. These calculations are addressed in the direct testimony and exhibits of Company Witness Timothy P. Stuller.

12. The Company proposes that the total fuel rate (base fuel factor, Rider A, and EMF Rider B) for each class be set as follows, effective February 1, 2022:

<u>Customer Class</u>	<u>Total</u>
Residential	\$0.022548
SGS & PA	\$0.022522
LGS	\$0.022339
Schedule NS	\$0.021677
6VP	\$0.021989
Outdoor Lighting	\$0.022548
Traffic	\$0.022548

13. For the North Carolina jurisdiction, the proposed jurisdictional fuel cost levels result in a total fuel recovery increase of \$21,988,007.

WHEREFORE, Dominion Energy North Carolina respectfully requests that the Commission: approve the proposed total fuel factor of 2.2292 ¢/kWh, effective February 1, 2022, which shall be allocated based on voltage differentiated adjustments, including the base fuel factor, Rider A, and EMF Rider B, as follows:

- (a) 2.2548 ¢/kWh for the Residential class of customers,
- (b) 2.2522 ¢/kWh for the Small General Service and Public Authority classes of customers,
- (c) 2.2339 ¢/kWh for the Large General Service class of customers,
- (d) 2.1677 ¢/kWh for the Schedule NS class of customers,
- (e) 2.1989 ¢/kWh for the Schedule 6VP class of customers, and
- (f) 2.2548 ¢/kWh for the Outdoor Lighting and Traffic classes of customers;

and grant any other relief the Commission deems appropriate.

Respectfully submitted, this the 10<sup>th</sup> day of August, 2021.

DOMINION ENERGY NORTH CAROLINA

By: /s/Mary Lynne Grigg  
Counsel

*Counsel for Virginia Electric and Power  
Company, d/b/a Dominion Energy North  
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**DIRECT TESTIMONY  
OF  
JEFFREY D. MATZEN  
ON BEHALF OF  
DOMINION ENERGY NORTH CAROLINA  
BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-22, SUB 605**

1 **Q. Please state your name, business address, and position of employment.**

2 A. My name is Jeffrey D. Matzen, and my business address is 600 E. Canal  
3 Street, Richmond, Virginia 23219. I am a Manager in the Strategic Planning  
4 Department for Virginia Electric and Power Company, which operates in  
5 North Carolina as Dominion Energy North Carolina (the “Company”). I am  
6 responsible for forecasting the Company’s system energy supply mix, and  
7 total system fuel and purchased power expenses. A statement of my  
8 background and qualifications is attached as Appendix A.

9 **Q. What is the purpose of your direct testimony in this proceeding?**

10 A. The purpose of my testimony is to present the Company’s nuclear and major  
11 coal-fired generating unit actual performance, the Company’s level of power  
12 purchases, and the generation mix for the Company’s 12-month test period  
13 ended June 30, 2021 (“Test Period”). My testimony describes drivers that  
14 affected system fuel expense and the normalization adjustments that impact  
15 the expected system fuel expense. I will present the system fuel expenses for  
16 the Test Period, and the normalized system fuel expense projected for the rate  
17 period February 2022 through January 2023.

1 **Q. During the course of your testimony, will you introduce an exhibit?**

2 A. Yes. Company Exhibit JDM-1, which consists of four schedules, has been  
3 prepared under my supervision and is accurate and complete to the best of my  
4 knowledge.

5 **Q. Please review the performance of the Company's major generating units**  
6 **for the Test Period.**

7 A. Schedules 1 and 2 of Company Exhibit JDM-1 show the actual monthly and  
8 12-month period ending June 30, 2021 average Equivalent Availability  
9 ("EA") and Capacity Factors ("CF") for the Company's nuclear units and  
10 large coal-fired units during the Test Period.

11 During the Test Period, the Company's coal units generated 9,177 GWh of  
12 energy. Mt. Storm Units 1-3 performed at EA factors of 67%, 61%, and 56%,  
13 respectively. Chesterfield Units 5 – 6 had EA factors of 75% and 52%,  
14 respectively. Virginia City Hybrid Energy Center ("VCHEC") had an EA of  
15 71% during the Test Period.

16 In regards to what constitutes reasonable nuclear unit performance,  
17 Commission Rule R8-55(k) requires that the Company achieve either (a) an  
18 actual system-wide nuclear capacity factor in the test year, or (b) an average  
19 system-wide nuclear capacity factor, based upon a two-year simple average of  
20 the system-wide capacity factors actually experienced in the test year and the  
21 preceding year, that is at least equal to the national average capacity factor for  
22 nuclear production facilities based on the most recent 5-year period available

1 as reflected in the most recent North American Electric Reliability  
2 Corporation's ("NERC") Generating Availability Report, appropriately  
3 weighted for size and type of plant, or a rebuttable presumption of imprudence  
4 is created.

5 The NERC 2015-2019 five-year industry average net capacity factor for  
6 Pressurized Water Reactors, which is the most recent available NERC  
7 average, is 92.8% for 800-999 MW units. The aggregate capacity factor for  
8 the Company's nuclear units for the Test Year and the preceding year was  
9 93.5%, based on a simple average of the four units at 100% of capacity. The  
10 Company's nuclear fleet performance during the Test Period and the  
11 preceding year was therefore higher than the industry five-year average for  
12 comparable units based on the two-year simple average metric.

13 The net capacity factors during the historic Test Period for the Company's  
14 nuclear units are shown below.

15	N. Anna 1	86.1%
16	N. Anna 2	91.7%
17	Surry 1	90.6%
18	Surry 2	102.3%

19 The aggregate capacity factor was 92.4% for the Company's nuclear units for  
20 the Test Period. This is based on the weighted average of the four units at  
21 100% of capacity. Based on these figures, the Company's nuclear fleet  
22 performance during the Test Period was similar to the industry five-year

1 average for comparable units. This capacity factor calculation includes the  
2 impact of refueling outages in three of the four nuclear units. These outages  
3 are performed every 18 months and are a required part of nuclear fleet  
4 maintenance. The four units had one forced outage during the Test Period.

5 In addition, for the same five-year period, the Company's net capacity factor  
6 was 94.1% compared to the national average of 92.8%. Nuclear net capacity  
7 factor is the best measure for reliable baseload performance and related  
8 operating efficiency and is the predominant standard recognized in the energy  
9 arena when evaluating nuclear power plant performance. A high net capacity  
10 factor reflects an excellent level of reliable baseload operations, which  
11 translates into many customer benefits in terms of reduced system fuel cost  
12 and consistency in availability. Maximizing generation from this low variable  
13 cost baseload resource reflects good operating efficiency and results in overall  
14 lower energy costs to customers.

15 **Q. What is the expected performance of the Company's nuclear generating**  
16 **units for the 12-month rate period ending January 31, 2022?**

17 A. The projected capacity factors for both North Anna and Surry are expected to  
18 be above the most recent NERC five-year average capacity factor of 92.8%.  
19 The projected capacity factors are shown below.

20	N. Anna 1	88.7%
21	N. Anna 2	89.1%
22	Surry 1	92.8%
23	Surry 2	100.2%

1 The projected weighted average for the nuclear fleet at ownership is 92.5%.

2 **Q. What was the Company's generation mix during the Test Period?**

3 A. The generation mix during the Test Period is shown on Schedule 3 of  
4 Company Exhibit JDM-1. Nuclear generation supplied 31%; coal-fired  
5 generation supplied 10%; combined cycle and combustion turbine generation  
6 supplied 45%; and power transactions (net) supplied 12%. These four energy  
7 sources accounted for 98% of the total energy supply. Oil, biomass, solar and  
8 hydro generation provided the remaining 2% (net) of the energy supplied.

9 **Q. Please describe the major drivers that affected the \$/MWh average fuel  
10 expense during the Test Period.**

11 A. As stated by Company Witness Ronnie T. Campbell, the Company  
12 experienced an under-recovery of fuel expenses during the test year. This fuel  
13 under-recovery was driven by commodity price spikes and a slight upward  
14 movement in all commodity prices, in addition to the Regional Greenhouse  
15 Gas Initiative costs presented by Company Witness Campbell and noted  
16 below.

17 **Q. Does the Company propose to normalize nuclear capacity factor levels in  
18 determining an appropriate fuel factor in this proceeding?**

19 A. Yes. Since the Company's projected nuclear generation during the upcoming  
20 rate year is expected to be slightly lower than the actual generation during the  
21 Test Period, we have normalized expected nuclear generation and fuel  
22 expenses using the expected nuclear capacity factors shown above for the 12-

1 month period ending January 31, 2023, in developing the proposed fuel cost  
2 rider in this proceeding.

3 **Q. Please describe the Company's normalization of system fuel expenses.**

4 A. Schedule 4 of Company Exhibit JDM-1 illustrates an expense normalization  
5 methodology that has been used by the Company and approved in previous  
6 North Carolina annual fuel factor proceedings. The first step in computing  
7 normalized system fuel expenses is to calculate nuclear generation based on  
8 the expected future operating parameters for each unit. The expected  
9 generation from the nuclear units was calculated for the 12-month period  
10 ending January 2023. Other sources of generation were then normalized for  
11 the Test Period. The total of coal, heavy oil, combustion turbine and  
12 combined cycle, non-utility generation ("NUG"), and purchased energy  
13 during the Test Period was then calculated. A percentage of this total was  
14 then calculated for each of the above resources. Normalized generation was  
15 computed by applying these percentages to a new total, which includes an  
16 adjustment for weather, customer growth, increased usage, and the net change  
17 in nuclear and solar generation. This methodology for normalizing the Test  
18 Period generation resulted in adjusted annual system energy requirements of  
19 88,116,518 MWh, an increase of 172,586 MWh from the actual energy  
20 requirements for the 12 months ended June 30, 2021.

1 **Q. Please describe any major changes to the generation fleet or regulatory**  
2 **changes that will impact the system fuel expense.**

3 A. During the test period, the 135 MW (nominal alternating current (“AC”))  
4 Spring Grove Solar Facility, located in Surry County, was placed in service in  
5 November 2020. In addition, the 128 MW (nominal alternating current  
6 (“AC”)) Sadler Solar Facility located in Greenville County was placed in  
7 service in May 2021. The Company retired Possum Point Unit 5 in December  
8 2020.

9 The Company anticipates adding additional solar facilities totaling  
10 approximately 113 MW AC during the next 12 months. The Company  
11 anticipates a benefit to system fuel expense from these changes and an  
12 adjustment of \$6.9 million has been included on my Schedule 4 showing the  
13 calculation of the system projected fuel expense.

14 **Q. Has the Company evaluated the current marketer percentage**  
15 **calculation?**

16 A. Yes. The system fuel expense includes PJM energy market purchases, NUG  
17 energy purchases and off-system sales. Generally, purchases from the PJM  
18 energy market and certain NUG purchases do not provide fuel cost data. The  
19 marketer percentage is a proxy used to approximate the percentage of these  
20 purchase costs related to fuel and is applied to these fuel expenses. Consistent  
21 with the Commission’s conclusions in the 2019 general base rate case, Docket  
22 No. E-22, Sub 562, the Company has updated the calculation of the marketer  
23 percentage based on the PJM State of the Market Reports for 2019 and 2020,

1 using the same averaging method that was applied in the 2018 fuel case as  
2 well as the Company's 2019 general rate case. The updated marketer  
3 percentage is 72% and a line item adjustment of \$1.9 million has been  
4 included on my Schedule 4 showing the calculation of the system projected  
5 fuel expense.

6 **Q. Please describe the other fuel expense normalization item associated with**  
7 **the Regional Greenhouse Gas Initiative implementation.**

8 A. As discussed in the testimony of Company Witness Campbell, the Company is  
9 seeking to recover costs related to the emittance of tons and usage of  
10 allowances purchased under the Regional Greenhouse Gas Initiative  
11 ("RGGI") through its fuel factor. That application is pending in Docket No.  
12 E-22, Sub 601. Pending the outcome of that application, the system fuel  
13 expense includes an estimate of emissions expenses associated with RGGI for  
14 the test period.

15 **Q. Please describe the other fuel expense normalization items.**

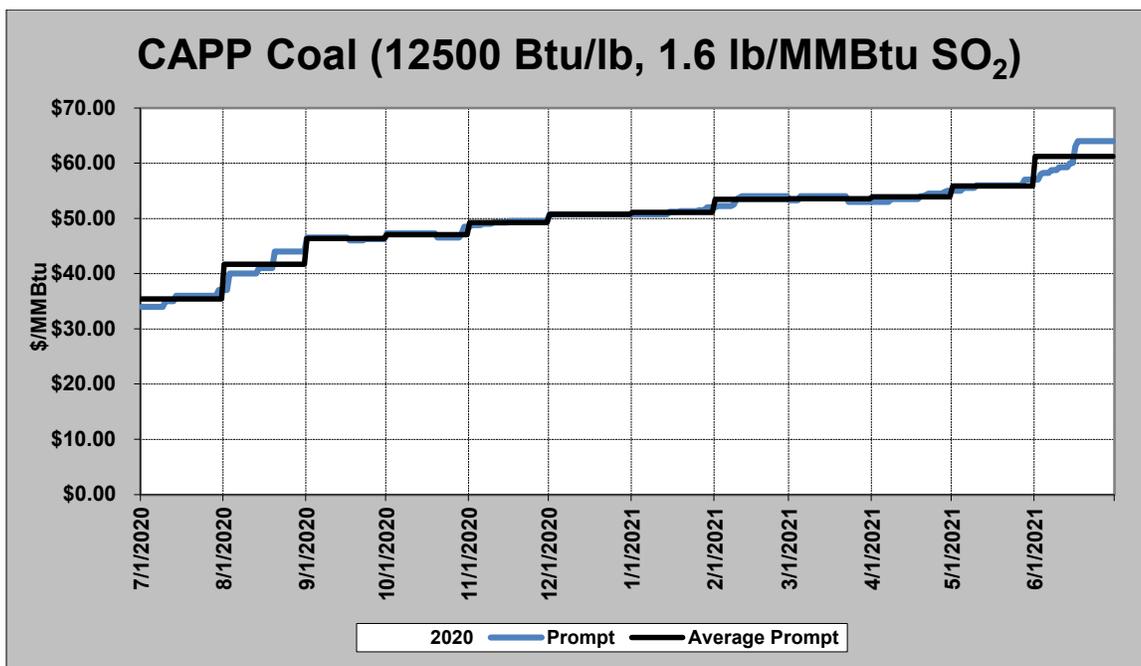
16 A. The \$/MWh expense rates for all fuel types are based on the actual 12-month  
17 average expense rates incurred during the Test Period. Using the 12-month  
18 average rate for these commodities is consistent with the methodology used in  
19 the 2008 – 2020 fuel cases and is a fair representation of the expected expense  
20 rates during the February 2022 – January 2023 rate period.

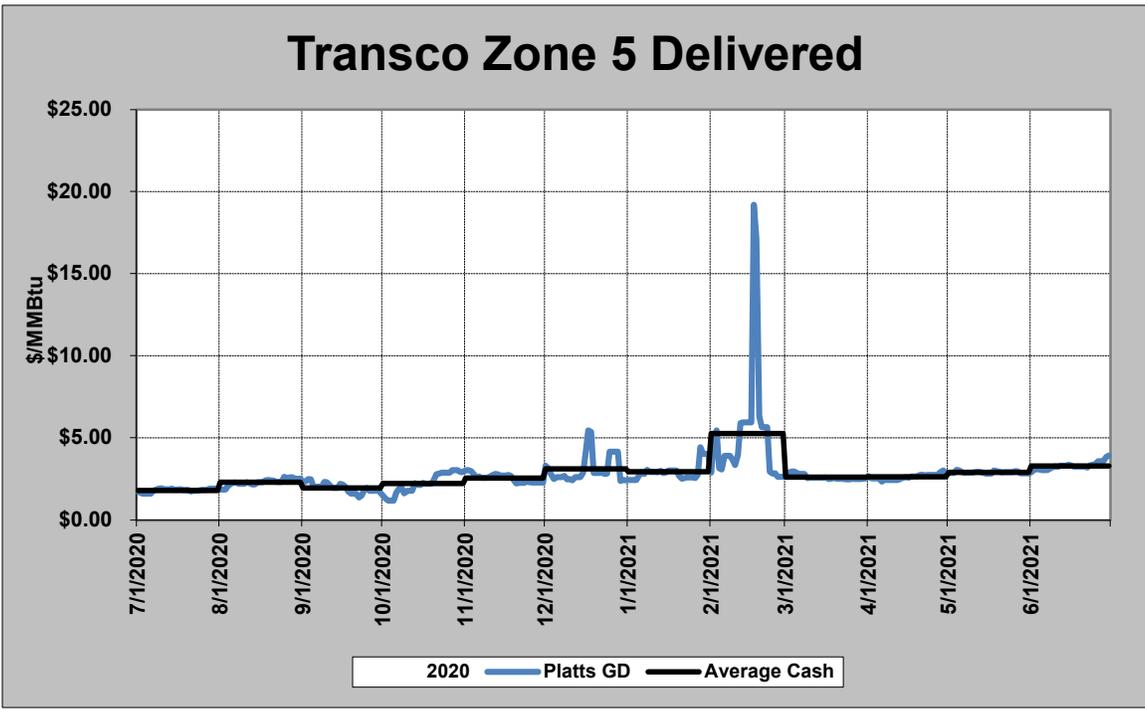
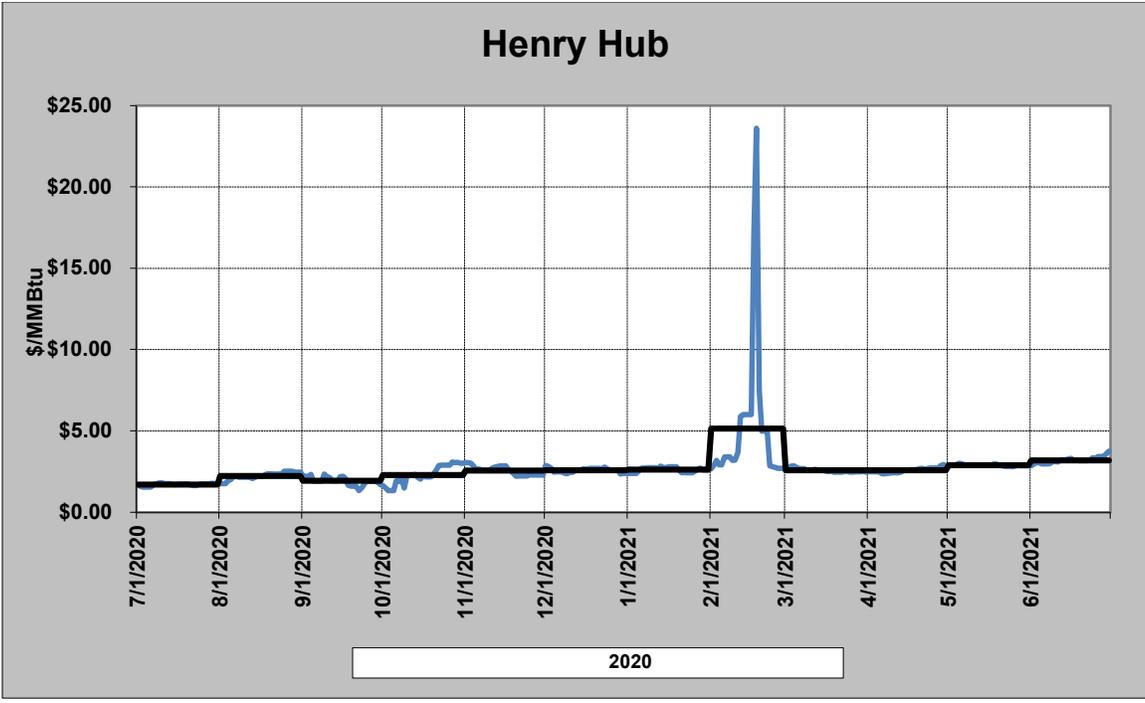
1 **Q. What is the resulting normalized system fuel expense?**

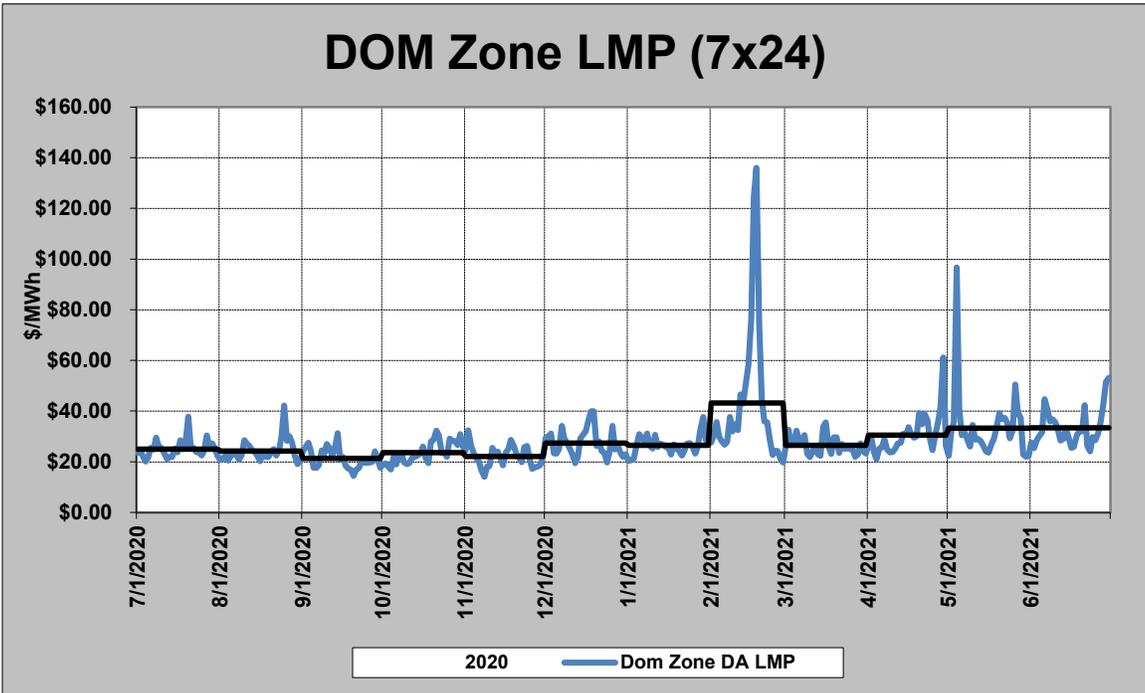
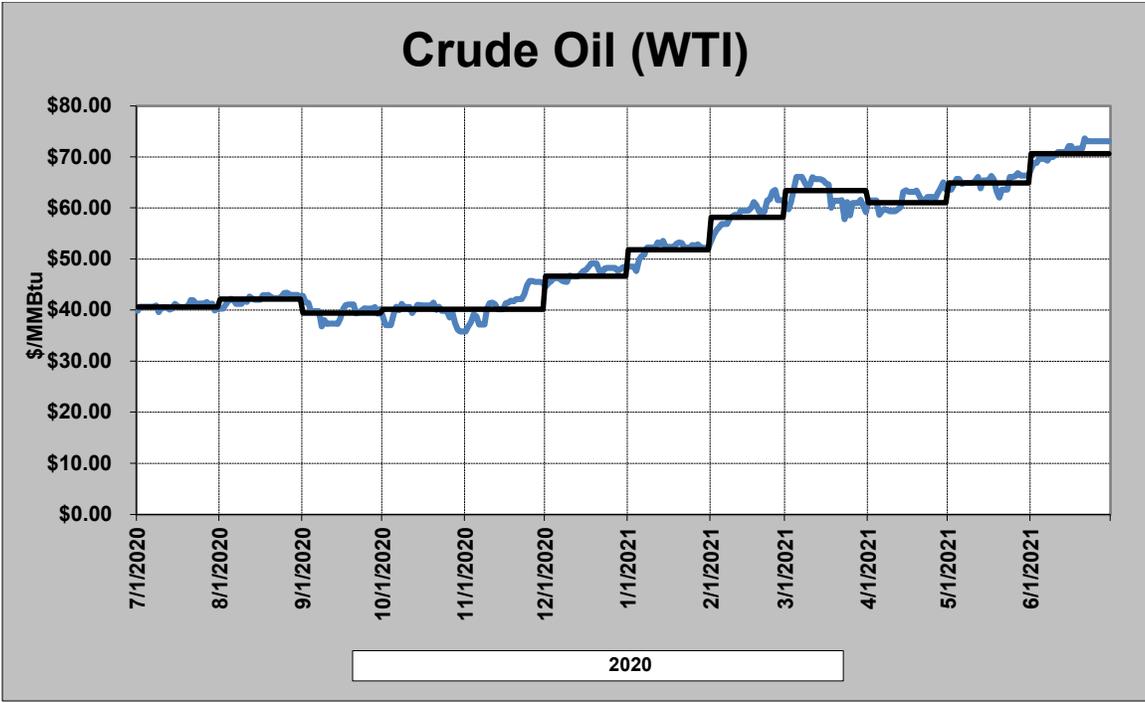
2 A. As shown by Schedule 4, which also presents the detailed calculations in  
 3 support, the resulting normalized system fuel expense is approximately \$1.8  
 4 billion.

5 **Q. Please summarize how commodity prices varied over the Test Period.**

6 A. The graphs below show the actual spot commodity prices during the Test  
 7 Period. All commodity prices trended slightly upward during the Test Period.  
 8 Company Witness Dale E. Hinson describes the Company’s coal and natural  
 9 gas buying practices, which determine the actual coal and natural gas  
 10 expenses. Spot power prices have also increased and have shown some slight  
 11 volatility during the Test Period. The charts indicate some weather-related  
 12 natural gas and power price spikes.







- 1 Q. Mr. Matzen, does this conclude your direct testimony?
- 2 A. Yes, it does.

**BACKGROUND AND QUALIFICATIONS**  
**OF**  
**JEFFREY D. MATZEN**

Jeffrey D. Matzen graduated from Virginia Tech in 1996 with a Bachelor of Arts degree in Economics. In 2001 he earned Master of Business Administration and Master of Public Policy degrees from the College of William and Mary. He joined the Company in 2007 as an Electric Pricing and Structuring Analyst. He has since held positions at the Company as an Energy Consulting Manager for Retail, a Business Modeling & Support Consultant for Alternative Energy Solutions, and a Market Operations Advisor for Energy Supply. In January 2020, Mr. Matzen was promoted to Manager of Generation System Planning where he is currently responsible for the Company's short-term operational forecast (PLEXOS model). Prior to joining Dominion, Mr. Matzen worked for Wells Fargo Advisors as an analyst and the Virginia Department of Taxation as an economist.

**DOMINION ENERGY NORTH CAROLINA  
EQUIVALENT AVAILABILITY FACTORS (%)  
NUCLEAR AND LARGE COAL UNITS**

**Company Exhibit JDM-1  
Schedule 1**

**July 2020-June 2021**

	Nuclear Units				Large Coal Units					
	North Anna		Surry		Mt. Storm		Chesterfield		VaCity	
	<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>	<u>Unit 5</u>		<u>Unit 6</u>
Jul-20	99.9%	100.0%	100.0%	100.0%	85.9%	70.7%	78.8%	88.7%	97.2%	94.2%
Aug-20	100.0%	99.2%	100.0%	100.0%	90.6%	66.0%	48.6%	97.6%	39.8%	81.4%
Sep-20	99.9%	36.7%	100.0%	100.0%	48.4%	67.6%	91.0%	65.6%	71.3%	10.5%
Oct-20	100.0%	39.0%	100.0%	100.0%	71.6%	83.3%	11.8%	31.1%	90.9%	0.0%
Nov-20	100.0%	100.0%	100.0%	100.0%	79.6%	0.0%	0.0%	1.3%	63.3%	59.9%
Dec-20	100.0%	100.0%	100.0%	100.0%	92.7%	9.3%	0.0%	94.6%	63.8%	96.8%
Jan-21	100.0%	100.0%	100.0%	100.0%	70.9%	80.0%	76.7%	100.0%	39.3%	100.0%
Feb-21	99.8%	100.0%	100.0%	100.0%	41.4%	82.5%	96.0%	97.5%	68.8%	98.2%
Mar-21	40.9%	100.0%	100.0%	100.0%	0.0%	78.6%	73.1%	90.3%	31.4%	100.0%
Apr-21	20.2%	100.0%	78.2%	100.0%	73.9%	30.4%	73.2%	57.0%	0.0%	70.0%
May-21	59.1%	100.0%	0.0%	100.0%	75.0%	90.8%	47.1%	98.1%	0.0%	36.2%
Jun-21	100.0%	100.0%	99.3%	100.0%	72.8%	73.8%	79.0%	80.0%	61.8%	100.0%
12-Month Average	85.0%	89.6%	89.8%	100.0%	66.9%	61.1%	56.3%	75.2%	52.3%	70.6%

**DOMINION ENERGY NORTH CAROLINA  
NET CAPACITY FACTORS (%)  
NUCLEAR AND LARGE COAL UNITS**

**Company Exhibit JDM-1  
Schedule 2**

**July 2020-June 2021**

	Nuclear Units				Large Coal Units					
	North Anna		Surry		Mt. Storm		Chesterfield		VaCity	
	<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 1</u>	<u>Unit 2</u>	<u>Unit 3</u>	<u>Unit 5</u>	<u>Unit 6</u>	<u>Unit 1</u>
Jul-20	99.3%	99.8%	99.4%	99.6%	63.9%	52.7%	62.7%	65.4%	68.9%	50.6%
Aug-20	99.8%	99.7%	99.7%	100.2%	58.1%	33.2%	13.4%	69.4%	26.3%	25.2%
Sep-20	101.1%	36.6%	101.5%	101.0%	23.6%	4.5%	61.4%	13.2%	10.2%	5.2%
Oct-20	102.4%	39.2%	102.4%	102.3%	40.5%	17.1%	0.0%	0.0%	0.1%	0.0%
Nov-20	103.2%	103.2%	103.2%	103.4%	55.7%	0.0%	0.0%	0.0%	37.4%	0.0%
Dec-20	103.4%	103.5%	104.0%	103.4%	80.3%	4.3%	0.0%	68.4%	39.0%	11.1%
Jan-21	103.4%	103.5%	104.1%	103.9%	55.2%	60.0%	49.1%	0.0%	0.0%	4.4%
Feb-21	102.5%	103.5%	104.4%	104.8%	36.4%	73.4%	87.5%	45.2%	24.9%	64.6%
Mar-21	38.5%	103.7%	100.4%	102.0%	0.0%	52.8%	45.7%	0.0%	16.2%	8.8%
Apr-21	17.3%	103.3%	75.4%	103.0%	57.3%	22.2%	64.1%	5.4%	0.0%	0.0%
May-21	61.1%	102.9%	0.0%	103.3%	49.1%	70.9%	38.9%	13.9%	0.0%	0.0%
Jun-21	100.6%	101.5%	93.4%	100.1%	47.7%	55.2%	61.9%	23.2%	4.8%	8.0%
12-Month Average	86.1%	91.7%	90.6%	102.3%	47.3%	37.2%	40.4%	25.3%	19.0%	14.8%

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**DOMINION ENERGY NORTH CAROLINA  
SYSTEM ENERGY SUPPLY**

**Company Exhibit JDM-1  
Schedule 3**

**Actual 12-Month Ended June 2021**

	<u>Generation (MWhs)</u>	<u>% of Energy Supply</u>
Nuclear	27,163,019	30.9%
Coal	9,177,429	10.4%
Heavy Oil	77,546	0.1%
Wood	911,298	1.0%
Combined Cycle and Combustion Turbine	39,182,136	44.6%
Solar, Wind and Hydro - Conv and Pumped Storage	3,407,723	3.9%
Net Power Transactions	10,486,986	11.9%
Less Energy for Pumping	(2,462,204)	-2.8%
Total System	87,943,932	100.0%
Nuclear, NG, Coal and Net Power Transactions		97.8%

**DOMINION ENERGY NORTH CAROLINA  
ENERGY AND FUEL EXPENSES**

**Company Exhibit JDM-1  
Schedule 4**

**Normalized and Adjusted Energy and Fuel Expense based on Actual 12-Months Ended June 2021  
(Company Ownership Only)**

(1)	(2) 12-Months Ended June 2021				(6)	(7)	(8)	(11)	(12)
	Expense (\$)	Generation (MWh)	Rate (\$/MWh)	Supply (%)					
Coal (1)	329,446,381	10,088,727	32.65	11.5	0.1686	60,063,807	10,127,238	32.65	(4) 330,654,321
Nuclear									
Surry	81,894,826	14,149,267	5.79	16.1			13,814,210		
North Anna	79,045,785	13,013,751	6.07	14.8			13,022,660		
Total Nuclear	160,940,611 (3)	27,163,019	5.92	30.9			26,836,870	5.92	(4) 158,874,270
Heavy Oil	4,569,261	77,546	58.92	0.1	0.0013	60,063,807	77,843	58.92	(4) 4,586,510
CC & CT (2)	847,700,878	39,182,136	21.63	44.6	0.6548	60,063,807	39,331,703	21.63	(4) 850,744,736
Hydro	0	2,794,839		3.2			2,794,839		0
Solar/ Wind	0	612,884		0.7			883,206		
Power Transactions									
NUG Fuel	137,849,715	2,504,124	55.05	2.8	0.0419	60,063,807	2,513,670	55.05	(4) 138,375,213
PJM Purchases	203,166,474	7,982,862	25.45	9.1	0.1334	60,063,807	8,013,353	25.45	(5) 203,942,480
Marketer Percent Adj to 72%									1,941,545
RGGI Emissions									131,078,459
Net	341,016,189	10,486,986	32.52	11.9			10,527,023		475,337,697
Pumping	0	(2,462,204)		-2.8			(2,462,204)		0
Energy Supply	1,683,673,319	87,943,932	19.14	100.0			88,116,518	20.66	1,820,197,534

NOTE: ALL VALUES REFLECT COMPANY'S OWNERSHIP OF NORTH ANNA, CLOVER AND BATH COUNTY

- (1) Coal includes wood and natural gas steam generation
- (2) CC & CT includes jet oil, light oil and natural gas generation
- (3) Nuclear expense excludes interim storage
- (4) Fuel expense rate based on weather normalized fuel expense
- (5) Purchases include 71% of the fuel expense and the impact of the FTRs

**DIRECT TESTIMONY  
OF  
RONNIE T. CAMPBELL  
ON BEHALF OF  
DOMINION ENERGY NORTH CAROLINA  
BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-22, SUB 605**

1   **Q.    Please state your name, business address, and position of employment.**

2    A.    My name is Ronnie T. Campbell, and my business address is 707 East Main  
3        Street, Richmond, Virginia 23219. I am a Supervisor of Accounting for the  
4        Dominion Energy Virginia and Contracted Assets operating segments of  
5        Dominion Energy, Inc., which includes responsibility for Virginia Electric &  
6        Power Company, which operates in North Carolina as Dominion Energy  
7        North Carolina (“Company”). My responsibilities include overseeing  
8        personnel responsible for recording the Company’s actual fuel and purchased  
9        power expenses, as well as any under-/over-recovery of such expenses  
10       through the fuel deferral mechanism, operation and maintenance accounting  
11       activities, reserve analysis and joint owner billings. A statement of my  
12       background and qualifications is attached as Appendix A.

13   **Q.    Mr. Campbell, what is the purpose of your testimony in this proceeding?**

14    A.    My testimony presents: 1) the Company’s actual system fuel expenses for the  
15        twelve months ended June 30, 2021 (“test period”); 2) the Company’s North  
16        Carolina recovery experience as of June 30, 2021; and 3) the accounting  
17        treatment for non-utility generators (“NUGs”).

1 **Q. In the course of your testimony will you introduce any exhibits?**

2 A. Yes. Company Exhibit RC-1 has been prepared under my direction and  
3 supervision and is accurate and complete to the best of my knowledge and  
4 belief. Company Exhibit RC-1 consists of the following five schedules, as  
5 prescribed by North Carolina Utilities Commission (“Commission”) Rule R8-  
6 55:

7 Schedule 1: Actual System Fuel and Purchased Power Expenses

8 Schedule 2: North Carolina Recovery Experience

9 Schedule 3: Actual Kilowatt-hour Sales

10 Schedule 4: Actual Fuel-Related Revenues

11 Schedule 5: Inventories of Fuel Burned

12 **Q. Please provide the Company’s actual fuel expenses incurred for the test**  
13 **period and the Company’s North Carolina recovery position as of June**  
14 **30, 2021.**

15 A. Based on the North Carolina jurisdictional fuel factor methodology approved  
16 by the Commission, the actual system fuel expenses incurred by the Company  
17 during the test period totaled \$1,683,673,319. The Company was in a fuel  
18 cost under-recovery position of \$4,011,772 on a North Carolina jurisdictional  
19 basis as of June 30, 2021. Details regarding fuel expenses and the calculation  
20 of this under-recovery position, also referred to as the Experience

1 Modification Factor (“EMF”), are provided in Company Exhibit RC-1 and are  
2 discussed later in my testimony.

3 **Q. How did the Company account for NUG energy costs?**

4 A. The Company does not currently have any dispatchable NUGs. If there were  
5 contracts with dispatchable NUGs in the future, the Company would include  
6 in the EMF calculation the actual fuel costs provided by those dispatchable  
7 NUGs. For dispatchable NUGs that do not provide actual fuel costs, the  
8 Company would include 71% of the reasonable and prudent energy costs in  
9 the EMF calculation. Additionally, to the extent a dispatchable NUG provides  
10 market-based energy rather than dispatching its facility, the Company would  
11 include 71% of the reasonable and prudent energy costs for such market-based  
12 energy in the EMF calculation. Use of the 71% “marketer’s percentage” was  
13 agreed to between the Company and the Public Staff and approved by the  
14 Commission in the Company’s 2019 fuel factor proceeding, Docket No. E-22,  
15 Sub 579.

16 **Q. Please provide an explanation of the five schedules presented in Company**  
17 **Exhibit RC-1.**

18 A. Schedule 1, Column 1 presents the system fuel and purchased power expenses  
19 incurred by the Company during the test period totaling \$1,741,618,027. Of  
20 that amount, \$1,683,673,319 was included in the EMF calculation based on

1 the North Carolina jurisdictional fuel factor methodology approved by the  
2 Commission, as shown by month in Column 2.

3 **Q. Please explain the adjustments that cause the amounts in Schedule 1,  
4 Column 1 to differ from those in Schedule 1, Column 2.**

5 A. The following adjustments are necessary to comply with Commission Rule  
6 R8-55 and its orders pertaining to fuel expenses.

7 1. Nuclear (page 1 of Schedule 1)

8 Column 2 excludes costs related to the interim storage of spent nuclear  
9 fuel.

10 2. Purchased Power (page 2 of Schedule 1)

11 Column 2 excludes PJM capacity costs, the non-fuel portion of  
12 purchases from PJM and any non-fuel NUG expenses not approved for  
13 recovery through the fuel factor.

14 **Q. Schedule 2 shows that the EMF calculation resulted in an under-recovery  
15 of \$4,011,772. Please provide further explanation of this schedule.**

16 A. Schedule 2 presents the North Carolina jurisdictional recovery experience by  
17 month for the test period. Schedule 2 is presented in three parts. Part 1 shows  
18 the total North Carolina system fuel and purchased power costs excluding the  
19 system allowance for funds used during construction (“AFUDC”). Part II  
20 shows the North Carolina jurisdictional fuel and purchased power costs

1 including credit adjustments for the fuel cost from non-requirements sales and  
2 PJM off-system sales, Regional Greenhouse Gas Initiative (“RGGI”) related  
3 emissions expenses and other fuel-related adjustments. Part III presents, by  
4 month, the North Carolina jurisdictional fuel revenues and the North Carolina  
5 jurisdictional monthly and cumulative recovery experience.

6 **Q. Schedule 2 includes RGGI related emissions expenses. Please provide**  
7 **further explanation.**

8 A. In 2020, the Virginia General Assembly enacted legislation to regulate CO2  
9 emissions from electric generation facilities and Virginia joined the Regional  
10 Greenhouse Gas Initiative (“RGGI”). The Company is seeking to recover  
11 costs related to the emittance of tons and usage of allowances purchased under  
12 the RGGI program through a rate adjustment clause in Virginia. The  
13 Company has filed an application with the Commission seeking to recover  
14 RGGI costs through its fuel factor. The Company’s application is pending in  
15 Docket No. E-22, Sub 601. The amounts in Schedule 2 are based upon  
16 consumption of emitted tons for the North Carolina jurisdiction.

17 **Q. What were the total fuel costs and fuel revenues for North Carolina**  
18 **jurisdictional customers?**

19 A. The fuel costs allocated to North Carolina jurisdictional customers totaled  
20 \$86,410,097. The Company received fuel revenues totaling \$82,398,324.

1           The difference between the fuel costs and the fuel revenues resulted in an  
2           under-recovery of \$4,011,772 for the test period.

3   **Q.    Please describe the information contained in Schedules 3 - 5 presented in**  
4   **Company Exhibit RC-1.**

5   A.    Schedule 3 provides the actual kilowatt-hour sales at a system level and at the  
6   North Carolina jurisdictional customer level for the test period. Schedule 4  
7   provides actual fuel revenues recorded for the test period. Column 1 of  
8   Schedule 4 provides the system fuel revenue, Column 2 provides the revenue  
9   received from North Carolina jurisdictional customers for the current fuel test  
10   period, and Column 3 provides the revenue received from North Carolina  
11   jurisdictional customers for Rider B. Schedule 5 provides inventory values of  
12   fuels burned in the production of electricity. Inventory values are recorded on  
13   the books of Virginia Electric and Power Company and its subsidiary,  
14   Virginia Power Services Energy Corp, Inc.

15   **Q.    Mr. Campbell, does this conclude your direct testimony?**

16   A.    Yes, it does.

**BACKGROUND AND QUALIFICATIONS**  
**OF**  
**RONNIE T. CAMPBELL, CPA**

Ronnie T. Campbell graduated from Virginia Tech with Bachelor of Science degree in Accounting. Mr. Campbell received his Certified Public Accountant license in 1998. He was controller at World Access Service Corporation (Allianz Global Assistance) prior to joining Dominion Energy Services, Inc. in 2007. His accounting experience includes retail, non-utility generation, petroleum and insurance industries. He has held several supervisor positions within the Dominion Energy Services, Inc. accounting organization, including contracted assets and non-fuel accounting. He transitioned into his current role in 2009. His current responsibilities include overseeing personnel responsible for the Company's regulated fuel and operation and maintenance accounting activities, purchased power expenses, deferred fuel mechanism, reserve analysis and joint owner billings.

Mr. Campbell has previously presented testimony before the North Carolina Utilities Commission.

**Dominion Energy North Carolina  
Actual System Fuel and Purchased Power Expenses  
July 2020 - June 2021**

	<u>System Expenses As Booked (1)</u>	<u>North Carolina System Expenses As Booked (2)</u>
<b><u>Steam Generation Fuel Cost</u></b>		
July 2020	\$ 60,500,358	\$ 60,500,358
August	37,982,728	37,982,728
September	21,643,643	21,643,643
October	9,662,712	9,662,712
November	17,161,154	17,161,154
December	32,527,432	32,527,432
January 2021	23,712,117	23,712,117
February	40,664,330	40,664,330
March	18,973,033	18,973,033
April	19,839,552	19,839,552
May	24,055,173	24,055,173
June	27,293,408	27,293,408
FERC Account 501 - Steam Fuel Cost	\$ 334,015,641	\$ 334,015,641
<b><u>Nuclear Generation Fuel Cost</u></b>		
July 2020	\$ 14,808,118	\$ 14,772,716
August	14,906,842	14,824,910
September	12,331,758	12,142,274
October	13,066,082	12,914,342
November	15,437,812	14,977,217
December	15,924,360	15,504,711
January 2021	15,565,404	15,521,688
February	13,919,469	13,833,265
March	12,313,497	12,264,028
April	10,417,689	10,383,392
May	9,927,408	9,807,240
June	14,072,770	13,994,828
FERC Account 518 - Nuclear Fuel Cost	\$ 162,691,209	\$ 160,940,611

**Dominion Energy North Carolina  
Actual System Fuel and Purchased Power Expenses  
July 2020 - June 2021**

	<u>System Expenses As Booked (1)</u>	<u>North Carolina System Expenses As Booked (2)</u>
<b><u>Other Generation Fuel Cost</u></b>		
July 2020	\$ 66,131,936	\$ 66,131,936
August	74,959,612	74,959,612
September	49,247,274	49,247,274
October	45,554,031	45,554,031
November	54,312,309	54,312,309
December	89,538,644	89,538,644
January 2021	95,176,891	95,176,891
February	99,415,616	99,415,616
March	79,185,119	79,185,119
April	56,689,980	56,689,980
May	53,794,388	53,794,388
June	83,695,079	83,695,079
FERC Account 547 - Other Fuel Cost	<u>\$ 847,700,878</u>	<u>\$ 847,700,878</u>
Total Cost of Fuel Used in Current Generation	<u>\$ 1,344,407,729</u>	<u>\$ 1,342,657,131</u>
<b><u>Purchased Power</u></b>		
July 2020	21,269,410	\$ 21,354,873
August	16,517,290	17,457,849
September	28,139,560	24,566,328
October	19,841,061	18,982,546
November	23,646,582	21,442,315
December	24,494,039	21,745,295
January 2021	30,797,855	26,893,899
February	41,526,344	35,393,766
March	22,016,954	20,804,210
April	39,488,325	33,621,706
May	72,620,186	55,863,100
June	56,852,690	42,890,301
FERC Account 555 - Purchased Power Cost	<u>\$ 397,210,298</u>	<u>\$ 341,016,189</u>

**Dominion Energy North Carolina  
Actual System Fuel and Purchased Power Expenses  
July 2020 - June 2021**

<u>Total Fuel and Purchased Power Cost</u>	<u>System Expenses As Booked (1)</u>	<u>North Carolina System Expenses As Booked (2)</u>
July 2020	\$ 162,709,823	\$ 162,759,884
August	144,366,472	145,225,099
September	111,362,236	107,599,519
October	88,123,885	87,113,630
November	110,557,858	107,892,995
December	162,484,475	159,316,081
January 2021	165,252,267	161,304,595
February	195,525,760	189,306,978
March	132,488,605	131,226,391
April	126,435,545	120,534,630
May	160,397,154	143,519,900
June	181,913,948	167,873,617
<b>Total Fuel and Purchased Power Cost</b>	<b>\$ 1,741,618,027</b>	<b>\$ 1,683,673,319</b>

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**Dominion Energy North Carolina  
North Carolina Recovery Experience  
Twelve Months Ended June 2021**

<b>PART I</b>	July-20	August-20	September-20	October-20	November-20	December-20	January-21	February-21	March-21	April-21	May-21	June-21	Total
FERC Account 501 - Steam Fuel Cost	\$ 60,500,358	\$ 37,982,728	\$ 21,643,643	\$ 9,662,712	\$ 17,161,154	\$ 32,527,432	\$ 23,712,117	\$ 40,664,330	\$ 18,973,033	\$ 19,839,552	\$ 24,055,173	\$ 27,293,408	\$ 334,015,641
FERC Account 518 - Nuclear Fuel Cost	\$ 14,772,716	\$ 14,824,910	\$ 12,142,274	\$ 12,914,342	\$ 14,977,217	\$ 15,504,711	\$ 15,521,688	\$ 13,833,265	\$ 12,264,028	\$ 10,383,392	\$ 9,807,240	\$ 13,994,828	\$ 160,940,611
FERC Account 547 - Other Fuel Cost	\$ 66,131,936	\$ 74,959,612	\$ 49,247,274	\$ 45,554,031	\$ 54,312,309	\$ 89,538,644	\$ 95,176,891	\$ 99,415,616	\$ 79,185,119	\$ 56,689,980	\$ 53,794,388	\$ 83,695,079	\$ 847,700,878
FERC Account 555 - Purchased Power Cost	\$ 21,354,873	\$ 17,457,849	\$ 24,566,328	\$ 18,982,546	\$ 21,442,315	\$ 21,745,295	\$ 26,893,899	\$ 35,393,766	\$ 20,804,210	\$ 33,621,706	\$ 55,863,100	\$ 42,890,301	\$ 341,016,189
Total NC System Fuel and Purchased Power Cost	\$ 162,759,884	\$ 145,225,099	\$ 107,599,519	\$ 87,113,630	\$ 107,892,995	\$ 159,316,081	\$ 161,304,595	\$ 189,306,978	\$ 131,226,391	\$ 120,534,630	\$ 143,519,900	\$ 167,873,617	\$ 1,683,673,319
Exclude System AFUDC	(21,387)	(21,455)	(16,555)	(17,702)	(21,680)	(22,437)	(22,451)	(19,825)	(16,109)	(14,110)	(16,006)	(22,539)	(232,256)
Total NC System Fuel and Purchased Power Cost w/o AFUDC	\$ 162,738,497	\$ 145,203,644	\$ 107,582,964	\$ 87,095,928	\$ 107,871,315	\$ 159,293,643	\$ 161,282,144	\$ 189,287,153	\$ 131,210,282	\$ 120,520,520	\$ 143,503,894	\$ 167,851,078	\$ 1,683,441,063
<b>PART II</b>													
NC Jurisdictional Fuel and Purchased Power Cost w/o AFUDC	\$ 7,903,302	\$ 3,584,580	\$ 6,225,164	\$ 6,092,211	\$ 6,618,328	\$ 8,472,046	\$ 9,523,408	\$ 8,431,857	\$ 7,369,229	\$ 4,867,914	\$ 7,242,010	\$ 7,926,297	\$ 84,256,345
Credit for the fuel cost from Non-Requirement Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Credit for the fuel cost from PJM Off-system Sales	\$ (216,644)	\$ (115,634)	\$ (179,414)	\$ (58,726)	\$ (61,596)	\$ (95,383)	\$ (28,332)	\$ (261,952)	\$ (117,401)	\$ (46,473)	\$ (3,283)	\$ (143,410)	\$ (1,328,248)
RGGI Related Emissions	-	-	-	-	-	-	677,700	654,783	822,118	335,462	376,856	422,731	3,289,650
Other Fuel Related Adjustments <sup>(1)</sup>	16,744	16,797	12,961	13,859	16,974	17,566	17,577	15,521	12,612	13,864	15,728	22,147	192,350
Adjusted NC Jurisdiction Fuel and Purchased Power Cost	\$ 7,703,402	\$ 3,485,743	\$ 6,058,711	\$ 6,047,343	\$ 6,573,706	\$ 8,394,230	\$ 10,190,353	\$ 8,840,208	\$ 8,086,557	\$ 5,170,767	\$ 7,631,311	\$ 8,227,765	\$ 86,410,097
<b>PART III</b>													
Adjusted NC Jurisdiction Fuel and Purchased Power Cost	\$ 7,703,402	\$ 3,485,743	\$ 6,058,711	\$ 6,047,343	\$ 6,573,706	\$ 8,394,230	\$ 10,190,353	\$ 8,840,208	\$ 8,086,557	\$ 5,170,767	\$ 7,631,311	\$ 8,227,765	\$ 86,410,097
NC Jurisdictional Revenue	(9,095,608)	(4,288,050)	(7,999,849)	(8,640,851)	(8,199,100)	(8,539,827)	(9,892,516)	(5,317,665)	(4,091,892)	(4,061,961)	(5,799,922)	(6,471,083)	(82,398,324)
(Over)/Under Recovery	\$ (1,392,207)	\$ (802,307)	\$ (1,941,138)	\$ (2,593,508)	\$ (1,625,394)	\$ (145,597)	\$ 297,837	\$ 3,522,543	\$ 3,994,665	\$ 1,108,807	\$ 1,831,389	\$ 1,756,681	\$ 4,011,772
Cumulative (Over)/Under Recovery	\$ (1,392,207)	\$ (2,194,513)	\$ (4,135,651)	\$ (6,729,159)	\$ (8,354,553)	\$ (8,500,150)	\$ (8,202,313)	\$ (4,679,770)	\$ (685,105)	\$ 423,702	\$ 2,255,091	\$ 4,011,772	

<sup>(1)</sup> Includes jurisdictional AFUDC and AFUDC tax credits.

**Dominion Energy North Carolina  
Actual Kilowatt-hour (kWh) Sales  
Twelve Months Ended June 2021**

*(In Thousands)*

	<b>System kWh Sales*</b>	<b>North Carolina Retail kWh Sales*</b>
	<u>(1)</u>	<u>(2)</u>
July 2020	8,986,413	436,420
August	8,229,009	203,146
September	6,631,498	383,724
October	5,881,831	411,424
November	6,365,021	390,519
December	7,714,118	410,276
January 2021	8,026,318	473,939
February	7,395,547	329,437
March	6,744,291	378,783
April	5,410,744	218,544
May	6,267,993	316,318
June	7,456,133	352,095
Total kWh Sales	<u><u>85,108,915</u></u>	<u><u>4,304,625</u></u>

\*Including unbilled kWh sales.

**Dominion Energy North Carolina  
Actual Fuel Related Revenues  
Twelve Months Ended June 2021**

		System Fuel Related Revenues As Booked*	North Carolina Retail Fuel Factor Related Revenues*	
			Current Period	EMF Rider B
		(1)	(2)	(3)
July	2020	\$159,155,461	\$ 9,173,002	60,376
August		141,817,763	4,288,050	28,301
September		116,058,742	7,999,849	52,240
October		103,260,917	8,640,851	56,693
November		111,372,248	8,199,100	53,876
December		134,660,722	8,539,827	55,690
January	2021	140,222,927	9,892,516	64,696
February		126,207,711	5,317,665	(787,072)
March		116,547,908	6,854,972	(422,181)
April		88,204,207	4,061,961	(251,089)
May		108,675,780	5,799,922	(357,945)
June		129,225,336	6,471,083	(399,481)
Revenues		<u>\$ 1,475,409,721</u>	<u>\$ 85,238,797</u>	<u>\$ (1,845,895)</u>

\*Including unbilled kWh revenues.

**Dominion Energy North Carolina  
Inventories of Fuel Burned  
As of June 30, 2021**

<u>Fuel</u> (1)	<u>Inventory Measure</u> (2)		<u>Inventory Volume</u> (3)	<u>Inventory Value</u> (4)
Coal <sup>(b)</sup>	Tons	Coal Rec	1,448,179	\$ 79,947,654
Wood <sup>(b)</sup>	Tons	Wood & Jet Fuel Rec	71,631	2,386,777
Light Oil <sup>(a)</sup>	Gallons	Oil Rec	59,150,612	115,080,268
Heavy Oil <sup>(a)</sup>	Barrels	Oil Rec	812,976	36,636,749
Jet Fuel <sup>(a)</sup>	Gallons	Wood & Jet Fuel Rec	47,111	119,047
Natural Gas <sup>(a)</sup>	Dth	Power Gen. Summary	1,750,417	3,648,269
Nuclear Fuel Stock <sup>(b)</sup>	N/A			450,627,109
<b>Total</b>				<u><u>\$ 688,445,873</u></u>

(a) Inventories are held by Virginia Power Services Energy Corp, Inc.

(b) Inventories are held by Virginia Electric & Power Company.

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Aug 10 2021

**DIRECT TESTIMONY  
OF  
DALE E. HINSON  
ON BEHALF OF  
DOMINION ENERGY NORTH CAROLINA  
BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-22, SUB 605**

1   **Q.    Please state your name, business address, and position of employment.**

2    A.    My name is Dale E. Hinson, and my business address is 600 Canal Street,  
3        Richmond, Virginia 23219. I am the Manager-Gas Supply and a member of  
4        the management team responsible for fossil fuel procurement for Virginia  
5        Electric and Power Company, which operates in North Carolina as Dominion  
6        Energy North Carolina (the “Company”). The Dominion Energy Fuels group  
7        handles the procurement, scheduling, transportation, and inventory  
8        management for natural gas, coal, biomass, and oil consumed at the  
9        Company’s power stations. A statement of my background and qualifications  
10       is attached as Appendix A.

11   **Q.    What is the purpose of your testimony in this proceeding?**

12    A.    I will discuss the Company’s fossil fuel procurement practices, including any  
13        recent changes to those practices, for the delivery of fuels to the Company’s  
14        fossil generation fleet during the test period of July 1, 2020 to June 30, 2021  
15        (“Test Period”), in compliance with Rule 8-55(e)(5).

1 **Q. Are you sponsoring any exhibits?**

2 A. Yes. Company Exhibit DEH-1, consisting of one schedule, was prepared  
3 under my direction and is accurate and complete to the best of my knowledge.  
4 Company Exhibit DEH-1 is the Dominion Energy North Carolina Summary  
5 Report of Fuel Transactions with Affiliates during the Test Period.

6 **I. FUEL COMMODITY MARKETS AND PROCUREMENT STRATEGIES**

7 **Q. Please discuss the trends that affected fuel commodity markets during the**  
8 **Test Period.**

9 A. During the Test Period of July 2020 through June 2021, natural gas, coal and  
10 oil commodity prices increased as Winter 2020/21 temperatures and post-  
11 COVID 19 recovery played key roles. For the Winter 2020/21 period,  
12 Virginia / North Carolina experienced temperatures approximately 6%  
13 warmer than normal, but approximately 8% colder than the last winter period.  
14 Relatively cold temperatures experienced in January and February 2021 were  
15 the difference between Winter 2020/21 and Winter 2019/20. Natural gas  
16 prices reflected stronger demand and lower post-Winter 2020/21 inventories,  
17 as Transco Zone 5 prices increased 82% comparing July 2020 to June 2021  
18 (\$3.28/MMBtu) average spot prices. The West Texas Intermediate (WTI) oil  
19 price has increased nearly \$30/barrel, from \$40.76/barrel in July 2020 to  
20 \$71.32/barrel in June 2021. The Central Appalachian coal price has increased  
21 73% from \$35.45/ton in July 2020 to \$61.27/ton in June 2021.

1 **Q. Has the Company changed its fuel procurement practices?**

2 A. No, the Company continues to follow the same procurement policy as it has in  
3 the past in accordance with the Company's Fuel Procurement Practices Report  
4 ("Dominion Fuel Policy"), a copy of which was filed with the Commission on  
5 December 30, 2013, in Docket No. E-100, Sub 47A. The Dominion Fuel  
6 Policy addresses the physical procurement of fossil and nuclear fuels.

7 **Q. Does the Company currently have a price hedging program?**

8 A. Yes, the Company has a price hedging program under which the Company  
9 price hedges commodities needed for power generation using a range of  
10 volume targets, which gradually decrease over a three-year period. The  
11 Company's fuel price hedging program is discussed in greater detail in the  
12 Fuel Procurement Strategy Report filed with the Virginia Commission on  
13 February 1, 2021, in Case No. PUR-2020-00031 (the "Report"). In summary,  
14 as that Report describes, through competitive fuel supply solicitations and  
15 other market purchases, the Company maintains a reliable supply of fuel  
16 specifically designed for combustion in the Company's generation stations.  
17 The duration of these physical procurement agreements is staggered (*i.e.*,  
18 different contract lengths) and can also include a fixed price component, the  
19 inclusion of which creates a price hedge. Managing price volatility is an  
20 important aspect of the Company's price hedging program and can be further  
21 supported, as needed, using financial transactions.

1

## II. NATURAL GAS PROCUREMENT

2 **Q. Please discuss the Company's gas procurement practices.**

3 A. The Company employs a disciplined natural gas procurement plan to ensure a  
4 reliable supply of natural gas at competitive prices. Through periodic  
5 solicitations and the open market, the Company serves its natural gas-fired  
6 fleet using a combination of day-ahead, monthly, seasonal, and multiyear  
7 physical gas supply purchases.

8 In addition to managing its natural gas supply portfolio, the Company  
9 evaluates its diverse portfolio of pipeline and storage contracts to determine  
10 the most reliable and economical delivered fuel options for each power  
11 station. This portfolio of natural gas transportation contracts provides access  
12 to multiple natural gas supply and trading points from the Marcellus shale  
13 region to the southeast region. Further, the Company actively participates in  
14 the interstate pipeline capacity release and physical supply markets to  
15 augment its transportation portfolio and enhance reliability at a reasonable  
16 cost.

17 **Q. Were there any changes to the Company's natural gas-fired generation  
18 fleet during the Test Period?**

19 A. No, there were no additions or retirements. Company-owned natural gas-fired  
20 generation accounted for as much as 53% and, on average, 44% of the  
21 Company's electricity generation, during the Test Period.

1 **Q. Mr. Hinson, does the Company continue to experience significant**  
2 **interstate pipeline constraints?**

3 A Yes, the Company continues to experience significant interstate pipeline  
4 constraints negatively affecting the flexibility of its natural gas-fired  
5 generation fleet. Transco continued to implement certain Priority of Service  
6 changes to its firm transportation service tariff restricting segmentation  
7 flexibility affecting the Company's ability to offer and fuel certain gas-fired  
8 generation stations. Transco also continued to enforce its existing, daily  
9 imbalance limit. Together, these changes have limited the Company's ability  
10 to handle natural gas consumption swings typically caused by various factors  
11 including, but not limited to: PJM directives, unforeseen outages, system  
12 emergencies and electric generation variability. Furthermore, Transco's daily  
13 imbalance restriction was in addition to Transco issuing operational flow  
14 orders ("OFOs") during times of constraint. Transco OFO constraints were in  
15 effect approximately 62% of the time during the Test Period, however,  
16 together with the restrictions mentioned above, Transco is effectively 100%  
17 constrained.

18 Furthermore, in February 2021, Columbia Gas Transmission ("Columbia  
19 Gas") imposed a primary delivery point restriction, at the Company's Warren  
20 County power station location. The Company never experienced a primary  
21 delivery restriction at this location, since Warren County Power Station's  
22 2016 in-service date. This restriction negated any natural gas supplies  
23 delivered on a 'secondary' or non-primary basis, including those the Company

1 purchased from third parties to augment its deliveries to the Warren County  
2 power station. Lastly, Columbia Gas proposed a Daily Scheduling Penalty  
3 Tariff, as part of its recent Section 4 rate FERC filing (FERC Docket No.  
4 RP20-1060). Notably, the proposed Tariff language would impose a daily  
5 penalty for consumption outside the Tariff-defined 10% tolerance, regardless  
6 of Columbia Gas system's operating conditions at the time.

7 **Q. Mr. Hinson, you discuss how pipeline constraints negatively affect the**  
8 **flexibility of the Company's natural gas-fired generation fleet. How else**  
9 **can pipeline constraints be viewed?**

10 A. Limiting the Company's ability to handle natural gas consumption swings to  
11 accommodate the variability of electric power generation requirements  
12 ultimately limits the Company's electric dispatch efficiencies and related costs  
13 and exposes the Company to PJM capacity performance risk.

### 14 III. COAL PROCUREMENT

15 **Q. Please discuss the Company's coal procurement practices.**

16 A. The Company employs a multiyear physical procurement plan to ensure a  
17 reliable supply of coal, delivered to its generating stations by truck or rail, at  
18 competitive prices. This is accomplished by procuring the Company's long-  
19 term coal requirements primarily through periodic solicitations and  
20 secondarily on the open market for short-term or spot needs. The effect of  
21 procuring both long- and short-term coal supplies provides a layering-in of  
22 contracts with staggered terms and blended prices. This ensures a reliable

1 supply of fuel with limited exposure to potential dramatic market price  
2 swings. This blend of contract terms creates a diverse coal fuel portfolio and  
3 allows the Company to actively manage its fuel procurement strategy,  
4 contingency plans, and any risk of supplier non-performance.

#### 5 **IV. BIOMASS PROCUREMENT**

6 **Q. Please discuss the Company's biomass procurement practices.**

7 A. The Company has a varied procurement strategy for its biomass stations  
8 depending on the geographical region of the power station. Hopewell and  
9 Southampton Power Stations are served by multiple suppliers under both short  
10 and long-term agreements, enabling the Company to increase the reliability of  
11 its biomass supply by diversifying its supplier base. The Company purchases  
12 long-term fuel supply through one primary supplier at its Altavista Power  
13 Station. Procurement for the Company's biomass needs at its co-fired  
14 Virginia City Hybrid Energy Center facility is also conducted via short and  
15 long-term contracts with various suppliers. All four biomass-consuming  
16 plants receive wood deliveries via truck.

#### 17 **V. OIL PROCUREMENT**

18 **Q. Please discuss the Company's oil procurement practices.**

19 A. The Company purchases its No. 2 fuel oil and No. 6 fuel oil requirements on  
20 the spot market and optimizes its inventory, storage, and transportation to  
21 ensure reliable supply to its power generating facilities. Trucks, vessels,  
22 barges, and pipelines are employed to transport oil to the Company's stations

1 and third-party storage locations, ensuring a reliable supply of oil and  
2 mitigating the price risk associated with potentially volatile prices for these  
3 products.

4 **Q. Does this conclude your pre-filed direct testimony?**

5 A. Yes, it does.

**BACKGROUND AND QUALIFICATIONS  
OF  
DALE E. HINSON**

Dale E. Hinson graduated from University of Missouri-Columbia in 1989 with a Bachelor of Science degree in Accounting and received a Master of Business Administration degree from Washington University in St. Louis-Olin Business School in 1997. He joined Dominion in 2006 as a Senior Energy Asset Trader and in 2011 became Manager of Power Asset Management. In 2013, Mr. Hinson assumed his current role as Manager – Gas Supply.

Prior to joining Dominion, Mr. Hinson worked most recently as a Senior Trader for LG&E and KU Energy LLC from 1997 to 2006. He has also held positions with Arch Coal as Director of Market Research and with Arthur Andersen & Co. as an Auditor.

Mr. Hinson has previously presented testimony before the North Carolina Utility Commission and the State Corporation Commission of Virginia.

**DOMINION ENERGY NORTH CAROLINA**  
**SUMMARY REPORT OF FUEL TRANSACTIONS WITH AFFILIATES**  
**FOR THE PERIOD JULY 2020 - JUNE 2021**  
**(IN THOUSANDS)**

**Dominion Energy North Carolina Receiving from Affiliate:**

Docket No. E-22, Sub 605

VP Services Energy Corp., Inc.  
Sale Of Natural Gas And Oil Inventory

<u>Month</u>	<u>Amount</u>
July-20	\$68,376
August-20	\$76,486
September-20	\$52,916
October-20	\$46,827
November-20	\$55,180
December-20	\$91,286
January-21	\$95,493
February-21	\$100,138
March-21	\$79,432
April-21	\$57,190
May-21	\$54,380
June-21	\$84,605

Total Charged to FERC Account 151      \$862,309

**DOMINION ENERGY NORTH CAROLINA  
SUMMARY REPORT OF FUEL TRANSACTIONS WITH AFFILIATES  
FOR THE PERIOD JULY 2020 - JUNE 2021**

**Dominion Energy Fuel Services, Inc. and Virginia Power Services Energy Corp., Inc.  
Natural Gas Transaction Summary**

Docket No. E-22, Sub 605

	Volume			Dollars			WACOG		
	Purchase	Sale	Difference	Purchase	Sale	Difference	Purchase	Sale	Difference
Jul-20	31,086,404	31,086,362	42	\$ 51,118,670.39	\$ 51,118,158.42	\$ 511.97	\$ 1.644	\$ 1.644	0.000
Aug-20	31,218,581	31,220,487	(1,906)	\$ 53,583,176.74	\$ 53,588,028.95	\$ (4,852.21)	\$ 1.716	\$ 1.716	(0.000)
Sep-20	24,016,116	24,017,831	(1,715)	\$ 32,671,927.84	\$ 32,674,359.10	\$ (2,431.26)	\$ 1.360	\$ 1.360	(0.000)
Oct-20	21,474,102	21,475,048	(946)	\$ 29,668,119.29	\$ 29,671,720.60	\$ (3,601.32)	\$ 1.382	\$ 1.382	(0.000)
Nov-20	18,261,524	18,261,997	(473)	\$ 37,935,754.92	\$ 37,936,169.51	\$ (414.59)	\$ 2.077	\$ 2.077	0.000
Dec-20	24,148,629	24,150,059	(1,430)	\$ 71,235,504.94	\$ 71,241,559.94	\$ (6,055.00)	\$ 2.950	\$ 2.950	(0.000)
Jan-21	24,153,536	24,154,000	(464)	\$ 77,520,404.80	\$ 77,521,590.50	\$ (1,185.70)	\$ 3.209	\$ 3.209	0.000
Feb-21	20,332,746	20,333,029	(283)	\$ 88,220,545.39	\$ 88,222,021.44	\$ (1,476.05)	\$ 4.339	\$ 4.339	(0.000)
Mar-21	21,454,967	21,456,034	(1,067)	\$ 58,521,569.26	\$ 58,524,524.60	\$ (2,955.34)	\$ 2.728	\$ 2.728	(0.000)
Apr-21	20,610,060	20,610,103	(43)	\$ 44,148,131.10	\$ 44,147,785.49	\$ 345.61	\$ 2.142	\$ 2.142	0.000
May-21	23,266,283	23,266,283	-	\$ 54,433,768.03	\$ 54,434,010.00	\$ (241.97)	\$ 2.340	\$ 2.340	(0.000)
Jun-21	25,780,390	25,786,276	(5,886)	\$ 65,545,314.40	\$ 65,563,531.47	\$ (18,217.07)	\$ 2.542	\$ 2.543	(0.000)
<b>Total</b>	<b>285,803,338</b>	<b>285,817,509</b>	<b>(14,171)</b>	<b>\$ 664,602,887.08</b>	<b>\$ 664,643,460.02</b>	<b>\$ (40,572.93)</b>			

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**DOMINION ENERGY NORTH CAROLINA**  
**SUMMARY REPORT OF FUEL TRANSACTIONS WITH AFFILIATES**  
**FOR THE PERIOD JULY 2020 - JUNE 2021**

**Dominion Energy North Carolina Power Receiving and Providing to Dominion  
Energy Fuel Services, Inc.:**

Docket No. E-22, Sub 605

July 2020 - June 2021 Contracted Affiliated Fuel Transactions

There were no affiliate transactions of Fuel from July 2020 through June 2021.

**DIRECT TESTIMONY  
OF  
TOM A. BROOKMIRE  
ON BEHALF OF  
DOMINION ENERGY NORTH CAROLINA  
BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-22, SUB 605**

1 **Q. Please state your name, position, business address, and responsibilities.**

2 A. My name is Tom A. Brookmire, and I am the Manager of Nuclear Fuel  
3 Procurement. My business address is Innsbrook Technical Center, 5000  
4 Dominion Boulevard, Glen Allen, Virginia 23060. I am responsible for  
5 nuclear fuel procurement, fuel-related project management, long-term nuclear  
6 spent fuel disposal, and nuclear fuel price forecasting and budgeting used by  
7 Virginia Electric and Power Company, which operates in North Carolina as  
8 Dominion Energy North Carolina (the “Company”). A statement of my  
9 background and qualifications is attached hereto as Appendix A.

10 **Q. What is the purpose of your testimony?**

11 A. The purpose of my testimony is to discuss the nuclear fuel market and any  
12 significant impact of the market on nuclear fuel costs during the test period of  
13 July 1, 2020 through June 30, 2021 (“test period”), in compliance with Rule 8-  
14 55(e)(5). Section I of my testimony will discuss the market and components  
15 of the Company’s nuclear fuel costs. Section II will discuss how the  
16 Company’s nuclear fuel expense rates are calculated.

1 **Q. Please briefly describe the Company’s nuclear fuel procurement policy.**

2 A. The Company continues to follow the same procurement practices as it has in  
3 the past in accordance with its procedures, a copy of which has been  
4 previously provided to this Commission in Docket No. E-100, Sub 47A.  
5 These procedures not only cover nuclear fuel procurement, but also the  
6 procurement of natural gas, coal, biomass, and oil.

7 **I. NUCLEAR FUEL MARKET AND COMPONENTS**

8 **Q. What are the major components of nuclear fuel expenses?**

9 A. Nuclear fuel expenses include the amortized value of the cost for uranium,  
10 along with required conversion, enrichment, and fabrication services  
11 (collectively the “front-end components”). In addition, there is the  
12 amortization of the Allowance for Funds Used During Construction  
13 (“AFUDC”) and the federal government’s fee for the disposal of spent nuclear  
14 fuel. I will discuss the current status of the disposal fee in Section II of my  
15 testimony.

16 **Q. Please describe any changes in the market conditions for the front-end  
17 components since the last fuel proceeding.**

18 A. The nuclear fuel market softened considerably in the six- to seven-year period  
19 after the Japanese earthquake and tsunami impact on the Fukushima nuclear  
20 plant in 2011, and uranium, conversion, and enrichment markets all showed  
21 varying decreasing price trends in that period. Beyond the notable Fukushima  
22 related reduced demand impacts in Japan, Germany made a decision to

1 permanently shut down eight reactors, there have been shut down decisions  
2 and announced closings of several U.S. reactors, and Chinese reactor startups  
3 have occurred at a somewhat slower pace than anticipated pre-Fukushima.  
4 There have also been some reductions in supply, but generally lagging the  
5 demand side reductions (*e.g.*, postponement and deferral of new mines and  
6 mine capacity expansions, some reduction in production in Kazakhstan, along  
7 with delays in planned increases in uranium enrichment capacity). Since 2018,  
8 however, there has been a gradual reduction of excess fuel inventory levels,  
9 and market prices for uranium and enrichment have increased somewhat.  
10 Market prices for conversion have increased significantly but prices at present  
11 for all three segments are relatively stable.

12 The price for conversion services has experienced significant upward price lift  
13 in the last three years due to production cuts in the U.S. Term and spot  
14 conversion prices have remained high due to concern over the lack of  
15 investment in new conversion production facilities, and the possibility for  
16 shortfalls in capacity longer-term, but are now relatively stable.

17 Since the Fukushima event, the price for enrichment services dropped  
18 dramatically and still continues to be below the price that enrichment  
19 companies would need to replace or expand their capacity. Nevertheless, the  
20 price for enrichment services has increased somewhat during the last couple  
21 years, and, although prices in this market are still depressed, I would expect  
22 continued price uplift as nuclear generating companies begin to contract for  
23 additional future supply.

1 The price for uranium concentrates largely bottomed in 2017. However, in  
2 the past year, there has been upward price movement in both spot and term  
3 prices as surplus supply decreases. Nevertheless, both spot and term prices  
4 remain below the point required for miners to restart idled production or  
5 develop new mine sources. Therefore I would expect there to be continued  
6 upward price pressure as steady demand (with decreasing surplus supply) for  
7 uranium will ultimately bring about the restart of idled capacity or new mine  
8 capacity to replace what was being supplied out of surplus.

9 The price trend in the U.S. domestic nuclear fuel fabrication continues to be  
10 difficult to measure because there is no active spot market, but the general  
11 consensus is that costs will continue to increase due to regulatory  
12 requirements, reduced competition, and new reactor demand both in the U.S.  
13 and abroad. Additionally, the parent companies for both U.S. nuclear fuel  
14 fabricators (Westinghouse Electric Corporation and Framatome) have  
15 experienced financial distress, which is likely to put upward pressure on  
16 fabrication costs and nuclear fuel engineering services.

17 Calendar year 2020 saw no reactor restarts in Japan. Previously, in 2018, five  
18 reactors met new standards and were restarted, and six additional reactors  
19 received initial approval with another 12 applications submitted to restart.

20 The timing and extent of other reactor restarts in Japan currently remains  
21 uncertain. China continues to have an aggressive nuclear energy program and  
22 continues to be a significant factor impacting supply and demand for uranium  
23 as they do not have significant indigenous sources of uranium. China has

1 acquired or developed significant uranium production capacity outside of  
2 China (especially in Africa). China uses its own indigenous sources for  
3 conversion and enrichment and is not a significant player impacting global  
4 demand outside of China for these services. China currently has 49 reactors in  
5 operation, 16 plants under construction, and others in planning.

6 **Q. Have these changes in market costs impacted the Company's projected**  
7 **near-term costs?**

8 A. Yes, but not significantly. The Company's current mix of longer-term front-  
9 end component contracts has reduced its exposure to market volatility that has  
10 occurred over the past several years. In addition, because the Company's  
11 nuclear plants replace about one-third of their fuel on an 18-month schedule,  
12 there is a delay before the full effect of any significant changes in a  
13 component price is seen in the plant operating costs. Finally, the Company  
14 has been active in the market and has executed some market-based and fixed  
15 price contracts, allowing the Company to take advantage of current lower  
16 prices for the benefit of customers.

17 **Q. Two U.S. miners filed a Section 232 petition in January 2018. How will**  
18 **this potentially affect the Company's fuel supply?**

19 A. In July 2019, contrary to the Department of Commerce's recommendation,  
20 President Trump decided to take no action with respect to any remedies  
21 associated with the uranium miners' Section 232 petition. In lieu thereof,  
22 President Trump formed the United States Nuclear Fuel Working Group  
23 consisting of certain cabinet members and other high-level agency staff. The

1 Working Group was requested to examine the current state of domestic  
2 nuclear fuel production to reinvigorate the entire nuclear fuel supply chain,  
3 consistent with United States national security and nonproliferation goals.  
4 The Working Group's report was issued on April 23, 2020, but to date no  
5 significant market impacts have been realized.

6 **Q. Could sanctions resulting from the Iran Nuclear Deal affect nuclear fuel**  
7 **costs in the United States?**

8 A. Yes, they could. However, it is not clear at this point if any sanctions would  
9 be imposed. Nevertheless, in a broader sense, geopolitical pressures aside  
10 from the Iran Nuclear Deal can potentially develop and affect supply of  
11 nuclear fuel components. The Company routinely monitors for these  
12 situations to develop strategies to mitigate potential supply disruptions.

## 13 II. NUCLEAR FUEL EXPENSE RATES

14 **Q. Would you please describe how the Company's nuclear fuel expense rates**  
15 **are developed?**

16 A. Yes. The calculation of nuclear fuel expense rates, expressed in mills per  
17 kilowatt-hour ("mills/kWh"), is based on expected plant operating cycles and  
18 the overall cost of nuclear fuel. As I stated above, front-end component costs  
19 include uranium, conversion, enrichment, and fabrication services. These  
20 costs, along with AFUDC, are amortized over the energy production life of  
21 the nuclear fuel. The federal government's fee, applied to net nuclear  
22 generation sold, would also typically be included in the expense rate. This

1 cost, applied to all U.S. nuclear generation companies, is intended to cover the  
2 eventual disposal cost of spent nuclear fuel in a federal repository. However,  
3 the fee, which historically has been one mill/kWh of net nuclear generation, is  
4 currently set to zero mills/kWh and is not collected.

5 **Q. Please provide an update regarding the status of this fee.**

6 A. In 2014, following a federal court decision, the U.S. Department of Energy  
7 (“DOE”) submitted a proposal to Congress to change this one mill/kWh fee to  
8 zero. This relief is industry-wide and applies to all operating reactors,  
9 including the Company’s operating reactors at the Surry and North Anna  
10 Power Stations. As of May 16, 2014, the Company is no longer required to  
11 pay the waste fee.

12 **Q. Can the waste fee collected by the federal government be reinstated?**

13 A. Yes, it can. As I explained in previous testimony, the Nuclear Waste Policy  
14 Act allows the Secretary of Energy to review fee adequacy on an annual basis.  
15 It is likely that at some point in the future when a viable waste disposal  
16 program is established by DOE, the Secretary will develop an adjustment to  
17 the waste fee that ensures full cost recovery for the life cycle of such a  
18 program. Any proposed adjustment to the fee will again need to be submitted  
19 to Congress for review. If and when a fee adjustment becomes effective, the  
20 Company will again become obligated to make the fee payment, and will  
21 again seek to recover payments for the assessed fee in its fuel factor.

- 1 **Q. What was the fuel expense rate for the Test Period?**
- 2 A. The fuel expense rate is provided in Company Exhibit JDM-1 to the Direct
- 3 Testimony of Company Witness Jeffrey D. Matzen.
- 4 **Q. Does this conclude your direct testimony?**
- 5 A. Yes, it does.

**BACKGROUND AND QUALIFICATIONS**  
**OF**  
**TOM A. BROOKMIRE**

Tom A. Brookmire is a graduate of Virginia Tech with a Bachelor of Science degree in Nuclear Science (1983), and a Master's degree in Engineering in Nuclear Engineering from the University of Virginia (1988). He is a registered professional engineer in the Commonwealth of Virginia.

Mr. Brookmire joined with Virginia Electric and Power Company in 1983, and has worked since then in staff and management positions involving nuclear fuel. His current responsibilities include procurement of nuclear fuel and related services, nuclear fuel-related project management, long-term disposal of spent nuclear fuel, and the projection of nuclear prices and related capital costs and expense rates.

**DIRECT TESTIMONY  
OF  
TIMOTHY P. STULLER  
ON BEHALF OF  
DOMINION ENERGY NORTH CAROLINA  
BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
DOCKET NO. E-22, SUB 605**

1 **Q. Please state your name, business address, and position of employment.**

2 A. My name is Timothy P. Stuller. My business address is 120 Tredegar Street,  
3 Richmond, Virginia 23219. My title is Regulatory Specialist for Virginia  
4 Electric and Power Company, which operates in North Carolina as Dominion  
5 Energy North Carolina (the “Company”). A statement of my background and  
6 qualifications is attached as Appendix A.

7 **Q. Mr. Stuller, what is the purpose of your testimony in this proceeding?**

8 A. The purpose of my testimony is to present the Company’s derivation of the  
9 proposed Fuel Cost Rider A and the proposed Experience Modification Factor  
10 (“EMF”) Rider B for the North Carolina jurisdiction and for each customer  
11 class based on the twelve months ended June 30, 2021 (the “test period”), to  
12 become effective on February 1, 2022. I am also sponsoring the calculation of  
13 the adjustment to total system sales (kWh) for the twelve months ended June  
14 30, 2021, due to change in usage, weather normalization, and customer  
15 growth.

1 **Q. In the course of your testimony will you introduce an exhibit?**

2 A. Yes. Company Exhibit TPS-1, consisting of six schedules, was prepared  
3 under my direction and is accurate and complete to the best of my knowledge  
4 and belief.

5 **Q. Mr. Stuller, please explain Schedule 1.**

6 A. Schedule 1 of Company Exhibit TPS-1 provides a summary of jurisdictional  
7 and total system kWh sales for the twelve months ended June 30, 2021,  
8 adjusted for change in usage, weather normalization, and customer growth.  
9 Line 1 of Schedule 1 shows the adjustment to sales for the North Carolina  
10 Jurisdiction of 56,344,262 kWh. The adjustment to total system kWh at sales  
11 level is 172,586,429 kWh. This adjustment is consistent with the  
12 methodology used in the Company's last general rate case (Docket No. E-22,  
13 Sub 562) and the last fuel charge adjustment case (Docket No. E-22, Sub  
14 590).

15 **Q. Have you calculated the proposed Fuel Cost Rider A for the North**  
16 **Carolina jurisdiction and each customer class?**

17 A. Yes. Schedule 2 of Company Exhibit TPS-1 presents the calculation of the  
18 proposed System Average Fuel Factor for the North Carolina jurisdiction and  
19 for each customer class. On Schedule 2, Page 1, a system fuel expense level of  
20 \$1,820,197,534 (as provided in Schedule 4 of Company Exhibit JDM-1) is  
21 divided by system sales of 85,281,501,429 kWh that reflect the normalization  
22 adjustments for change in usage, weather and customer growth, and adjusted  
23 for the North Carolina regulatory fee. The result is a normalized system

1 average fuel factor of \$0.021371/kWh, applicable to the North Carolina  
2 jurisdiction. The calculations used to differentiate the jurisdictional Base Fuel  
3 Component by voltage to determine the class fuel factors are shown on  
4 Schedule 2, Page 2. They are consistent with the methodology used in the  
5 Company's most recent fuel case (Docket No. E-22, Sub 590). The Base Fuel  
6 Component for each class determined in Docket No. E-22, Sub 590 is shown  
7 in Column 8 of Schedule 2, Page 2. Fuel Cost Rider A is calculated in Column  
8 9 of Schedule 2, Page 2.

9 **Q. Please describe the Experience Modification Factor, Rider B, applicable**  
10 **to the North Carolina jurisdiction.**

11 A. Schedule 3 of Company Exhibit TPS-1 presents the calculation of the  
12 proposed EMF Rider B applicable to the North Carolina jurisdiction and the  
13 resulting factors for each customer class. Schedule 3, Page 1, shows the  
14 calculation of the proposed uniform EMF applicable to the North Carolina  
15 jurisdiction. The total under-recovered fuel expense, for the period July 1,  
16 2020 through June 30, 2021, of \$4,011,772 (as provided in Schedule 2 of  
17 Company Exhibit RTC-1) was not adjusted for interest. The total net balance  
18 of \$4,011,772 was then divided by North Carolina test year sales of  
19 4,360,969,262 kWh which have been adjusted for change in usage, weather,  
20 and customer growth. After being adjusted for the North Carolina regulatory  
21 fee, the result is a uniform EMF of \$0.000921/kWh, applicable to the North  
22 Carolina jurisdiction. The calculations used to differentiate the uniform factor  
23 by voltage to determine the class factors are shown on Schedule 3, Page 2.

1 The resulting EMF for each class is shown in Column 7 of Schedule 3, Page  
2 2.

3 **Q. Please provide a summary of the total fuel factors that the Company is**  
4 **requesting in this case for each class to become effective February 1,**  
5 **2022.**

6 A. The total proposed fuel rates (\$/kWh) for each class are as follows:

<u>Customer Class</u>	<u>Total</u>
Residential	\$0.022548
SGS & PA	\$0.022522
LGS	\$0.022339
Schedule NS	\$0.021677
6VP	\$0.021989
Outdoor Lighting	\$0.022548
Traffic	\$0.022548

7 A comparison of the present and proposed total rates for each class is shown  
8 on my Schedule 4, Pages 1 and 2 of Company Exhibit TPS-1.

9 **Q. Do you have a schedule that shows the total fuel revenue recovery by**  
10 **class and for the North Carolina jurisdiction for the 2022 fuel year?**

11 A. Yes. Schedule 5 of Company Exhibit TPS-1 shows the total fuel revenue  
12 recovery by class and for the North Carolina jurisdiction for the 2022 fuel  
13 year. For the North Carolina jurisdiction, the proposed jurisdictional fuel cost  
14 levels result in a total fuel recovery increase of \$21,988,007.

1 **Q. Have you included in your exhibit a revision to the Fuel Cost Rider A and**  
2 **EMF Rider B which will reflect the Company's proposed total fuel**  
3 **factors, to be effective February 1, 2022?**

4 A. Yes. Schedule 6, Pages 1 and 2 of Company Exhibit TPS-1 provides the  
5 revised Fuel Charge Rider A and EMF Rider B that the Company proposes to  
6 become effective on and after February 1, 2022.

7 **Q. Mr. Stuller, would you explain how these proposed changes in the fuel**  
8 **factor will affect customers' bills? Use bill amounts as of August 1, 2021**  
9 **as a point of reference.**

10 A. For Rate Schedule 1 (residential), for a customer using 1,000 kWh per month,  
11 the weighted monthly residential bill (4 summer months and 8 base months)  
12 would increase by \$5.12 from \$106.95 to \$112.07, or by 4.8%. For Rate  
13 Schedule 5 (small general service), for a customer using 12,500 kWh per  
14 month and 50 kW of demand, the weighted monthly bill (4 summer months  
15 and 8 base months) would increase by \$63.78 from \$1,027.58 to \$1,091.36, or  
16 by 6.2%. For Rate Schedule 6P (large general service), for a primary voltage  
17 customer using 576,000 kWh (259,200 kWh on-peak and 316,800 kWh off-  
18 peak) per month and 1,000 kW of demand, the monthly bill would increase by  
19 \$2,913.98 from \$35,788.45 to \$38,702.43, or by 8.1%. For Rate Schedule 6L  
20 (large general service), for a primary voltage customer using 6,000,000 kWh  
21 (2,400,000 kWh on-peak and 3,600,000 kWh off-peak) per month and 10,000  
22 kW of demand, the monthly bill would increase by \$30,354.00 from  
23 \$339,019.30 to \$369,373.30, or by 9.0%.

1 Q. Does this conclude your testimony?

2 A. Yes, it does.

**BACKGROUND AND QUALIFICATIONS  
OF  
TIMOTHY P. STULLER**

Timothy P. Stuller, Jr. holds a Bachelor of Science degree in Economics and Business from Randolph – Macon College and a Master of Business Administration from Virginia Commonwealth University. In 2007, Mr. Stuller joined Dominion Energy as a Regulatory Accounting Analyst I. In 2009, Mr. Stuller moved to the Customer Rates department as Regulatory Analyst II. Since 2009, Mr. Stuller has held various roles in the Customer Rates department including cost of service study development, analysis of rates and tariffs, supporting non-jurisdictional contracts, and generally supporting regulatory filings. Mr. Stuller’s primary responsibility is analysis and design of rates for customers across the Dominion Energy Virginia and Dominion Energy North Carolina systems.

**SUMMARY OF KWH ATTRIBUTABLE TO  
CHANGE IN USAGE, WEATHER NORMALIZATION, AND CUSTOMER GROWTH  
TWELVE MONTHS ENDED JUNE 30, 2021**

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		<b>SYSTEM</b>			
<u>LINE</u>	<u>JURISDICTION</u>	<u>CHANGE IN USAGE KWH</u>	<u>WEATHER NORM. KWH</u>	<u>CUSTOMER GROWTH KWH</u>	<u>TOTAL KWH</u>
1)	NORTH CAROLINA (A)	43,057,562	(3,151,586)	16,438,286	56,344,262
2)	VIRGINIA	132,021,508	(187,082,768)	313,978,375	258,917,115
3)	COUNTY	(60,512,182)	(54,456,967)	1,876,100	(113,093,049)
4)	STATE	(114,326,818)	(18,856,099)	99,041,786	(34,141,131)
5)	MS / FEDERAL GOVERNMENT	0	0	0	0
7)	FERC	<u>0</u>	<u>4,559,232</u>	<u>0</u>	<u>4,559,232</u>
8)	SYSTEM KWH AT SALES LEVEL	240,070	(258,988,188)	431,334,547	172,586,429
9)	SUBTOTAL - SYSTEM KWH AT GENERATION LEVEL (LINE 8 x 2020 EXPANSION FACTOR) (B)				179,923,423

**NOTES**

( ) DENOTES NEGATIVE VALUE

(A) NORTH CAROLINA BY CLASS	<u>CHANGE IN USAGE KWH</u>	<u>WEATHER NORM. KWH</u>	<u>CUSTOMER GROWTH KWH</u>	<u>TOTAL KWH</u>
RESIDENTIAL	42,454,649	3,873,718	9,227,982	55,556,349
SGS / PA	(11,043,202)	(7,025,304)	5,520,665	(12,547,841)
LGS	(2,952,977)	0	1,501,334	(1,451,643)
NS	16,424,688	0	0	16,424,688
6VP	(1,222,947)	0	0	(1,222,947)
ODL & ST LTS	(591,529)	0	186,481	(405,048)
TRAFFIC	<u>(11,120)</u>	<u>0</u>	<u>1,824</u>	<u>(9,296)</u>
TOTAL	43,057,562	(3,151,586)	16,438,286	56,344,262

(B) 2020 SYSTEM EXPANSION FACTOR IS 1.042512

**DOMINION ENERGY NORTH CAROLINA  
CALCULATION OF SYSTEM AVERAGE FUEL FACTOR  
TWELVE MONTHS ENDED JUNE 30, 2021  
TO BE EFFECTIVE FEBRUARY 1, 2022**

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EXPENSE:	12 MONTH NORMALIZED SYSTEM FUEL EXPENSE (A)	\$1,820,197,534
SALES:	12 MONTHS SYSTEM KWH SALES ADJUSTED FOR CHANGE IN USAGE, WEATHER AND CUSTOMER GROWTH (B)	85,281,501,429
FEE:	NORTH CAROLINA REGULATORY FEE ADJUSTMENT FACTOR	1.0013
FACTOR =	$\frac{\$1,820,197,534}{85,281,501,429} \times 1.0013$	
FACTOR =	\$0.021371 / KWH (C) (D)	

NOTES

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- (A) FROM COMPANY EXHIBIT NO. JDM-1 SCHEDULE 4
- (B) SYSTEM KWH AT SALES LEVEL [COMPANY EXHIBIT RC-1, SCHEDULE 3] 85,108,915,000  
PLUS: SYSTEM KWH USAGE, WEATHER, GROWTH ADJUSTMENT  
[COMPANY EXHIBIT NO. TPS-1, SCHEDULE 1, LINE 8] 172,586,429  
TOTAL SYSTEM SALES 85,281,501,429
- (C) THE NORTH CAROLINA JURISDICTIONAL BASE FUEL FACTOR IS \$0.02092/KWH
- (D) WITHOUT NC REGULATORY FEE \$0.021343 /KWH

**DOMINION ENERGY NORTH CAROLINA  
CALCULATION OF FUEL COST RIDER A  
TWELVE MONTHS ENDED JUNE 30, 2021  
TO BE EFFECTIVE FEBRUARY 1, 2022**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>CUSTOMER CLASS</u>	<u>KWH SALES</u> (A)	<u>SYSTEM FUEL FACTOR</u> (B)	<u>FUEL REVENUE UNIFORM RATE</u> (1) x (2)	<u>CLASS EXPANSION FACTOR</u>	<u>CLASS KWH @ GENERATION LEVEL</u> (1) x (4)	<u>JURISDICTIONAL UNIFORM RATE @ GENERATION LEVEL</u> (3a) / (5a)	<u>JURISDICTIONAL VOLTAGE DIFFERENTIATED RATE @ SALES LEVEL</u> (4) x (6)	<u>VOLTAGE DIFFERENTIATED BASE FUEL RATE</u>	<u>FUEL COST RIDER A RATE</u> (7) - (8)
RESIDENTIAL	1,731,902,378	\$0.021371	\$37,012,486	1.050678	1,819,671,727	\$0.020573	\$0.021616	\$0.021180	\$0.000436
SGS & PA	757,602,177	\$0.021371	\$16,190,716	1.049459	795,072,603	\$0.020573	\$0.021591	\$0.021150	\$0.000441
LGS	648,374,758	\$0.021371	\$13,856,417	1.040971	674,939,363	\$0.020573	\$0.021416	\$0.020980	\$0.000436
SCHEDULE NS	926,528,107	\$0.021371	\$19,800,832	1.010127	935,911,057	\$0.020573	\$0.020781	\$0.020360	\$0.000421
6VP	272,300,663	\$0.021371	\$5,819,337	1.024636	279,009,062	\$0.020573	\$0.021080	\$0.020650	\$0.000430
OUTDOOR LIGHTING	23,849,646	\$0.021371	\$509,691	1.050678	25,058,299	\$0.020573	\$0.021616	\$0.021180	\$0.000436
TRAFFIC	411,533	\$0.021371	\$8,795	1.050678	432,388	\$0.020573	\$0.021616	\$0.021180	\$0.000436
<b>TOTAL</b>	<b>4,360,969,262</b>		<b>\$93,198,274</b>	<b>(3a)</b>	<b>4,530,094,499</b>	<b>(5a)</b>			

NOTES

(A)

	<u>TEST YR KWH</u>	<u>CHG IN USAGE, WEATHER CUST GROWTH ADJ</u>	<u>TOTAL*</u>
RESIDENTIAL	1,676,346,029	55,556,349	1,731,902,378
SGS & PA	770,150,018	(12,547,841)	757,602,177
LGS	649,826,401	(1,451,643)	648,374,758
SCHEDULE NS	910,103,419	16,424,688	926,528,107
6VP	273,523,610	(1,222,947)	272,300,663
OUTDOOR LIGHTING	24,254,694	(405,048)	23,849,646
TRAFFIC	420,829	(9,296)	411,533
<b>TOTAL</b>	<b>4,304,625,000</b>	<b>56,344,262</b>	<b>4,360,969,262</b>

\* CLASS KWH AT SALES LEVEL PLUS CHANGE IN USAGE, WEATHER NORMALIZATION, AND CUSTOMER GROWTH [COMPANY EXHIBIT NO. TPS-1 SCHEDULE 1]

(B) IN \$/KWH

**DOMINION ENERGY NORTH CAROLINA  
CALCULATION OF EXPERIENCE MODIFICATION FACTOR - RIDER B  
TWELVE MONTHS ENDED JUNE 30, 2021  
TO BE EFFECTIVE FEBRUARY 1, 2022**

EXPENSE:	JULY 1, 2020 - JUNE 30, 2021 NC JURISDICTIONAL FUEL EXPENSE UNDER RECOVERY (A)	\$4,011,772
INTEREST:		<u>\$0</u>
NET:		\$4,011,772
SALES:	12 MONTHS JURISDICTIONAL KWH SALES ADJUSTED FOR CHANGE IN USAGE, WEATHER, AND CUSTOMER GROWTH (B)	4,360,969,262
FEE:	NORTH CAROLINA REGULATORY FEE ADJUSTMENT FACTOR	1.0013

$$\text{FACTOR} = \frac{\$4,011,772}{4,360,969,262} \times 1.0013$$

$$\text{FACTOR} = \$0.000921 \quad / \text{KWH (C)}$$

NOTES

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(A) FROM COMPANY EXHIBIT NO. RTC-1 SCHEDULE 2

(B) FROM COMPANY EXHIBIT NO. TPS-1 SCHEDULE 2, PAGE 2

(C) WITHOUT NC REGULATORY FEE      \$0.000920 /KWH

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**DOMINION ENERGY NORTH CAROLINA  
CALCULATION OF EXPERIENCE MODIFICATION FACTOR - RIDER B  
TWELVE MONTHS ENDED JUNE 30, 2021  
TO BE EFFECTIVE FEBRUARY 1, 2022**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>CUSTOMER CLASS</u>	<u>KWH SALES</u> (A)	<u>NC JURISDICTIONAL EMF</u> (B)	<u>FUEL REVENUE UNIFORM EMF</u> (1) x (2)	<u>CLASS EXPANSION FACTOR</u>	<u>CLASS KWH @ GENERATION LEVEL</u> (1) x (4)	<u>UNIFORM EMF @ GENERATION LEVEL</u> (3a) / (5a)	<u>VOLTAGE DIFFERENTIATED EMF @ SALES LEVEL</u> (4) x (6)
RESIDENTIAL	1,731,902,378	\$0.000921	\$1,595,082	1.050678	1,819,671,727	\$0.000887	\$0.000932
SGS & PA	757,602,177	\$0.000921	\$697,752	1.049459	795,072,603	\$0.000887	\$0.000931
LGS	648,374,758	\$0.000921	\$597,153	1.040971	674,939,363	\$0.000887	\$0.000923
SCHEDULE NS	926,528,107	\$0.000921	\$853,332	1.010127	935,911,057	\$0.000887	\$0.000896
6VP	272,300,663	\$0.000921	\$250,789	1.024636	279,009,062	\$0.000887	\$0.000909
OUTDOOR LIGHTING	23,849,646	\$0.000921	\$21,966	1.050678	25,058,299	\$0.000887	\$0.000932
TRAFFIC	411,533	\$0.000921	\$379	1.050678	432,388	\$0.000887	\$0.000932
<b>TOTAL</b>	<b>4,360,969,262</b>		<b>\$4,016,453</b>	<b>(3a)</b>	<b>4,530,094,499</b>	<b>(5a)</b>	

NOTES

(A) FROM COMPANY EXHIBIT NO. TPS-1 SCHEDULE 2, PAGE 2

(B) IN \$/KWH

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**DOMINION ENERGY NORTH CAROLINA  
TOTAL FUEL COST LEVEL - PRESENT AND PROPOSED  
TO BE EFFECTIVE FEBRUARY 1, 2022**

	(1)	(2)	(3)	(4)
	BASE FUEL COMPONENT	RIDER A FUEL CHARGE	RIDER B EMF	TOTAL FUEL RATE
	\$/KWH	\$/KWH	\$/KWH	\$/KWH
<u>NC JURISDICTION</u>				
PRESENT	\$0.020920	(\$0.002540)	(\$0.001130)	\$0.017250
PROPOSED	\$0.020920	\$0.000451	\$0.000921	\$0.022292
CHANGE	\$0.000000	\$0.002991	\$0.002051	\$0.005042
<u>RESIDENTIAL</u>				
PRESENT	\$0.021180	(\$0.002600)	(\$0.001150)	\$0.017430
PROPOSED	\$0.021180	\$0.000436	\$0.000932	\$0.022548
CHANGE	\$0.000000	\$0.003036	\$0.002082	\$0.005118
<u>SGS &amp; PA</u>				
PRESENT	\$0.021150	(\$0.002590)	(\$0.001140)	\$0.017420
PROPOSED	\$0.021150	\$0.000441	\$0.000931	\$0.022522
CHANGE	\$0.000000	\$0.003031	\$0.002071	\$0.005102
<u>LGS</u>				
PRESENT	\$0.020980	(\$0.002560)	(\$0.001140)	\$0.017280
PROPOSED	\$0.020980	\$0.000436	\$0.000923	\$0.022339
CHANGE	\$0.000000	\$0.002996	\$0.002063	\$0.005059

NOTES

( ) DENOTES NEGATIVE VALUE

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**DOMINION ENERGY NORTH CAROLINA  
TOTAL FUEL COST LEVEL - PRESENT AND PROPOSED  
TO BE EFFECTIVE FEBRUARY 1, 2022**

	(1)	(2)	(3)	(5)
	BASE FUEL COMPONENT	RIDER A FUEL CHARGE	RIDER B EMF	TOTAL FUEL RATE
<u>SCHEDULE NS</u>	<u>\$/KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>
PRESENT	\$0.020360	(\$0.002490)	(\$0.001100)	\$0.016770
PROPOSED	<u>\$0.020360</u>	<u>\$0.000421</u>	<u>\$0.000896</u>	<u>\$0.021677</u>
CHANGE	\$0.000000	\$0.002911	\$0.001996	\$0.004907
<u>6VP</u>	BASE FUEL COMPONENT	RIDER A FUEL CHARGE	RIDER B EMF	TOTAL FUEL RATE
	<u>\$/KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>
PRESENT	\$0.020650	(\$0.002530)	(\$0.001120)	\$0.017000
PROPOSED	<u>\$0.020650</u>	<u>\$0.000430</u>	<u>\$0.000909</u>	<u>\$0.021989</u>
CHANGE	\$0.000000	\$0.002960	\$0.002029	\$0.004989
<u>OUTDOOR LIGHTING</u>	BASE FUEL COMPONENT	RIDER A FUEL CHARGE	RIDER B EMF	TOTAL FUEL RATE
	<u>\$/KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>
PRESENT	\$0.021180	(\$0.002600)	(\$0.001150)	\$0.017430
PROPOSED	<u>\$0.021180</u>	<u>\$0.000436</u>	<u>\$0.000932</u>	<u>\$0.022548</u>
CHANGE	\$0.000000	\$0.003036	\$0.002082	\$0.005118
<u>TRAFFIC</u>	BASE FUEL COMPONENT	RIDER A FUEL CHARGE	RIDER B EMF	TOTAL FUEL RATE
	<u>\$/KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>	<u>\$/KWH</u>
PRESENT	\$0.021180	(\$0.002600)	(\$0.001150)	\$0.017430
PROPOSED	<u>\$0.021180</u>	<u>\$0.000436</u>	<u>\$0.000932</u>	<u>\$0.022548</u>
CHANGE	\$0.000000	\$0.003036	\$0.002082	\$0.005118

NOTES

( ) DENOTES NEGATIVE VALUE

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**DOMINION ENERGY NORTH CAROLINA  
TOTAL FUEL RECOVERY  
TWELVE MONTHS ENDED JUNE 30, 2021  
TO BE EFFECTIVE FEBRUARY 1, 2022**

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	(1)	(2)	(3)	(4)	(5)	(6)
<u>CUSTOMER CLASS</u>	<u>SALES(KWH)</u>	<u>BASE FUEL COMPONENT</u> (A)	<u>FUEL COST RIDER A</u> (B)	<u>EMF RIDER B</u> (C)	<u>TOTAL</u> (2) + (3) + (4)	<u>TOTAL REVENUE</u> (1) x (5)
RESIDENTIAL	1,731,902,378	\$0.021180	\$0.000436	\$0.000932	\$0.022548	\$39,050,935
SGS & PA	757,602,177	\$0.021150	\$0.000441	\$0.000931	\$0.022522	\$17,062,716
LGS	648,374,758	\$0.020980	\$0.000436	\$0.000923	\$0.022339	\$14,484,044
SCHEDULE NS	926,528,107	\$0.020360	\$0.000421	\$0.000896	\$0.021677	\$20,084,350
6VP	272,300,663	\$0.020650	\$0.000430	\$0.000909	\$0.021989	\$5,987,619
OUTDOOR LIGHTING	23,849,646	\$0.021180	\$0.000436	\$0.000932	\$0.022548	\$537,762
TRAFFIC	411,533	\$0.021180	\$0.000436	\$0.000932	\$0.022548	\$9,279
<b>TOTAL</b>	<b>4,360,969,262</b>					<b>\$97,216,705</b>

	<u>SALES(KWH)</u>	<u>BASE FUEL COMPONENT</u>	<u>FUEL COST RIDER A</u>	<u>EMF RIDER B</u>	<u>TOTAL</u> (2) + (3) + (4)	<u>TOTAL REVENUE</u> (1) x (5)
NORTH CAROLINA JURISDICTION	4,360,969,262	\$0.020920	\$0.000451	\$0.000921	\$0.022292	\$97,214,727

	<u>SALES(KWH)</u>	<u>PRESENT TOTAL RATE</u>	<u>PROPOSED TOTAL RATE</u>	<u>TOTAL CHANGE</u> (3) - (2)	<u>TOTAL REVENUE CHANGE</u> (4) x (1)
NORTH CAROLINA JURISDICTION REVENUE CHANGE	4,360,969,262	\$0.017250	\$0.022292	\$0.005042	\$21,988,007

**NOTES**

- (A) FROM COMPANY EXHIBIT NO. TPS-1 SCHEDULE 2, PAGE 2
- (B) FROM COMPANY EXHIBIT NO. TPS-1 SCHEDULE 2, PAGE 2
- (C) FROM COMPANY EXHIBIT NO. TPS-1 SCHEDULE 3, PAGE 2

RIDER AFUEL COST RIDER

The applicable cents per kilowatt-hour charge<sup>1</sup> shall be added to the base fuel cost contained in the energy charges within each of the following Dominion Energy North Carolina filed Rate Schedules.

<b>Rate Schedule</b>	<b>Customer Class</b>	<b>Cents per kWh Charge</b>
Schedule 1	Residential	0.0436¢/kWh
Schedule 1DF	Residential	0.0436¢/kWh
Schedule 1P	Residential	0.0436¢/kWh
Schedule 1T	Residential	0.0436¢/kWh
Schedule 1W	Residential	0.0436¢/kWh
Schedule 5	SGS & Public Authority	0.0441¢/kWh
Schedule 5C	SGS & Public Authority	0.0441¢/kWh
Schedule 5P	SGS & Public Authority	0.0441¢/kWh
Schedule 7	SGS & Public Authority	0.0441¢/kWh
Schedule 30	SGS & Public Authority	0.0441¢/kWh
Schedule 42	SGS & Public Authority	0.0441¢/kWh
Schedule 6C	Large General Service	0.0436¢/kWh
Schedule 6P	Large General Service	0.0436¢/kWh
Schedule 6L	Large General Service	0.0436¢/kWh
Schedule 10	Large General Service	0.0436¢/kWh
Schedule LGS – RTP With Customer Baseline Load	Large General Service	0.0436¢/kWh
Schedule LGS – RTP Economic Development	Large General Service	0.0436¢/kWh
Schedule 26	Outdoor Lighting	0.0436¢/kWh
Schedule 30T	Traffic Control	0.0436¢/kWh
Schedule 6VP	6VP	0.0430¢/kWh
Schedule NS Tier 2-Type A and Tier 3 Energy Charges	Schedule NS	0.0421¢/kWh
Schedule NS Tier 1 Type A & B, and Tier 2-Type B Energy Charges	Schedule NS	Rider A is Included in the Energy Charges

<sup>1</sup>This charge is not a part of the base fuel cost included in the energy prices stated in the Rate Schedules and should, therefore, be applied in addition to the prices stated in the Rate Schedules.

RIDER BEXPERIENCE MODIFICATION FACTOR (EMF)

The applicable cents per kilowatt-hour charge<sup>1</sup> shall be added to the energy charges contained within each of the following Dominion Energy North Carolina filed Rate Schedules.

<b>Rate Schedule</b>	<b>Customer Class</b>	<b>Cents per kWh Charge</b>
Schedule 1	Residential	0.0932¢/kWh
Schedule 1DF	Residential	0.0932¢/kWh
Schedule 1P	Residential	0.0932¢/kWh
Schedule 1T	Residential	0.0932¢/kWh
Schedule 1W	Residential	0.0932¢/kWh
Schedule 5	SGS & Public Authority	0.0931¢/kWh
Schedule 5C	SGS & Public Authority	0.0931¢/kWh
Schedule 5P	SGS & Public Authority	0.0931¢/kWh
Schedule 7	SGS & Public Authority	0.0931¢/kWh
Schedule 30	SGS & Public Authority	0.0931¢/kWh
Schedule 42	SGS & Public Authority	0.0931¢/kWh
Schedule 6C	Large General Service	0.0923¢/kWh
Schedule 6P	Large General Service	0.0923¢/kWh
Schedule 6L	Large General Service	0.0923¢/kWh
Schedule 10	Large General Service	0.0923¢/kWh
Schedule LGS – RTP With Customer Baseline Load	Large General Service	0.0923¢/kWh
Schedule LGS – RTP Economic Development	Large General Service	0.0923¢/kWh
Schedule 26	Outdoor Lighting	0.0932¢/kWh
Schedule 30T	Traffic Control	0.0932¢/kWh
Schedule 6VP	6VP	0.0909¢/kWh
Schedule NS Tier 2-Type A and Tier 3 Energy Charges	Schedule NS	0.0896¢/kWh
Schedule NS Tier 1 Type A & B, and Tier 2-Type B Energy Charges	Schedule NS	Rider B is Included in the Energy Charges

<sup>1</sup>This charge is not a part of the base fuel cost included in the energy prices stated in the Rate Schedules and should, therefore, be applied in addition to the prices stated in the Rate Schedules.

