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August 23, 2017

VIA ELECTRONIC FILING

Ms. M. Lynn Jarvis, Chief Clerk
North Carolina Utilities Commission
Dobbs Building
430 North Salisbury Street
Raleigh, North Carolina 27603

Re: Docket No. E-22, Sub 546
Dominion Energy North Carolina's 2017 Fuel Charge Adjustment Proceeding

Dear Ms. Jarvis:

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 ("Dominion Energy North Carolina" or the "Company"), in compliance with North Carolina General Statute ("N.C.G.S.") § 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 Bruce E. Petrie, James D. Merritt, Ronnie T. Campbell, Tom A. Brookmire, and Gregory A. Workman, as well as Commission Rule R8-55 Information and Workpapers.

Pursuant to Commission Rule R1-28(e)(2), the Company will deliver fifteen (15) paper copies of the Application to the Clerk's Office by August 24, 2017.

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

Very truly yours,

/s/Mary Lynne Grigg

Enclosures

cc: Lucy E. Edmondson – NC Utilities Commission Public Staff
Margaret A. Force – NC Assistant Attorney General

Dominion Energy®

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

PUBLIC VERSION

Docket No. E-22, Sub 546

Filed: August 23, 2017

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-22, SUB 546

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	))))))	APPLICATION FOR A CHANGE IN FUEL COMPONENT OF ELECTRIC RATES

Pursuant to North Carolina General Statutes ("N.C.G.S") § 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 ("Dominion Energy North Carolina" or the "Company"), by counsel, hereby applies to the Commission to adjust the fuel component of its electric rates to become effective January 1, 2018, and remain in effect for the calendar year 2018. In support thereof, the Company respectfully demonstrates as follows:

1. The Company's headquarters are located at 120 Tredegar Street, Richmond, Virginia 23219. The post office address of Dominion Energy North Carolina is P.O. Box 26666, Richmond, Virginia 23261.

2. The attorneys for the Company are:

Lisa S. Booth
Horace P. Payne, Jr.
Dominion Energy, Inc.
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Copies of all pleadings, testimony, orders, and correspondence in this proceeding should be served upon the attorneys listed above.

3. 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 an operating subsidiary of Dominion Energy, Inc.

4. Dominion Energy North Carolina 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, 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.

5. Pursuant to Rule R8-55(b), Dominion Energy North Carolina's fuel adjustment hearing would normally be scheduled for the second Tuesday in November. However, due to a scheduling conflict, the hearing in this case is scheduled for November 6, 2017. Pursuant to Rule R8-55(f), the Company is to file its direct testimony, exhibits, and workpapers supporting its fuel adjustment 75 days prior to the hearing. Accordingly, Dominion Energy North Carolina hereby files the direct testimony, exhibits, and workpapers of the following witnesses in support of its proposed fuel adjustment: Bruce E. Petrie, James D. Merritt, Ronnie T. Campbell, Tom A. Brookmire, and Gregory A. Workman.

6. Pursuant to Rule R8-55(c), Dominion Energy North Carolina's test period for this proceeding is the 12-month period ending June 30, 2017 ("Test Period").

7. The last general rate case order for the Company was issued by the Commission on December 22, 2016, in Docket No. E-22, Sub 532 ("2016 Base Rate Case Order"). The Commission's last fuel adjustment proceeding order for the Company was issued on December 22, 2016, in Docket No. E-22, Sub 534 ("2016 Fuel Order"). The 2016 Base and 2016 Fuel Orders also set the marketer's percentage for this proceeding (and subsequent fuel adjustment proceedings through 2018 or until the Company's next general rate case) at 78% effective January 1, 2017.

8. In the 2016 Base Rate Case Order, the Commission reset the Company's system average base fuel factor applicable to the North Carolina jurisdiction to $0.02073/kWh including North Carolina gross receipts tax ("GRT") ($0.02070/kWh without GRT). In the 2016 Fuel Order, the Commission reset Rider A to zero and approved an updated Experience Modification Factor ("EMF"), Rider B, rate decrement of $0.00468/kWh including GRT ($0.00467/kWh without GRT) applicable to the North Carolina jurisdiction to be effective for the 12-months ending December 31, 2017.

9. As explained by the direct testimony of Company Witness Bruce E. Petrie, 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 Petrie explains, this methodology is a fair representation of the expected expense rates during the calendar year 2018 rate period.

10. For the Test Period, the normalized system fuel expense is $1,758,608,978, which is then divided by system sales of 84,774,563,328 kWh, which reflect the normalization adjustments for change in usage, weather, and customer growth. The result is a normalized system average fuel factor of 2.077¢/kWh, which is an increase of 0.004¢/kWh, applicable to the North Carolina jurisdiction.

11. Dominion Energy North Carolina has over-recovered its fuel costs for the Test Period by $4,739,956. The total over-recovered fuel expense as of June 30, 2017, based on the current 78% marketer percentage, is provided in the direct testimony and exhibits of Company Witness Ronnie T. Campbell. This fuel over-recovery was primarily driven by mild weather, moderate commodity prices, and the addition of new

and efficient natural gas generation. In addition, the Company optimized its diverse fleet of generating assets to reduce system fuel expense.

12. The Company calculated the EMF Rider B, including interest, applicable to the North Carolina jurisdiction and to each customer class using the methodology approved in the 2016 Fuel Order. These calculations are addressed in the direct testimony and exhibits of Company Witness James D. Merritt.

13. In the 2014 fuel proceeding (Docket No. E-22, Sub 515), the Company had a large deferral balance due to extreme cold weather in January through March 2014. Therefore, the Company requested and the Commission approved a mitigation proposal (the "mitigation plan") that would recover, through EMF Rider B2, the prior period deferral balance established in that case over the 2015 and 2016 fuel rate years, without interest, subject to a final true-up to be determined in the 2017 fuel case and recovered over the 2018 fuel year. The Rider B2 rates were set to $0.00000/kWh for all classes for purposes of the 2016 fuel case and for the 2017 fuel year. As discussed in the testimony of Company Witness Merritt, the Company has calculated the proposed EMF Rider B2 of $0.00009/kWh to be applicable to the North Carolina jurisdiction for the 2018 fuel year, designed to recover the remaining under-recovery balance related to the approved mitigation plan.

14. The Company proposes that the total fuel rate (base fuel factor, Rider A, and EMF Riders B and B2) for each class be set as follows effective January 1, 2018:

Customer Class	
Residential	1.982¢/kWh
SGS & PA	1.980¢/kWh
LGS	1.964¢/kWh
Schedule NS	1.906¢/kWh
6VP	1.933¢/kWh
Outdoor Lighting	1.982¢/kWh
Traffic	1.982¢/kWh

15. For the North Carolina jurisdiction, the recovery increase for fuel year 2018 will be $15,220,111.

WHEREFORE, Dominion Energy North Carolina respectfully requests that the Commission: approve the proposed total fuel factor of 1.959¢/kWh, effective on January 1, 2018, which shall be allocated based on voltage differentiated adjustments, including the base fuel factor, Rider A, EMF Rider B, and EMF Rider B2, as follows:

(a) 1.982 ¢/kWh for the Residential class of customers,
(b) 1.980 ¢/kWh for the Small General Service and Public Authority classes of customers,
(c) 1.964 ¢/kWh for the Large General Service class of customers,
(d) 1.906 ¢/kWh for the Schedule NS class of customers,
(e) 1.933 ¢/kWh for the Schedule 6VP class of customers, and
(f) 1.982 ¢/kWh for the Outdoor Lighting and Traffic classes of customers; and

grant any other relief the Commission deems appropriate.

Respectfully submitted, this the 23rd day of August, 2017.

DOMINION ENERGY NORTH CAROLINA

By: */s/Mary Lynne Grigg*
Counsel

Counsel for Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina

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VERIFICATION

E-22, Sub 546

I, J. Kevin Curtis, Vice President – Technical Solutions, for Virginia Electric and Power Company, do solemnly swear that the facts stated in the foregoing *Application Pursuant to G.S. 62-133.2 and Commission Rule R8-55 Regarding Fuel and Fuel-Related Costs Adjustments for Electric Utilities* insofar as they relate to Virginia Electric and Power Company d/b/a Dominion Energy North Carolina, are true and correct to the best of my knowledge and belief.

J. Kevin Curtis

COMMONWEALTH OF VIRGINIA)
) to wit:
City of Richmond)

The foregoing instrument was sworn to and acknowledged before me this 22nd day of August, 2017.

Notary Public

My registration number is 7296406 and my commission expires:
07/31/2021

Amy Leigh Bowers
NOTARY PUBLIC
Commonwealth of Virginia
Reg. #7296406
My Commission Expires 7/31/2021

DOMINION ENERGY NORTH CAROLINA

DOCKET NO. E-22, SUB 546

TESTIMONY

AND

EXHIBITS

OF

BRUCE E. PETRIE

JAMES D. MERRITT

RONNIE T. CAMPBELL

TOM A. BROOKMIRE

GREGORY A. WORKMAN

RULE R8-55

INFORMATION AND WORKPAPERS

AUGUST 23, 2017

DIRECT TESTIMONY
OF
BRUCE E. PETRIE
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 546

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

A. My name is Bruce E. Petrie, and my business address is 5000 Dominion Boulevard, Glen Allen, Virginia 23060. I am Manager of Generation System Planning for Virginia Electric and Power Company, which operates in North Carolina as Dominion Energy North Carolina (the "Company"). I am responsible for forecasting the Company's system energy supply mix, and total system fuel and purchased power expenses. A statement of my background and qualifications is attached as Appendix A.

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

A. The purpose of my testimony is to present the Company's nuclear and major coal-fired generating unit actual performance, the Company's level of power purchases, and the generation mix for the Company's 12-month test period ended June 30, 2017 ("Test Period"). My testimony describes drivers that affected system fuel expense and the normalization adjustments that impact the expected system fuel expense. I will present the system fuel expenses for the Test Period, and the normalized system fuel expense projected for the calendar year 2018 rate period.

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

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

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

A. Schedules 1 and 2 of Company Exhibit BEP-1 show the actual monthly and 12-month period ending June 30, 2017 average Equivalent Availability ("EA") and Capacity Factors ("CF") for the Company's nuclear units and large coal-fired units during the Test Period.

During the Test Period, the Company's coal units generated 20,417 GWh of energy. Mt. Storm Units 1-3 performed at EA factors of 67.5%, 76.1%, and 77.1%, respectively. Chesterfield Units 5 – 6 had EA factors of 79.8% and 68.6%, respectively. Virginia City Hybrid Energy Center ("VCHEC") had an EA of 79.4% during the Test Period.

In regards to what constitutes reasonable nuclear unit performance, North Carolina Utilities Commission Rule R8-55(k) requires that the Company's actual system-wide nuclear capacity factor in the Test Period must exceed the national average capacity factor for nuclear production facilities based on the most recent five-year period available as reflected by the North American Electric Reliability Corporation ("NERC"), appropriately weighted for size and type of plant. The NERC 2011-2015 five-year industry average net

capacity factor for Pressurized Water Reactors, which is the most recent available NERC average, is 88.5% for 800-999 MW units. The net capacity factors during the historic Test Period for the Company's nuclear units are shown below.

N. Anna 1	91.6%
N. Anna 2	100.6%
Surry 1	96.6%
Surry 2	93.1%

The aggregate capacity factor was 95.5% for the Company's nuclear units for the Test Period. This is based on the weighted average of the four units at 100% of capacity. Based on these figures, the Company's nuclear fleet performance during the Test Period was clearly better than the industry five-year average for comparable units.

In addition, for the same five-year period, the Company's net capacity factor was 91.0% compared to the national average of 88.5%. Nuclear net capacity factor is the best measure for reliable baseload performance and related operating efficiency and is the predominant standard recognized in the energy arena when evaluating nuclear power plant performance. A high net capacity factor reflects an excellent level of reliable baseload operations, which translates into many customer benefits in terms of reduced system fuel cost and consistency in availability. Maximizing generation from this baseload resource reflects good operating efficiency and results in overall lower energy costs to customers.

Q. Please review the performance of the Company's nuclear generating units in last year's fuel case.

A. In the 2016 fuel case, the Public Staff investigated several outages at the Surry station during the summer and fall of 2015. Since the matter was still being discussed at the conclusion of that case, the Public Staff and the Company agreed that any resulting recommendations would be made in the 2017 fuel adjustment proceeding. In its final order issued in the 2016 case, the Commission concluded, subject to further consideration of these outages, that the Company managed its baseload plants prudently and efficiently so as to minimize fuel costs. (Order at 9) The Company's maintains that it reasonably and prudently followed well-established procedures prior to and throughout these outages that, without exception, had been successful in prior years, and that it had no reason to expect that the procedures it followed leading up to these outages would not be adequate. The Company also continues to maintain that its management of and response to these outages were reasonable and prudent. Furthermore, as it was shown to be in the 2016 fuel proceeding, the Company's overall nuclear unit performance continues to be excellent. This excellent performance is demonstrated by the consistent high capacity factors for the fleet, which included an aggregate capacity factor during the 2015-2016 Test Period of 92.2%, followed by the 95.5% aggregate capacity factor for the 2016-2017 Test Period. The following table summarizes the Company's nuclear fleet performance over various time periods, versus the most current five-year NERC industry average.

Net Capacity Factor	2011-2015	July 2015-June 2017	July 2016-June 2017
Dominion Energy Fleet	91.0	93.8	95.5
NERC (800-999 PWR)	88.5		

The Company's excellent nuclear performance over the industry average has resulted in lower fuel costs for its customers. Nuclear fuel expenses are much lower than other types of baseload fuel expenses, as shown on Schedule 4 of Company Exhibit BEP-1.

Q. What is the expected performance of the Company's nuclear generating units for the 12-month rate period ending December 31, 2018?

A. The projected capacity factors for both North Anna and Surry are expected to be above the most recent NERC five-year average capacity factors of 88.5%. The projected capacity factors are shown below.

N. Anna 1	90.4%
N. Anna 2	99.6%
Surry 1	93.1%
Surry 2	91.1%

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

A. The generation mix during the Test Period is shown on Schedule 3 of Company Exhibit BEP-1. Nuclear generation supplied 33.0%; coal-fired generation supplied 22.3%; combined cycle and combustion turbine generation supplied 33.6%; and power transactions (net) supplied 8.5%. These four energy sources accounted for 97.3% of the total energy supply.

Natural gas-steam, oil, biomass and hydro generation provided the remaining 2.7% (net) of the energy supplied.

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

A. As stated by Company Witness Ronnie T. Campbell, the Company experienced an over-recovery of fuel expenses during the Test Period. This fuel over-recovery was primarily driven by mild weather, moderate commodity prices, and the addition of new and efficient natural gas generation. In addition, the Company optimized its diverse fleet of generating assets to reduce system fuel expense.

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

A. Yes. Since the Company's projected nuclear generation during the upcoming rate year is expected to be slightly lower than the actual generation during the Test Period, we have normalized expected nuclear generation and fuel expenses using the expected nuclear capacity factors shown above for the 12-month period ending December 31, 2018, in developing the proposed fuel cost rider in this proceeding.

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

A. Schedule 4 of Company Exhibit BEP-1 illustrates an expense normalization methodology that has been used by the Company and approved in previous North Carolina annual fuel factor proceedings. The first step in computing

normalized system fuel expenses is to calculate nuclear generation based on the expected future operating parameters for each unit. The expected generation from the nuclear units was calculated for the 12-month period ending December 2018. Other sources of generation were then normalized for the Test Period. The total of coal, heavy oil, combustion turbine and combined cycle, non-utility generation ("NUG"), and purchased energy during the Test Period was then calculated. A percentage of this total was then calculated for each of the above resources. Normalized generation was computed by applying these percentages to a new total, which includes an adjustment for weather, customer growth, increased usage, and the net change in nuclear generation. This methodology for normalizing the Test Period generation resulted in adjusted annual system energy requirements of 85,796,167 MWh, an increase of 947,748 MWh from the actual energy requirements for the 12 months ended June 30, 2017.

Q. Please describe any major changes to the generation fleet that will impact the system fuel expense.

A. There are no major changes to the Company owned units. There will be changes to the NUG contracts, with two contracts scheduled to expire during 2017. The 605 MW contract with Doswell ended in May 2017, and the 116 MW and 85 MW contracts with the Spruance facility ended in July 2017. The Company also expects additional growth in solar energy production.

Q. Please describe the other fuel expense normalization items.

A. The following normalization adjustments were made in Schedule 4.

(1) The $/MWh expense rates for nuclear, natural gas, coal, oil, and NUGs are based on the actual 12-month average expense rates incurred during the Test Period. Using the 12-month average rate for these commodities is consistent with the methodology used in the 2008 – 2016 fuel cases, and is a fair representation of the expected expense rates during the calendar year 2018 rate period.

(2) The NUG expense is adjusted higher to account for the retirements of the Doswell and Spruance contracts.

Q. Please comment on the changes in the expenses included for PJM market purchases, NUG energy purchases, and off-system sales.

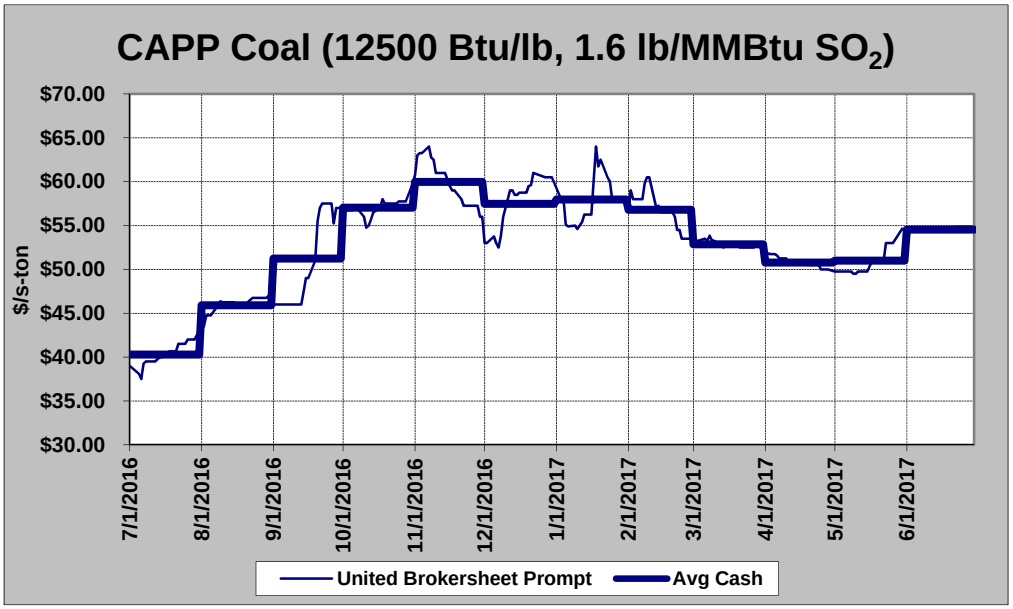
A. Schedule 4 shows the PJM market purchases during the Test Period including the FTR net revenues, as well as off-system sales and NUG purchases made with the marketer percentage applied to these expenses at the appropriate level.

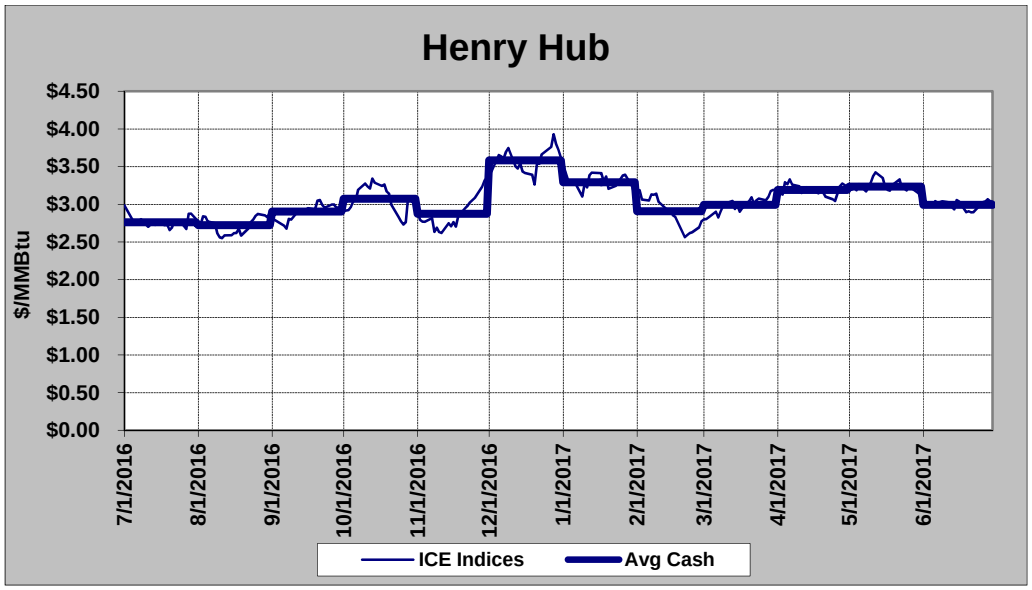
Q. What is the resulting normalized system fuel expense?

A. As shown by Schedule 4, which also presents the detailed calculations in support, the resulting normalized system fuel expense is approximately $1.76 billion.

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

A. The graphs below show the actual spot commodity prices during the Test Period. Spot coal prices trended upward during the Test Period. Natural gas spot prices trended upward slightly during the Test Period. Company Witness Gregory A. Workman describes the Company's coal and natural gas buying practices, which determine the actual coal and natural gas expenses. Spot power prices showed relatively low prices and low volatility, due in part to the correlated nature of natural gas and power prices.





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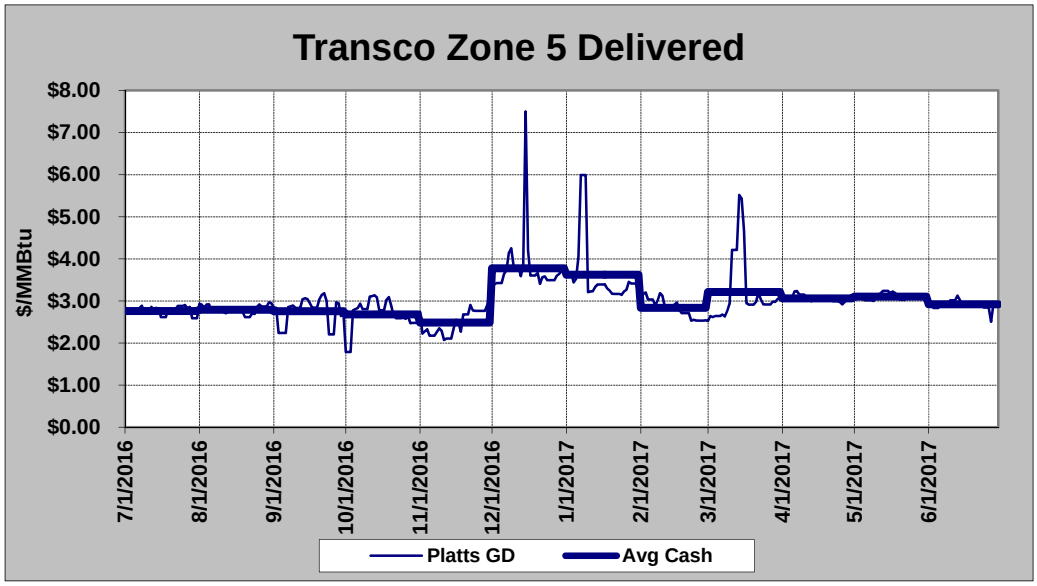

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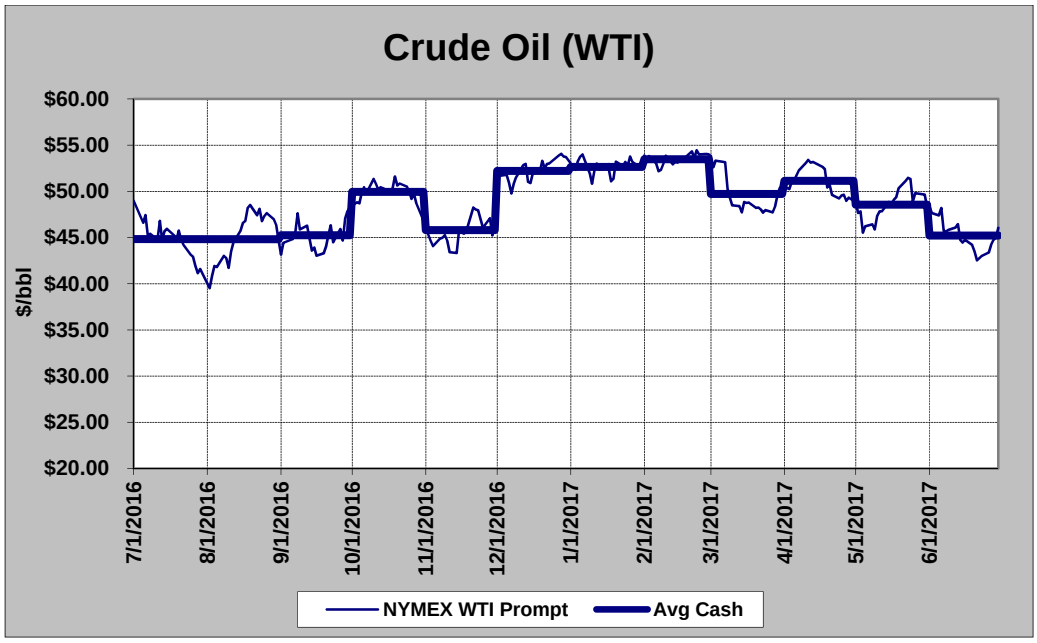

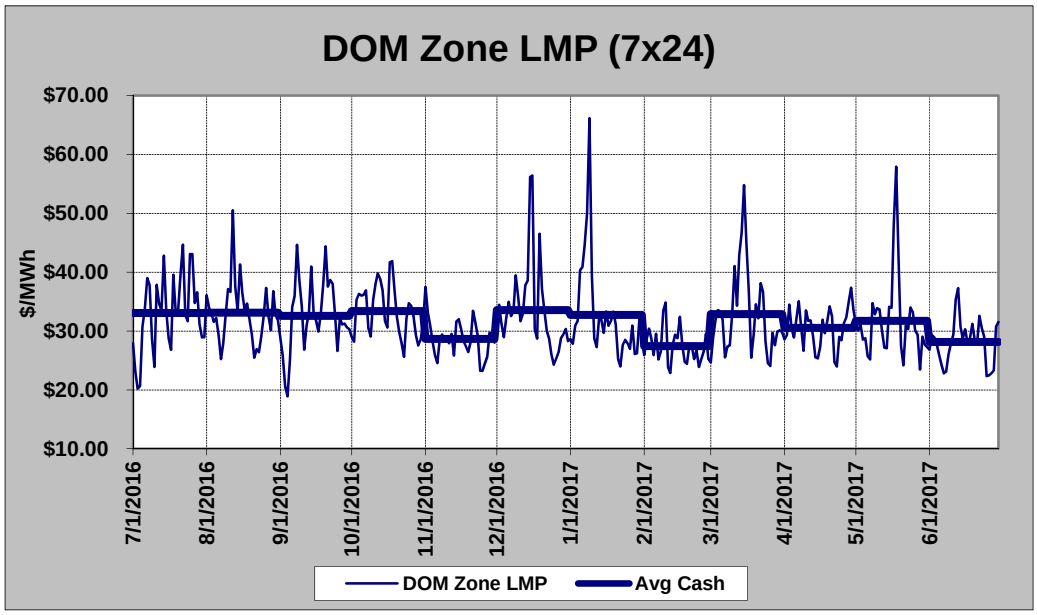

Q. Mr. Petrie, does this conclude your direct testimony?

A. Yes, it does.

BACKGROUND AND QUALIFICATIONS
OF
BRUCE E. PETRIE

Bruce E. Petrie graduated from Clarkson University in 1983 with a Bachelor of Science degree in Mechanical Engineering. From 1983 to 1986 he worked for Babcock and Wilcox designing tools for nuclear power plant maintenance. In 1988 he earned a Master of Business Administration degree from Virginia Tech.

Mr. Petrie worked for Niagara Mohawk Power Corporation from 1988 through 1998 in generation planning, fuel procurement, and wholesale power marketing, and then at Old Dominion Electric Cooperative from 1998 until 2001 as a power supply analyst. He joined the Company in April 2001 as an electric pricing and structuring analyst. His responsibilities included the pricing and structuring of wholesale electric transactions, project financial analysis, and analytical support to the Energy Supply group.

In October 2007, Mr. Petrie was promoted to Manager of Generation System Planning. He is currently responsible for the Company's mid-term operational forecast (PROMOD model).

E-22, Sub 546 **Company Exhibit BEP-1**
DOMINION ENERGY NORTH CAROLINA **Schedule 1**
EQUIVALENT AVAILABILITY FACTORS (%)
NUCLEAR AND LARGE COAL UNITS

July 2016-June 2017

	Nuclear Units				Large Coal Units					
	North Anna		Surry		Mt. Storm			Chesterfield		VaCity
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2	Unit 3	Unit 5	Unit 6	Unit 1
Jul-16	99.0%	96.9%	100.0%	100.0%	98.3%	90.7%	97.1%	84.6%	87.3%	85.2%
Aug-16	99.2%	87.5%	100.0%	100.0%	93.1%	97.2%	95.8%	58.3%	86.4%	100.0%
Sep-16	31.9%	100.0%	100.0%	100.0%	35.8%	95.0%	74.7%	57.4%	88.5%	99.7%
Oct-16	45.9%	100.0%	67.6%	86.5%	23.5%	0.1%	96.0%	93.8%	64.2%	16.1%
Nov-16	100.0%	100.0%	62.7%	100.0%	94.0%	73.8%	39.8%	97.1%	51.2%	39.6%
Dec-16	100.0%	100.0%	96.5%	100.0%	94.6%	99.9%	98.6%	91.6%	98.7%	100.0%
Jan-17	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%	99.3%	98.4%	100.0%
Feb-17	100.0%	93.7%	100.0%	100.0%	69.2%	72.5%	99.9%	83.2%	84.2%	68.7%
Mar-17	100.0%	100.0%	99.9%	100.0%	0.0%	100.0%	90.5%	90.2%	41.1%	84.9%
Apr-17	100.0%	100.0%	100.0%	98.7%	18.9%	46.7%	15.0%	98.8%	0.0%	74.2%
May-17	100.0%	100.0%	100.0%	15.0%	96.5%	39.1%	43.4%	22.3%	38.3%	97.9%
Jun-17	100.0%	100.0%	100.0%	86.8%	86.7%	98.0%	74.6%	81.5%	85.0%	86.1%
12-Month Average	89.7%	98.2%	93.9%	90.5%	67.5%	76.1%	77.1%	79.8%	68.6%	79.4%

E-22, Sub 546 **Company Exhibit BEP-1**
DOMINION ENERGY NORTH CAROLINA **Schedule 2**
NET CAPACITY FACTORS (%) NUCLEAR
AND LARGE COAL UNITS

July 2016-June 2017

	Nuclear Units				Large Coal Units					
	North Anna		Surry		Mt. Storm			Chesterfield		VaCity
	Unit 1	Unit 2	Unit 1	Unit 2	Unit 1	Unit 2	Unit 3	Unit 5	Unit 6	Unit 1
Jul-16	100.1%	95.8%	100.3%	100.5%	88.4%	81.9%	93.5%	70.2%	76.3%	78.4%
Aug-16	99.5%	88.1%	100.2%	100.1%	82.6%	84.4%	88.0%	52.0%	72.5%	86.1%
Sep-16	31.9%	101.3%	101.6%	101.8%	29.2%	77.7%	66.3%	47.3%	71.9%	83.2%
Oct-16	44.6%	102.9%	68.8%	89.4%	17.8%	0.0%	86.5%	80.3%	49.6%	13.3%
Nov-16	103.3%	103.6%	65.5%	104.3%	57.3%	42.7%	12.3%	45.3%	36.8%	31.5%
Dec-16	103.1%	103.5%	100.8%	104.7%	66.3%	78.2%	39.5%	64.0%	83.3%	90.8%
Jan-17	103.5%	103.8%	104.7%	104.8%	74.9%	75.3%	71.0%	69.5%	76.6%	87.0%
Feb-17	103.4%	96.9%	104.4%	104.2%	43.4%	43.8%	45.3%	41.3%	9.2%	56.6%
Mar-17	103.7%	103.8%	104.1%	104.2%	0.0%	80.6%	63.3%	54.6%	29.1%	77.2%
Apr-17	103.0%	103.5%	103.6%	102.0%	13.7%	38.6%	11.3%	82.1%	0.0%	65.4%
May-17	102.4%	102.8%	103.2%	14.5%	78.5%	33.6%	35.7%	13.8%	26.4%	82.4%
Jun-17	101.0%	101.4%	101.9%	88.0%	69.0%	75.9%	46.0%	57.2%	52.7%	72.3%
12-Month Average	91.6%	100.6%	96.6%	93.1%	51.8%	59.4%	54.9%	56.5%	48.7%	68.7%

E-22, Sub 546

Company Exhibit BEP-1
Schedule 3

DOMINION ENERGY NORTH CAROLINA

SYSTEM ENERGY SUPPLY

Actual 12-Month Ended June 2017

	Generation (MWhs)	% of Energy Supply
Nuclear	27,998,627	33.0%
Coal	18,885,985	22.3%
Heavy Oil	186,787	0.2%
Wood and Natural Gas Steam	1,530,691	1.8%
Combined Cycle and Combustion Turbine	28,477,922	33.6%
Solar and Hydro - Conventional and Pumped Storage	3,155,211	3.7%
Net Power Transactions	7,176,726	8.5%
Less Energy for Pumping	(2,563,530)	-3.0%
Total System	84,848,419	100.0%
Nuclear, Coal and Net Power Transactions		97.3%

E-22, Sub 546
DOMINION ENERGY NORTH CAROLINA
ENERGY AND FUEL EXPENSES

Company Exhibit BEP-1
Schedule 4

Normalized and Adjusted Energy and Fuel Expense based on Actual 12-Months Ended June 2017
(Company Ownership Only)

OFFICIAL COPY

Aug 23 2017

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)
	12-Months Ended June 2017							June 2017				
	Expense ($)	Generation (MWh)	Rate ($/MWh)	Supply (%)	Ratio of Coal Oil, CT & CC NUG & Other MWH To Total Sum	Coal, Oil, CT & CC, NUG, Other, Nuclear Adj. and Growth MWh	Adjusted Generation (MWh)	Expense ($)	Generation (MWh)	Rate ($/MWh)		Normalized & Adjusted Fuel Expense at Applicable Rate (8) x (11)
Coal (1)	625,244,290	20,416,677	30.62	24.1	0.3367	62,190,984	20,939,580	53,442,322	1,738,005	30.62	(5)	641,169,940
Nuclear												
Surry	95,494,632	13,919,279	6.86	16.4			13,523,434	11,017,946	1,145,668			
North Anna	94,379,567	14,079,348	6.70	16.6			13,919,074	8,242,373	1,218,545			
Total Nuclear	189,874,199 (4)	27,998,627	6.78	33.0			27,442,508	19,260,318	2,364,213	6.78	(5)	186,060,207
Heavy Oil	16,556,016	186,787	88.64	0.2	0.0031	62,190,984	191,548	4,928,825	57,322	88.64	(5)	16,978,815
CC & CT (2)	725,870,216	28,477,922	25.49	33.6	0.4696	62,190,984	29,207,250	63,515,375	2,776,453	25.49	(5)	744,492,803
Hydro	0	3,106,119		3.7			3,106,119	0	416,138			0
Solar		49,093		0.1			49,093		11,250			
Power Transactions												
NUG Fuel (6)	103,196,186	5,556,931	18.57	6.5	0.0916	62,190,984	5,699,244	3,962,034	207,549	18.57	(5)	105,839,040
Doswell/Spruance contracts												16,183,650
PJM Purchases	131,759,401	5,999,710	21.96	7.1	0.0989	62,190,984	6,153,363	5,732,290	391,729	21.96	(7)	135,133,779
Adjustments												
Sales for Resale	(87,249,255)	(4,379,915)	19.92	-5.2			(4,379,915)	(2,155,799)	(99,277)			(87,249,255) (3)
Net	147,706,332	7,176,726	20.58	8.5			7,472,692	7,538,526	500,001			169,907,214
Pumping	0	(2,563,530)		-3.0			(2,563,530)	0	(333,831)			0
Energy Supply	1,705,251,054	84,848,419	20.10	100.0			85,796,167	148,685,366	7,529,552	20.50 at gen level		1,758,608,978

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) Fuel expense is equal to 12 months ended June 2017
(4) Nuclear expense excludes interim storage
(5) Fuel expense rate based on average cost for 12 month period ending Jun 2017
(6) NUG fuel includes expenses related to dispatchable NUGs at 85%(July-Dec) and 78% (Jan-Jun) for those units subject to the marketer percentage
(7) Purchases include at 85% (July-Dec) and 78% (Jan-Jun) of the fuel expense and the impact of the FTRs

DIRECT TESTIMONY
OF
JAMES D. MERRITT
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 546

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

A. My name is James D. Merritt. My business address is 701 East Cary Street, Richmond, Virginia 23219. My title is Regulatory Analyst II for Virginia Electric and Power Company, which operates in North Carolina as Dominion Energy North Carolina (the "Company"). A statement of my background and qualifications is attached as Appendix A.

Q. Mr. Merritt, what is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present the Company's derivation of the proposed Fuel Cost Rider A and the proposed Experience Modification Factor ("EMF") Rider B, and EMF Rider B2, for the North Carolina jurisdiction and for each customer class based on the twelve months ended June 30, 2017 (the "test period"), to become effective on January 1, 2018. I am also sponsoring the calculation of the adjustment to total system sales (kWh) for the twelve months ended June 30, 2017, due to change in usage, weather normalization, and customer growth.

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

A. Yes. Exhibit JDM-1, consisting of seven schedules, was prepared under my direction and is accurate and complete to the best of my knowledge and belief.

Q. Mr. Merritt, please explain Schedule 1.

A. Schedule 1 of Exhibit JDM-1 provides a summary of jurisdictional and total system kWh sales for the twelve months ended June 30, 2017, adjusted for change in usage, weather normalization, and customer growth. Line 1 of Schedule 1 shows the adjustment to sales for the North Carolina Jurisdiction of 24,172,950 kWh. The adjustment to total system kWh at sales level is 996,840,129 kWh. This adjustment is consistent with the methodology used in the Company's last general rate case (Docket No. E-22, Sub 532) and the last fuel charge adjustment case (Docket No. E-22, Sub 534). The workpapers supporting the change in usage, weather normalization, and customer growth calculation are provided in response to Rule R8-55 (e)(2).

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

A. Yes. Schedule 2 of Exhibit JDM-1 presents the calculation of the proposed System Average Fuel Factor for the North Carolina jurisdiction and for each customer class. On Schedule 2, Page 1, a system fuel expense level of $1,758,608,978 (as provided in Schedule 4 of Exhibit BEP-1) is divided by system sales of 84,774,563,328 kWh that reflect the normalization adjustments for change in usage, weather and customer growth, and adjusted for the North Carolina regulatory fee. The result is a normalized system average fuel factor of $0.02077/kWh, applicable to the North Carolina jurisdiction. The calculations used to differentiate the jurisdictional Base Fuel

Component by voltage to determine the class fuel factors are shown on Schedule 2, Page 2. They are consistent with the methodology used in the Company's most recent fuel case (Docket No. E-22, Sub 534). The Base Fuel Component for each class determined in Docket No. E-22, Sub 534 is shown in Column 8 of Schedule 2, Page 2. Fuel Cost Rider A is calculated in Column 9 of Schedule 2, Page 2.

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

A. Schedule 3 of Exhibit JDM-1 presents the calculation of the proposed EMF Rider B applicable to the North Carolina jurisdiction and the resulting factors for each customer class. Schedule 3, Page 1, shows the calculation of the proposed uniform EMF applicable to the North Carolina jurisdiction. The total over recovered fuel expense, for the period July 1, 2016, through June 30, 2017, of $4,739,956 (as provided in Schedule 2 of Exhibit RTC-1) was adjusted by $710,993 to account for interest. The total net balance of $5,450,950 was then divided by North Carolina test year sales of 4,299,466,351 kWh which have been adjusted for change in usage, weather, and customer growth. After being adjusted for the North Carolina regulatory fee, the result is a uniform EMF of ($0.00127)/kWh, applicable to the North Carolina jurisdiction. The calculations used to differentiate the uniform factor by voltage to determine the class factors are shown on Schedule 3, Page 2.

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

Q. Mr. Merritt, will you be updating the Experience Modification Factor, Rider B2?

A. Yes. Pursuant to the Commission's order in Docket No. E-22, Sub 515, the Commission approved a mitigation proposal that would recover the prior period deferral balance of $16,602,670 over the 2015 and 2016 fuel rate years, without interest, subject to a final true-up to be determined in the 2017 fuel case and recovered over the 2018 fuel year. The total under-recovery balance for the 24 months ended December 31, 2016, is $381,535 (as provided in Schedule 6 of Exhibit RTC-1). Schedule 4 of Exhibit JDM-1 presents the calculation of the proposed uniform EMF Rider B2 applicable to the North Carolina jurisdiction and the resulting factors for each customer class. Schedule 4, Page 1 shows the calculation of the proposed EMF Rider B2 of $0.00009 kWh to be applicable to the North Carolina jurisdiction for the 2018 fuel year, designed to recover the remaining balance related to the approved mitigation plan. The calculations used to differentiate this factor by voltage to determine the class factors are shown on Schedule 4, Page 2. The resulting EMF Rider B2 for each class is shown in Column 7 of Schedule 4, Page 2.

Q. Please provide a summary of the total fuel factors that the Company is requesting in this case for each class to become effective January 1, 2018.

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

Customer Class	Total
Residential	$0.01982
SGS & PA	$0.01980
LGS	$0.01964
Schedule NS	$0.01906
6VP	$0.01933
Outdoor Lighting	$0.01982
Traffic	$0.01982

A comparison of the present and proposed total rates for each class is shown on my Schedule 5, Pages 1 and 2 of Exhibit JDM-1.

Q. Do you have a schedule that shows the total fuel revenue recovery by class and for the North Carolina jurisdiction for the 2018 fuel year?

A. Yes. Schedule 6 of Exhibit JDM-1 shows the total fuel revenue recovery by class and for the North Carolina jurisdiction for the 2018 fuel year. For the North Carolina jurisdiction, the proposed jurisdictional fuel cost levels result in a total fuel recovery increase of $15,220,111.

Q. Have you included in your exhibit a revision to the Fuel Cost Rider A, EMF Rider B, and EMF Rider B2 which will reflect the Company's proposed total fuel factors, to be effective January 1, 2018?

A. Yes. Schedule 7, Pages 1-3 of Exhibit JDM-1 provides the revised Fuel Charge Rider A, EMF Rider B, and the EMF Rider B2, that the Company proposes to become effective on and after January 1, 2018.

Q. Mr. Merritt, please explain how these proposed changes in the fuel factor will affect customers' bills. Use bill amounts as of August 1, 2017 as a point of reference.

A. For Rate Schedule 1 (residential), for a customer using 1,000 kWh per month, the weighted monthly residential bill (4 summer months and 8 base months) would increase by $3.60 from $105.53 to $109.13, or by 3.4%. For Rate Schedule 5 (small general service), for a customer using 12,500 kWh per month and 50 kW of demand, the weighted monthly bill (4 summer months and 8 base months) would increase by $44.88 from $1,015.02 to $1,059.90, or by 4.4%. For Rate Schedule 6P (large general service), for a customer using 576,000 kWh (259,200 kWh on-peak and 316,800 kWh off-peak) per month and 1,000 kW of demand, the monthly bill would increase by $2039.04 from $35,067.07 to $37,106.11, or by 5.8%.

Q. Does this conclude your testimony?

A. Yes, it does.

BACKGROUND AND QUALIFICATIONS
OF
JAMES D. MERRITT

James D. Merritt graduated from Virginia Commonwealth University in 2008 with a Bachelor of Arts degree in Political Science. He received his Master of Public Administration from Virginia Polytechnic and State University in 2014. He was hired by Virginia Electric and Power Company in January 2009. From 2009 to 2010, he worked in the PJM/LSE/Wholesale Data Management Group. In 2010, he served in Customer Relations, assisting with regulatory policy and customer service analytics. In 2011, he moved to the Regulatory Case Management group, coordinating many of the Company's rate cases and other regulatory filings. In 2013, Mr. Merritt moved to the Customer Rates group, performing rate design, the large industrial manual bill process, typical bills, rate design software implementation and programming, and communication. He has also assisted with multiple rate case filings in Virginia and North Carolina.

Mr. Merritt has previously presented testimony before the North Carolina Utilities Commission in Docket E-22, Sub 535 and before the Virginia State Corporation Commission.

SUMMARY OF KWH ATTRIBUTABLE TO
CHANGE IN USAGE, WEATHER NORMALIZATION, AND CUSTOMER GROWTH
TWELVE MONTHS ENDED JUNE 30, 2017

SYSTEM

LINE	JURISDICTION	CHANGE IN USAGE KWH	WEATHER NORM. KWH	CUSTOMER GROWTH KWH	TOTAL KWH
1)	NORTH CAROLINA (A)	(30,654,481)	49,588,559	5,238,872	24,172,950
2)	VIRGINIA	660,591,710	161,616,013	145,890,423	968,098,146
3)	COUNTY	114,409,944	(33,142,312)	(22,413,932)	58,853,700
4)	STATE	(11,158,143)	(11,517,252)	9,910,576	(12,764,819)
5)	MS - GOVERNMENTAL	(12,242,614)	(41,277,315)	(58,035,643)	(111,555,572)
7)	FERC	0	27,455,685	0	27,455,685
8)	SYSTEM KWH AT SALES LEVEL	720,946,416	152,723,378	80,590,296	954,260,090
9)	SUBTOTAL - SYSTEM KWH AT GENERATION LEVEL (LINE 8 x 2016 EXPANSION FACTOR) (B)				996,840,129

NOTES

( ) DENOTES NEGATIVE VALUE

(A) NORTH CAROLINA BY CLASS	CHANGE IN USAGE KWH	WEATHER NORM. KWH	CUSTOMER GROWTH KWH	TOTAL KWH
RESIDENTIAL	1,912,184	42,343,840	845,659	45,101,683
SGS / PA	(6,709,574)	7,244,719	1,299,515	1,834,660
LGS	(25,529,551)	0	3,022,785	(22,506,766)
NS	(1,585,636)	0	0	(1,585,636)
6VP	1,362,609	0	0	1,362,609
ODL & ST LTS	(99,993)	0	70,913	(29,080)
TRAFFIC	(4,520)	0	0	(4,520)
TOTAL	(30,654,481)	49,588,559	5,238,872	24,172,950

(B) 2016 SYSTEM EXPANSION FACTOR IS 1.044621

DOMINION ENERGY NORTH CAROLINA
CALCULATION OF SYSTEM AVERAGE FUEL FACTOR
TWELVE MONTHS ENDED JUNE 30, 2017
TO BE EFFECTIVE JANUARY 1, 2018

EXPENSE:	12 MONTH NORMALIZED SYSTEM FUEL EXPENSE (A)	$1,758,608,978
SALES:	12 MONTHS SYSTEM KWH SALES ADJUSTED FOR CHANGE IN USAGE, WEATHER AND CUSTOMER GROWTH (B)	84,774,563,328
FEE:	NORTH CAROLINA REGULATORY FEE ADJUSTMENT FACTOR	1.0014

$$\text{FACTOR} = \frac{\$1,758,608,978}{84,774,563,328} \times 1.0014$$

FACTOR = $0.02077 / KWH (C) (D)

NOTES

(A) FROM COMPANY EXHIBIT NO. BEP-1 SCHEDULE 4

(B) SYSTEM KWH AT SALES LEVEL [COMPANY EXHIBIT RC-1, SCHEDULE 3]	83,820,303,238
PLUS: SYSTEM KWH USAGE, WEATHER, GROWTH ADJUSTMENT [COMPANY EXHIBIT NO. JDM-1, SCHEDULE 1, LINE 8]	954,260,090
TOTAL SYSTEM SALES	84,774,563,328

(C) THE NORTH CAROLINA JURISDICTIONAL BASE FUEL FACTOR IS $0.02073/KWH

(D) WITHOUT NC REGULATORY FEE $0.02074 /KWH

DOMINION ENERGY NORTH CAROLINA
CALCULATION OF FUEL COST RIDER A
TWELVE MONTHS ENDED JUNE 30, 2017
TO BE EFFECTIVE JANUARY 1, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CUSTOMER CLASS	KWH SALES (A)	SYSTEM FUEL FACTOR (B)	FUEL REVENUE UNIFORM RATE (1) x (2)	CLASS EXPANSION FACTOR	CLASS KWH @ GENERATION LEVEL (1) x (4)	JURISDICTIONAL UNIFORM RATE @ GENERATION LEVEL (3a) / (5a)	JURISDICTIONAL VOLTAGE DIFFERENTIATED RATE @ SALES LEVEL (4) x (6)	VOLTAGE DIFFERENTIATED BASE FUEL RATE	FUEL COST RIDER A RATE (7) - (8)
RESIDENTIAL	1,601,013,554	$0.02077	$33,253,052	1.05204180	1,684,333,184	$0.01997	$0.02101	$0.02095	$0.00006
SGS & PA	817,305,119	$0.02077	$16,975,427	1.05087924	858,888,979	$0.01997	$0.02099	$0.02093	$0.00006
LGS	710,913,646	$0.02077	$14,765,676	1.04236129	741,028,867	$0.01997	$0.02082	$0.02079	$0.00003
SCHEDULE NS	880,048,860	$0.02077	$18,278,615	1.01138685	890,069,846	$0.01997	$0.02020	$0.02014	$0.00006
6VP	264,735,757	$0.02077	$5,498,562	1.02593554	271,601,822	$0.01997	$0.02049	$0.02043	$0.00006
OUTDOOR LIGHTING	17,207,930	$0.02077	$357,409	1.05204180	18,103,462	$0.01997	$0.02101	$0.02095	$0.00006
TRAFFIC	8,241,485	$0.02077	$171,176	1.05204180	8,670,387	$0.01997	$0.02101	$0.02095	$0.00006
TOTAL	4,299,466,351		$89,299,916	(3a)	4,472,696,545	(5a)			

NOTES

(A)

	TEST YR KWH	CHG IN USAGE, WEATHER CUST GROWTH ADJ	TOTAL*
RESIDENTIAL	1,555,911,871	45,101,683	1,601,013,554
SGS & PA	815,470,459	1,834,660	817,305,119
LGS	733,420,412	(22,506,766)	710,913,646
SCHEDULE NS	881,634,496	(1,585,636)	880,048,860
6VP	263,373,148	1,362,609	264,735,757
OUTDOOR LIGHTING	17,237,010	(29,080)	17,207,930
TRAFFIC	8,246,005	(4,520)	8,241,485
TOTAL	4,275,293,401	24,172,950	4,299,466,351

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

(B) IN $/KWH

DOMINION ENERGY NORTH CAROLINA
CALCULATION OF EXPERIENCE MODIFICATION FACTOR - RIDER B
TWELVE MONTHS ENDED JUNE 30, 2017
TO BE EFFECTIVE JANUARY 1, 2018

EXPENSE:	JULY 1, 2016 - JUNE 30, 2017 NC JURISDICTIONAL FUEL EXPENSE UNDER RECOVERY (A)	($4,739,956)
INTEREST:	18 MONTHS AT 10%	($710,993)
NET:		($5,450,950)
SALES:	12 MONTHS JURISDICTIONAL KWH SALES ADJUSTED FOR CHANGE IN USAGE, WEATHER, AND CUSTOMER GROWTH (B)	4,299,466,351
FEE:	NORTH CAROLINA REGULATORY FEE ADJUSTMENT FACTOR	1.0014

$$\text{FACTOR} = \frac{(\$5,450,950)}{4,299,466,351} \times 1.0014$$

FACTOR = ($0.00127) / KWH (C)

NOTES

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

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

(C) WITHOUT NC REGULATORY FEE ($0.00127) /KWH

DOMINION ENERGY NORTH CAROLINA
CALCULATION OF EXPERIENCE MODIFICATION FACTOR - RIDER B
TWELVE MONTHS ENDED JUNE 30, 2017
TO BE EFFECTIVE JANUARY 1, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CUSTOMER CLASS	KWH SALES (A)	NC JURISDICTIONAL EMF (B)	FUEL REVENUE UNIFORM EMF (1) x (2)	CLASS EXPANSION FACTOR	CLASS KWH @ GENERATION LEVEL (1) x (4)	UNIFORM EMF @ GENERATION LEVEL (3a) / (5a)	VOLTAGE DIFFERENTIATED EMF @ SALES LEVEL (4) x (6)
RESIDENTIAL	1,601,013,554	($0.00127)	($2,033,287)	1.05204180	1,684,333,184	($0.00122)	($0.00128)
SGS & PA	817,305,119	($0.00127)	($1,037,978)	1.05087924	858,888,979	($0.00122)	($0.00128)
LGS	710,913,646	($0.00127)	($902,860)	1.04236129	741,028,867	($0.00122)	($0.00127)
SCHEDULE NS	880,048,860	($0.00127)	($1,117,662)	1.01138685	890,069,846	($0.00122)	($0.00123)
6VP	264,735,757	($0.00127)	($336,214)	1.02593554	271,601,822	($0.00122)	($0.00125)
OUTDOOR LIGHTING	17,207,930	($0.00127)	($21,854)	1.05204180	18,103,462	($0.00122)	($0.00128)
TRAFFIC	8,241,485	($0.00127)	($10,467)	1.05204180	8,670,387	($0.00122)	($0.00128)
TOTAL	4,299,466,351		($5,460,322) (3a)		4,472,696,545 (5a)		

NOTES

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

(B) IN $/KWH

DOMINION ENERGY NORTH CAROLINA
CALCULATION OF APPROVED MITIGATION FACTOR - RIDER B2
TWENTY FOUR MONTHS ENDED DECEMBER 31, 2016
TO BE EFFECTIVE JANUARY 1, 2018

EXPENSE:	JANUARY 1, 2015 - DECEMBER 31, 2016 NC JURISDICTIONAL MITIGATION FUEL EXPENSE UNDER RECOVERY (A)	$381,535
INTEREST:	NO INTEREST AS PER FINAL COMMISSION ORDER IN DOCKET E-22, SUB 515 (D)	$0
NET:		$381,535
SALES:	12 MONTHS JURISDICTIONAL KWH SALES ADJUSTED FOR CHANGE IN USAGE, WEATHER, AND CUSTOMER GROWTH (B)	4,299,466,351
FEE:	NORTH CAROLINA REGULATORY FEE ADJUSTMENT FACTOR	1.0014

$$\text{FACTOR} = \frac{\$381,535}{4,299,466,351} \times 1.0014$$

FACTOR = $0.00009 / KWH (C)

NOTES

(A) FROM COMPANY EXHIBIT NO. RC-1 SCHEDULE 6, LINE 5.

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

(C) WITHOUT NC REGULATORY FEE $0.00009 /KWH

(D) FINAL ORDER IN DOCKET E-22, SUB 515 PAGE 26.

DOMINION ENERGY NORTH CAROLINA
CALCULATION OF APPROVED MITIGATION FACTOR - RIDER B2
TWENTY FOUR MONTHS ENDED DECEMBER 31, 2016
TO BE EFFECTIVE JANUARY 1, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CUSTOMER CLASS	KWH SALES (A)	NC JURISDICTIONAL EMF B2 (B)	FUEL REVENUE UNIFORM EMF B2 (1) x (2)	CLASS EXPANSION FACTOR	CLASS KWH @ GENERATION LEVEL (1) x (4)	UNIFORM EMF B2 @ GENERATION LEVEL (3a) / (5a)	VOLTAGE DIFFERENTIATED EMF B2 @ SALES LEVEL (4) x (6)
RESIDENTIAL	1,601,013,554	$0.00009	$144,091	1.05204180	1,684,333,184	$0.00009	$0.00009
SGS & PA	817,305,119	$0.00009	$73,557	1.05087924	858,888,979	$0.00009	$0.00009
LGS	710,913,646	$0.00009	$63,982	1.04236129	741,028,867	$0.00009	$0.00009
SCHEDULE NS	880,048,860	$0.00009	$79,204	1.01138685	890,069,846	$0.00009	$0.00009
6VP	264,735,757	$0.00009	$23,826	1.02593554	271,601,822	$0.00009	$0.00009
OUTDOOR LIGHTING	17,207,930	$0.00009	$1,549	1.05204180	18,103,462	$0.00009	$0.00009
TRAFFIC	8,241,485	$0.00009	$742	1.05204180	8,670,387	$0.00009	$0.00009
TOTAL	4,299,466,351		$386,952 (3a)		4,472,696,545 (5a)		

NOTES

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

(B) IN $/KWH

DOMINION ENERGY NORTH CAROLINA
TOTAL FUEL COST LEVEL - PRESENT AND PROPOSED
TO BE EFFECTIVE JANUARY 1, 2018

	(1)	(2)	(3)	(4)	(5)
NC JURISDICTION	BASE FUEL COMPONENT $/KWH	RIDER A FUEL CHARGE $/KWH	RIDER B EMF $/KWH	RIDER B2 EMF $/KWH	TOTAL FUEL RATE $/KWH
PRESENT	$0.02073	$0.00000	($0.00468)	$0.00000	$0.01605
PROPOSED	$0.02073	$0.00004	($0.00127)	$0.00009	$0.01959
CHANGE	$0.00000	$0.00004	$0.00341	$0.00009	$0.00354
RESIDENTIAL	BASE FUEL COMPONENT $/KWH	RIDER A FUEL CHARGE $/KWH	RIDER B EMF $/KWH	RIDER B2 EMF $/KWH	TOTAL FUEL RATE $/KWH
PRESENT	$0.02095	$0.00000	($0.00473)	$0.00000	$0.01622
PROPOSED	$0.02095	$0.00006	($0.00128)	$0.00009	$0.01982
CHANGE	$0.00000	$0.00006	$0.00345	$0.00009	$0.00360
SGS & PA	BASE FUEL COMPONENT $/KWH	RIDER A FUEL CHARGE $/KWH	RIDER B EMF $/KWH	RIDER B2 EMF $/KWH	TOTAL FUEL RATE $/KWH
PRESENT	$0.02093	$0.00000	($0.00472)	$0.00000	$0.01621
PROPOSED	$0.02093	$0.00006	($0.00128)	$0.00009	$0.01980
CHANGE	$0.00000	$0.00006	$0.00344	$0.00009	$0.00359
LGS	BASE FUEL COMPONENT $/KWH	RIDER A FUEL CHARGE $/KWH	RIDER B EMF $/KWH	RIDER B2 EMF $/KWH	TOTAL FUEL RATE $/KWH
PRESENT	$0.02079	$0.00000	($0.00469)	$0.00000	$0.01610
PROPOSED	$0.02079	$0.00003	($0.00127)	$0.00009	$0.01964
CHANGE	$0.00000	$0.00003	$0.00342	$0.00009	$0.00354

NOTES

( ) DENOTES NEGATIVE VALUE

DOMINION ENERGY NORTH CAROLINA
TOTAL FUEL COST LEVEL - PRESENT AND PROPOSED
TO BE EFFECTIVE JANUARY 1, 2018

	(1)	(2)	(3)	(4)	(5)
SCHEDULE NS	BASE FUEL COMPONENT $/KWH	RIDER A FUEL CHARGE $/KWH	RIDER B EMF $/KWH	RIDER B2 EMF $/KWH	TOTAL FUEL RATE $/KWH
PRESENT	$0.02014	$0.00000	($0.00454)	$0.00000	$0.01560
PROPOSED	$0.02014	$0.00006	($0.00123)	$0.00009	$0.01906
CHANGE	$0.00000	$0.00006	$0.00331	$0.00009	$0.00346
6VP	BASE FUEL COMPONENT $/KWH	RIDER A FUEL CHARGE $/KWH	RIDER B EMF $/KWH	RIDER B2 EMF $/KWH	TOTAL FUEL RATE $/KWH
PRESENT	$0.02043	$0.00000	($0.00461)	$0.00000	$0.01582
PROPOSED	$0.02043	$0.00006	($0.00125)	$0.00009	$0.01933
CHANGE	$0.00000	$0.00006	$0.00336	$0.00009	$0.00351
OUTDOOR LIGHTING	BASE FUEL COMPONENT $/KWH	RIDER A FUEL CHARGE $/KWH	RIDER B EMF $/KWH	RIDER B2 EMF $/KWH	TOTAL FUEL RATE $/KWH
PRESENT	$0.02095	$0.00000	($0.00473)	$0.00000	$0.01622
PROPOSED	$0.02095	$0.00006	($0.00128)	$0.00009	$0.01982
CHANGE	$0.00000	$0.00006	$0.00345	$0.00009	$0.00360
TRAFFIC	BASE FUEL COMPONENT $/KWH	RIDER A FUEL CHARGE $/KWH	RIDER B EMF $/KWH	RIDER B2 EMF $/KWH	TOTAL FUEL RATE $/KWH
PRESENT	$0.02095	$0.00000	($0.00473)	$0.00000	$0.01622
PROPOSED	$0.02095	$0.00006	($0.00128)	$0.00009	$0.01982
CHANGE	$0.00000	$0.00006	$0.00345	$0.00009	$0.00360

NOTES

( ) DENOTES NEGATIVE VALUE

DOMINION ENERGY NORTH CAROLINA
TOTAL FUEL RECOVERY
TWELVE MONTHS ENDED JUNE 30, 2017
TO BE EFFECTIVE JANUARY 1, 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CUSTOMER CLASS	SALES(KWH)	BASE FUEL COMPONENT (A)	FUEL COST RIDER A (B)	EMF RIDER B (C)	EMF RIDER B2 (D)	TOTAL (2) + (3) + (4) + (5)	TOTAL REVENUE (1) x (6)
RESIDENTIAL	1,601,013,554	$0.02095	$0.00006	($0.00128)	$0.00009	$0.01982	$31,732,089
SGS & PA	817,305,119	$0.02093	$0.00006	($0.00128)	$0.00009	$0.01980	$16,182,641
LGS	710,913,646	$0.02079	$0.00003	($0.00127)	$0.00009	$0.01964	$13,962,344
SCHEDULE NS	880,048,860	$0.02014	$0.00006	($0.00123)	$0.00009	$0.01906	$16,773,731
6VP	264,735,757	$0.02043	$0.00006	($0.00125)	$0.00009	$0.01933	$5,117,342
OUTDOOR LIGHTING	17,207,930	$0.02095	$0.00006	($0.00128)	$0.00009	$0.01982	$341,061
TRAFFIC	8,241,485	$0.02095	$0.00006	($0.00128)	$0.00009	$0.01982	$163,346
TOTAL	4,299,466,351						$84,272,555

	SALES(KWH)	BASE FUEL COMPONENT	FUEL COST RIDER A	EMF RIDER B	EMF RIDER B2	TOTAL (2) + (3) + (4) + (5)	TOTAL REVENUE (1) x (6)
NORTH CAROLINA JURISDICTION	4,299,466,351	$0.02073	$0.00004	($0.00127)	$0.00009	$0.01959	$84,226,546

	SALES(KWH)	PRESENT TOTAL RATE	PROPOSED TOTAL RATE	TOTAL CHANGE (3) - (2)	TOTAL REVENUE CHANGE (4) x (1)
NORTH CAROLINA JURISDICTION REVENUE CHANGE	4,299,466,351	$0.01605	$0.01959	$0.00354	$15,220,111

NOTES

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

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

(C) FROM COMPANY EXHIBIT NO. JDM-1 SCHEDULE 3, PAGE 2

(D) FROM COMPANY EXHIBIT NO. JDM-1 SCHEDULE 4, PAGE 2

RIDER A

FUEL COST RIDER

The applicable cents per kilowatt-hour charge[1] 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.

Rate Schedule	Customer Class	Cents per kWh Charge
Schedule 1	Residential	0.006¢/kWh
Schedule 1DF	Residential	0.006¢/kWh
Schedule 1P	Residential	0.006¢/kWh
Schedule 1T	Residential	0.006¢/kWh
Schedule 1W	Residential	0.006¢/kWh
Schedule 5	SGS & Public Authority	0.006¢/kWh
Schedule 5C	SGS & Public Authority	0.006¢/kWh
Schedule 5P	SGS & Public Authority	0.006¢/kWh
Schedule 7	SGS & Public Authority	0.006¢/kWh
Schedule 30	SGS & Public Authority	0.006¢/kWh
Schedule 42	SGS & Public Authority	0.006¢/kWh
Schedule 6C	Large General Service	0.003¢/kWh
Schedule 6P	Large General Service	0.003¢/kWh
Schedule 6L	Large General Service	0.003¢/kWh
Schedule 10	Large General Service	0.003¢/kWh
Schedule 26	Outdoor Lighting	0.006¢/kWh
Schedule 30T	Traffic Control	0.006¢/kWh
Schedule 6VP	6VP	0.006¢/kWh
Schedule NS Tier 2-Type A and Tier 3 Energy Charges	Schedule NS	0.006¢/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

[1]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 B

EXPERIENCE MODIFICATION FACTOR (EMF)

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

Rate Schedule	Customer Class	Cents per kWh Charge
Schedule 1	Residential	-0128¢/kWh
Schedule 1DF	Residential	-0.128¢/kWh
Schedule 1P	Residential	-0.128¢/kWh
Schedule 1T	Residential	-0.128¢/kWh
Schedule 1W	Residential	-0.128¢/kWh
Schedule 5	SGS & Public Authority	-0.128¢/kWh
Schedule 5C	SGS & Public Authority	-0.128¢/kWh
Schedule 5P	SGS & Public Authority	-0.128¢/kWh
Schedule 7	SGS & Public Authority	-0.128¢/kWh
Schedule 30	SGS & Public Authority	-0.128¢/kWh
Schedule 42	SGS & Public Authority	-0.128¢/kWh
Schedule 6C	Large General Service	-0.127¢/kWh
Schedule 6P	Large General Service	-0.127¢/kWh
Schedule 6L	Large General Service	-0.127¢/kWh
Schedule 10	Large General Service	-0.127¢/kWh
Schedule 26	Outdoor Lighting	-0.128¢/kWh
Schedule 30T	Traffic Control	-0.128¢/kWh
Schedule 6VP	6VP	-0.125¢/kWh
Schedule NS Tier 2-Type A and Tier 3 Energy Charges	Schedule NS	-0.123¢/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

[1]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 B2

EXPERIENCE MODIFICATION FACTOR (EMF)

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

Rate Schedule	Customer Class	Cents per kWh Charge
Schedule 1	Residential	0.009¢/kWh
Schedule 1DF	Residential	0.009¢/kWh
Schedule 1P	Residential	0.009¢/kWh
Schedule 1T	Residential	0.009¢/kWh
Schedule 1W	Residential	0.009¢/kWh
Schedule 5	SGS & Public Authority	0.009¢/kWh
Schedule 5C	SGS & Public Authority	0.009¢/kWh
Schedule 5P	SGS & Public Authority	0.009¢/kWh
Schedule 7	SGS & Public Authority	0.009¢/kWh
Schedule 30	SGS & Public Authority	0.009¢/kWh
Schedule 42	SGS & Public Authority	0.009¢/kWh
Schedule 6C	Large General Service	0.009¢/kWh
Schedule 6P	Large General Service	0.009¢/kWh
Schedule 6L	Large General Service	0.009¢/kWh
Schedule 10	Large General Service	0.009¢/kWh
Schedule 26	Outdoor Lighting	0.009¢/kWh
Schedule 30T	Traffic Control	0.009¢/kWh
Schedule 6VP	6VP	0.009¢/kWh
Schedule NS Tier 2-Type A and Tier 3 Energy Charges	Schedule NS	0.009¢/kWh
Schedule NS Tier 1 Type A & B, and Tier 2-Type B Energy Charges	Schedule NS	Rider B2 is Included in the Energy Charges

[1]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.

DIRECT TESTIMONY
OF
RONNIE T. CAMPBELL
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 546

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

A. My name is Ronnie T. Campbell, and my business address is 120 Tredegar Street, Richmond, Virginia 23219. I am a Supervisor of Accounting for the Power Generation and Power Delivery Groups, which includes responsibility for Virginia Electric and Power Company, which operates in North Carolina as Dominion Energy North Carolina (the "Company"). My responsibilities include overseeing personnel responsible for recording the Company's actual fuel and purchased power expenses, as well as any under-/over-recovery of such expenses through the fuel deferral mechanism, operation and maintenance accounting activities, reserve analysis and joint owner billings. A statement of my background and qualifications is attached as Appendix A.

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

A. My testimony presents: 1) the Company's actual system fuel expenses for the twelve months ended June 30, 2017 ("test period"); 2) the Company's North Carolina recovery experience as of June 30, 2017; and 3) the accounting treatment for non-utility generators ("NUGs").

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

A. Yes. Company Exhibit RTC-1 has been prepared under my direction and supervision and is accurate and complete to the best of my knowledge and belief. Exhibit RTC-1 consists of the following six schedules, as prescribed by North Carolina Utilities Commission ("Commission") Rule R8-55:

Schedule 1: Actual System Fuel and Purchased Power Expenses

Schedule 2: North Carolina Recovery Experience

Schedule 3: Actual Kilowatt-hour Sales

Schedule 4: Actual Fuel-Related Revenues

Schedule 5: Inventories of Fuel Burned

Schedule 6: Actual Fuel Related Revenues From Mitigation Plan

Q. Please provide the Company's actual fuel expenses incurred for the test period and the Company's North Carolina recovery position as of June 30, 2017.

A. Based on the North Carolina jurisdictional fuel factor methodology approved by the Commission, the actual system fuel expenses incurred by the Company during the test period totaled $1,792,500,309. The Company was in a fuel cost over-recovery position of $4,739,956 on a North Carolina jurisdictional basis as of June 30, 2017. Details regarding fuel expenses and the calculation of this over-recovery position, also referred to as the Experience Modification Factor ("EMF"), are provided in Exhibit RTC-1 and are discussed later in my testimony.

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

A. The Company continues to include in the EMF calculation the actual fuel costs provided by dispatchable NUGs (Birchwood, ROVA l, ROVA II and Spruance Genco, LLC). For dispatchable NUGs that do not provide actual fuel costs (Doswell Complex), up through December 31, 2016, the Company continued to include 85% of the reasonable and prudent energy costs in the EMF calculation. Additionally, to the extent a dispatchable NUG provides market-based energy rather than dispatching its facility, the Company included 85% of the reasonable and prudent energy costs for such market-based energy in the EMF calculation up through December 31, 2016. Continued use of the 85% "marketer's percentage" was agreed to between the Company and the Public Staff and approved by the Commission in the Company's 2012 fuel factor proceeding, Docket No. E-22, Sub 485, and was maintained up through the 2015 fuel factor proceeding, Docket No. E-22, Sub 526. Beginning in 2017, the Company used the 78% marketer's percentage as approved by the Commission in the Company's 2016 fuel factor proceeding, Docket No. E-22, Sub 534. This change was implemented January 1, 2017, to coincide with the change in rates as approved by the Commission in the Company's 2016 base factor proceeding, Docket No. E-22, Sub 532. The contract with Doswell Complex expired May 5, 2017.

Q. Please provide an explanation of the six schedules presented in Exhibit RTC-1.

A. Schedule 1, Column 1 presents the system fuel and purchased power expenses incurred by the Company during the test period totaling $1,906,267,992. Of that amount, $1,792,500,309 was included in the EMF calculation based on the North Carolina jurisdictional fuel factor methodology approved by the Commission, as shown by month in Column 2.

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

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

1. Nuclear (page 1 of Schedule 1)

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

2. Purchased Power (page 2 of Schedule 1)

   Column 2 excludes (1) capacity costs; (2) the non-fuel portion of purchases from dispatchable NUGs; (3) actual energy costs for non-dispatchable NUGs; and (4) the non-fuel portion of purchases from PJM.

Q. Schedule 2 shows that the EMF calculation resulted in an over-recovery of $4,739,956. Please provide further explanation of this schedule.

A. Schedule 2 presents the North Carolina jurisdictional recovery experience by month for the test period. Schedule 2 is presented in three parts. Part 1 shows the total North Carolina system fuel and purchased power costs excluding the system allowance for funds used during construction ("AFUDC"). Part II shows the North Carolina jurisdictional fuel and purchased power costs including credit adjustments for the fuel cost from non-requirements sales and PJM off-system sales, and other fuel-related adjustments. Part III presents, by month, the North Carolina jurisdictional fuel revenues and the North Carolina jurisdictional monthly and cumulative recovery experience.

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

A. The fuel costs allocated to North Carolina jurisdictional customers totaled $87,012,025. The Company received fuel revenues totaling $91,751,981. The difference between the fuel costs and the fuel revenues resulted in an over-recovery of $4,739,956 for the test period.

Q. Please describe the information contained in Schedules 3 – 5 presented in Exhibit RTC-1.

A. Schedule 3 provides the actual kilowatt-hour sales at a system level and at the North Carolina jurisdictional customer level for the test period. Schedule 4 provides actual fuel revenues recorded for the test period. Column 1 of

Schedule 4 provides the system fuel revenue, Column 2 provides the revenue received from North Carolina jurisdictional customers for the current fuel test period, and Column 3 provides the revenue received from North Carolina jurisdictional customers for Rider B. Schedule 5 provides inventory values of fuels burned in the production of electricity. Inventory values are recorded on the books of Virginia Electric and Power Company and its subsidiary, Virginia Power Services Energy Corp, Inc.

Q. Please describe the information contained in Schedule 6 presented in Exhibit RTC-1.

A. Pursuant to the Commission's order in Docket No. E-22, Sub 515, the Commission approved a mitigation proposal that would recover the prior period deferral balance of $16,602,670 over the 2015 and 2016 fuel rate years, without interest, subject to a final true-up to be determined in the 2017 fuel case and recovered over the 2018 fuel year. Schedule 6 presents the calculation of the final true-up of $381,535.17. Company Witness James D. Merritt uses this final true-up amount to calculate the Company's proposed uniform EMF Rider B2 applicable to the North Carolina jurisdiction and the resulting factors for each customer class.

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

A. Yes, it does.

BACKGROUND AND QUALIFICATIONS
OF
RONNIE T. CAMPBELL, CPA

Ronnie T. Campbell graduated from Virginia Tech with a 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 merchant 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 2016 - June 2017

	System Expenses As Booked (1)	North Carolina System Expenses As Booked (2)
Steam Generation Fuel Cost		
July 2016	$ 91,905,517	$ 91,905,517
August	86,314,682	86,314,682
September	59,085,119	59,085,119
October	38,893,912	38,893,912
November	31,091,799	31,091,799
December	65,392,871	65,392,871
January 2017	63,688,351	63,688,351
February	29,915,029	29,915,029
March	44,178,828	44,178,828
April	28,650,104	28,650,104
May	44,312,947	44,312,947
June	58,371,148	58,371,148
FERC Account 501 - Steam Fuel Cost	$ 641,800,307	$ 641,800,307
Nuclear Generation Fuel Cost		
July 2016	$ 18,225,620	$ 16,126,060
August	17,174,620	15,756,594
September	14,045,676	12,760,665
October	13,488,969	12,470,420
November	18,011,010	17,109,935
December	17,773,826	16,860,915
January 2017	18,364,729	17,453,329
February	16,495,702	15,466,919
March	18,502,524	17,392,869
April	17,416,303	15,792,254
May	14,752,432	13,410,453
June	20,583,834	19,273,787
FERC Account 518 - Nuclear Fuel Cost	$ 204,835,243	$ 189,874,199

Dominion Energy North Carolina
Actual System Fuel and Purchased Power Expenses
July 2016 - June 2017

	System Expenses As Booked (1)	North Carolina System Expenses As Booked (2)
Other Generation Fuel Cost		
July 2016	$ 70,015,031	$ 70,015,031
August	75,319,691	75,319,691
September	44,007,478	44,007,478
October	26,023,074	26,023,074
November	56,109,073	56,109,073
December	71,898,722	71,898,722
January 2017	97,356,091	97,356,091
February	68,699,444	68,699,444
March	71,029,016	71,029,016
April	38,129,635	38,129,635
May	43,765,255	43,765,255
June	63,517,706	63,517,706
FERC Account 547 - Other Fuel Cost	$ 725,870,216	$ 725,870,216
Total Cost of Fuel Used in Current Generation	$ 1,572,505,766	$ 1,557,544,722
Purchased Power		
July 2016	17,247,178	$ 11,127,997
August	6,347,444	5,244,678
September	26,548,613	17,009,181
October	55,403,448	37,544,427
November	23,302,388	16,767,850
December	42,884,430	38,087,872
January 2017	16,550,886	15,940,812
February	20,049,705	14,678,110
March	19,921,188	16,105,527
April	34,934,237	24,227,516
May	37,615,995	28,527,293
June	32,956,714	9,694,325
FERC Account 555 - Purchased Power Cost	$ 333,762,226	$ 234,955,587

Dominion Energy North Carolina
Actual System Fuel and Purchased Power Expenses
July 2016 - June 2017

	System Expenses As Booked (1)	North Carolina System Expenses As Booked (2)
Total Fuel and Purchased Power Cost		
July 2016	$ 197,393,347	$ 189,174,605
August	185,156,437	182,635,645
September	143,686,887	132,862,443
October	133,809,402	114,931,833
November	128,514,269	121,078,657
December	197,949,849	192,240,380
January 2017	195,960,057	194,438,583
February	135,159,880	128,759,501
March	153,631,556	148,706,240
April	119,130,279	106,799,509
May	140,446,628	130,015,948
June	175,429,401	150,856,965
Total Fuel and Purchased Power Cos	$ 1,906,267,992	$ 1,792,500,309

Dominion Energy North Carolina
North Carolina Recovery Experience
Twelve Months Ended June 2017

PART I	July-16	August-16	September-16	October-16	November-16	December-16	January-17	February-17	March-17	April-17	May-17	June-17	Total
FERC Account 501 - Steam Fuel Cost	$ 91,905,517	$ 86,314,682	$ 59,085,119	$ 38,893,912	$ 31,091,799	$ 65,392,871	$ 63,688,351	$ 29,915,029	$ 44,178,828	$ 28,650,104	$ 44,312,947	$ 58,371,148	$ 641,800,307
FERC Account 518 - Nuclear Fuel Cost	$ 16,126,060	$ 15,756,594	$ 12,760,665	$ 12,470,420	$ 17,109,935	$ 16,860,915	$ 17,453,329	$ 15,466,919	$ 17,392,869	$ 15,792,254	$ 13,410,453	$ 19,273,787	189,874,199
FERC Account 547 - Other Fuel Cost	$ 70,015,031	$ 75,319,691	$ 44,007,478	$ 26,023,074	$ 56,109,073	$ 71,898,722	$ 97,356,091	$ 68,699,444	$ 71,029,016	$ 38,129,635	$ 43,765,255	$ 63,517,706	725,870,216
FERC Account 555 - Purchased Power Cost	$ 11,127,997	$ 5,244,678	$ 17,009,181	$ 37,544,427	$ 16,767,850	$ 38,087,872	$ 15,940,812	$ 14,678,110	$ 16,105,527	$ 24,227,516	$ 28,527,293	$ 9,694,325	234,955,587
Total NC System Fuel and Purchased Power Cost	$ 189,174,605	$ 182,635,645	$ 132,862,443	$ 114,931,833	$ 121,078,657	$ 192,240,380	$ 194,438,583	$ 128,759,501	$ 148,706,240	$ 106,799,509	$ 130,015,948	$ 150,856,965	$ 1,792,500,309
Exclude System AFUDC	(15,439)	(15,019)	(10,219)	(10,657)	(14,387)	(14,796)	(14,900)	(13,136)	(14,864)	(13,586)	(12,258)	(15,800)	(165,059)
Total NC System Fuel and Purchased Power Cost w/o AFUDC	$ 189,159,166	$ 182,620,627	$ 132,852,224	$ 114,921,176	$ 121,064,269	$ 192,225,584	$ 194,423,682	$ 128,746,365	$ 148,691,376	$ 106,785,923	$ 130,003,690	$ 150,841,165	$ 1,792,335,249
PART II													
NC Jurisdictional Fuel and Purchased Power Cost w/o AFUDC	$ 10,488,794	$ 8,587,423	$ 6,982,587	$ 6,013,868	$ 7,025,424	$ 9,211,030	$ 9,794,043	$ 5,672,633	$ 7,261,688	$ 5,586,988	$ 6,777,952	$ 7,841,120	$ 91,243,550
Credit for the fuel cost from Non-Requirement Sales	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 36	$ (36)	0
Credit for the fuel cost from PJM Off-system Sales	$ (484,060)	$ (269,048)	$ (126,124)	$ (145,166)	$ (219,184)	$ (1,307,116)	$ (563,360)	$ (245,830)	$ (738,778)	$ (108,615)	$ (23,306)	$ (112,064)	(4,342,652)
Other Fuel Related Adjustments [1]	10,895	10,582	6,933	8,252	8,777	9,701	9,668	8,277	9,853	8,632	8,186	11,372	111,127
Adjusted NC Jurisdiction Fuel and Purchased Power Cost	$ 10,015,629	$ 8,328,957	$ 6,863,396	$ 5,876,954	$ 6,815,017	$ 7,913,616	$ 9,240,350	$ 5,435,081	$ 6,532,762	$ 5,487,005	$ 6,762,869	$ 7,740,391	$ 87,012,025
PART III													
Adjusted NC Jurisdiction Fuel and Purchased Power Cost	$ 10,015,629	$ 8,328,957	$ 6,863,396	$ 5,876,954	$ 6,815,017	$ 7,913,616	$ 9,240,350	$ 5,435,081	$ 6,532,762	$ 5,487,005	$ 6,762,869	$ 7,740,391	$ 87,012,025
NC Jurisdictional Revenue	(10,804,860)	(9,110,917)	(8,420,540)	(7,273,833)	(7,284,589)	(7,296,790)	(7,606,257)	(5,856,661)	(6,908,387)	(6,424,753)	(6,865,193)	(7,899,201)	(91,751,981)
(Over)/Under Recovery	$ (789,232)	$ (781,960)	$ (1,557,144)	$ (1,396,880)	$ (469,573)	$ 616,826	$ 1,634,093	$ (421,580)	$ (375,625)	$ (937,748)	$ (102,324)	$ (158,810)	$ (4,739,956)
Cumulative (Over)/Under Recovery	$ (789,232)	$ (1,571,192)	$ (3,128,336)	$ (4,525,216)	$ (4,994,789)	$ (4,377,963)	$ (2,743,870)	$ (3,165,450)	$ (3,541,075)	$ (4,478,823)	$ (4,581,147)	$ (4,739,956)	

[1] Includes jurisdictional AFUDC and AFUDC tax credits.

Dominion Energy North Carolina
Actual Kilowatt-hour (kWh) Sales
Twelve Months Ended June 2017

(In Thousands)

	System kWh Sales* (1)	North Carolina Retail kWh Sales* (2)
July 2016	8,564,746	474,717
August	8,477,572	398,475
September	7,031,668	369,396
October	6,107,270	319,406
November	6,115,109	354,666
December	7,334,086	351,299
January 2017	7,286,825	366,934
February	6,405,127	282,107
March	6,847,126	334,240
April	5,934,711	310,359
May	6,370,797	332,014
June	7,345,267	381,681
Total kWh Sales	83,820,303	4,275,293
	83,820,303,238	

*Including unbilled kWh sales.

Dominion Energy North Carolina
Actual Fuel Related Revenues
Twelve Months Ended June 2017

	System Fuel Related Revenues As Booked* (1)	North Carolina Retail Fuel Factor Related Revenues* Current Period (2)	North Carolina Retail Fuel Factor Related Revenues* EMF Rider B (3)
July 2016	$171,702,193	$ 10,804,860	1,109,236
August	167,968,465	9,110,917	934,852
September	139,318,453	8,420,540	864,184
October	120,652,559	7,273,833	746,590
November	117,851,358	7,284,589	(1,758,795)
December	142,212,568	7,296,790	(1,646,415)
January 2017	141,320,775	7,606,257	(1,716,191)
February	124,598,837	5,856,661	(1,321,445)
March	132,855,968	6,908,387	(1,558,502)
April	115,556,699	6,424,753	(1,449,432)
May	124,243,709	6,865,193	(1,548,776)
June	143,108,221	7,899,201	(1,782,114)
Total Fuel Related Revenues	$ 1,641,389,804	$ 91,751,981	$ (9,126,807)

*Including unbilled kWh revenues.

Dominion Energy North Carolina
Inventories of Fuel Burned
As of June 30, 2017

Fuel	Inventory Measure		Inventory Volume	Inventory Value
(1)	(2)		(3)	(4)
Coal [b]	Tons	Coal Rec	1,351,113	$ 98,138,922
Wood [b]	Tons	Wood & Jet Fuel Rec	85,436	2,337,444
Light Oil [a]	Gallons	Oil Rec	59,789,838	125,462,694
Heavy Oil [a]	Barrels	Oil Rec	1,740,351	79,450,303
Jet Fuel [a]	Gallons	Wood & Jet Fuel Rec	50,030	130,978
Natural Gas [a]	Dth	Power Gen. Summary	2,346,810	5,191,404
Nuclear Fuel Stock [b]	N/A			453,438,411
Total				$ 764,150,156

(a) Inventories are held by Virginia Power Services Energy Corp, Inc.
(b) Inventories are held by Virginia Electric & Power Company.

Dominion Energy North Carolina
Actual Fuel Related Revenues From Mitigation Plan
Twenty Four Months Ended December 2016

(1)	Total June 30, 2014 Under Recovery Balance:	$ 16,602,670.00
(2)	Rider B Revenue for 2015:	$ 8,104,716.37
(3)	Rider B2 Revenue for 2016:	$ 8,116,418.46
(4)	Total 2015 and 2016 Mitigation Revenues:	$ 16,221,134.83
(5)	Under Recovery Balance 24 Months Ended December 31, 2016:	$ 381,535.17

DIRECT TESTIMONY
OF
TOM A. BROOKMIRE
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 546

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

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

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to discuss the nuclear fuel market and any significant impact of the market on nuclear fuel costs during the test period of July 1, 2016, through June 30, 2017 ("test period"), in compliance with Rule R8-55(e)(5). Section I of my testimony will discuss the market and components of the Company's nuclear fuel costs. Section II will discuss how the Company's nuclear fuel expense rates are calculated.

Q. Please briefly describe the Company's nuclear fuel procurement policy.

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

SECTION I

NUCLEAR FUEL MARKET AND COMPONENTS

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

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

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

A. The nuclear fuel market has softened considerably in the past five years with uranium, conversion and enrichment markets all showing varying levels of decreasing price trends. This is largely due to the devastating Japanese earthquake and tsunami of March 2011, which has been discussed in prior fuel

cases. However, there have been other factors influencing this trend as well, such as clear reductions in demand (*e.g.*, Germany's decision to permanently shut down eight reactors and the closing of several U.S. reactors). There have also been some reductions in supply (*e.g.*, postponement and deferral of new mines and mine capacity expansions along with delays in planned increases in uranium enrichment capacity) which may have, in part, offset some of the downward trend in demand.

The spot market price for conversion services has dropped significantly due to reduced near-term demand, while long-term prices have remained high due to concern over the lack of investment in new conversion production facilities, and the possibility for shortfalls in capacity longer-term. The cost for enrichment services appears to have stabilized after a steady decline due to reduced demand and the recent addition of new centrifuge capacity in Europe and the U.S. Domestic trends in fabrication prices continue to be difficult to measure because there is no active spot market, but the general consensus is that costs will continue to increase due to regulatory requirements, reduced competition, and new reactor demand both in the U.S. and abroad.

Calendar year 2017 may mark the restart of several more reactors in Japan which may have some short-term price lift on front end components. The timing and extent of other reactor restarts in Japan remains uncertain at this time. China continues to have an aggressive nuclear energy program, with 36 reactors currently in operation, 21 plants under construction, and others in development with a planned doubling of nuclear generating capacity by 2021.

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

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

Q. Westinghouse filed for Chapter 11 bankruptcy protection in March 2017. How will this potentially affect the Company's nuclear fuel supply?

A. At this point we do not anticipate any significant effect. Our principal business relationship with Westinghouse pertains to its fuel analyses and fuel and core component manufacturing businesses. The Company is not involved with Westinghouse's reactor construction projects for Southern Company and SCANA. We communicate with the Westinghouse fuel fabrication and nuclear services organizations on a frequent basis. To date there has been no interruption in their fuel fabrication activities stemming from their bankruptcy, and we have no indication that there will be any such interruption. Westinghouse's public communications, as well as their comments to us, have

indicated that they intend to maintain these profitable business activities moving forward.

SECTION II

NUCLEAR FUEL EXPENSE RATES

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

A. The calculation of nuclear fuel expense rates, expressed in mills per kilowatt-hour ("mills/kWh"), is based on expected plant operating cycles and the overall cost of nuclear fuel. As I stated above, front-end component costs include uranium, conversion, enrichment and fabrication services. These costs, along with AFUDC, are amortized over the estimated energy production life of the nuclear fuel. The Company's Generation System Planning group provides the estimated energy production used to determine amortization rates. The federal government's fee, which is a rear-end cost, applied to net nuclear generation sold, would also typically be included in the expense rate. This cost, applied to all U.S. nuclear generation companies, is intended to cover the eventual disposal cost of spent nuclear fuel in a federal repository. However, the fee, which historically has been one mill/kWh of net nuclear generation, is currently set to zero mills/kWh and is not collected.

Q. You stated earlier in your testimony that you would discuss the status of the fee charged by the federal government for spent nuclear fuel disposal. Please provide an update regarding the status of this fee.

A. In 2014, following a federal court decision, the U.S. Department of Energy ("DOE") submitted a proposal to Congress to change this one mill/kWh fee to zero. This relief is industry-wide and applies to all operating reactors, including the Company's operating reactors at Surry and North Anna. The processes specified in the Nuclear Waste Policy Act for adjustment of the fee have now been completed, and as of May 16, 2014, the Company is no longer required to pay the waste fee.

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

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

Q. What was the fuel expense rate for the prior period?

A. The fuel expense rate is provided in Company Exhibit BEP-1 to the Direct Testimony of Company Witness Bruce E. Petrie.

Q. Does this conclude your direct testimony?

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
GREGORY A. WORKMAN
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 546

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

A. My name is Gregory A. Workman, and my business address is 120 Tredegar Street, Richmond, Virginia 23219. I am Director-Fuels, and have the responsibility of fossil fuel procurement for Virginia Electric and Power Company, which operates in North Carolina as Dominion Energy North Carolina (the "Company"). The Dominion Fuels group handles the procurement, scheduling, transportation, and inventory management for natural gas, coal, biomass, and oil consumed at the Company's power stations. A statement of my background and qualifications is attached as Appendix A.

Q. What is the purpose of your testimony?

A. I will discuss the Company's fossil fuel procurement practices, including any recent changes to those practices, for the delivery of fuels to the Company's fossil generation fleet during the test period of July 1, 2016, through June 30, 2017 ("Test Period"), in compliance with Rule 8-55(e)(5).

Q. Are you sponsoring any exhibits?

A. Yes. Company Exhibit GAW-1, consisting of one schedule, was prepared under my direction and is accurate and complete to the best of my knowledge. Company Exhibit GAW-1 is the Dominion Energy North Carolina Summary

Report of Fuel Transactions with Affiliates for the period July 2016 – June 2017.

SECTION I

FUEL MARKETS

Q. Please discuss the trends that affected commodity markets during the period of July 2016 through June 2017.

A. After descending to recent historic-low levels last year, commodity prices have begun to recover and stabilize.

Domestic natural gas production has dropped approximately 3%, averaging 73.69 bcf/day during the prior test period of July 1, 2015, through June 30, 2016 ("Prior Test Period"), down to 71.46 bcf/day during the first ten months of the Test Period. While power generation's demand for natural gas has grown, prompt-month Henry Hub natural gas prices have increased, averaging $3.04/MMBtu during the Test Period. This represents an approximate 32% increase compared to the prices in the Prior Test Period, which averaged $2.30/mmbtu.

An abundant supply of competitively priced natural gas continues to impact coal markets, providing an economic incentive for utilities to maintain the switch of fuels from coal to natural gas for power generation. However, coal prices are closely correlated with natural gas prices and as natural gas prices increased, coal prices also increased; averaging $53/ton for the Test Period. This represents an approximate 37% increase compared to the prices in the

Prior Test Period, which averaged $39/ton. Also influencing the increase in coal prices is a significant increase in global coking coal prices, which diverted some of the thermal coal previously supplied to power generation to the metallurgical coal markets.

Decreases in the production of domestic shale oil, as well as OPEC's decision to reduce production, have recently encouraged price recovery in the oil markets. As a result, West Texas Intermediate crude prices averaged $48.63/bbl for the Test Period. This represents an approximate 16% increase when compared to the prices in the Prior Test Period, which averaged $42/bbl.

SECTION II

FUEL PROCUREMENT AND PRICE HEDGING

Q. Please briefly describe the Company's fuel procurement policy.

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

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

A. Yes. The Company has a hedging program under which the Company hedges commodities needed for power generation using a range of volume targets, which gradually decrease over a three-year period. The Company's fuel price hedging program is discussed in greater detail in the Fuel Procurement

Strategy Report filed with the Virginia Commission on January 31, 2017, in Case No. PUE-2016-00047. In summary, as that Report describes, through competitive fuel supply solicitations and other market purchases, the Company maintains a reliable supply of fuel specifically designed for combustion in the Company's generation stations. The duration of these physical procurement agreements is staggered (*i.e.*, different contract lengths). These agreements can also include a fixed price (the inclusion of a fixed price in an agreement creates a price hedge) or price trigger options allowing all or some portion of the variable-priced agreement to be fixed. Managing price volatility is an important aspect of the Company's price hedging program and can be further supported, as needed, by the use of financial transactions. These transactions provide greater price certainty for commodities whose prices fluctuate based on market conditions.

SECTION III

NATURAL GAS PROCUREMENT

Q. Please describe the Company's natural gas procurement practices.

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

In addition to managing its natural gas supply portfolio, the Company

evaluates its diverse portfolio of pipeline transportation and storage contracts to determine the most reliable and economical delivered fuel options for each power station. This portfolio of natural gas transportation contracts provides access to multiple natural gas supply points from the Gulf region to the Marcellus shale region. Further, the Company actively participates in the interstate pipeline capacity release and physical supply markets as well as longer-term, pipeline expansion projects that will augment its transportation portfolio and enhance reliability at a reasonable cost.

Q. Please discuss any changes to the Company's gas-fired fleet portfolio that have occurred since Dominion Energy North Carolina's previous fuel charge adjustment proceeding.

A. The Company continues to utilize more natural gas to serve the electricity needs of its customers. In fact, during the Test Period, energy production at the Company's gas-fired power stations accounted for about 33.6% of the electricity produced for its customers. In addition, during the four-year period from 2013 to 2016, the Company increased its gas consumption by an average of 23% per year with the most recent gas addition being the Brunswick County Power Station ("Brunswick"), which became operational on April 25, 2016. Brunswick added 1,358 MW of efficient combined-cycle generating capacity to the Company's power generation fleet.

SECTION IV

COAL PROCUREMENT

Q. Please briefly describe the Company's coal procurement protocol.

A. The Company employs a multi-year physical procurement plan to ensure a reliable supply of coal, delivered to its generating stations by truck or rail, at competitive prices. This is accomplished by procuring the Company's long-term coal requirements primarily through periodic solicitations and secondarily on the open market for short-term or spot needs. The effect of procuring both long- and short-term coal supplies provides a layering-in of contracts with staggered terms and blended prices. This ensures a reliable supply of fuel with limited exposure to potential dramatic market price swings. This blend of contract terms creates a diverse coal fuel portfolio and allows the Company to proactively manage its fuel procurement strategy, contingency plans and any risk of supplier non-performance.

SECTION V

BIOMASS PROCUREMENT

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

A. As a result of a competitive biomass solicitation, the Company has made some adjustments to its biomass procurement approach for the Hopewell and Southampton Power Stations. Effective January 1, 2017, these stations are served by multiple suppliers under long-term agreements, enabling the Company to increase the reliability of its biomass supply by diversifying its

supplier base. The Company continues to purchase long-term fuel supply through one supplier at its Altavista and Pittsylvania Power Stations. Procurement for the Company's biomass needs at its co-fired Virginia City Hybrid Energy Center facility continues to be conducted via short-term contracts with various suppliers. All five biomass-consuming plants receive wood deliveries via truck.

SECTION VI

OIL PROCUREMENT

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

A. The Company purchases its No. 2 fuel oil and No. 6 fuel oil requirements on the spot market and optimizes its inventory, storage, and transportation to ensure reliable supply to its power generating facilities. Trucks, vessels, barges, and pipelines are employed to transport oil to the Company's stations and third-party storage locations, ensuring a reliable supply of oil and mitigating the price risk associated with potentially volatile prices for these products.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BACKGROUND AND QUALIFICATIONS
OF
GREGORY A. WORKMAN

Gregory A. Workman graduated from Fairmont State College with a Bachelor of Science degree in Business Administration and received a Master of Business Administration degree from West Virginia University. He became an employee of Dominion in 2001 and has held various positions within the following departments: Business Development and Acquisitions, Fossil and Hydro Merchant Operations, and Technical Services. In October 2007, Mr. Workman assumed his current role as Director–Fuels. He currently serves as the Vice-Chairman of the National Coal Council, a federal advisory committee to the U.S. Secretary of Energy.

Prior to joining Dominion, Mr. Workman worked for Norfolk Southern Corporation from 1990-2001. He served in various capacities at Norfolk Southern Corporation including Finance, Operations, Coal Marketing, and Strategic Planning. Prior to Norfolk Southern, he worked as a Financial Consultant for American Express.

Mr. Workman has previously presented testimony before the State Corporation Commission of Virginia, the North Carolina Utilities Commission, and the Federal Energy Regulatory Commission.

DOMINION ENERGY NORTH CAROLINA
SUMMARY REPORT OF FUEL TRANSACTIONS WITH AFFILIATES
FOR THE PERIOD JULY 2016 - JUNE 2017
(IN THOUSANDS)

Dominion Energy North Carolina Receiving from Affiliate:

Docket No. E-22, Sub 546

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

Month	Amount
July-16	$77,771
August-16	$81,756
September-16	$46,986
October-16	$26,795
November-16	$57,574
December-16	$71,992
January-17	$98,301
February-17	$69,434
March-17	$73,402
April-17	$39,223
May-17	$49,278
June-17	$70,209

DOMINION ENERGY NORTH CAROLINA
SUMMARY REPORT OF FUEL TRANSACTIONS WITH AFFILIATES
FOR THE PERIOD JULY 2016 - JUNE 2017

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

Docket No. E-22, Sub 546

	Volume			Dollars			WACOG		
	Purchase	Sale	Difference	Purchase	Sale	Difference	Purchase	Sale	Difference
Jul-16	28,172,839	28,180,266	(7,427)	$ 64,920,146.54	$ 64,934,955.31	$ (14,808.77)	$ 2.304	$ 2.304	0.000
Aug-16	28,460,675	28,460,614	61	$ 62,138,106.02	$ 62,137,648.05	$ 457.97	$ 2.183	$ 2.183	0.000
Sep-16	22,056,751	22,058,557	(1,806)	$ 47,797,363.45	$ 47,799,157.27	$ (1,793.82)	$ 2.167	$ 2.167	0.000
Oct-16	21,795,037	21,798,401	(3,364)	$ 43,652,320.14	$ 43,655,967.87	$ (3,647.73)	$ 2.003	$ 2.003	0.000
Nov-16	17,347,304	17,350,385	(3,081)	$ 49,116,948.08	$ 49,125,652.73	$ (8,704.65)	$ 2.831	$ 2.831	0.000
Dec-16	18,140,048	18,148,048	(8,000)	$ 69,681,576.61	$ 69,681,501.91	$ 74.70	$ 3.841	$ 3.840	0.002
Jan-17	19,127,239	19,128,516	(1,277)	$ 87,537,131.91	$ 87,543,984.90	$ (6,852.99)	$ 4.577	$ 4.577	(0.000)
Feb-17	17,922,150	17,922,150	-	$ 64,925,643.23	$ 64,925,643.23	$ -	$ 3.623	$ 3.623	0.000
Mar-17	20,086,822	20,086,875	(53)	$ 64,106,232.10	$ 64,106,387.85	$ (155.75)	$ 3.191	$ 3.191	0.000
Apr-17	16,502,693	16,501,632	1,061	$ 45,921,954.28	$ 45,919,625.23	$ 2,329.05	$ 2.783	$ 2.783	(0.000)
May-17	16,846,266	16,847,390	(1,124)	$ 46,812,846.74	$ 46,816,084.85	$ (3,238.11)	$ 2.779	$ 2.779	(0.000)
Jun-17	23,099,456	23,101,401	(1,945)	$ 60,339,750.57	$ 60,344,604.87	$ (4,854.30)	$ 2.612	$ 2.612	0.000
Total	249,557,280	249,584,235	(26,955)	$ 706,950,019.67	$ 706,991,214.07	$(41,194.40)			

DOMINION ENERGY NORTH CAROLINA
SUMMARY REPORT OF FUEL TRANSACTIONS WITH AFFILIATES
FOR THE PERIOD JULY 2016 - JUNE 2017

Dominion Energy North Carolina Receiving and Providing to Dominion Energy Fuel Services, Inc.: **Docket No. E-22, Sub 546**

July 2016 - June 2017 Contracted Affiliated Fuel Transactions

There were no affiliate transactions of Fuel from July 2016 through June 2017.