PLACE: Dobbs Building, Raleigh, North Carolina

DATE: Thursday, November 8, 2018

TIME: 9:30 a.m. - 9:39 a.m.

DOCKET NO: E-22, Sub 558

BEFORE: Chairman Edward S. Finley, Jr., Presiding
Commissioner ToNola D. Brown-Bland
Commissioner Jerry C. Dockham
Commissioner James G. Patterson
Commissioner Lyons Gray
Commissioner Daniel G. Clodfelter
Commissioner Charlotte A. Mitchell

IN THE MATTER OF:

Application by Virginia Electric and Power Company,
d/b/a Dominion Energy North Carolina
Pursuant to N.C.G.S. § 62-133.2 and NCUC Rule R8-55
Regarding Fuel and Fuel-Related Charge Adjustments for
Electric Utilities

Volume 2

A P P E A R A N C E S:

FOR VIRGINIA ELECTRIC and POWER COMPANY, d/b/a DOMINION ENERGY NORTH CAROLINA:

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A P P E A R A N C E S Cont'd:

FOR THE USING AND CONSUMING PUBLIC:

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Public Staff - North Carolina Utilities Commission
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Raleigh, North Carolina 27699-4300

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EXAMINATIONS

P R O C E E D I N G S

CHAIRMAN FINLEY: Good morning. Let's come to order and please go on the record. My name is Edward Finley and with me this morning are Commissioners ToNola D. Brown-Bland, Jerry C. Dockham, James G. Patterson, Lyons Gray and Daniel G. Clodfelter, and Charlotte A. Mitchell.

I now call for hearing Docket Number E-22, Sub 558, which is the Application by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina for Authority to Adjust Its Electric Rates and Charges and Revise Its Fuel Factor Pursuant to N.C. Gen. Stat. § 62-133.2 and NCUC Rule R8-55.

On August 30, 2018, Dominion filed its Application for a change in fuel component of the electric rates with the direct testimony and exhibits of Bruce E. Petrie, Ronnie T. Campbell, Gregory A. Workman, Tom A. Brookmire and George G. Beasley.

On September 7, 2018, the Commission issued its Order Scheduling Hearing, Requiring Filing of Testimony, Establishing Discovery Guidelines and Requiring Public Notice.

On October 2, 2018, among other things, the Commission issued an Order rescheduling the expert witness testimony to today. The public witness hearing in this matter remained scheduled for this date and time.

Petitions to Intervene have been filed by and granted to Carolina Industrial Group for Fair Utility Rates and Nucor Steel-Hertford.

On October 26, 2018, the Public Staff filed the testimony of Witnesses Dustin Metz, Darlene Peedin and Michelle Boswell.

Also on October 26th, the Intervenor CIGFUR filed the direct testimony of Nicholas Phillips, Jr. And Nucor Steel-Hertford filed the direct testimony of Paul A. Wielgus; I think that's right.

On October 29, 2018, Dominion filed Affidavits of Publication verifying that newspaper notice of the public hearings had been published.

On November 5, 2018, Dominion filed the rebuttal testimony of Witnesses Bruce Petrie and George Beasley.

On November 6, 2018, the Public Staff filed a Joint Motion on behalf of the parties to excuse witnesses in this proceeding unless the Commission has questions for them. The Commission has granted that motion excusing the witnesses from attending this hearing and accepting their prefiled testimony and exhibits into evidence.

Pursuant to the State Ethics Act, I remind all members of the Commission of their duty to avoid conflicts of interest, and inquire whether any member of the Commission has a known conflict of interest with regard to the matters coming before the Commission this morning?

(No response)

Let the record reflect that there are no conflicts of interest noted.

And I will now call upon the parties to announce their appearances beginning with the Applicant, Dominion.

MS. GRIGG: Good morning, Chairman Finley. Members of the Commission, I'm Mary Lynne Grigg with the Law Firm of McGuireWoods appearing on behalf of the Company. Also appearing on behalf of the Company is Ms. Andrea Kells.

CHAIRMAN FINLEY: Mr. McDonald, if you'll note your appearance, please.

MR. McDONALD: Good morning. I'm Ralph McDonald for the Carolina Industrial Group for Fair Utility Rates.

MR. BLAKE: Good morning, Chairman Finley. Members of the Commission, I'm Chris Blake here on behalf of Nucor Steel-Hertford.

MS. EDMONDSON: Good morning. I'm Lucy Edmondson with the Public Staff on behalf of the Using and Consuming Public.

CHAIRMAN FINLEY: Are there any preliminary matters we must take up before we begin the hearing?

MS. GRIGG: No, sir.

CHAIRMAN FINLEY: Ms. Edmondson, have you identified any public witnesses that we need to note and hear from?

MS. EDMONDSON: I have not.

CHAIRMAN FINLEY: Let the record so reflect that the Commission identifies folks in the audience and determines that none of those are public witnesses.

So we'll turn the matter over to the Company.

MS. GRIGG: Thank you, Chairman Finley. I'd first like to identify the Company's Application which was filed on August 30, 2018, as DENC Exhibit 1, and the information and workpapers that were filed with that Application be identified as DENC Exhibit 2, and request that they be included in the record in this case and received into evidence.

CHAIRMAN FINLEY: The Company's Application is received as Exhibit 1 and the workpapers are received as Exhibit 2.

(WHEREUPON, DENC Exhibits 1 and 2 are admitted into evidence.)

MS. GRIGG: Thank you. And now, if it pleases the Commission, I'll go through the testimonies and exhibits of the Company witnesses who have been excused from the hearing today, and will ask that those be copied into the record as if given orally from the stand.

First, in support of the Application, the Company prefiled the direct testimony of Bruce E. Petrie consisting of 12 typed pages of questions and answers, an Appendix A and an exhibit, one exhibit consisting of four schedules.

The Company also prefiled the direct testimony of Ronnie T. Campbell consisting of six typed pages of questions and answers, and an Appendix A, and one exhibit consisting of five schedules.

The Company prefiled the direct testimony of Gregory A. Workman consisting of six typed pages of questions and answers, and an Appendix A, and one exhibit.

The Company prefiled the direct testimony of Tom A. Brookmire consisting of eight typed pages of questions and answers and an Appendix A.

The Company prefiled the direct testimony of George G. Beasley consisting of 12 typed pages of questions and answers, an Appendix A, and one exhibit consisting of 11 schedules.

On November 5, 2018, the Company prefiled the rebuttal testimony of Bruce E. Petrie consisting of three pages of questions of answers. Finally, on that same date, the Company filed the rebuttal testimony of George G. Beasley consisting of six pages and one exhibit consisting of two schedules.

That concludes the Company's case and I request that the testimony be copied into the record and all of the supporting exhibits be accepted into evidence at this time.

CHAIRMAN FINLEY: Very well, the testimony and exhibits of direct witnesses and the rebuttal witnesses as outlined by Ms. Grigg - Bruce Petrie, Donnie (sic) Campbell, Gregory Workman, Tom Brookmire, George Beasley - are copied into the record as though given orally from the stand and the exhibits -- the Appendices are also copied into the record as though given orally from the stand. And the exhibits as she outlined of those witnesses are marked for identification as premarked in the filing and received into evidence.

MS. GRIGG: Thank you, sir. That concludes our case.

(WHEREUPON, Company Exhibit BEP-1, Schedules 1 - 4, is marked for identification as prefiled and received into evidence.)

(WHEREUPON, the prefiled direct testimony and Appendix A of BRUCE E. PETRIE is copied into the record as if given orally from the stand.)

DIRECT TESTIMONY
OF
BRUCE E. PETRIE
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 558

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, 2018 ("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 rate period February 2019 through January 2020.

Q. Why is the Company proposing to use a different rate period than in previous fuel rider proceedings?

A. In previous years, the Company has proposed Rider A and Rider B rates to be effective for a calendar year rate period. Based on discussions with the Public Staff following the conclusion of the Company's 2017 rider proceedings, the Company is proposing for its updated fuel riders to be effective for a February 1, 2019 through January 31, 2020 Rate Period. The Company is requesting this adjustment to the annual Rate Period in order to extend the time for the Commission to issue orders in the Company's three annual rider proceedings filed pursuant to NCUC Rules R8-55, R8-67, and R8-69, respectively, and to then allow the Company additional time to finalize rates and customer notices (including allowing reasonable time for Public Staff review) prior to the updated annual riders' effective date. The Company intends to continue to use a February 1 through January 31 rate period in future rider cases.

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, 2018 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 13,544 GWh of energy. Mt. Storm Units 1-3 performed at EA factors of 73.2%, 69.8%, and 72.8%, respectively. Chesterfield Units 5 – 6 had EA factors of 61.4% and 47.2%, respectively. Virginia City Hybrid Energy Center ("VCHEC") had an EA of 66.0% during the Test Period.

In regards to what constitutes reasonable nuclear unit performance, 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 2012-2016 five-year industry average net capacity factor for Pressurized Water Reactors, which is the most recent available NERC average, is 89.8% 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	91.4%
N. Anna 2	92.7%
Surry 1	90.3%
Surry 2	102.7%

The aggregate capacity factor was 94.2% 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 93.5% compared to the national average of 89.8%. 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 to 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. What is the expected performance of the Company's nuclear generating units for the 12-month rate period ending January 31, 2020?

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 89.8%. The projected capacity factors are shown below.

N. Anna 1	93.9%
N. Anna 2	90.3%

Surry 1	91.8%
Surry 2	100.2%

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 30.9%; coal-fired generation supplied 15.1%; combined cycle and combustion turbine generation supplied 32.9%; and power transactions (net) supplied 19.1%. These four energy sources accounted for 98.0% of the total energy supply. Natural gas-steam, oil, biomass, solar, and hydro generation provided the remaining 2.0% (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 under-recovery of fuel expenses during the test year. This fuel under-recovery was primarily driven by cold winter weather and higher commodity prices. The energy use in January reached a peak of 21,232 MW, which is close to the all-time peak experienced in the winter of 2015. The fuel expense created by the extended period of cold weather in January was a major factor in the amount of the Experience Modification Factor. The Company offset the higher market fuel prices by optimizing 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 January 31, 2020, 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 January 2020. 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 88,445,965 MWh, a decrease of 1,138,692 MWhs from the actual energy requirements for the 12 months ended June 30, 2018.

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

A. The addition of the 1,588 MW Greensville County natural gas-fired combined cycle power station in December 2018 will provide a benefit to the system fuel expense. For this case, the system fuel expense was adjusted to reflect the expected fuel benefits related to the Greensville County power station. The system fuel savings, calculated using the PROMOD production cost model, are forecasted to be approximately $90.7 million in 2019.

The Company also continues to evaluate the customer benefits versus expenses of the units in the Company's generation fleet. As part of this effort, the Company will place 10 generating units into "cold reserve" in 2018. "Cold reserve" does not mean permanent retirement. These units, which are a combination of older, less efficient coal, biomass, and natural gas units totaling 1,292 MW of generation, can be reactivated in approximately six months if system needs and market conditions dictate. These units are currently planned to remain in cold reserve until 2021. The Company does not anticipate a significant impact to system fuel expense from these changes.

In addition, due to the enactment of North Carolina House Bill 589 on July 27, 2017, and House Bill 374 on June 27, 2018, the Company can now recover the total delivered costs, including capacity and non-capacity costs, associated with certain purchases of power from qualifying facilities ("QFs") under PURPA that are not subject to economic dispatch or curtailment. Reflecting these costs will increase system fuel expense by approximately $29.4 million.

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, coal, oil, purchases, 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 – 2017 fuel cases, and is a fair representation of the expected expense rates during the February 2019 – January 2020 rate period.

(2) The NUG expense is adjusted higher to account for the new legislation.

(3) The natural gas expense rate is lower to account for a return to normal weather during the rate period.

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

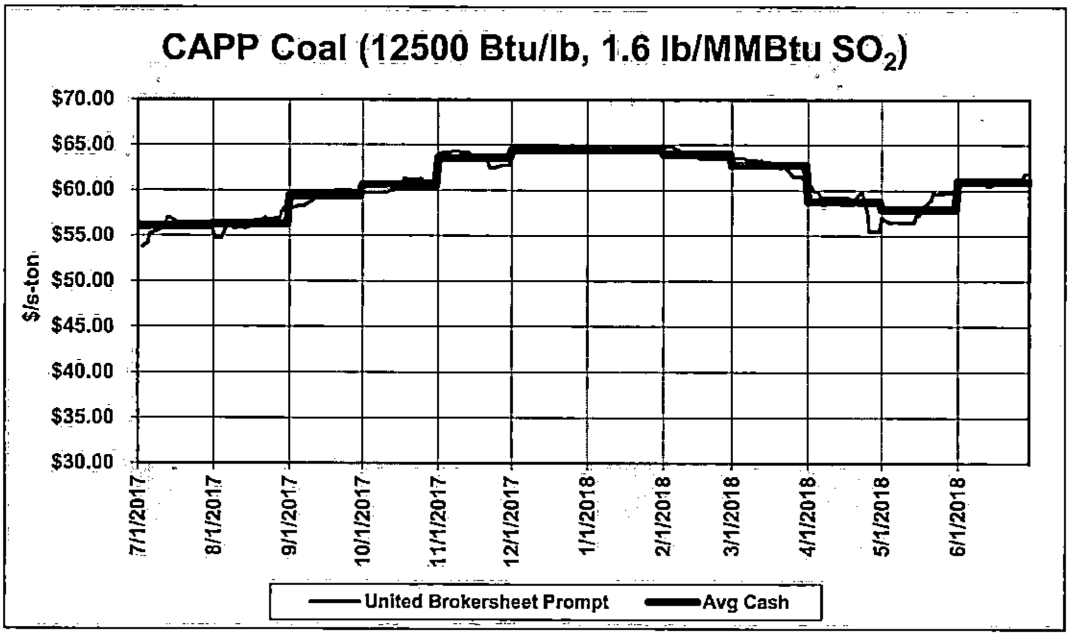
A. Schedule 4 shows the PJM market purchases during the Test Period including the firm transmission right ("FTR") net revenues, as well as off-system sales and NUG purchases made with the marketer percentage applied to these expenses at the appropriate level. The Company believes that this percentage is reasonable and does not propose a change at this time.

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 $1.82 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 with volatility during January 2018 with the cold weather that was experienced. 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 moderate prices and volatility during the Test Period, with the exception of January 2018.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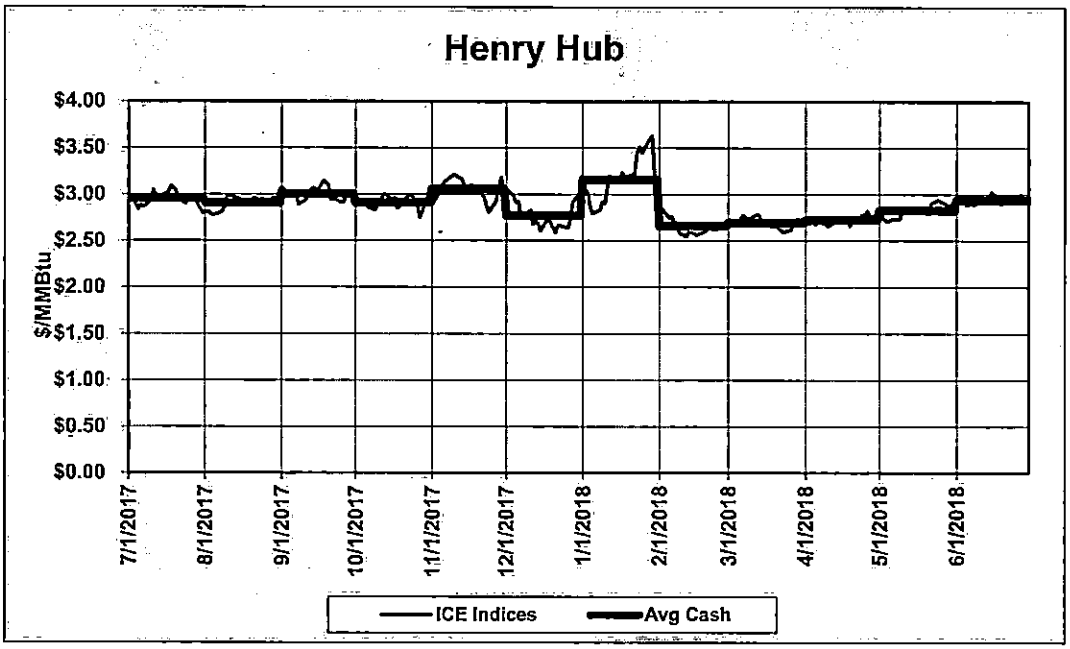
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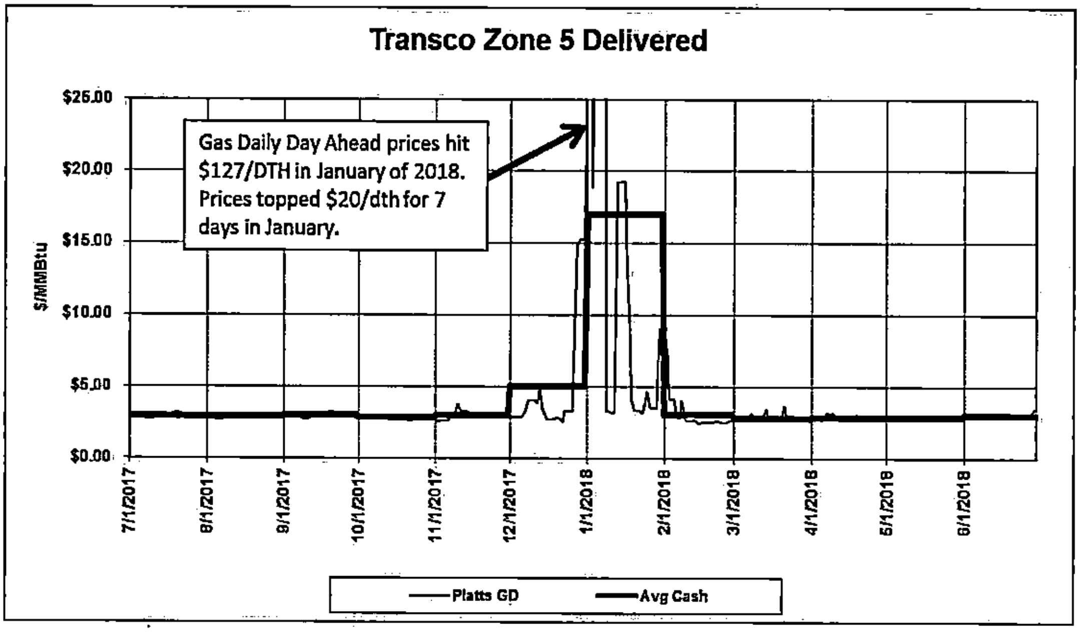
5/1/2018
6/1/2018
ICE Indices
Avg Cash


Transco Zone 5 Delivered
Gas Daily Day Ahead prices hit $127/DTH in January of 2018. Prices topped $20/dth for 7 days in January.
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$10.00
$5.00
$0.00
7/1/2017
8/1/2017
9/1/2017
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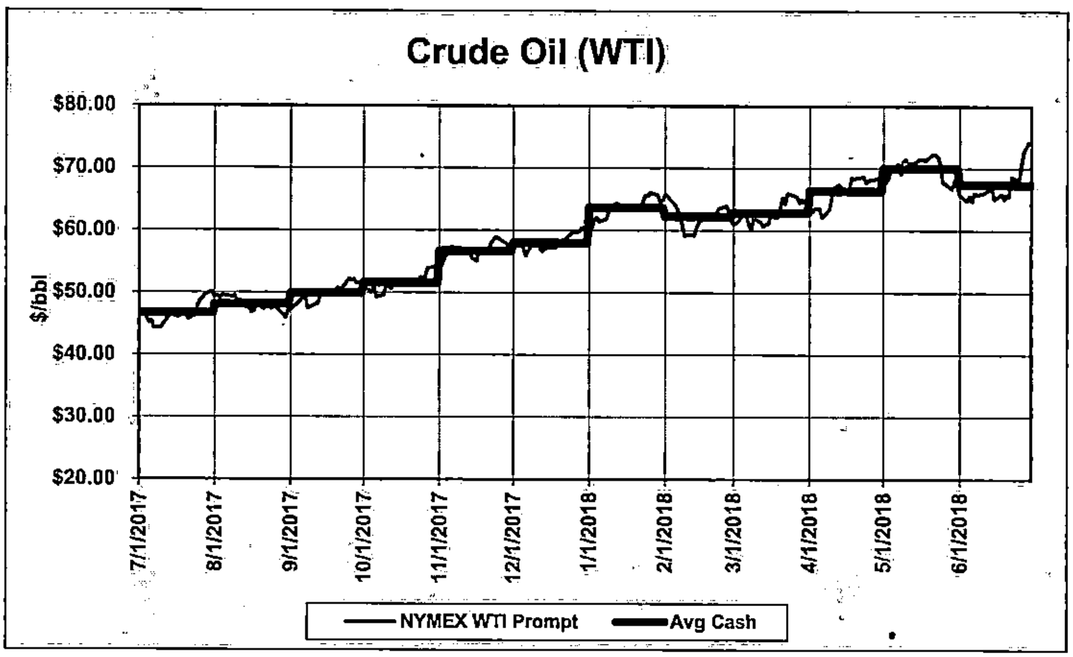
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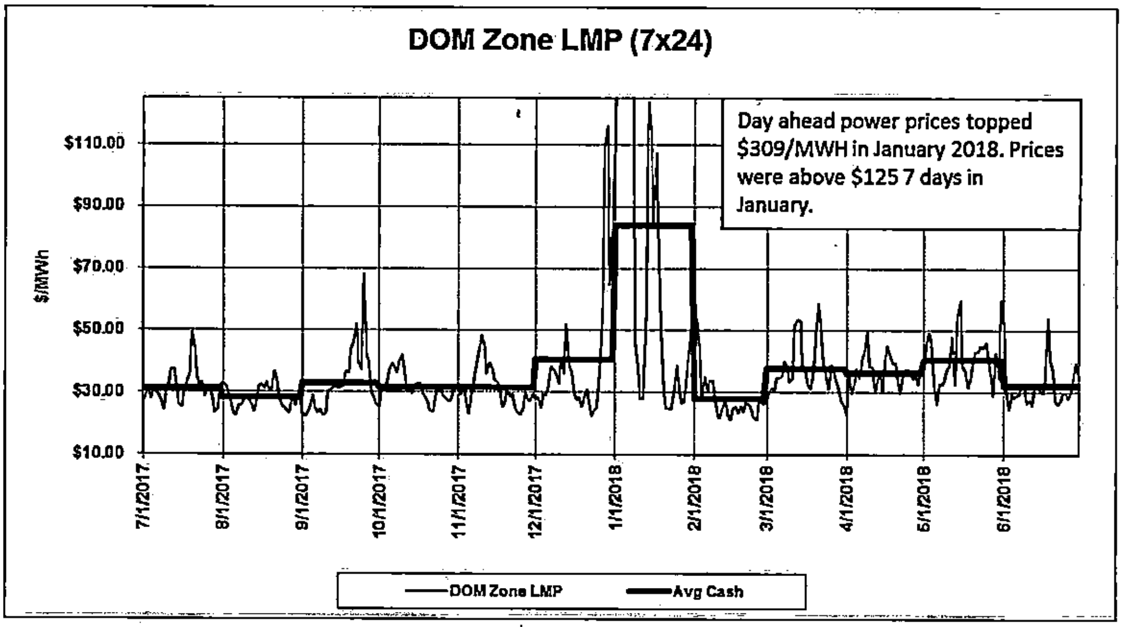

Q. Mr. Petrie, does this conclude your direct testimony?

A. Yes, it does.

APPENDIX A

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).

(WHEREUPON, Company Exhibit RTC-1, Schedules 1 - 5, is marked for identification as prefiled and received into evidence.)

(WHEREUPON, the prefiled direct testimony and Appendix A of RONNIE T. CAMPBELL is copied into the record as if given orally from the stand.)

**DIRECT TESTIMONY
OF
RONNIE T. CAMPBELL
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 558**

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 ("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, 2018 ("test period"); 2) the Company's North Carolina recovery experience as of June 30, 2018; 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 five 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

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, 2018.

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 $2,106,053,828. The Company was in a fuel cost under-recovery position of $16,162,154 on a North Carolina jurisdictional basis as of June 30, 2018. Details regarding fuel expenses and the calculation of this under-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 and Spruance Genco, LLC). The contract with Spruance Genco, LLC expired July 31, 2017. For dispatchable NUGs that do not provide actual fuel costs (ROVA I and ROVA II), the Company continued to include 78% 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 78% of the reasonable and prudent energy costs for such market-based energy in the EMF calculation. Use of the 78% "marketer's percentage" was agreed to between the Company and the Public Staff and approved by the Commission in the Company's 2016 fuel factor proceeding, Docket No. E-22, Sub 534.

Q. Please provide an explanation of the six schedules presented in Company 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 $2,550,628,864. Of that amount, $2,106,053,828 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. <u>Nuclear (page 1 of Schedule 1)</u>

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

2. <u>Purchased Power (page 2 of Schedule 1)</u>

   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 under-recovery of $16,162,154. 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 I 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 $104,925,682. The Company received fuel revenues totaling $88,763,528. The difference between the fuel costs and the fuel revenues resulted in an under-recovery of $16,162,154 for the test period.

Q. Please describe the information contained in Schedules 3 - 5 presented in Company 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. Mr. Campbell, does this conclude your direct testimony?

A. Yes, it does.

APPENDIX A

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.

(WHEREUPON, Company Exhibit GAW-1, Schedule 1, is marked for identification as prefiled and received into evidence.)

(WHEREUPON, the prefiled direct testimony and Appendix A of GREGORY A. WORKMAN is copied into the record as if given orally from the stand.)

DIRECT TESTIMONY
OF
GREGORY A. WORKMAN
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 558

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 the 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 Energy 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 in this proceeding?

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, 2017 to June 30, 2018 ("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.

Exhibit GAW-1 is the Dominion Energy North Carolina Summary Report of Fuel Transactions with Affiliates during the Test Period.

SECTION I
FUEL COMMODITY MARKETS

Q. **Please discuss the trends that affected fuel commodity markets during the period of July 2017 through June 2018.**

A. During the Test Period of July 2017 through June 2018, domestic natural gas production increased, a result of rising global oil prices, natural gas exports, and an increase in domestic natural gas demand, particularly in the residential and industrial sectors. This increasing demand for natural gas, combined with waves of sustained, colder-than-normal winter weather in most parts of the eastern United States, led to short-term spikes in prices at Henry Hub and other locations. For example, on January 5, 2018, the price of Transco Z5 natural gas was over $120/million British thermal units ("MMBtu").

While this daily data point illustrates the volatility in the natural gas market, the January 2018 average monthly price was still quite high at about $17/MMBtu. Coal prices rose due to thermal coal exports and the continued rise of global coking coal prices. Oil prices also rose, with an average West Texas Intermediate ("WTI") price of around $59/barrel.

SECTION II
FUEL PROCUREMENT STRATEGY

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 price hedging program under which the Company price 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 State Corporation Commission of Virginia on January 31, 2018, in Case No. PUR-2017-00058 (the "Report"). 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) and can also include a fixed price component, the inclusion of which creates a price hedge. 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.

SECTION III
NATURAL GAS PROCUREMENT

Q. Please discuss the Company's 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 the diverse portfolio of pipeline 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 and trading points from the Marcellus shale region to the southeast 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.

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% of the electricity generated for the Company's customers.

In late 2018, the Company will add the Greensville County Power Station ("Greensville") to its regulated fleet. Greensville will be a gas-fired combined cycle power station with a generating capacity of 1,588 MW.

SECTION IV
COAL PROCUREMENT

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

A. The Company employs a multiyear 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. The Company has a varied procurement strategy for its biomass stations depending on the geographical region of the power station. Hopewell and Southampton Power Stations continue to be 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 primary supplier at its Altavista Power Station. 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 four 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 pre-filed direct testimony?

A. Yes, it does.

APPENDIX A

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 Energy 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 Energy, Mr. Workman worked for Norfolk Southern Corporation from 1990 to 2001. He served in various capacities at Norfolk Southern 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.

(WHEREUPON, the prefiled direct testimony and Appendix A of TOM A. BROOKMIRE is copied into the record as if given orally from the stand.)

**DIRECT TESTIMONY
OF
TOM A. BROOKMIRE
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 558**

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. 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 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 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, 2017, through June 30, 2018 ("Test Period"), in compliance with Rule 8-55(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 six to seven years with uranium, conversion, and enrichment markets all showing varying levels of decreased prices. This is largely due to the devastating Japanese earthquake and tsunami of March 2011, which has been discussed in prior North Carolina fuel cases. But 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, a pause in the pace of Chinese reactor builds, and the closing and announced closings of several U.S. reactors). There have also been reductions in supply (*e.g.*, postponement and deferral of new mines and mine capacity expansions, shutdowns and reduction in production at some existing mines (most notably Cameco's Rabbit Lake and McArthur River/Key Lake operations), the idling of a U.S.-based uranium conversion plant, along with delays in planned increases in uranium enrichment capacity) which have, in part, offset some of the downward trend in demand. However, secondary sources of production (especially using excess enrichment capacity to conserve uranium and re-enrichment of tails) and high global inventory levels continue to mitigate some of these reductions. The uranium market prices have continued to be depressed though they were relatively stable during the current period.

The price for conversion services has also dropped significantly on the spot market due to reduced near-term demand, while long-term prices have remained higher due to concern over the lack of investment in new conversion production facilities, and the possibility for shortfalls in capacity longer-term. For example, the operator of the sole U.S. uranium conversion facility announced in January 2017 its intention to scale back its capacity to be in better alignment with a projected decrease in future demand. However, in December 2017 the same facility announced a full shutdown of production that will depend upon the market to improve before a restart is likely.

The cost for enrichment services has declined slightly after appearing to have stabilized during the last fuel factor period. The decline is due to reduced demand and the addition of new centrifuge capacity in Europe in recent years.

The price trend in the U.S. domestic nuclear fuel fabrication industry continues 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. Additionally, the parent companies for both U.S. nuclear fuel fabricators (Westinghouse Electric Corporation ("Westinghouse") and former Areva (now Framatome after restructuring)) have experienced financial distress, which is likely to put upward pressure on fabrication costs and nuclear fuel engineering services.

Calendar year 2018 may mark the restart of several more reactors in Japan, which may have some short-term price lift on front-end components. Five reactors have met new standards and have been restarted, and an additional 19 have submitted applications to restart. The timing and extent of other reactor restarts in Japan remains uncertain at this time. China continues to have an aggressive nuclear energy program. It currently has 39 reactors in operation, 18 plants under construction, and others in planning, with a planned doubling of nuclear generating capacity by the early 2020s.

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 market 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, the Company has been active in the market and has executed some market-based and fixed price contracts, allowing us to take advantage of current lower prices for the benefit of customers.

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, the Company does not anticipate any significant effect. Our principal business relationship with Westinghouse pertains to its fuel analyses and fuel and core component manufacturing businesses. 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 Westinghouse's bankruptcy, and the Company has no indication that there will be any such interruption. Westinghouse's public communications, as well as their comments to the Company, have indicated that Westinghouse intends to maintain these profitable business activities moving forward.

Q. Two U.S. miners filed a "Section 232" petition in January 2018. What does this mean and how will this potentially affect the Company's fuel supply?

A. As explained by the U.S. Department of Commerce,[1] Section 232 of the Trade Expansion Act of 1962, as amended, gives the executive branch the ability to conduct investigations to "determine the effects on the national security of imports." Within 270 days of initiating any investigation, the Commerce Department issues a report to the President with the investigation's findings, including whether certain imports threaten to impair America's national security. The President has 90 days to determine whether he concurs with the findings and, if so, to use his statutory authority under Section 232 "to adjust the imports" as necessary, including through tariffs or quotas.

At this point, the outcome of this petition is uncertain. The petition is asking the federal government, specifically, the Department of Commerce, for relief for the domestic uranium mining sector as a matter of national security. The petition was signed by the two U.S. miners in January 2018 and on July 18, 2018, the Department of Commerce officially opened an investigation into the matter. We expect to hear the results of this investigation by this time next year. While there are some proposed remedies in the petition, it is difficult to predict what steps will be taken resulting from the Department of Commerce's investigation. Steps taken that would restrict access or impose tariffs on

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[1] *See* https://www.commerce.gov/news/blog/2018/03/what-you-need-know-about-section-232-investigations-and-tariffs.

global supply sources could increase nuclear fuel costs, but the degree of any such impacts is uncertain at this time.

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 energy production life of the nuclear fuel. The federal government's fee, 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. As discussed in my direct testimony in the Company's 2017 fuel factor adjustment proceeding, 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. As I explained in my direct testimony in the Company's 2017 fuel factor adjustment proceeding, 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 Test 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.

APPENDIX A

**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.

(WHEREUPON, Company Exhibit GGB-1, Schedules 1 - 11, is marked for identification as prefiled and received into evidence.)

(WHEREUPON, the prefiled direct testimony and Appendix A of GEORGE G. BEASLEY is copied into the record as if given orally from the stand.)

DIRECT TESTIMONY
OF
GEORGE G. BEASLEY
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 558

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

A. My name is George G. Beasley. My business address is 701 East Cary Street, Richmond, Virginia 23219. My title is Regulatory Specialist 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. Beasley, 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, for the North Carolina jurisdiction and for each customer class based on the twelve months ended June 30, 2018 (the "Test Period"), to become effective on February 1, 2019. I will then describe an alternative proposal by the Company and present calculations to mitigate the impact of the increase in the total fuel factor through an alternative voluntary agreement to recover the accumulated fuel deferral balance over two rate periods, rather than one, with a true-up, without incremental costs to customers ("mitigation alternative"). I am also sponsoring the calculation of the adjustment to total system sales (kWh) for the twelve months ended June 30, 2018, due to change in usage, weather normalization, and customer growth.

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

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

Q. Mr. Beasley, are you proposing any changes to the methodology of rate design in this case?

A. Yes. The Company is proposing to adjust by one month the implementation of new rates for the proposed Fuel Charge Rider A and EMF Rider B. In previous years, the Company has proposed Rider A and Rider B rates to be effective for a calendar year Rate Period. Based on discussions with the Public Staff following the conclusion of the Company's 2017 rider proceedings, the Company is proposing for its updated fuel riders to be effective for a February 1, 2019 through January 31, 2020 Rate Period. The Company is requesting this adjustment to the annual Rate Period in order to extend the time for the Commission to issue orders in the Company's three annual rider proceedings filed pursuant to NCUC Rules R8-55, R8-67, and R8-69, respectively, and to then allow the Company additional time to finalize rates and customer notices (including allowing reasonable time for Public Staff review) prior to the updated annual riders' effective date. The Company intends to continue to use a February 1 through January 31 rate period in future rider cases.

In this case, the Company therefore is seeking for its Rider A and Rider B tariffs to become effective on February 1, 2019. Since the existing tariffs approved in Docket No. E-22, Sub 546 will expire on December 31, 2018, the Company is proposing interim tariffs for January 2019 showing Riders A and B both set to zero, and Rate Period tariffs for February 2019 through January 2020 with updated rates.

Q. **What is the total fuel factor that the Company is requesting in this case to become effective February 1, 2019?**

A. I have calculated the average fuel factor equal to the combined base fuel and Fuel Cost Rider A, excluding Rider B (the Experience Modification Factor) ("EMF"), applicable to the North Carolina jurisdiction for the Test Period to be $0.02142/kWh.

The deferral balance for the Test Period applicable to the North Carolina jurisdiction is $16,162,154, presented by Company Witness Ronnie T. Campbell. This substantial under-recovery is largely due to cold winter weather and higher commodity prices, specifically for an extended period in January as discussed by Company Witness Bruce E. Petrie. If the entire under-recovery amount is to be recovered during the upcoming Rate Period, the average prior period EMF will be $0.00388/kWh, which then results in a total full recovery fuel factor of $0.02530 kWh. This is an increase of $0.00582/kWh, when compared to the average total fuel factor presently in effect of $0.01948/kWh for the North Carolina jurisdiction.

The Company requests the Commission approve and implement the full recovery rates scheduling recovery of 100% of the June 30, 2018, fuel deferral account balance of $16,162,154 over the February 1, 2019 – January 31, 2020, Rate Period.

However, while North Carolina General Statutes § 62-133 allows prompt recovery of these expenses, we also recognize the impact of such an increase in fuel rates on the Company's customers. Therefore, as an alternative to the full recovery rate, the Company is voluntarily proposing a mitigation alternative that would help mitigate the increase, should the Commission find it to be in the public interest and so approve. Under the mitigation alternative, the Company would waive its right to recovery of the full deferral balance over the upcoming Rate Period in favor of recovering the deferral balance on a dollar-for-dollar basis over the next two rate periods, with a final true-up to be recovered or refunded during the rate period commencing on February 1, 2022. That is, under the mitigation alternative, the Company proposes to establish rates in this proceeding to recover 50% of the deferral balance in upcoming Rate Period and establish rates in the 2019 fuel proceeding to recover the other 50% of the deferral balance in the February 1, 2020 – January 31, 2021 rate period. Lastly, in the 2021 fuel proceeding, the

Company will establish rates to recover or refund during the February 1, 2022 – January 31, 2023 rate period any final over or under recovery of this original deferred balance.

If the Commission declines to approve the Company's full recovery request and to approve the mitigation alternative, the Company will further agree to ensure that its customers will see no incremental cost associated with financing the deferral balance over this extended period.

Implementing the mitigation alternative would result in a prior period EMF of \$0.00194/kWh, and an average total fuel factor of \$0.02336/kWh for the jurisdiction. This is an increase of \$0.00398/kWh, when compared to the average total fuel factor presently in effect of \$0.01938/kWh for the jurisdiction, \$0.00194/kWh less than the full recovery rate.

The fuel factor calculations and typical bill impacts for both the full recovery and mitigation alternative are presented later in my testimony.

Q. **Mr. Beasley, please explain Schedule 1.**

A. Schedule 1 of Company Exhibit GGB-1 provides a summary of jurisdictional and total system kWh sales for the twelve months ended June 30, 2018, 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 (102,723,711) kWh. The adjustment to total system kWh at sales level is (993,601,325) 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 546). 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 Company Exhibit GGB-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 $1,824,035,658 (as provided in Schedule 4 of Exhibit BEP-1) is divided by system sales of 85,266,747,633 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 $0.02142/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 546). The Base Fuel Component for each class determined in Docket No. E-22, Sub 532 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, for the full recovery scenario.

A. Schedule 3 of Company Exhibit GGB-1 presents the calculation of the proposed EMF Rider B applicable to the North Carolina jurisdiction and the resulting factors for each customer class based upon full recovery of the deferred fuel balance. Schedule 3, Page 1, shows the calculation of the proposed uniform EMF applicable to the North Carolina jurisdiction. The total under recovered fuel expense, for the period July 1, 2017 through June 30, 2018, was $16,162,154 as provided in Schedule 2 of Company Exhibit RTC-1. This total balance was then divided by North Carolina test year sales of 4,175,472,287 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 $0.00388/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. Please describe the Experience Modification Factor, Rider B, applicable to the North Carolina jurisdiction, for the mitigation alternative.

A. Schedule 4 of Company Exhibit GGB-1 presents the calculation of the proposed EMF Rider B applicable to the North Carolina jurisdiction and the resulting factors for each customer class under the mitigation alternative. Schedule 4, Page 1, shows the calculation of the proposed uniform EMF applicable to the North Carolina jurisdiction. The total under recovered fuel expense, for the period July 1, 2017, through June 30, 2018, is $16,162,154 as provided in Schedule 2 of Company Exhibit RTC-1. Multiplying this amount by 50% equals a net balance of $8,081,077. This net balance was then divided by North Carolina test year sales of 4,175,472,287 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 $0.00194/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 4, Page 2. The resulting EMF 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 February 1, 2019.**

A. As explained earlier in my testimony, the Company requests Commission approval of the full recovery proposal. However, should the Commission not approve the full recovery proposal, the Company requests that the Commission approve and implement the mitigation alternative, and permit the Company to (1) recover 50% of the deferral balance in the February 1, 2019 – January 31, 2020 Rate Period, (2) establish rates in the 2019 fuel proceeding to recover the other 50% of the deferral balance in the following rate period, and (3) in the 2021 fuel proceeding, establish rates to recover or refund during the rate period commencing on February 1, 2022 any final over or under recovery of this original deferred balance.

The total proposed fuel rates ($/kWh) for each class, depending on the Commission's determination to approve full recovery or the mitigation alternative, are as follows:

Customer Class	Full Recovery	Mitigation Alternative
Residential	$0.02558	$0.02363
SGS & PA	$0.02556	$0.02361
LGS	$0.02536	$0.02342
Schedule NS	$0.02459	$0.02271
6VP	$0.02495	$0.02304
Outdoor Lighting	$0.02558	$0.02363
Traffic	$0.02558	$0.02363

A comparison of the present and proposed total rates for each class is shown on my Company Exhibit GGB-1, Schedule 5 for full recovery and Schedule 6 for the mitigation alternative.

Q. **Do you have a schedule that shows the total fuel revenue recovery by class and for the North Carolina jurisdiction for the upcoming Rate Period if the full recovery rates are approved?**

A. Yes. Schedule 7 of Company Exhibit GGB-1 shows the total fuel revenue recovery by class and for the North Carolina jurisdiction for the upcoming Rate Period if the full recovery rates are approved. For the North Carolina jurisdiction, the proposed jurisdictional fuel cost levels result in a total fuel recovery increase of $24,301,249.

Q. Do you have a schedule that shows the total fuel revenue recovery by class and for the North Carolina jurisdiction for the upcoming Rate Period if the mitigation alternative is approved?

A. Yes. Schedule 8 of Exhibit GGB-1 shows the total fuel revenue recovery by class and for the North Carolina jurisdiction for the upcoming Rate Period if the mitigation alternative is approved. For the North Carolina jurisdiction, the proposed jurisdictional fuel cost levels result in a total fuel recovery increase of $16,200,832.

Q. Mr. Beasley, would you explain how these proposed changes in the fuel factor assuming full recovery of the deferral balance in the upcoming Rate Period will affect customers' bills? Use bill amounts as of August 1, 2018 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 $5.87 from $108.96 to $114.83, or by 5.4%. 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 $73.38 from $1,066.62 to $1,140.00, or by 6.9%. 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 $3,363.84 from $37,323.05 to $40,686.89, or by 9.0%.

Q. Mr. Beasley, would you explain how these proposed changes in the fuel factor under the mitigation alternative will affect customers' bills? Use bill amounts as of August 1, 2018, 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 $3.92 from $108.96 to $112.88, or by 3.6%. 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 $49.00 from $1,066.62 to $1,115.62, or by 4.6%. 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 $2,246.40 from $37,323.05 to $39,569.45, or by 6.0%.

Q. Have you included in your exhibit a revision to the Fuel Cost Rider A and EMF Rider B to reflect the Company's proposed total fuel factors, to be effective January 1, 2019?

A. Yes. Schedule 9, Pages 1 and 2 provide the revised fuel charge Rider A and EMF Rider B that the Company proposes to become effective on and after January 1, 2019 for one month only.

Q. Have you included in your exhibit a revision to the Fuel Cost Rider A and EMF Rider B which will reflect the Company's proposed total fuel factors to be effective February 1, 2019, based upon full recovery of the deferred fuel balance of $16,162,154 and based on the mitigation alternative?

A. Yes. Schedule 10, Pages 1 and 2 of Company Exhibit GGB-1 provide the revised Fuel Charge Rider A and EMF Rider B under the full recovery proposal, which would be applicable for usage on and after February 1, 2019. Schedule 11, Pages 1 and 2 provide the revised Fuel charge Rider A and the EMF Rider B under the mitigation alternative, which likewise would be applicable for usage on and after February 1, 2019.

Q. Does this conclude your testimony?

A. Yes, it does.

APPENDIX A

BACKGROUND AND QUALIFICATIONS OF GEORGE G. BEASLEY

George G. Beasley received a Bachelor of Science degree in Finance from Virginia Commonwealth University in 1996. Mr. Beasley started his career with the Company in 2008 as a Sr. Business Performance Analyst. In 2011 Mr. Beasley was promoted to Supervisor Customer Revenue Management Planning and Analysis where he was responsible for the analytical support of our electric Credit and Billing functions. In 2015 Mr. Beasley took over the Customer Billing Compliance and Quality Control Manager position and was responsible for the auditing and quality control of changes implemented into the Billing system including rate and regulatory changes. In 2017, Mr. Beasley joined the Rate Department as a Regulatory Specialist to work in the Rate Design section, where he assists with regulatory filings, the design of rates, and performing analysis related to the Company's Virginia and North Carolina service territories.

(WHEREUPON, the prefiled rebuttal testimony of BRUCE E. PETRIE is copied into the record as if given orally from the stand.)

REBUTTAL TESTIMONY
OF
BRUCE E. PETRIE
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22 SUB 558

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 the Manager of Generation System Planning for Dominion Energy North Carolina ("DENC" or the "Company"). My responsibilities include forecasting total system fuel and purchased power expenses. A statement of my background and qualifications is attached as Appendix A in my Direct Testimony.

Q. Have youpreviously filed testimony in this proceeding?

A. Yes. I prepared direct testimony in this case, and have also participated in responding to data requests in this proceeding.

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

A. First, I will address Public Staff Witness Metz's testimony regarding the calculation of the adjustment in system fuel and purchased energy costs for the addition of the Greensville Power Station. Second, I will address the change in the marketers' percentage as proposed by Public Staff Witnesses Peedin and Boswell.

Q. What is the Company's position regarding Public Staff Witness Metz's contention that the capacity factor used for the Greenville Power Station is likely higher than should be reasonably expected and that the marketer percentage should be applied to the Greenville Power Station if the Commission adopts the mitigation alternative?

A. The Company believes it reasonably estimated the expected fuel and purchased energy savings from the addition of the Greensville Power Station to the fleet. The adjustment as-filed assumed a high level of availability and performance during the future rate period, and includes two planned outages.

However, in the event that the Commission decides the Company should implement the rate mitigation alternative, the Company agrees to work with the Public Staff in the required timeframe to revise the Greensville Power Station adjustment to account for a lower initial capacity factor, and to apply the marketer percentage to the Greensville Power Station savings estimate.

Q. Do you agree with Public Staff Witness Peedin's general recommendation that a marketer percentage of 75% should be used effective February 1, 2019?

A. No. The Company believes that this adjustment is improper because it will deny the Company the opportunity to recover the full dollar amount of prudently incurred PJM purchased energy costs. Any change in the marketer percentage should be made in coordination with the Company's next base rate case to keep the recovery of purchased power costs consistent across both aspects of purchased energy expense recovery. The 78% marketer percentage endorsed by the Company is a better representation of the fuel-related costs, and is consistent with the Company's method that was used in the 2016 base rate case. The Company believes the proper level of the marketer percentage should be further reviewed in the Company's next general base rate case.

Q. Does this conclude your pre-filed rebuttal testimony?

A. Yes.

(WHEREUPON, Company Exhibit GGB-1, Rebuttal Schedules 1 and 2, is marked for identification as prefiled.)

(WHEREUPON, the prefiled rebuttal testimony of GEORGE G. BEASLEY is copied into the record as if given orally from the stand.)

**REBUTTAL TESTIMONY
OF
GEORGE G. BEASLEY
ON BEHALF OF
DOMINION ENERGY NORTH CAROLINA
BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-22, SUB 558**

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

A. My name is George G. Beasley. My business address is 701 East Cary Street, Richmond, Virginia 23219. My title is Regulatory Specialist for Virginia Electric and Power Company, which operates in North Carolina as Dominion Energy North Carolina ("the Company").

Q. **Have you previously filed testimony in this proceeding?**

A. Yes. I am the same George G. Beasley who filed direct testimony in this case on August 30, 2018.

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

A. The purpose of my rebuttal testimony is to comment on and further clarify the Company's position regarding the proposed full recovery and mitigation alternative scenarios.

Q. **Have there been any developments since you filed your direct testimony that will affect the rate impact to customers' bills?**

A. Yes. Rider EDIT (credit rider) expired on October 31, 2018. In my Exhibit GGB-1, Rebuttal Schedule 1, I show an updated impact for typical bills for the full recovery and mitigation alternative. Also, in Docket No. M-100, Sub

148, in its October 5, 2018 order, the Commission ordered the Company "to adjust their base rates to reflect the reduction in the federal corporate income tax rate to 21% for taxable years beginning after December 31, 2017, as outlined in the Tax Act." On October 25, 2018, the Company made a filing in Docket No. E-22, Sub 560 to reduce the non-fuel base rates as directed by the Commission. Note, this is a proposed reduction in non-fuel base rates that has not been approved by the Commission.

Q. **Have you prepared a schedule showing the impact on typical customer bills of both 1) the full recovery of fuel combined with the proposed Tax Act reduction; and 2) the mitigation alternative combined with the proposed Tax Act reduction?**

A. Yes. This is presented in my Rebuttal Schedule 1 at the bottom of the page. The impact of the proposed reduction in rates due to the Tax Act serves to offset in part the bill impact of the increases for both the full recovery of fuel expense and the mitigation alternative.

As shown in Rebuttal Schedule 1 for a typical residential customer using 1,000 kWH, the impact on the bill of the full recovery of fuel expenses is an increase of 5.24% while the impact of the mitigation alternative is an increase of 3.50%. When combined with the Tax Act reduction, the full recovery impact is an increase of 1.09% and the mitigation alternative impact is a decrease of 0.65%.

As shown in Rebuttal Schedule 1 for a typical 6P customer, the impact of the bill of the full recovery expense is an increase of 8.80% while the impact of the mitigation alternative is an increase of 5.88%. When combined with the Tax Act reduction, the full recovery impact is an increase of 5.27% and the mitigation alternative is an increase of 2.35%.

Similar typical bill impacts are provided in Rebuttal Schedule 1 for Schedule 5 and Schedule 6L customers.

Q. **Have you reviewed the testimony from CIGFUR and Nucor?**

A. Yes. The Company recognizes and is sensitive to the concerns of large industrial customers expressed by CIGUR Witness Nicholas Phillips, Jr. and Nucor Witness Paul J. Wieglus who both characterized the full recovery impact using the term, "rate shock."

Q. **Have you prepared information to show the impact of the full recovery and mitigation alternative for the Schedule 6VP and Schedule NS classes?**

A. Yes. In my Rebuttal Schedule 2, Page 1, I present the bill impact for the 6VP class of both the full recovery and mitigation alternatives. I present the same information for the NS class in my Rebuttal Schedule 2, page 2.

Q. Have you prepared information showing the impact on the 6VP and NS classes of both 1) the full recovery of fuel expenses combined with the Tax Act reduction; and 2) the mitigation alternative combined with the Tax Act reduction?

A. Yes. For the 6VP class, I show these impacts in my Rebuttal Schedule 2, page 1 at the bottom half of the page. For the NS class, I show these impacts in my Rebuttal Schedule 2, page 2 at the bottom half of the page.

I note that even when the proposed Tax Act Reduction is considered, the impact of the full recovery of fuel expense on these customer classes results in a substantial increase.

Q. Please clarify the Company's position on the full recovery and mitigation alternative scenarios.

A. The Company's original request to the Commission was to approve and implement the full recovery rates recovering 100% of the June 30, 2018 fuel deferral account balance of $16,162,154 over the 2019 fuel year. Recognizing the significant amount of under-recovery in the fuel deferral account balance and considering the impact of recovering 100% of that amount over the 2019 fuel year led the Company to proposing the alternative mitigation plan in its August 30, 2018 filing. At that point in time, the Company had not been directed to make the filing in Docket E-22, Sub 560 to reduce the non-fuel base rates due to the provisions of the Tax Act. This proposed reduction will help offset, in part, the impact of the fuel increase on customers. In addition, in its filing in Docket No. E-22, Sub 560, the Company has proposed a re-billing back to January 1, 2018, of the final approved rates in that proceeding. If approved, this will provide a one-time credit to customers. Assuming a Commission Order in Docket No. E-22, Sub 560 in December 2018 and based on the anticipated time to implement the re-billing of approximately 60 days, the Company believes that customers may be receiving this one-time credit soon after the new fuel recovery rates are scheduled to take effect on February 1, 2019.

However, while the proposed reduction due to the Tax Act now serves to help offset, in part, the fuel increase based upon full recovery of the deferral balance, the Company still recognizes that such an increase is still high for large high load factor customers served under rate schedules such as Schedule 6P and 6L and in the 6VP and NS classes. The estimates of the net impact for typical customers presented in my Rebuttal Schedule 1 and for the 6VP and NS classes presented in my Rebuttal Schedule 2 do not include the impact of the re-billing credit that I discussed earlier.

In conclusion, the Company recognizes that the impact of the increase in fuel rates based on full recovery of the deferral will be offset, in part, if the Commission approves the proposed reduction in non-fuel base rates filed in the Tax Act proceeding.

However, given that substantial increases will remain for large high load factor customers if full recovery of fuel expenses is approved, the Company continues to offer the mitigation alternative.

Q. Does this conclude your rebuttal testimony?

A. Yes.

CHAIRMAN FINLEY: Mr. McDonald.

MR. McDONALD: Yes, sir. CIGFUR, the Carolina Industrial Group, prefiled the testimony of Nicholas Phillips on October 26th; there's nine pages and one exhibit (sic). We ask that that be admitted into the record.

CHAIRMAN FINLEY: As outlined by Mr. McDonald, the testimony of Mr. Phillips plus his Appendix is copied into the record as though given orally from the stand.

(WHEREUPON, the prefiled direct testimony and Appendix A of NICHOLAS PHILLIPS, JR., is copied into the record as if given orally from the stand.)

BEFORE THE

NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina, for Authority to Adjust its Electric Rates and Charges and Revise its Fuel Factor Pursuant to N.C.G.S. § 62-133.2 and NCUC Rule R8-55	Docket No. E-22, Sub 558

Direct Testimony of Nicholas Phillips, Jr.

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Nicholas Phillips, Jr. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q WHAT IS YOUR OCCUPATION?

A I am a consultant in the field of public utility regulation and a managing principal of Brubaker & Associates, Inc., energy, economic, and regulatory consultants. Our firm and its predecessor firms have been in this field since 1937 and have participated in more than 1,000 proceedings in 40 states and in various provinces in Canada. We have experience with more than 350 utilities, including many electric utilities, gas pipelines, and local distribution companies. I have testified in many electric and gas rate proceedings on virtually all aspects of ratemaking. More details are provided in Appendix A of this testimony.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A I am testifying on behalf of a group of intervenors designated as the Carolina Industrial Group for Fair Utility Rates I ("CIGFUR"),[1] a group of large industrial customers that purchase power from Dominion Energy North Carolina ("DENC" or "Company"). CIGFUR's members receive service from Dominion under Rate Schedules 6VP and 6P.

Q HAVE YOU PRESENTED TESTIMONY IN PRIOR PROCEEDINGS BEFORE THE NORTH CAROLINA UTILITIES COMMISSION ("COMMISSION")?

A Yes. I have been involved in numerous of prior proceedings before this Commission and have presented testimony in many of those proceedings. I have been involved with matters involving DENC for decades, including DENC's previous base rate and other proceedings.

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A CIGFUR is filing testimony to urge the Commission to approve the Company's mitigation alternative, which is discussed in Paragraphs 11-12 of its Application for a Change in Fuel Component of Electric Rates ("Fuel Application"), as the mitigation alternative will result in less rate shock to DENC's customers, particularly its declining industrial base, for the reasons described herein.

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[1]CIGFUR I members are: Cummins RMEP, Domtar Paper Company, LLC, Pfizer Inc., and Kapstone Kraft Paper Corporation.

Q **DOES YOUR TESTIMONY ADDRESS DENC'S NEED FOR AN INCREASE IN FUEL RATES?**

A No. In order to make my presentation consistent with the revenue levels requested by DENC, I have, in many instances, used its proposed figures for fuel cost. Use of these numbers should not be interpreted as an endorsement of them for purposes of determining the total dollar amount of fuel increase to which DENC may be entitled.

Q **PLEASE DESCRIBE DENC'S PENDING FUEL APPLICATION.**

A The Company requests an increase for the February 1, 2019 through January 31, 2020 Rate Period of $24,301,249.00, which includes a fuel recovery increase of $16,200,832.00. As explained by DENC, the fuel under-recovery was largely driven by abnormally cold weather for an extended period and high commodity prices that occurred in January 2018. For the North Carolina jurisdiction, this results in the following change over current total average rates:

	Current ($/kWh)	Proposed ($/kWh)	Change ($/kWh)
Base Non-Fuel	$0.06321	$0.06321	$0.00000
Base Fuel	$0.02073	$0.02073	$0.00000
Rider A	$0.00004	$0.00069	$0.00065
Rider B EMF	($0.00139)	$0.00388	$0.00527
Rider B2 EMF	$0.00010	$0.00000	($0.00010)
Total	$0.08269	$0.08851	$0.00582
% Change	**7.04%**		

The increase in the fuel rate is shown as $0.00582/kWh and amounts to a 29.9% increase over the current fuel rate of $0.01948/kWh. The proposed increase is significant and, if approved in its entirety, will have a detrimental impact on customers, including but not limited to rate shock.

Q WHAT IS RATE SHOCK AND WHY SHOULD IT BE AVOIDED?

A Rate shock refers to a large increase, particularly when it is unexpected. For reference, in Docket No. E-22, Sub 515, DENC 2014 Fuel Adjustment proceeding, the Company requested a large increase which would increase residential rates by 5.3% and Rate 6VP by 8.5%. The Public Staff referenced that level of increase as rate shock and approved DENC's mitigation plan (Commission Order E-22, Sub 515, December 18, 2014, page 26). In this proceeding, DENC's full increase would result in a residential increase of 5.4% and a Rate 6VP increase of 9.7%. If the 2014 fuel increase was rate shock, the larger fuel increase in this case must be considered as rate shock. Rate shock constitutes a large level of increase, not included in budgets, which can cause a harmful impact on customers and should be avoided.

Q HOW WILL THE REQUESTED INCREASE IMPACT DENC'S INDUSTRIAL CUSTOMERS?

A The Company serves major industrial facilities including CIGFUR's members and also Nucor Steel. Large industrial customers use power for around-the-clock manufacturing operations and operate at high load factors. A high load factor means a customer is using relatively more energy in relation to the demand for power. Energy usage is a much larger portion of the total bill for a large high load factor customer as compared to a smaller, lower load factor customer. The increase in the fuel rate applies to energy usage which translates into a higher than average increase to high load factor industrial customers. DENC's Fuel Application requests that the Commission approve a proposed total fuel rate (base fuel factor, Rider A, and EMF Rider B) of $0.02495/kWh for 6VP customers, which is a 9.77% increase over the current total bill and a 29.8% increase over the current fuel rate. For Large General Service customers, including

Rate Schedule 6P, the Company proposes a total fuel rate (base fuel factor, Rider A, and EMF Rider B) of $0.02536/kWh, which is a 29.9% increase over the current total fuel rate.

6VP

	Current ($/kWh)	Proposed ($/kWh)	Change ($/kWh)
Base Non-Fuel	$0.03945	$0.03945	$0.00000
Base Fuel	$0.02043	$0.02043	$0.00000
Rider A	$0.00006	$0.00069	$0.00063
Rider B EMF	($0.00137)	$0.00383	$0.00520
Rider B2 EMF	$0.00010	$0.00000	($0.00010)
Total	$0.05867	$0.06440	$0.00573
% Change	9.77%		

The proposed fuel increase will significantly increase the cost of energy for DENC's industrial base, which is essential to the manufacturing process of these customers. In my opinion, the proposed increase will impose an undue burden on DENC's industrial customers and constitutes rate shock.

Q **WHY MUST THE ABOVE-STATED HARM TO NORTH CAROLINA'S INDUSTRIAL BASE BE AVOIDED?**

A The northeastern portion of North Carolina, which includes DENC's service area, is a traditionally disadvantaged area in terms of jobs, wages and income. In its recently filed 2018 Integrated Resource Plan (filed in Docket No. E-100, Sub 157 on May 1, 2018), DENC's Appendix 2C shows that the industrial class will decrease by 50,000 MWh or about 2.9% from actual 2017 to projected 2033. The industrial base in DENC's service area has been shrinking in this century and is not expected to return to prior levels during DENC's current planning horizon.

CIGFUR members constitute a significant portion of the industrial base of DENC's service area. CIGFUR members are major employers in the counties where they have manufacturing plants, and the jobs they provide are vital to the local economies. Together, CIGFUR members provide thousands of direct jobs in the DENC service area. Pfizer (formerly Hospira) is the largest employer in Nash County, followed by Cummins, the fourth largest employer in that county. Domtar is likewise the largest employer in its county (Washington). Kapstone is the second largest private employer and fifth overall in Halifax County.[2] The economic effect of these jobs is of course multiplied by other businesses and jobs indirectly created because of the existence of CIGFUR manufacturing operations. A study performed by Dr. Julius A. Wright vividly illustrated the rippling effect of industrial manufacturing jobs on the local economy in North Carolina: for every new (lost) employee at an industrial facility, there are 1-3 additional new jobs created (lost) in the region; there is region-wide increase (loss) of approximately $500,000 per year in economic output; and there is a region-wide increase (loss) of $200,000 to $350,000 in employee earnings.[3]

In DENC's most recent base electric case, E-22, Sub 532, Company witness Paul Haynes stated at pages 10-11 of his direct testimony that the Company was keenly aware of the reduction in industrial customers and industrial usage in its North Carolina service territory and that the loss of industrial customers and industrial electric usage can have drastic negative impacts on the economic well-being of local communities and the State as a whole. Witness Hayes recognized that the loss of an industrial customer often equates to the loss of jobs and can directly impact the

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[2]Data as of the first quarter of 2016 (North Carolina Department of Commerce). Domtar's property straddles Washington and Martin counties. Its manufacturing facility is physically located in Martin County, but its administrative offices are located in Washington County. The Department of Commerce associates the facility's employment with Washington County. Upon information and belief, if the facility's employment was associated with Martin County, Domtar would be the second largest employer in that county (and the largest private employer).

[3] *See* Julius A. Wright, *The Economic and Rate Implications from an Electric Utility's Loss of Large-Load Customers* [hereinafter, "Wright Study"], p. 3 (filed March 14, 2013 in Docket No. E-2, Sub 1023).

economic vitality of a locality and even an entire region of the State. Similarly, the Commission twice recognized earlier this year that the continued loss of industrial jobs will have a detrimental effect on this State. *See Order Accepting Stipulation, Deciding Contested Issues and Granting Partial Rate Increase*, p. 135, February 23, 2018, NCUC Docket E-2, Sub 1142, and *Order Accepting Stipulation, Deciding Contested Issues, and Requiring Revenue Reduction*, p. 204, June 22, 2018, NCUC Docket E-7, Sub 1146.

Especially in light of global competitive concerns—both externally for customers and internally for capital—market forces increasingly dictate production and siting decisions for large manufacturers. It is no surprise, then, that electricity-intensive industrial customers show dramatic responses to changes in electricity prices.[4] A material change in the cost of electricity has the potential to impact employment, production and investment levels for large customers such as CIGFUR members, significantly impacting local communities that can least afford it.

Q HAS DENC PROPOSED A SOLUTION TO MITIGATE THE IMPACT OF THE LARGE UNDERRECOVERY ON ITS NORTH CAROLINA RATEPAYERS?

A Yes. DENC recognizes the adverse impact on its customers of such a large increase in fuel rates, as is stated in its Fuel Application and the testimony of Company witness George G. Beasley. Therefore, as an alternative to full recovery of the underrecovered amount over the upcoming Rate Period, the Company voluntarily proposes the mitigation alternative, which offers to amortize the balance of the underrecovery over two years without financing charges and with a final true-up to be implemented in the 2021 fuel case. The Company's proposed mitigation alternative will levelize the

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[4]Wright Study, pp. 11-12.

increase and lessen rate shock when compared with full recovery of the undercollection over a single rate period.

NC Jurisdiction

NC Jurisdiction	Current ($/kWh)	Proposed ($/kWh)	Change ($/kWh)
Base Non-Fuel	$0.06321	$0.06321	$0.00000
Base Fuel	$0.02073	$0.02073	$0.00000
Rider A	$0.00004	$0.00069	$0.00065
Rider B EMF	($0.00139)	$0.00194	$0.00333
Rider B2 EMF	$0.00010	$0.00000	($0.00010)
Total	$0.08269	$0.08657	$0.00388
% Change	4.69%		

6VP

6VP	Current ($/kWh)	Proposed ($/kWh)	Change ($/kWh)
Base Non-Fuel	$0.03945	$0.03945	$0.00000
Base Fuel	$0.02043	$0.02043	$0.00000
Rider A	$0.00006	$0.00069	$0.00063
Rider B EMF	($0.00137)	$0.00192	$0.00329
Rider B2 EMF	$0.00010	$0.00000	($0.00010)
Total	$0.05867	$0.06249	$0.00382
% Change	6.51%		

Q **SHOULD THERE BE AN AVERSION TO A DEFERRAL TO A FUTURE PERIOD?**

A No. Deferrals are often used. The Commission is now deferring the return of ratepayer money associated with the over-collection of federal taxes from January 1, 2018 to January 1, 2019. The return of excess deferred income taxes ("EDIT") to ratepayers is also being deferred. These deferrals associated with the over-collection of federal taxes can last up to three years before being returned to customers. The deferral of an abnormal cost in this fuel proceeding is appropriate and will only last one year under DENC's proposal as opposed to the longer deferral for revenues associated with excess taxes paid by ratepayers.

Q **HAS THE COMMISSION PREVIOUSLY APPROVED THE DEFERRAL OF A LARGE FUEL EXPENSE FOR DENC?**

A Yes. In the Company's 2014 fuel proceeding, NCUC docket E-22, Sub 515, the Commission concluded that, in order to lessen rate shock to DENC's customers, it was appropriate to approve a near-identical mitigation proposal by the Company, which amortized a $16,602,670.00 undercollection over two years without interest.

Q **DOES CIGFUR RECOMMEND THAT THE COMMISSION APPROVE DENC'S PROPOSED MITIGATION ALTERNATIVE?**

A Yes. The Company's proposed mitigation alternative will result in less rate shock to DENC's North Carolina retail customers, particularly its declining industrial base, at no additional cost to ratepayers and is therefore in the public interest.

Q **DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

A Yes.

Qualifications of Nicholas Phillips, Jr.

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

A Nicholas Phillips, Jr. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q **PLEASE STATE YOUR OCCUPATION.**

A I am a consultant in the field of public utility regulation and a Managing Principal with the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q **PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EMPLOYMENT EXPERIENCE.**

A I graduated from Lawrence Institute of Technology in 1968 with a Bachelor of Science Degree in Electrical Engineering. I received a Master's of Business Administration Degree from Wayne State University in 1972. Since that time I have taken many Masters and Ph.D. level courses in the field of Economics at Wayne State University and the University of Missouri.

I was employed by The Detroit Edison Company in June of 1968 in its Professional Development Program. My initial assignments were in the engineering and operations divisions where my responsibilities included the overhead and underground design, construction, operation and specifications for transmission and distribution equipment; budgeting and cost control for operations and capital expenditures; equipment performance under field and laboratory conditions; and emergency service restoration. I also worked in various districts, planning system expansion and construction based on increased and changing loads.

Since 1973, I have been engaged in the preparation of studies involving revenue requirements based on the cost to serve electric, steam, water and other portions of utility operations.

Other responsibilities have included power plant studies; profitability of various segments of utility operations; administration and recovery of fuel and purchased power costs; sale of utility plant; rate investigations; depreciation accrual rates; economic investigations; the determination of rate base, operating income, rate of return; contract analysis; rate design and revenue requirements in general.

I held various positions at Detroit Edison, including Supervisor of Cost of Service, Supervisor of Economic studies and Depreciation, Assistant Director of Load Research, and was designated as Manager of various rate cases before the Michigan Public Service Commission and the Federal Energy Regulatory Commission. I was acting as Director of Revenue Requirements when I left Detroit Edison to accept a position at Drazen-Brubaker & Associates, Inc., in May of 1979.

The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and has assumed the utility rate and economic consulting activities of Drazen Associates, Inc., active since 1937. In April 1995, the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and staff.

Our firm has prepared many studies involving original cost and annual depreciation accrual rates relating to electric, steam, gas and water properties, as well as cost of service studies in connection with rate cases and negotiation of contracts for substantial quantities of gas and electricity for industrial use. In these cases, it was necessary to analyze property records, depreciation accrual rates and reserves, rate base determinations, operating revenues, operating expenses, cost of capital and all other elements relating to cost of service.

In general, we are engaged in valuation and depreciation studies, rate work, feasibility, economic and cost of service studies and the design of rates for utility services. In addition to our main office in St. Louis, the firm also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

Q **WHAT ADDITIONAL EDUCATIONAL, PROFESSIONAL EXPERIENCE AND AFFILIATIONS HAVE YOU HAD?**

A I have completed various courses and attended many seminars concerned with rate design, load research, capital recovery, depreciation, and financial evaluation. I have served as an instructor of mathematics of finance at the Detroit College of Business located in Dearborn, Michigan. I have also lectured on rate and revenue requirement topics.

Q **HAVE YOU PREVIOUSLY APPEARED BEFORE A REGULATORY COMMISSION?**

A Yes. I have appeared before the public utility regulatory commissions of Arkansas, Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Missouri, Montana, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, South Dakota, Virginia, West Virginia, and Wisconsin, the Lansing Board of Water and Light, the District of Columbia, and the Council of the City of New Orleans in numerous proceedings concerning cost of service, rate base, unit costs, pro forma operating income, appropriate class rates of return, adjustments to the income statement, revenue requirements, rate design, integrated resource planning, power plant operations, fuel cost recovery, regulatory issues, rate-making issues, environmental compliance, avoided costs, cogeneration, cost recovery, economic dispatch, rate of return, demand-side management, regulatory accounting and various other items.

CHAIRMAN FINLEY: Mr. Blake.

MR. BLAKE: Thank you, Chairman Finley. On October 26th, Nucor Steel-Hertford filed the direct testimony of Paul J. Wielgus, W-I-E-L-G-U-S, consisting of four pages, typed pages of questions and answers, and one exhibit. And on behalf of Nucor Steel-Hertford, we ask that that be admitted into the record as if given from the stand.

CHAIRMAN FINLEY: Mr. Wielgus' direct testimony is copied into the record as though given orally from the stand, and his exhibits (sic) are marked for identification as premarked in the filing and received into evidence.

(WHEREUPON, Exhibit PJW-1 is marked for identification as prefiled and received into evidence.)

(WHEREUPON, the prefiled direct testimony of PAUL J. WIELGUS is copied into the record as if given orally from the stand.)

I. POSITION AND QUALIFICATIONS

Q. PLEASE STATE YOUR FULL NAME AND BUSINESS ADDRESS.

A. My name is Paul J. Wielgus. My business address is 1850 Parkway Place, Suite 800, Marietta, Georgia 30067.

Q. BY WHOM ARE YOU EMPLOYED?

A. I am employed by GDS Associates, Inc. ("GDS") at its Marietta, Georgia headquarters.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. Nucor Steel ("Nucor"), located in Hertford, North Carolina.

Q. PLEASE OUTLINE YOUR PROFESSIONAL AND EDUCATIONAL QUALIFICATIONS.

A. I am a Managing Director with GDS. Prior to joining GDS, I was a senior energy executive engaged in the development and implementation of commercial business plans. Initiatives undertaken included long term energy sales and marketing arrangements, energy procurement, development projects, asset expansions, asset management, mergers and acquisitions, and regulatory activities. With GDS, I provide energy advisory services to clients involving the above matters and perform other energy related work assignments on the behalf of clients including expert testimony. I have a B.S. in Economics, an M.S. in Mineral and Energy Resources, an MBA, and a JD. I am licensed to practice law in Texas. My resume is attached as Exhibit PJW-1.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE NORTH CAROLINA UTILITIES COMMISSION ("COMMISSION")?

A. Yes. I submitted testimony on behalf of Nucor in Docket No. E-22, Sub 451.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN OTHER PROCEEDINGS?

A. Yes.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have conducted a review of the filing made by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina ("Company") in this Docket No. E-22, Sub 558 to adjust the fuel component of its electric rates to become effective February 1, 2019, and remain in effect through January 31, 2020. I will present my findings and recommendations regarding the Company's proposed full recovery request and its mitigation alternative.

III. SUMMARY OF THE COMPANY'S PROPOSAL

Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF THE COMPANY'S PROPOSAL.

A. DENC's total fuel rate is composed of (i) a base fuel factor, (ii) Rider A, and (iii) an Experience Modification Factor (EMF), Rider B. The Company is requesting the Commission approve and implement "full recovery" rates, which includes scheduling recovery of 100% of the fuel deferral account balance of $16,162,154 (as of June 30, 2018) over the February 1, 2019 – January 31, 2020 Rate Period.[1] However, the Company recognizes the impact of such an increase in fuel rates on its customers, so the Company is proposing an alternative that would help mitigate the increase ("mitigation alternative").[2]

Q. WHAT MITIGATION IS THE COMPANY PROPOSING?

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[1] Direct Testimony of George G. Beasley at 4, lines 4-7.

[2] *Id.* at 4, lines 8-13.

A. Under the mitigation alternative, the Company would waive its right to recovery of the full deferral balance over the upcoming rate period in favor of recovering the deferral balance on a dollar for dollar basis over the next two rate periods. That is, under the mitigation alterative, the Company is proposing to establish rates in this proceeding to recover 50% of the deferral balance in the upcoming rate period and establish rates in the 2019 fuel proceeding to recover the other 50% of the deferral balance in the February 1, 2020 – January 31, 2021 rate period.[3]

Q. DO YOU AGREE WITH THE COMPANY'S REASON FOR PROPOSING THIS MITIGATION ALTERATIVE?

A. Yes. The full deferral amount is materially significant. The Company recognizes the impact of such an increase in fuel rates on its customers. For example, the impact on Nucor's facility in North Carolina is estimated to be almost $300,000 per month if the deferral is collected on the twelve-month basis. This would clearly exacerbate the rate shock and further negatively impact the North Carolina steel mill's competitiveness.

IV. <u>FINDINGS AND RECOMMENDATIONS</u>

Q. BASED ON YOUR REVIEW WHAT ARE YOUR FINDINGS?

A. Based on my review, my findings are as follows:

1. The Company's fuel deferral account balance of $16,162,154 is materially significant.
2. The Company recognizes the impact of such an increase in fuel rates on its customers.
3. The impact on Nucor's North Carolina facility is estimated to be almost $300,000 if the deferral is collected on the twelve-month basis.

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[3] *Id.* at 4, lines 13-22.

4. This clearly creates tremendous rate shock for Nucor's operations, significantly impacting that plant's competitiveness.

Q. BASED ON YOUR FINDINGS WHAT ARE YOUR RECOMMENDATIONS?

A. Based on my findings, my recommendations are as follows:

1. The Company's proposed mitigation alternative will provide necessary relief to its customers.
2. The Company's proposed mitigation alternative that collects the deferral amount over two rate periods instead of just one is good regulatory policy and should be approved by the Commission.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

MS. EDMONDSON: Chairman Finley, on October 26th, the Public Staff filed the testimony of Dustin R. Metz consisting of 10 pages and a two-page appendix; the confidential testimony of Darlene P. Peedin consisting of 10 pages and a one-page appendix, and Confidential Exhibit 1 to her testimony; and the testimony of Michelle M. Boswell consisting of six pages and a two-page appendix. I would move that the testimony be copied into the record as if given orally from the stand, and Confidential Peedin Exhibit 1 be marked and admitted, I mean, and be received into evidence.

CHAIRMAN FINLEY: As outlined by Ms. Edmondson, the direct testimony of the Public Staff Witnesses Metz, Peedin, Boswell, and those three witnesses -- and the appendices are copied into the record as though given orally from the stand. And the one exhibit of Ms. Peedin is marked for identification as premarked in the filing and received into evidence. And we need to note that the Peedin testimony and exhibits is confidential in the record, please.

(WHEREUPON, the prefiled direct testimony and Appendix A of DUSTIN R. METZ is copied into the record as if given orally from the stand.)

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-22, SUB 558

In the Matter of Application by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina Pursuant to N.C.G.S. § 62-133.2 and Commission Rule R8-55 Regarding Fuel and Fuel-Related Costs Adjustments for Electric Utilities	))))))	TESTIMONY OF DUSTIN R. METZ PUBLIC STAFF – NORTH CAROLINA UTILITIES COMMISSION

Q. PLEASE STATE YOUR NAME AND ADDRESS FOR THE RECORD.

A. My name is Dustin R. Metz. My business address is 430 North Salisbury Street, Raleigh, North Carolina.

Q. WHAT IS YOUR POSITION WITH THE PUBLIC STAFF?

A. I am an engineer with the Electric Division of the Public Staff representing the using and consuming public.

Q. WOULD YOU BRIEFLY DISCUSS YOUR EDUCATION AND EXPERIENCE?

A. A summary of my education and experience is outlined in detail in Appendix A of my testimony.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to present the Public Staff's recommendations regarding the proposed fuel and fuel-related cost factors for the Residential, Small General Service and Public Authority, Large General Service, Schedule NS, Schedule 6VP, Outdoor Lighting, and Traffic retail customer classes of Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (DENC or the Company) as set forth in the Company's August 30, 2018, application.

Q. WHAT DID YOU REVIEW IN CONDUCTING YOUR INVESTIGATION OF THE COMPANY'S APPLICATION?

A. I reviewed the Company's application, prefiled testimony and exhibits, fuel and fuel-related costs, and test period baseload power plant performance reports, as well as the current coal, natural gas, and nuclear fuel markets, various documents related to test year power plant outages, and the costs authorized to be recovered by Session Law 2017-192 (HB 589). I also reviewed the testimony of Public Staff witnesses Michelle Boswell and Darlene Peedin.

Q. WHAT ARE THE TEST AND BILLING PERIODS FOR THIS PROCEEDING?

A. For this proceeding, the test period is July 1, 2017, through June 30, 2018, and the billing period is proposed to be February 1, 2019, through January 31, 2020.

Q. DID THE COMPANY MEET THE STANDARDS OF COMMISSION RULE R8-55(K) FOR THE TEST YEAR?

A. For the test year, the Company met the standards of Commission Rule R8-55(k) with an actual system-wide nuclear capacity factor that exceeded the NERC (North American Electric Reliability Corporation) weighted average nuclear capacity factor. Additionally, the Company's two-year simple average of its system-wide nuclear capacity factor exceeded the NERC weighted average nuclear capacity factor. Had the utility not meet at least one of these standards, a rebuttable presumption would have been created that the utility imprudently incurred the increased fuel costs during the test year.

Q. WERE THERE ANY ITEMS OF PARTICULAR CONCERN TO THE PUBLIC STAFF IN its INVESTIGATION OF THE TEST YEAR FUEL COSTS?

A. Yes. Of particular concern to the Public Staff in its investigation of the test year fuel costs was the significant underrecovery that took place due to the Company's greater than expected fuel costs in January 2018. After reviewing discovery responses and discussing the issue with the Company, the Public Staff is satisfied that the January 2018 fuel costs were reasonably and prudently incurred.

Q. WHAT ARE THE RESULTS OF YOUR INVESTIGATION OF PROJECTED FUEL PRICES AND THE CALCULATION OF THE TOTAL FUEL FACTOR?

A. Based upon my investigation, I have determined that the projected fuel prices set forth in the testimony of Company witnesses Petrie, Campbell, Workman, and Brookmire are reasonable as used in the calculation of the total fuel factor. I have also concluded that the total fuel factor has been calculated in accordance with the requirements of N.C. Gen. Stat. § 62-133.2, with one caveat regarding the Greensville County natural gas-fired combined cycle station (Greensville) that I will discuss later.

Q. PLEASE DISCUSS THE PUBLIC STAFF'S INVESTIGATION OF THE CATEGORIES OF DENC'S FUEL COSTS AUTHORIZED FOR RECOVERY IN ITS FUEL ADJUSTMENT PROCEEDINGS BY HB 589.

A. The Public Staff's investigation of the categories of DENC's fuel costs authorized for recovery in its fuel adjustment proceedings by HB 589 included the review of various spreadsheets provided by the Company detailing Qualifying Facilities' costs for the test year. Based upon this investigation, I have determined that the costs authorized by HB 589 that the Company seeks to recover for the test year are reasonable and are not currently being recovered through base rates.

Q. PLEASE DISCUSS THE PUBLIC STAFF'S INVESTIGATION OF THE TEST PERIOD EXPERIENCE MODIFICATION FACTOR (EMF).

A. Public Staff witness Boswell describes the Public Staff's review of the test period EMF in her testimony, and I have incorporated her recommendations in Table 1 below.

Q. PLEASE DISCUSS THE ISSUE WITH GREENSVILLE TO WHICH YOU ALLUDED EARLIER IN YOUR TESTIMONY.

A. The Greensville County natural gas-fired combined cycle station (Greensville) will begin commercial operation during or just prior to the upcoming billing period. The Company included a level of "cost savings" in its calculation of proposed rates due to Greensville displacing less efficient and more expensive generation. As part of the Public Staff's investigation, it was discovered that (1) a marketer percentage had not been applied to the anticipated Greensville fuel savings, and (2) the capacity factor used for Greensville is likely higher than should be reasonably expected for the February – June 2019 portion of the test period that will be included in the next fuel proceeding.

Per NCUC Rule R8-55, prospective test periods and billing periods are not the same. In other words, only some of the costs realized during a particular billing period will be reflected in the immediately upcoming EMF test period. The remaining billing period costs will be accounted for in the subsequent EMF test period. The Company anticipates Greensville being commercially operational by end of calendar year 2018. However, it is not unusual, and it is even expected, that when a new generation plant becomes commercially available it would undergo certain tests and inspections over the first six months or so to ensure proper operation. In other words, for approximately the first six months of commercial operation of a new generating plant, its average capacity factor will be lower than for the next six months. In calculating the prospective component in this fuel case, the Company did not take into account the likelihood that the first six months of commercial operation would result in a lower capacity factor than would be expected after that period. Because the prospective factor set in this proceeding (effective February 1, 2019) will affect the EMF component of the Company's 2019 fuel case, and because DENC's EMF test period for the 2019 fuel case will be July 1, 2018, through June 30, 2019, the achieved capacity factor for Greensville from commercial operation through June 30, 2019 will have a significant impact on any over- or undercollection in the 2019 fuel proceeding.

Had the marketer percentage been applied to Greensville, along with a lower capacity factor for the first six months of operation, the expected overall fuel cost savings from Greensville generation for the billing period beginning February 1, 2019, would be diminished, resulting in higher billing period fuel costs than included in the Company's application.

Q. DOES THE PUBLIC STAFF SUPPORT THE COMPANY'S REQUEST FOR FULL RECOVERY OF THE FUEL

COMPONENTS AND FUEL FACTORS PROPOSED BY THE COMPANY?

A. Yes. The Company requested that the Commission approve and implement the full recovery rates. However, the Company requested that if the Commission did not approve full recovery, the Commission approve a mitigation alternative with the June 30, 2018, deferral balance being collected over two years with no incremental cost associated with financing over the extended period. Public Staff witness Boswell discusses the Public Staff's rationale for supporting full recovery of the deferral balance over one year as opposed to two years.

Q. SHOULD THE COMMISSION APPROVE THE MITIGATION ALTERNATIVE, WHAT IS THE PUBLIC STAFF'S RECOMMENDATION AS TO WHAT SHOULD BE INCLUDED IN THE COMPANY'S PROPOSED RATES?

A. Should the Commission adopt the Company's proposed mitigation alternative, the Public Staff recommends that DENC include in this year's rider: (1) the cost savings from Greensville with the marketer percentage recommended by Public Staff witness Peedin applied, and (2) a modification to the proposed capacity factor for the first six months of commercial operation of Greensville to better align with the 2019 fuel case test period. Therefore, if the mitigation alternative is approved, the Public Staff requests that the

Commission order the Company to: (1) recalculate the proposed rates by: applying (a) the marketer percentage to the fuel savings calculation for the Greensville station, and (b) a more appropriate capacity factor for the Greensville station; (2) consult with the Public Staff and provide the respective workpapers; and (3) after consulting with the Public Staff, make a filing of the alternative rates within 10 days of the Commission order.

Q. WHAT ARE THE FUEL COMPONENTS AND TOTAL FUEL FACTORS THAT THE PUBLIC STAFF RECOMMENDS THAT THE COMMISSION APPROVE?

A. The Public Staff recommends approval of the fuel components and total fuel factors (excluding the regulatory fee) shown in Table 1, effective for the twelve months beginning February 1, 2019:

TABLE 1 – Total Proposed Fuel and Fuel-Related Cost Factors ($ per kWh) with Full Recovery

(includes regulatory fee, which currently has a multiplier of 1.0014)

Rate Class	Base	Rider A	Rider B	Total[1]
Residential	$0.02095	$0.00071	$0.00392	$0.02558
Small General Service & Public Authority	$0.02093	$0.00071	$0.00392	$0.02556
Large General Service	$0.02079	$0.00068	$0.00389	$0.02536
Schedule NS (Nucor Steel)	$0.02014	$0.00068	$0.00377	$0.02459
Schedule 6VP (Variable Pricing)	$0.02043	$0.00069	$0.00383	$0.02495
Outdoor Lighting	$0.02095	$0.00071	$0.00392	$0.02558
Traffic	$0.02095	$0.00071	$0.00392	$0.02558

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, this concludes my testimony.

[1] Calculations reflect the application of the voltage differentiation factors used by the Company in its Application, which the Public Staff accepts.

Appendix A

Dustin R. Metz

Through the Commonwealth of Virginia Board of Contractors, I hold a current Tradesman License certification of Journeyman and Master within the electrical trade, awarded in 2008 and 2009 respectively. I graduated from Central Virginia Community College, receiving Associates of Applied Science degrees in Electronics and Electrical Technology (Magna Cum Laude) in 2011 and 2012 respectively, and an Associates of Arts in Science in General Studies (Cum Laude) in 2013. I graduated from Old Dominion University in 2014, earning a Bachelor of Science degree in Engineering Technology with a major in Electrical Engineering and a minor in Engineering Management.

I have over 12 years of combined experience in engineering, electromechanical system design, troubleshooting, repair, installation, commissioning of electrical and electronic control systems in industrial and commercial nuclear facilities, project planning and management, and general construction experience, including six years with AREVA NP, where I provided onsite technical support and participated in root cause analysis teams at commercial nuclear power plants, including plants owned by both Duke and Dominion.

I joined the Public Staff in the fall of 2015. Since that time, I have worked on general rate cases, fuel cases, applications for certificates of public convenience and necessity, customer complaints, nuclear decommissioning, and power plant performance evaluations; I have also participated in multiple technical working groups and been involved in other aspects of utility regulation.

(WHEREUPON, Confidential Peedin Exhibit 1 is marked for identification as prefiled and received into evidence.)

(WHEREUPON, the prefiled confidential direct testimony and Appendix A of DARLENE P. PEEDIN is copied into the record as if given orally from the stand.)

(Confidential testimony and Peedin Exhibit 1 is filed under seal.)

PUBLIC

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-22, SUB 558

In the Matter of

Application by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina Pursuant to N.C.G.S. § 62-133.2 and Commission Rule R8-55 Regarding Fuel and Fuel-Related Costs Adjustments for Electric Utilities	))))))	TESTIMONY OF DARLENE P. PEEDIN PUBLIC STAFF – NORTH CAROLINA UTILITIES COMMISSION

Q. PLEASE STATE FOR THE RECORD YOUR NAME, ADDRESS, AND PRESENT POSITION.

A. My name is Darlene P. Peedin. My business address is 430 North Salisbury Street, Raleigh, North Carolina. I am the Accounting Manager – Electric Section of the Public Staff Accounting Division.

Q. WHAT ARE YOUR DUTIES?

A. I am responsible for (1) the examination and analysis of testimony, exhibits, books and records, and other data presented by electric utilities and other parties involved in Commission proceedings; and (2) the preparation and presentation of testimony, exhibits, and other documents in proceedings that come before the Commission. I have the further responsibility of supervising the examination and analysis of testimony, exhibits, books and records, and other data presented by electric utilities in Commission proceedings.

Q. PLEASE DISCUSS YOUR EDUCATION AND EXPERIENCE.

A. A summary of my education and experience is attached as Appendix A.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is:

(1) to present the Public Staff's analysis and recommendations concerning the appropriate Marketer Percentage to be

applied to power purchases for which Dominion Energy North Carolina (DENC) does not have fuel cost information to reflect the fuel costs to be recovered through the fuel factor; and

(2) to recommend that the prospective factor proposed by DENC that sets forth certain components to which the Marketer Percentage should be applied, (i.e. purchases from PJM Interconnection, Inc. (PJM), certain non-utility generators (NUGS), and the Greensville Plant Credit Adjustment as discussed in the testimony of Public Staff witness Dustin Metz), be trued up in next year's EMF (test year July 2018 – June 2019), with rates effective February 1, 2019, reflecting the Public Staff's recommended Marketer Percentage.

Q. WHAT IS THE MARKETER PERCENTAGE AND HOW DOES IT RELATE TO DENC?

A. The Marketer Percentage is a proxy for the percentage of fuel costs included in overall energy costs associated with certain purchases from suppliers and power marketers who sell power to DENC. Use of the Marketer Percentage began in 1997 to enable the three North Carolina investor-owned electric utilities – DENC, Duke Energy Carolinas, LLC (DEC), and Duke Energy Progress, LLC (DEP), to recover in annual fuel cost proceedings under N.C. Gen. Stat. § 62-133.2, fuel costs associated with power purchased from marketers when the actual fuel cost of the underlying generator could not be determined. At that time, the statute permitted annual fuel charge adjustments only for "actual changes in the cost of fuel and the fuel cost component of purchased power." The theory behind the determination of the Marketer Percentage at that time was that fuel costs as a percentage of total energy costs associated with power generated and **sold** off system by the electric utilities was a reasonable proxy for fuel costs as a percentage of total energy costs associated with power generated off system and **purchased** by the utilities through power marketers.

Amendments to N.C. Gen. Stat. § 62-133.2 enacted by the General Assembly in Senate Bill 3 (Session Law 2007-397) expanded the definition of costs recoverable in annual fuel cost proceedings to include "fuel and fuel-related costs." Under the amended statute, utilities other than DENC (i.e., DEC and DEP) are allowed to recover all of the fuel and fuel-related costs identified in N.C. Gen. Stat. § 62-133.2(a1), including "total delivered non-capacity related costs, including all related transmission charges, of all purchases of electric power . . . that are subject to economic dispatch or economic curtailment" as provided in N.C. Gen. Stat. § 133.2 (a1)(4). Thus, it is no longer necessary to determine a ratio of fuel to energy costs for such purchases by DEP and DEC, and a Marketer Percentage is no longer calculated for them. In contrast, costs recoverable by DENC in an annual fuel proceeding are set forth in N.C. Gen. Stat. § 62-

133.2(a3), which provides that the utility may recover in annual fuel clause proceedings the costs identified in N.C. Gen. Stat. § 62-133.2(a3)(1), (2), (6), and (7), and (10) and "the fuel cost component, as may be modified by the Commission, of electric power purchases identified in subdivision (4) of that subsection."

Because DENC buys substantial amounts of purchased power in transactions where the fuel cost component of the purchased power costs is not disclosed, a Marketer Percentage has continued to be used as a proxy to determine the cost to be recovered by the Company through the fuel factor.

Q. WHAT IS THE CURRENT MARKETER PERCENTAGE?

A. The Commission approved a Stipulation between the Public Staff and DENC[1] in DENC's last general rate proceeding (Docket No. E-22, Sub 532) that provided in Section IV.A.:

> The Stipulating Parties agree to adjust the Company's base fuel and non-fuel expenses to reflect 78% as a proxy for the fuel cost component of energy purchases for which the actual fuel cost is unknown (Marketer Percentage). This represents a reduction from the Company's current Marketer Percentage of 85%. The 78% Marketer Percentage shall remain in effect until the Company's next base rate application or the Company's 2018 application to adjust its annual fuel factor, whichever occurs first.

[1] *See* p. 18, Finding of Fact No. 51 of Order Approving Rate Increase and Cost Deferrals and Revising PJM Regulatory Conditions, issued December 22, 2016, Docket No. E-22, Sub 532.

The Commission also found in the Company's last fuel adjustment proceeding (Docket No. E-22, Sub 546) "that the percentage should be reviewed in the context of DENC's next general rate case, or its 2018 fuel charge adjustment proceeding, whichever occurs first."[2] In simple terms, 78% of the Company's test period purchased power costs subject to the Marketer Percentage are being recovered through DENC's fuel factor.

Q. WHAT IS DENC PROPOSING AS A MARKETER PERCENTAGE IN THIS PROCEEDING?

A. The Company is proposing that the Marketer Percentage remain at 78%. DENC believes that the Marketer Percentage is reasonable and does not propose a change at this time.

Q. DID DENC APPLY THE MARKETER PERCENTAGE CORRECTLY TO THE EMF?

A. Yes. DENC correctly applied 78% as the Marketer Percentage for the test year EMF.

Q. DOES THE PUBLIC STAFF AGREE WITH DENC'S PROPOSAL TO LEAVE THE MARKETER PERCENTAGE AT 78%?

A. No.

[2] Order Deciding Contested Issues and Requiring Compliance Filing, p. 23, issued January 25, 2018, Docket No. E-22, Sub 546.

Q. WHAT DOES THE PUBLIC STAFF RECOMMEND AS AN APPROPRIATE MARKETER PERCENTAGE IN THIS PROCEEDING?

A. The Public Staff recommends that the Commission adopt a Marketer Percentage of 75% to be used as a proxy for the fuel cost component of purchases for which the actual fuel cost is unknown, effective February 1, 2019.

Q. PLEASE EXPLAIN HOW THE PUBLIC STAFF ARRIVED AT THIS PERCENTAGE.

A. The Public Staff used two methods to determine an appropriate Marketer Percentage; these methods were first proposed by DENC in its 2008 fuel proceeding, Docket No. E-22, Sub 451, as an alternative to the methodology using the off-system sales traditionally applied for DEC and DEP.[3] The Company's justification for the different methodologies for calculating the Marketer Percentage related to the fact that DENC was in a regional transmission organization (RTO), unlike DEC and DEP.

The first methodology involved reviewing data from the 2016 and 2017 State of the Market reports for PJM. These reports identified each fuel component of the cost of energy that is used to set the

[3] In Sub 451, DENC also used a third methodology, which was based on reviewing actual contracts signed with counterparties. However, as in Sub 451, there were so few of these contracts in this case (i.e., two), that the Public Staff does not believe that this methodology would provide a reasonable result.

market price of energy. According to these reports, the fuel components of energy cost for calendar years 2016 and 2017 were 73.3% and 69.5%, respectively. The second methodology involved reviewing data provided by the Company that blended DENC's internal data with PJM State of the Market report data for the Dominion Zone[4] to determine an appropriate fuel to energy cost ratio for the Dominion Zone. The values provided by the Company for calendar years 2016 and 2017 are **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** respectively. The data used for the Dominion Zone reflect the generating units specific to the zone or geographical area. The **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** yields a 75% Marketer Percentage. This calculation is set forth in Confidential Peedin Exhibit 1.

Q. DID THE PUBLIC STAFF COMPARE ITS RECOMMENDED MARKETER PERCENTAGE TO THE MARKETER PERCENTAGE CALCULATED USING DEC AND DEP'S OFF-SYSTEM SALES?

A. Yes. While DEC and DEP are not part of an RTO, the Public Staff performed this calculation to serve as a test of reasonableness for its proposed Marketer Percentage. The Public Staff used the off-system sales of DEC and DEP during the twelve months ended

[4] The Dominion Zone (DomZone) is the load zone for DENC.

December 31, 2016 and 2017, to determine what the Marketer Percentage would have been utilizing that methodology. Under this methodology, the fuel to energy cost ratio was calculated to be 66.19% and 55.75%, respectively.

Q. WHAT DID DENC PROPOSE IN ITS PROSPECTIVE RATE AS IT APPLIES TO PJM PURCHASES, NUGS, AND THE GREENSVILLE CREDIT ADJUSTMENT?

A. As set forth on Company Exhibit BEP-1, Schedule 4, the Company proposed that the 78% Marketer Percentage be applied to the PJM purchases and NUGS that do not provide actual fuel costs. However, the Company did not reflect the Marketer Percentage in the Greensville Plant Credit Adjustment, as discussed by Public Staff witness Metz. Instead, DENC reflected the Greensville Plant Credit Adjustment at a 100% fuel level.

Q. WHAT IS THE PUBLIC STAFF'S RECOMMENDATION REGARDING DENC'S PROPOSAL REGARDING THE PROSPECTIVE RATE?

A. The prospective rate in this case will be collected over the Rate Period (February 1, 2019 – January 31, 2020). The Public Staff does not recommend that the Company change its prospective rate in this case, as it will reflect higher customer rates than what the Company has recommended in this case. The Public Staff does recommend, however, that the Company true up PJM purchases, certain NUGS, and the effect of the fuel savings due to the addition of the Greensville Plant in next year's EMF (test year July 2018 – June 2019) to reflect the Public Staff's recommended Marketer Percentage of 75%, effective February 1, 2019.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

APPENDIX A

Darlene P. Peedin

I am a 1989 graduate of Campbell University with a Bachelor of Business Administration degree in Accounting. I am a Certified Public Accountant and a member of the North Carolina Association of Certified Public Accountants.

Since joining the Public Staff in September 1990, I have filed testimony or affidavits in several general and fuel clause rate cases of utilities currently organized as Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Virginia Electric and Power Company (Dominion Energy North Carolina), Nantahala Power & Light Company, Western Carolina University, and Shipyard Power and Light Company, as well as in several water and sewer general rate cases. I have also filed testimony or affidavits in other proceedings, including applications for certificates of public convenience and necessity for the construction of generating facilities and applications for the approval of cost recovery for Renewable Energy and Energy Efficiency Portfolio Standard (REPS) cases.

I was promoted to Accounting Manager with responsibility for electric matters in January 2017. I have had supervisory responsibility over the Electric Section of the Accounting Division since 2009.

Prior to joining the Public Staff, I was employed by the North Carolina Office of the State Auditor. My duties included the performance of financial, compliance, and operational audits of state agencies, community colleges, and Clerks of Court.

(WHEREUPON, the prefiled direct testimony and Appendix A of MICHELLE M. BOSWELL is copied into the record as if given orally from the stand.)

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. E-22, SUB 558

In the Matter of Application by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina Pursuant to N.C.G.S. § 62-133.2 and Commission Rule R8-55 Regarding Fuel and Fuel-Related Costs Adjustments for Electric Utilities	))))))	TESTIMONY OF MICHELLE M. BOSWELL PUBLIC STAFF – NORTH CAROLINA UTILITIES COMMISSION

Q. **PLEASE STATE FOR THE RECORD YOUR NAME, ADDRESS, AND PRESENT POSITION.**

My name is Michelle M. Boswell. My business address is 430 North Salisbury Street, Raleigh, North Carolina. I am a Staff Accountant with the Public Staff Accounting Division.

Q. **PLEASE DISCUSS YOUR EDUCATION AND EXPERIENCE.**

A. A summary of my education and experience is attached as Appendix A.

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

A. The purpose of my testimony is to present the Public Staff's investigation of the Experience Modification Factor (EMF) rider proposed by Dominion Energy North Carolina (DENC or Company) in this proceeding.

EXPERIENCE MODIFICATION FACTOR

Q. **PLEASE DESCRIBE THE EXPERIENCE MODIFICATION FACTOR.**

A. The EMF rider is utilized to "true-up" the over- or underrecovery of fuel and fuel-related costs (fuel costs) experienced during the test year, which is determined by comparing the revenues collected during the test year to recover previously estimated fuel costs (fuel revenues) to the actual amount of fuel costs incurred during the test year. DENC's test year in this fuel proceeding is the twelve months ended June 30, 2018.

Q. PLEASE DESCRIBE THE PUBLIC STAFF'S INVESTIGATION OF THE EXPERIENCE MODIFICATION FACTOR.

A. The Public Staff's investigation included procedures to evaluate whether the Company properly determined its per books fuel costs and fuel revenues during the test period. These procedures included review of the Company's filing, prior Commission orders, the Monthly Fuel Reports filed by the Company with the Commission, and other Company data provided to the Public Staff. Additionally, the procedures included review of certain specific types of expenditures affecting the Company's test year fuel costs, payments to non-utility generators (NUGs), and payments for purchases of power from the markets administered by PJM Interconnection, LLC (PJM). The Public Staff's procedures also included a review of source documentation of fuel costs for certain selected Company generation resources. Finally, the Public Staff's investigation included the review of numerous responses to written and verbal data requests.

Q. WHAT ARE THE RESULTS OF YOUR INVESTIGATION?

A. I have reviewed the calculations of the EMF provided by DENC and set forth in the direct testimony and exhibits of the Company's witnesses. The Public Staff has three recommendations in this fuel proceeding. First, the Public Staff recommends that DENC's EMF increment rider (Rider B) for each customer class be based on a net underrecovery of fuel and fuel related costs of $16,162,154 and the Company's pro-forma North Carolina retail sales of 4,175,472,287 kWh. This produces an aggregate EMF increment rider (Rider B), before class-specific voltage differentiation, of $0.00388 per kilowatt-hour (kWh), including the North Carolina regulatory fee ($0.00387 per kWh, excluding the regulatory fee) for all North Carolina retail customer classes.

Second, the Public Staff recommends that the Commission approve and implement full recovery rates as opposed to the mitigation alternative suggested by DENC in this proceeding. According to DENC witness Beasley's calculations presented on Company Exhibit GGB-1, Schedules 3 and 4, the impact of the EMF under full recovery is $3.88 on a 1,000 kWh bill, in effect for a one-year period, and the mitigation alternative would defer recovery of half of that amount ($1.94 per each 1,000 kWh bill) until the annual billing period beginning February 1, 2020, so that the underrecovery is recovered over a two-year period. The Company states in its application and throughout witness testimony that the underrecovery was primarily driven by cold weather and higher commodity prices. The increased fuel expenses due to periods of cold weather are not new to the region or DENC, and are likely to occur again, impacting future fuel cases. If similar weather occurs again, resulting in another underrecovery, that underrecovery would presumably need to be recovered along with the underrecovery related to the mitigation alternative. Thus, if full EMF recovery was ordered on in that case as normally expected, the mitigation alternative would compound any underrecovery in future fuel cases, and further increase the rates to be collected in those future years. Should a party in that future case propose additional mitigation, a "snowball" effect could be created as past costs continued to be deferred for future recovery beyond the time periods contemplated by statutes, Commission Rules, and normal Commission practices. Furthermore, as detailed in the testimony of Public Staff witness Metz, the Company has overstated its fuel credit related to the Greensville plant, which will already result in a known underrecovery for the item in the 2019 EMF period. Additionally, should there be a base rate increase next year, ratepayers would likely be paying higher base rates and fuel costs that are higher than they would be without the mitigation alternative. Therefore, the Public Staff believes that in the long-term, it is in ratepayers' interest for the Company to recover the underrecovery in full over the upcoming Rate Period. However, should the Commission decide that the mitigation alternative is in the ratepayers' interest, the Public Staff recommends that the Commission accept its proposal concerning the Greensville Plant credit adjustment and include the adjustment in the Rate Period increment calculations, as detailed in the testimony of Public Staff witness Dustin R. Metz.

Third, the Public Staff recommends the Marketer Percentage decrease from 78% to 75% effective February 1, 2019, as detailed in the testimony on Public Staff witness Darlene P. Peedin.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes.

APPENDIX A

MICHELLE M. BOSWELL

Qualifications and Experience

I graduated from North Carolina State University in 2000 with a Bachelor of Science degree in Accounting. I am a Certified Public Accountant.

I am responsible for analyzing testimony, exhibits, and other data presented by parties before this Commission. I have the further responsibility of performing the examinations of books and records of utilities involved in proceedings before the Commission, and summarizing the results into testimony and exhibits for presentation to the Commission.

I joined the Public Staff in September 2000. I have performed numerous audits and/or presented testimony and exhibits before the Commission addressing a wide range of electric, natural gas, and water topics. I have performed audits and/or presented testimony in Duke Energy Carolina, LLC's (DEC's) 2010 REPS Cost Recovery Rider; the 2008 REPS Compliance Reports for North Carolina Municipal Power Agency 1, North Carolina Eastern Municipal Power Agency, GreenCo Solutions, Inc., and EnergyUnited Electric Membership; DEC's 2017 rate case, four recent Piedmont Natural Gas, Inc. (Piedmont), rate cases; the 2016 rate case of Public Service Company of North Carolina, Inc., the 2012 rate case for Dominion Energy North Carolina (formerly Dominion North Carolina Power), Duke Energy Progress, LLC's 2013 and 2017 rate case, the 2018 rate case of Aqua North Carolina, Inc., several Piedmont, NUI Utilities Inc., and Toccoa annual gas cost reviews; the merger of Piedmont and NUI; the merger of Piedmont and North Carolina Natural Gas; and the merger of Dominion Energy, Inc. and SCANA Corporation.

Additionally, I have filed testimony and exhibits in numerous water rate cases and performed investigations addressing a wide range of topics and issues related to the water, electric, and telephone industries.

CHAIRMAN FINLEY: Does that conclude the presentations of the parties?

MS. GRIGG: Yes, sir.

MR. BLAKE: Yes, sir.

MR. McDONALD: (Nods head in agreement.)

MS. EDMONDSON: (Nods head in agreement.)

CHAIRMAN FINLEY: Thank you very much. That being the case, we will close this record and we'll move on to REPS.

(WHEREUPON, the proceedings were adjourned.)

C E R T I F I C A T E

I, KIM T. MITCHELL, DO HEREBY CERTIFY that the Proceedings in the above-captioned matter were taken before me, that I did report in stenographic shorthand the Proceedings set forth herein, and the foregoing pages are a true and correct transcription to the best of my ability.

Kim T. Mitchell

Kim T. Mitchell
Court Reporter

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