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December 10, 2018

VIA Electronic Filing

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

RE: Docket No. E-22, Sub 558
Dominion Energy North Carolina's Proposed Order Approving Fuel

Charge Adjustment

Dear Ms. Jarvis:

Enclosed for filing in the above-referenced docket is Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina's <u>Proposed Order Approving Fuel Charge Adjustment</u>.

Please feel free to contact me with any questions. Thank you for your assistance in this matter.

Very truly yours,

/s/Andrea R. Kells

ARK:kma

Enclosure

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. E-22, SUB 558

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)	
Application by Virginia Electric and Power)	PROPOSED
Company, d/b/a Dominion Energy North)	ORDER APPROVING
Carolina, Pursuant to N.C.G.S. § 62-133.2 and)	FUEL CHARGE
NCUC Rule R8-55 Regarding Fuel and Fuel-)	ADJUSTMENT
Related Costs Adjustments for Electric Utilities)	

HEARD: Thursday, November 8, 2018, in Commission Hearing Room 2115, Dobbs

Building, 430 North Salisbury Street, Raleigh, North Carolina 27603

BEFORE: Chairman Edward S. Finley, Jr., presiding; Commissioners ToNola D.

Brown-Bland, Jerry C. Dockham, James G. Patterson, Lyons Gray, Daniel

G. Clodfelter, and Charlotte A. Mitchell

APPEARANCES:

For Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina:

Mary Lynne Grigg, McGuireWoods LLP, 434 Fayetteville Street, Suite 2600, Raleigh, North Carolina 27601

Andrea R. Kells, McGuireWoods LLP, 434 Fayetteville Street, Suite 2600, Raleigh, North Carolina 27601

For Carolina Industrial Group for Fair Utility Rates I:

Ralph McDonald, Bailey & Dixon, LLP, 434 Fayetteville Street, Suite 2500, Raleigh, North Carolina 27601

For Nucor Steel-Hertford:

Christopher J. Blake, Nelson, Mullins, Riley & Scarborough, 4140 Parklake Avenue, Suite 200, Raleigh, North Carolina 27612

For the Using and Consuming Public:

Lucy E. Edmondson, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699-4300

BY THE COMMISSION: On August 30, 2018, Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (DENC or the Company), filed its application for a fuel charge adjustment, along with accompanying testimony and exhibits, pursuant to G.S. 62-133.2 and North Carolina Utilities Commission (Commission) Rule R8-55 relating to fuel and fuel-related charge adjustments for electric utilities (Application). The Application was accompanied by the testimony and exhibits of Bruce E. Petrie, Ronnie T. Campbell, Tom A. Brookmire, Gregory A. Workman, and George G. Beasley as well as Commission Rule R8-55 Information and Workpapers.

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

On September 28, 2018, the Public Staff filed a Motion to Amend Procedural Schedule to provide the Public Staff additional time to investigate, conduct discovery, and prepare testimony.

On October 2, 2018, the Public Staff's Motion to Amend Procedural Schedule was granted by the Commission. Pursuant to this Order, the Commission established a deadline of October 25, 2018, for the filing of petitions to intervene as well as direct testimony and exhibits of expert witnesses. The Commission scheduled a public witness hearing for November 5, 2018, and expert witness hearing for November 8, 2018.

On October 15, 2018, Carolina Industrial Group for Fair Utility Rates I (CIGFUR) filed a Petition to Intervene.

¹ Pursuant to G.S. 62-133.2(a1) and (a3), which were enacted as part of Session Law 2017-192 (House Bill 589) and Session Law 2018-114 (House Bill 374), the Company is now eligible to recover certain non-fuel (but still fuel-related) costs through the annual rate adjustments authorized pursuant to G.S. 62-133.2. For ease of reference, however, throughout this Order, the costs being considered for recovery shall be termed "fuel costs," and the proceeding shall be termed the "fuel charge proceeding."

On October 23, 2018, Nucor Steel-Hertford (Nucor) filed a Petition to Intervene.

On October 25, 2018, the Commission granted the Petitions to Intervene of Nucor and CIGFUR.

On October 26, 2018, Nucor file the direct testimony of Paul J. Wielgus, CIGFUR filed the direct testimony of Nicholas Phillips, Jr., and the Public Staff filed the direct testimony of Dustin R. Metz, Darlene P. Peedin, and Michelle M. Boswell.

On November 5, 2018, the Company filed the rebuttal testimony of Bruce E. Petrie and George G. Beasley.

On November 5, 2018, the matter came for public hearing as scheduled. No public witnesses appeared at the hearing.

On November 6, 2018, the Public Staff and the Company filed a Joint Motion to Excuse Witnesses from appearing at the November 8, 2018 evidentiary hearing, stating that they had reached agreement on all issues in this docket and had agreed to waive cross-examination of each other's witnesses.

On November 7, 2018, the Commission granted the Joint Motion to Excuse Witnesses.

The matter came on for evidentiary hearing on November 8, 2018, as scheduled. At the hearing, the Company's Application and direct and rebuttal testimony and exhibits were received into evidence.

Based upon the entire record in this proceeding, the Commission makes the following:

FINDINGS OF FACT

- 1. The Company is duly organized as a public utility operating under the laws of the State of North Carolina and is subject to the jurisdiction of the North Carolina Utilities Commission. The Company is engaged in the business of generating, transmitting, distributing, and selling electric power to the public in northeastern North Carolina. The Company is lawfully before this Commission based on its application filed pursuant to G.S. 62-133.2.
- 2. The test period for purposes of this proceeding is the 12 months ended June 30, 2018.
- 3. The rate period for purposes of this proceeding is the 12 months ending January 31, 2020.
- 4. The Company's fuel procurement practices during the test period were reasonable and prudent.
- 5. The per books test period system sales are 86,260,348,958 kilowatt-hours (kWh).
- 6. The per books test period system generation is 89,584,657 megawatthours (MWh), which includes various types of generation as follows:

Generation Types	MWh
Nuclear	27,650,942
Coal	13,543,704
Heavy Oil	357,813
Wood and Natural Gas Steam	1,374,673
Combined Cycle and Combustion Turbine	29,436,131
Solar and Hydro – Conventional and Pumped	3,437,770
Net Power Transactions	17,173,828
Less: Energy for Pumping	(3,370,203)

- 7. The Company's baseload plants were managed prudently and efficiently during the test period so as to minimize fuel and fuel-related costs.
- 8. The nuclear capacity factor appropriate for use in this proceeding is 93.9%, which is the estimated nuclear capacity factor for the 12 months beginning February 1, 2019.
- 9. The adjusted test period system sales for use in this proceeding are 85,266,747,633 kWh.
- 10. The adjusted test period system generation for use in this proceeding is 88,445,965 MWh, which is categorized as follows:

Generation Types	<u>MWh</u>
Nuclear	27,578,419
Coal (including wood and natural gas steam)	14,686,411
Heavy Oil	352,223
Combined Cycle and Combustion Turbine	28,978,466
Hydro	3,337,366
Solar	100,404
Net Power Transactions	16,883,282
Less: Energy for Pumping	(3,370,203)

- 11. A marketer percentage serves as a proxy for fuel costs when actual fuel costs associated with power purchases are not available. A marketer percentage of 78% should be applied in this proceeding to appropriately determine the fuel cost of such power purchases.
- 12. The adjusted test period system fuel expense for use in this proceeding is \$1,824,035,658.
- 13. The proper fuel factors for Rider A for this proceeding, including the regulatory fee, are as follows:

Rider A
0.071 ¢/kWh
0.071 ¢/kWh
0.068 ¢/kWh
0.068 ¢/kWh
0.069 ¢/kWh
0.071 ¢/kWh
0.071 ¢/kWh

- 14. The appropriate North Carolina retail test period jurisdictional fuel expense under-collection is (\$16,162,154), and the adjusted North Carolina retail jurisdictional test period system sales are 4,175,472,287 kWh.
- 15. It is appropriate to accept the Company's full recovery proposal and to establish rates in this proceeding to recover 100% of the test period fuel expense undercollection in the upcoming rate period.
- 16. The appropriate Experience Modification Factors (EMF or Rider B) for this proceeding (including the regulatory fee) are as follows:

EMF Billing Factor
0.392 ¢/kWh
0.392 ¢/kWh
0.389 ¢/kWh
0.377 ¢/kWh
0.383 ¢/kWh
0.392 ¢/kWh
0.392 ¢/kWh

17. The total fuel factors to be billed to the Company's retail customers during the February 1, 2019 through January 31, 2020 fuel charge billing period, including the regulatory fee, are as follows:

<u>Customer Class</u>	Class-Specific Prospective Factor
Residential	2.558 ¢/kWh
SGS &PA	2.556 ¢/kWh
LGS	2.536 ¢/kWh
Schedule NS	2.459 ¢/kWh
6VP	2.495 ¢/kWh
Outdoor Lighting	2.558 ¢/kWh
Traffic	2.558 ¢/kWh

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 1

This finding of fact is essentially informational, jurisdictional, and procedural in nature and is not controverted.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 2

G.S. 62-133.2(c) sets out the verified, annualized information that each electric utility is required to furnish the Commission in an annual fuel charge adjustment proceeding for an historical 12-month test period. Commission Rule R8-55(b) prescribes the 12 months ending June 30 as the test period for the Company. The Company's filing was based on the 12 months ended June 30, 2018.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 3

The evidence for this finding is contained in the Commission's rules and the direct testimony of Company witnesses Petrie and Beasley and the direct testimony of Public Staff witness Metz.

Commission Rule R8-55(b) provides for annual public hearings to review charges in each electric public utility's cost of fuel and fuel-related costs. As testified by Company witness Petrie, 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 conclusions of DENC's 2017 rider proceedings, in this case the Company is proposing that its updated fuel riders become effective for a February 1,

2019 through January 31, 2020 rate period. Witness Petrie explained that this adjustment will extend the time for the Commission to issue orders in the Company's three annual rider proceedings, and 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. He stated that the Company intends to continue to use a February 1 through January 31 rate period in future rider cases.

Company witness Beasley testified that, since the existing tariffs approved in the Company's last fuel factor proceeding, Docket No. E-22, Sub 546, will expire on December 31, 2018, DENC is proposing interim tariffs for January 2019 showing Riders A and B both set to zero, and updated rate period tariffs for February 2019 through January 2020.

No other party offered testimony on this proposal, with the exception that the Public Staff recommended acceptance of the Company's proposed rates with an effective date of February 1, 2019. The Company's proposal is consistent with the Petition filed by the Public Staff in Docket No. E-100, Sub 160 on September 6, 2018, which suggested that moving the effective date of DENC's new cost recovery riders to February 1 would alleviate the burden on the Commission, the Public Staff, and the Company to file and issue proposed and final orders and implement revised rates by January 1 each year. On October 11, 2018, the Commission issued an order adopting the Public Staff's recommendation.

Based on the evidence presented, the Commission finds and concludes that DENC's proposal to adjust the rate period for its fuel riders to February 1 through January 31 is reasonable and should be approved. Rates approved in this order will take

effect February 1, 2019. For January 2019, the Company shall reduce the rates charged under Rider A and Rider B to zero as proposed, and shall begin charging the updated rates under these schedules as approved herein beginning February 1, 2019.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 4

The evidence for this finding of fact is contained in the direct testimony and exhibits of Company witnesses Workman and Brookmire.

Commission Rule R8-52(b) requires each electric utility to file a Fuel Procurement Practices Report at least once every ten years and each time the utility's fuel procurement practices change. The Company's current fuel procurement practices were filed with the Commission in Docket No. E-100, Sub 47A, on December 20, 2013.

In his direct testimony, Company witness Workman explained that as a result of rising global oil prices, natural gas exports, and an increase in domestic natural gas demand, domestic natural gas production increased during the test period. He stated that natural gas prices were relatively high during January 2018, and that coal and oil prices also rose as compared to prices in the prior test period.

Mr. Workman described the Company's fuel procurement practices and explained that the Company continues to follow the same procurement practices it has in the past in accordance with its report filed in Docket No. E-100, Sub 47A. He also testified to the Company's price hedging program under which it price hedges commodities needed for power generation using a range of volume targets, gradually decreasing over a three-year period.

In regard to natural gas procurement, Mr. Workman explained that 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. Witness Workman also described how the Company evaluates its diverse portfolio of pipeline transportation and storage contracts to determine the most reliable and economical delivered fuel options for each power station, and how 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. He also noted that 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. Witness Workman testified that, since the Company's 2017 fuel charge adjustment proceeding, the Company has continued to utilize more natural gas to serve its customers' electricity needs, noting that during the test period in this case, energy production at its gas-fired power stations accounted for about 33% of the electricity produced for customers. Finally, he noted that in late 2018, the Company will add the Greensville County Power Station (Greensville Station or Greensville) to its regulated fleet.

In regard to coal procurement, Mr. Workman testified that the Company employs a multi-year physical procurement plan to ensure a reliable supply of coal, delivered to its generating stations by truck or rail, at competitive prices. The Company accomplishes this by procuring long-term coal requirements primarily through periodic solicitations and secondarily on the open market for short-term or spot needs. He noted that 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.

Mr. Workman also testified that the Company has a varied procurement strategy for its biomass stations depending on their geographical region. He stated that the Company's biomass stations at Hopewell and Southampton continue to be served by multiple suppliers under long-term agreements, which enables the Company to increase the reliability of its biomass supply by diversifying it supplier base. He also noted that the Company continues to purchase long-term fuel supply through one supplier for its Altavista Power Station, and to procure biomass needs for the Virginia City Hybrid Energy Center via short-term contracts with various suppliers.

Finally, Mr. Workman described how, with respect to its oil procurement practices, the Company purchases 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.

Company witness Brookmire testified that the nuclear fuel market has softened considerably in the past six to seven years, largely due to the earthquake and tsunami in Japan in March 2011, but also due to reductions in demand. He noted that some reductions in supply have in part offset some of the downward trend in demand. Witness Brookmire indicated that the spot market price for conversion services has dropped significantly due to reduced near-term demand, while long-term prices have remained high. He also noted that the cost for enrichment services has declined slightly due to reduced demand and the addition of new centrifuge capacity in Europe in recent years. He explained that while the price trend in the U.S. domestic nuclear fuel fabrication

industry continues to be difficult to measure due to the lack of a spot market, the general consensus is that costs will continue to increase due to regulatory requirements, reduced competition, new reactor demand in the U.S. and abroad, and financial distress recently experienced by parent companies for U.S. nuclear fuel fabricators. He also pointed out that there may be some short-term price lift on front-end components due to the potential restart of several more reactors in Japan and the growth of China's nuclear energy program.

Witness Brookmire stated that these changes in market costs have not significantly impacted the Company's projected near-term costs, as the Company's current mix of longer-term front-end component contracts has reduced its exposure to the market price escalation and volatility that has occurred over the past several years. Witness Brookmire also pointed out that the 18-month refueling schedule for the Company's nuclear plants delays the full effect of any significant changes in a component price. He also noted that the Company has been active in the market and has some market-based and fixed price contracts that allow the Company to take advantage of current lower prices. Witness Brookmire testified that the Company continues to follow the same procurement practices as it has in the past in accordance with the procedures filed in Docket No. E-100, Sub 47A.

Witness Brookmire also testified that the Company does not currently anticipate that any significant effect on its nuclear fuel supply will result from Westinghouse filing for Chapter 11 bankruptcy in March 2017. He also stated that the outcome of the Section 232 petition filed by two U.S. miners in January 2018 is uncertain at this time, but that

the Company expects to hear the results of the Department of Commerce investigation by late 2019.

No party offered testimony contesting the Company's fuel procurement practices.

Based on the foregoing, the Commission concludes that the Company's fuel procurement and power purchasing practices during the test period were reasonable and prudent.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 5-6

The evidence for these findings of fact is contained in the direct testimony and exhibits of Company witnesses Campbell and Petrie.

Company witness Campbell testified that the Company's per books test period system sales were 86,260,348,958 kWh, and witness Petrie testified that the Company's per books test period system generation was 89,584,657 MWh. Witness Petrie stated that the per books test period system generation is categorized as follows:

Generation Types	<u>MWh</u>
Nuclear	27,650,942
Coal	13,543,704
Heavy Oil	357,813
Wood and Natural Gas Steam	1,374,673
Combined Cycle and Combustion Turbine	29,436,131
Solar and Hydro – Conventional and Pumped	3,437,770
Net Power Transactions	17,173,828
Less: Energy for Pumping	(3,370,203)

No other party offered or elicited testimony on the level of per books test period system MWh sales or generation. The Commission thus concludes that the foregoing test period per books levels of sales and generation are reasonable and appropriate for use in this proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 7

The evidence for this finding of fact is contained in the direct testimony of Company witness Petrie and the testimony of Public Staff witness Metz.

For purposes of determining the EMF rider, Commission Rule R8-55(k) requires that a utility must achieve either (a) an actual system-wide nuclear capacity factor in the test year that is at least equal to the national average capacity factor for nuclear production facilities based on the most recent five-year period available as reflected in the most recent Generating Availability Report of the North American Electric Reliability Corporation (NERC), appropriately weighted for size and type of plant, or (b) an average system-wide nuclear capacity factor, based upon a two-year simple average of the system-wide capacity factors actually experienced in the test year and the preceding year, that is at least equal to the national average capacity factor for nuclear production facilities based on the most recent five-year period available as reflected in the most recent NERC Generating Availability Report, appropriately weighted for size and type of plant. Rule R8-55(k) also provides that, if a utility does not meet either standard, a rebuttable presumption is created that the increased cost of fuel was incurred imprudently and a disallowance may be appropriate. Commission Rule R8-55(d)(1) provides that capacity factors for nuclear production facilities will be normalized based generally on the national average for nuclear production facilities as reflected in the most recent NERC Generating Availability Report, adjusted to reflect the unique, inherent characteristics of the utility facilities and any unusual events.

In his direct testimony, Company witness Petrie testified to the performance of the Company's major generating units during the test period. Witness Petrie also testified that the Company's net capacity factors during the test period for its four nuclear units were:

North Anna Unit 1	91.4%
North Anna Unit 2	92.7%
Surry Unit 1	90.3%
Surry Unit 2	102.7%

Thus, the aggregate capacity factor for the Company's nuclear units during the test period was 94.2%, which exceeded the five-year industry weighted average capacity factor of 89.8% for the period 2012-2016 for 800-999 megawatt (MW) units, as reported by NERC in its latest Generating Availability Report. Mr. Petrie testified in addition that, for the same five-year period (i.e., 2012-2016), the Company's net nuclear capacity factor was 93.5% compared to the national average of 89.8%. Based on these figures, he stated that the Company's nuclear fleet performance during the test period was clearly better than the industry five-year average for comparable units.

Public Staff witness Metz testified that the Company met the standards of Commission Rule R8-55(k) with both an actual system-wide capacity factor and a two-year simple average of the system wide capacity factor that exceeded the NERC weighted average capacity factor.

Based upon the evidence in the record, the Commission concludes that DENC managed its baseload plants prudently and efficiently so as to minimize fuel and fuel-related costs.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 8

The evidence for this finding of fact is contained in the direct testimony of Company witness Petrie.

Witness Petrie testified that for the 12-month rate period ending January 31, 2020, North Anna Unit 1 is projected to operate at a net capacity factor of 93.9%, North Anna Unit 2 is projected to operate at a net capacity factor of 90.3%, Surry Unit 1 is projected to operate at a net capacity factor of 91.8%, and Surry Unit 2 is projected to operate at a net capacity factor of 100.2%. Based on this projection, the Company normalized expected nuclear generation and fuel expenses in developing the proposed fuel cost rider. DENC's projected fuel costs are based on a 93.9% nuclear capacity factor, which is what DENC anticipates for the 12 months from February 1, 2019 through January 31, 2020, the period the new rates will be in effect. No party offered testimony contesting the projected normalized system nuclear capacity factor.

Based on the foregoing evidence, the Commission concludes that a projected normalized system nuclear capacity factor of 93.9% is reasonable and appropriate for use in this proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 9

The evidence for this finding of fact is contained in the direct testimony of the Company witness Beasley and the testimony of the Public Staff.

Witness Beasley testified that he was sponsoring the calculation of the adjustment to the Company's system sales for the 12 months ended June 30, 2018, due to changes in usage, weather normalization, and customer growth. Mr. Beasley stated the adjustment is consistent with the methodology used in the Company's last general rate case (Docket No. E-22, Sub 532) and the last fuel charge adjustment case (Docket No. E-22, Sub 534). Witness Beasley adjusted total system Company sales by 993,601,325 kWh. This adjustment is the sum of adjustments for changes in usage, weather normalization, and

customer growth. The Public Staff reviewed and accepted these adjustments. No other party offered or elicited testimony on the adjustment.

Based on the foregoing, the Commission concludes that the adjustments for changes in usage, weather normalization, and customer growth are reasonable and appropriate adjustments for use in this proceeding. The adjusted system sales for the 12 months ended June 30, 2018, are 85,266,747,633 kWh.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 10

The evidence for this finding of fact is contained in the direct testimony of Company witness Petrie and the testimony of the Public Staff.

Company witness Petrie presented an adjustment to per books MWh generation for the 12-month period ended June 30, 2018, to incorporate nuclear generation based upon the expected future operating parameters for each unit. Other sources of generation were then normalized, including an adjustment for weather, customer growth, and increased usage. This methodology for normalizing test period generation resulted in an adjusted generation level of 88,445,965 MWh. The Public Staff accepted this adjusted generation level, which includes various types of generation as follows:

Generation Types	<u>MWh</u>
Nuclear	27,578,419
Coal (including wood and natural gas steam)	14,686,411
Heavy Oil	352,223
Combined Cycle and Combustion Turbine	28,978,466
Hydro	3,337,366
Solar	100,404
Net Power Transactions	16,883,282
Less: Energy for Pumping	(3,370,203)

No other party offered or elicited testimony on the adjusted test period system generation for use in this proceeding. Thus, based on the foregoing, the Commission

concludes that the adjusted test period system generation level of 88,445,965 MWh is reasonable and appropriate for use in this proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 11

The evidence for this finding of fact is contained in the Commission's Order Approving Rate Increase issued December 22, 2016, in Docket No. E-22, Sub 532 (Sub 532 Order), its final order in DENC's 2017 fuel adjustment proceeding (Docket No. E-22, Sub 546), the direct testimony of Company witness Campbell, the direct and rebuttal testimony of Company witness Petrie, and in the testimony of Public Staff witnesses Peedin, Metz, and Boswell.

In his direct testimony, Company witness Petrie testified that the Company believes that its current marketer percentage (78%) is reasonable and that DENC was not proposing a change to the marketer percentage in this case. In his direct testimony, Company witness Campbell explained that the 78% marketer 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. He stated that in accounting for non-utility generator (NUG) energy costs, for dispatchable NUGs that do not provide actual fuel costs, the Company included 78% of the reasonable and prudent energy costs in the EMF calculation, and to the extent a dispatchable NUG provides market-based energy rather than dispatching its facility, DENC included 78% of the reasonable and prudent energy costs for that market-based energy in the EMF calculation.

Public Staff witness Peedin testified to the origin and purpose of the marketer percentage. She stated that 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. She stated that 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. She noted that the Commission's final order in the Company's last general rate proceeding (Docket No. E-22, Sub 532) and its final order in DENC's 2017 fuel adjustment proceeding (Docket No. E-22, Sub 546) stated that the 78% marketer percentage should be reviewed in the context of DENC's next general rate case or its 2018 fuel charge adjustment proceeding, whichever occurred first. Witness Peedin agreed that DENC correctly applied the 78% marketer percentage for the test year EMF in this case, but testified that the Public Staff does not agree with the Company's proposal that the marketer percentage remain unchanged.

She presented the Public Staff's recommendation that the marketer percentage be reduced to 75%, effective February 1, 2019, based on the Public Staff's usage of two methods to determine the marketer percentage first proposed by DENC in its 2008 fuel proceeding, Docket No. E-22, Sub 451, as an alternative to the methodology of using off-system sales that was traditionally applied to Duke Energy Carolinas, LLC and Duke Energy Progress, LLC. The first methodology involved a review of data from the 2016 and 2017 State of the Market reports for PJM; the second 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.

Witness Peedin clarified that the Public Staff does not recommend that the Company change its prospective rate in this case, since that will reflect higher customer

rates, but that DENC true up PJM purchases, certain NUGs, and the effect of the fuel savings due to the addition of the Greensville Station (discussed further below) in next year's EMF (test year July 2018 through June 2019) to reflect the Public Staff's recommended marketer percentage of 75%, effective February 1, 2019. Public Staff witness Boswell also recommended the decrease in the marketer percentage to 75% effective February 1, 2019, as detailed by witness Peedin.

In his rebuttal testimony, cCompany witness Petrie testified that he does not agree with the Public Staff's proposed 75% marketer percentage. He explained that this adjustment would be improper because it would deny the Company the opportunity to recover the full dollar amount of prudently incurred PJM purchased energy costs. He stated that 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. He also stated that the 78% marketer percentage is a better representation of the fuel-related costs, and is consistent with the Company's method used in the 2016 base rate case. He testified that the Company believes the proper level of the marketer percentage should be further reviewed in the Company's next general base rate case.

Based on the evidence in this proceeding, the Commission concludes that it is reasonable for the Company to continue to apply a 78% marketer percentage to purchases from suppliers that do not provide DENC with actual fuel costs as a proxy for actual fuel costs associated with such purchases in this proceeding. The Company and the Public Staff have complied with the Commission's directive to review the marketer percentage in this case, which has occurred before DENC's next general base rate case. While the

Public Staff disagrees with DENC as to the proper method to calculate the marketer percentage, there is no evidence that the Company's method is inappropriate. Given that consideration, the Commission agrees with DENC that any change to the marketer percentage should occur in the context of the Company's next general rate case in order to not prevent DENC the opportunity to recover the full dollar amount of prudently incurred PJM purchased energy costs.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 12-13

The evidence for these findings of fact is contained in the direct testimony of Company witnesses Petrie and Beasley, and the testimony of Public Staff witnesses Metz and Peedin.

Company witness Petrie presented the Company's system fuel expense for the test period and the normalized system fuel expenses for the upcoming rate period of \$1,824,035,658. He testified that the fuel under-recovery experienced by the Company during the test year was primarily driven by colder winter weather and higher commodity prices. He noted that the energy use in January 2018 reached a peak of 21,232 MW, which is close to the Company's all-time peak experienced in the winter of 2015. He also noted that the fuel expense created by the extended period of cold weather in January was a major factor in the amount of the EMF in this case. He stated that the Company offset the higher market fuel prices by optimizing its diverse fleet of generating assets to reduce system fuel expense. He further testified that he used the expense normalization methodology that has been used by the Company and approved in previous North Carolina annual fuel factor proceedings. Specifically, the first step in computing normalized system fuel expense 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 cycles, 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 these resources. Normalized generation was computed by applying these percentages to a new total, including an adjustment for weather, customer growth, increased usage, and the net change in nuclear generation. He stated that this methodology for normalizing the test period generation resulted in adjusted annual system energy requirements of 88,445,965 MWh.

Witness Petrie also testified that the addition of DENC's 1,588 MW Greensville Station in December 2018 will benefit system fuel expense. He stated that the system fuel expense in this case was adjusted to reflect the expected fuel benefits related to the Greensville Station. He stated that the Company does not anticipate a significant impact to system fuel expense from the placement of several generating units in cold reserve until 2021. Finally, he noted that due to the enactment of House Bill 589 and House Bill 374, 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 the Public Utility Regulatory Policies Act of 1978 that are not subject to economic dispatch or curtailment. He stated that reflecting those costs increases system fuel expense by approximately \$29.4 million.

Company witness Beasley presented the Company's calculation of the Fuel Cost Rider A applicable for each North Carolina retail jurisdiction customer class. He first determined the average system fuel factor of 2.142 ¢/kWh, based on system fuel expenses of \$1,824,035,658, and system sales of 85,266,747,633 kWh, that reflected adjustments for changes in usage, weather normalization, and customer growth. Witness Beasley also presented the calculations used to differentiate the jurisdictional base fuel component by voltage to determine the class fuel factors, and testified that these are consistent with the methodology used in the Company's previous fuel proceeding, Docket No. E-22, Sub 546. In his testimony, Public Staff witness Metz stated that he agreed with the Company's determination and calculation of its proposed Rider A.

Public Staff witness Peedin noted that the Company proposed to apply the 78% marketer percentage to PJM purchases and NUGs that do not provide actual fuel costs, but did not reflect the marketer percentage in the Greensville Station Credit Adjustment, instead reflecting the Adjustment at a 100% fuel level. Witness Metz also testified that the Company did not apply a marketer percentage to the anticipated Greensville Station fuel savings, and that the capacity factor used for Greensville is likely higher than should be reasonably expected for the February through June 2019 portion of the test period that will be included in the next fuel proceeding. While recognizing the Company's expectation that the Greensville Station will become commercially operational by the end of 2018, he stated that it is not unusual and is even expected that when a new generation plant becomes commercially available it undergoes tests and inspections over the first six months or so to ensure proper operation, such that its average capacity factor will be lower than for the next six months. He stated that 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 for the billing period

beginning February 1, 2019, would be diminished, resulting in higher rate period fuel costs than were included in the Company's Application. He stated that, if the Commission approves the Company's mitigation alternative, the Public Staff recommends that DENC include in this year's rider the cost savings from Greensville with the 75% marketer percentage, and 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.

In his rebuttal testimony, Company witness Petrie testified that the Company believes that it reasonably estimated the expected fuel and purchased energy savings from the addition of the Greensville Station to the fleet, and that the adjustment for those savings as filed assumed a high level of availability and performance during the future rate period, and included two planned outages. He also stated, however, that should the Commission accept the rate mitigation alternative, the Company would work with the Public Staff to revise the Greensville Station adjustment to account for a lower initial capacity factor, and to apply the marketer percentage to the Greensville savings estimate.

Based upon the foregoing, the Commission concludes that the appropriate level of fuel expenses to be used to set the prospective, or forward-looking, fuel factor in this proceeding is \$1,824,035,658. Because, as discussed below for Finding of Fact No. 15, we are not accepting the Company's mitigation alternative, the Company's proposed adjustment for savings from the Greensville Station is accepted as filed, and we will not direct the modifications to Greensville savings related to the marketer percentage and capacity factor discussed by the Public Staff

The Commission further concludes that the proper fuel factors (Rider A) for use in this proceeding, including the regulatory fee, are as follows:

<u>Customer Class</u>	Rider A
Residential	0.071 ¢/kWh
SGS &PA	0.071 ¢/kWh
LGS	0.068 ¢/kWh
Schedule NS	0.068 ¢/kWh
6VP	0.069 ¢/kWh
Outdoor Lighting	0.071 ¢/kWh
Traffic	0.071 ¢/kWh

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 14-16

The evidence for these findings of fact is contained in the Company's Application, the direct testimony of Company witness Petrie, the direct and rebuttal testimony of Company witness Beasley, the testimony of Public Staff witnesses Boswell and Metz, and the testimony of Nucor witness Wielgus and CIGFUR witness Phillips.

In his direct testimony, Company witness Beasley testified that DENC's deferral balance for the test period applicable to the North Carolina jurisdiction is \$16,162,154. He stated that this substantial under-recovery is largely due to cold winter weather and higher commodity prices, specifically for an extended period in January 2018. He clarified that the Company is seeking Commission approval of the full recovery rates, which will allow the Company to recover 100% of the June 30, 2018 fuel deferral account balance of \$16,162,154 over the February 1, 2019 through January 31, 2020 rate period. He also testified, however, that while North Carolina law allows prompt recovery of these expenses, the Company recognizes the impact of such an increase in fuel rates on its customers. Therefore, as an alternative to the full recovery rate, the Company proposes a recovery alternative that will help mitigate the increase. Under the mitigation

alternative, the Company would waive its right to recover the full deferral balance over the upcoming rate period in favor of recovering the 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, rates established in this proceeding would recover 50% of the deferral balance in the upcoming rate period and establish rates in the 2019 fuel factor proceeding to recover the remaining deferral balance in the February 1, 2020 through January 31, 2021 rate period. In the 2021 fuel proceeding, the Company will establish rates to recover or refund any final over- or under-recovery of the original deferred balance during the February 1, 2022 through January 31, 2023 rate period. Witness Beasley testified that, if the Commission declines to approve the Company's full recovery request and approves the mitigation alternative, DENC will further agree to ensure that its customers will see no incremental cost associated with financing the deferral balance over the extended period.

Public Staff witness Boswell testified that she reviewed the calculations of the EMF provided by DENC, and based on that review recommends that DENC's EMF increment rider (Rider B) for each customer class be based on a net under-recovery 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 conclusion is consistent with the Company's Application. She stated that this produces an aggregate EMF increment rider (Rider B), before class-specific voltage differentiation, or \$0.00388 per kWh, including the regulatory fee, for all North Carolina retail customer classes.

Witness Boswell also testified that the Public Staff supports the Company's request for full recovery in this case. She explained that 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. She noted that if similar weather occurs again, resulting in another under-recovery, that under-recovery would presumably need to be recovered along with the under-recovery related to the mitigation alternative. So if full EMF recovery was ordered in that case as normally expected, the mitigation alternative would compound any under-recovery in future fuel cases, and further increase the rates to be collected in those future years. This could result in a snowball effect as past costs continue to be deferred for future recovery beyond the time periods contemplated by statutes, Commission Rules, and normal Commission practices. She also noted witness Metz's testimony that DENC overstated its fuel credit related to the Greensville Station, which the Public Staff believes will result in an under-recovery in the 2019 EMF period. She also stated that if the Company receives a base rate increase in 2019, customers would likely pay higher base rates and fuel costs than they would without the mitigation alternative. She concluded that, in the long term, it is in customers' interest for DENC to recover the under-recovery in full over the upcoming rate period. Witness Boswell also indicated that if the Commission accepts the mitigation alternative, the Public Staff recommends that the Commission also accept the Public Staff's proposal regarding the Greensville credit adjustment as detailed by witness Metz and include the adjustment in the rate period increment calculations.

Public Staff witness Metz testified that the Public Staff was particularly concerned in its investigation of the test year fuel costs with the significant under-recovery that took place due to greater than expected fuel costs in January 2018. He stated that after reviewing discovery responses and discussing the issue with the

Company, the Public Staff believes that the January 2018 fuel costs were reasonably and prudently incurred.

In his testimony, Nucor witness Wielgus testified in support of the Company's proposed mitigation alternative. He stated that the full deferral amount is materially significant, and that 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 12-month basis. He stated that this would amount to rate shock and would negatively impact the mill's competitiveness. CIGFUR witness Phillips testified that the mitigation alternative would result in less rate shock to the Company's North Carolina retail customers, particularly its declining industrial base, at no additional cost to ratepayers and that it is therefore in the public interest. He also noted that the Commission approved a mitigation proposal by the Company in its 2014 fuel proceeding that amortized a similar \$16,602,670 under-collection over two years without interest.

In his rebuttal testimony, Company witness Beasley stated that on October 31, 2018, and subsequent to the Company filing its Application and direct testimony and exhibits, DENC's Rider EDIT expired. He provided a schedule showing the updated impact to typical bills for both the full recovery and mitigation alternatives, considering the expiration of Rider EDIT. He also noted that on October 25, 2018, the Company made a filing in Docket No. E-22, Sub 560 to reduce its non-fuel base rates to reflect the reduction in the federal corporate income tax rate as provided in the Tax Cuts and Jobs Act (Tax Act), as directed by the Commission in its October 5, 2018 order issued in Docket No. M-100, Sub 148. Noting that the proposed reduction in non-fuel base rates has not been approved by the Commission, he also provided a schedule showing the

impact on typical customer bills of both the full recovery and mitigation alternative combined with the proposed Tax Act reduction.

Witness Beasley testified that the Company recognizes and is sensitive to the concerns of large industrial customers expressed by CIGFUR witness Phillips and Nucor witness Wielgus. He stated that the Tax Act reduction would help offset in part the impact of the fuel increase on customers, and noted that the Company proposed a rebilling back to January 1, 2018, of the final approved rates in the Sub 560 tax docket, which will provide a one-time credit to customers if approved. He also recognized, however, that even when the proposed Tax Act reduction is considered, the impact of the full recovery of fuel expense on these customer classes still results in a substantial increase. He concluded that the Company therefore continues to offer the mitigation alternative.

Based on the evidence in this proceeding, the Commission concludes that it is appropriate to accept the Company's full recovery proposal. We recognize the burden that this will place on the Company's customers, including the specific burden on the industrial customers. However, we find persuasive the testimony of the Public Staff regarding the risk of a snowball effect should the Company experience another underrecovery during the upcoming rate period, which would only continue to burden DENC's customers, perhaps to an even greater degree. We also are persuaded by Company witness Beasley's rebuttal testimony as to the impact of the Tax Act non-fuel base rate reductions proposed in Docket No. E-22, Sub 560. While these have not yet been ruled upon, some reduction in DENC's non-fuel base rates due to the Tax Act will occur in the coming year, and that reduction will help to offset, in part, the increase in fuel rates

approved in this proceeding. Because the Commission concludes that full recovery is appropriate, we do not address the Public Staff's proposal to adjust the projected savings for the Greensville Station or to apply the marketer percentage to the Greensville adjustment.

The Commission further concludes that the appropriate North Carolina retail test period jurisdictional fuel expense under-collection is \$16,162,154 and that the adjusted North Carolina jurisdictional test period sales appropriate for computing the EMF (Rider B) are 4,175,472,287 kWh.

The appropriate Experience Modification Factors (EMF) (Rider B) for this proceeding, including interest and the regulatory fee, are as follows:

EMF Billing Factor
0.392 ¢/kWh
0.392 ¢/kWh
0.389 ¢/kWh
0.377 ¢/kWh
0.383 ¢/kWh
0.392 ¢/kWh
0.392 ¢/kWh

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 17

The evidence supporting this finding of fact is cumulative and is contained in the direct testimony and exhibits of Company witnesses Petrie, Campbell, Workman, Brookmire, and Beasley, the testimony of Public Staff witnesses Metz, Peedin, and Boswell, and the rebuttal testimony and exhibits of Company witnesses Petrie and Beasley.

Based upon the above findings and conclusions, the Commission finds and concludes that the total net fuel factors (ϕ /kWh) are determined as follows (with Regulatory Fee):

<u>Customer Class</u>	Total Net Fuel Factor	
Residential	2.558 ¢/kWh	
SGS &PA	2.556 ¢/kWh	
LGS	2.536 ¢/kWh	
Schedule NS	2.459 ¢/kWh	
6VP	2.495 ¢/kWh	
Outdoor Lighting	2.558 ¢/kWh	
Traffic	2.558 ¢/kWh	

IT IS THEREFORE ORDERED as follows:

- 1. That effective beginning with usage on and after February 1, 2019, the Company shall implement a Fuel Cost Rider A and an EMF Rider increment (Rider B) for all classes as approved and set forth above.
- 2. That a total fuel factor as approved and set forth in the Evidence and Conclusion for Finding of Fact No. 17 above, shall be instituted and remain in effect for usage from February 1, 2019, through January 31, 2020.
- 3. That the Company shall implement a Fuel Cost Rider A and an EMF Rider increment (Rider B) of zero for all classes for the January 1-31, 2019 period.
- 4. That the Company shall file appropriate rate schedules and riders with the Commission in order to implement the fuel charge adjustments approved herein no later than five working days from the date of receipt of this Order.
- 5. That the Company shall work with the Public Staff to prepare a joint proposed Notice to Customers of the rate adjustments ordered by the Commission herein,

and the Company shall file such proposed notice for Commission approval as soon as practicable.

ISSUED BY ORDER OF THE COMMISSION

This, the ___ day of December, 2018.

NORTH CAROLINA UTILITIES COMMISSION

Chief Clerk

CERTIFICATE OF SERVICE

I hereby certify that a copy of Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina's *Proposed Order Approving Fuel Charge Adjustment*, filed in Docket No. E-22, Sub 558, was served electronically or via U.S. mail, first-class postage prepaid, upon all parties of record.

This the 10th day of December, 2018.

/s/Andrea R. Kells

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