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December 20, 2021

VIA Electronic Filing

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

Re: Joint Proposed Order of Dominion Energy North Carolina and the Public Staff
Docket No. E-22, Sub 605

Dear Ms. Dunston:

Enclosed for filing in the above-referenced proceedings is the *Joint Proposed Order of Dominion Energy North Carolina and the Public Staff*.

Thank you for your assistance with this matter. If you have any questions regarding this filing, you may reach me at the number shown above.

Sincerely,

/s/Andrea R. Kells

ARK:kjg

Enclosure

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-22, SUB 605

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina Pursuant to N.C.G.S. § 62-133.2 and Commission Rule R8-55 Regarding Fuel and Fuel-Related Costs Adjustments for Electric Utilities	))))))	JOINT PROPOSED ORDER OF DOMINION ENERGY NORTH CAROLINA AND THE PUBLIC STAFF

HEARD: Tuesday, November 16, 2021, and Thursday, December 16, 2021, held in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina 27603

BEFORE: Chair Charlotte A. Mitchell; and Commissioners ToNola D. Brown-Bland, Lyons Gray, Daniel G. Clodfelter, Kimberly W. Duffley, Jeffrey A. Hughes, and Floyd B. McKissick, Jr. (November 16, 2021 Public Witness Hearing, Hearing Examiner Warren Hicks, Presiding. December 16, 2021 Public Witness Hearing, Hearing Examiner Derrick Mertz, Presiding.)

APPEARANCES:

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

Andrea R. Kells, McGuireWoods LLP, 501 Fayetteville Street, Suite 500, Raleigh, North Carolina 27601

For the Using and Consuming Public:

John D. Little and William E. H. Creech, Staff Attorneys, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699-4300

BY THE COMMISSION: On August 10, 2021, 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 N.C. Gen. Stat. § 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 Jeffrey D. Matzen, Ronnie T. Campbell, Dale E. Hinson, Tom A. Brookmire, and Timothy P. Stuller.

On August 23, 2021, the Commission issued its Order Scheduling Hearing, Requiring Filing of Testimony, Establishing Discovery Guidelines, and Requiring Public Notice (Procedural Order). Pursuant to the Procedural Order, the Commission established deadlines for the filing of petitions to intervene, intervenor testimony and exhibits, and Company rebuttal testimony and exhibits.

The intervention and participation of the Public Staff in this docket are recognized pursuant to N.C.G.S. § 62-15(d) and Commission Rule R1-19(e).

On August 25, 2021, the Carolina Industrial Group for Fair Utility Rates I (CIGFUR I) filed a Petition to Intervene. The Petition was granted on August 27, 2021.

On September 1, 2021, Carolina Utility Customers Association, Inc. (CUCA) filed a Petition to Intervene. The Petition was granted on September 3, 2021.

On September 9, 2021, Nucor Steel-Hertford (Nucor) filed a Petition to Intervene. The Petition was granted on September 10, 2021.

On October 14, 2021, the Commission issued an Order Rescheduling Expert Witness Hearings, which rescheduled the expert witness hearing in this proceeding to be held on November 22, 2021.

On October 25, 2021, the Public Staff filed a Motion for Extension of Time for the Public Staff and other intervenors to file testimony and exhibits until November 5, 2021, and for the Company to file rebuttal testimony until November 12, 2021. The Motion was granted on October 26, 2021.

On October 27, 2021, DENC filed its Affidavit of Publication evidencing the publication of the Public Notice pursuant to the Procedural Order.

On October 28, 2021, the Company filed a Petition to Modify Test Period, requesting that the Commission grant the Company authority to include in its request for recovery the deferral balance for the months of July, August, and September 2021, schedule an additional public hearing following the evidentiary hearing in this matter in order for the Company to comply with the Rule R8-55(g) notice requirements, and approve the Company's revised notice.

Also on October 28, 2021, the Company filed the supplemental testimonies and exhibits of Ronnie T. Campbell, Dale E. Hinson, Jeffrey D. Matzen, and Timothy P. Stuller.

On October 29, 2021, the Company filed the revised supplemental direct testimony and exhibit of Witness Hinson.

On November 5, 2021, the Public Staff filed the testimonies of Evan D. Lawrence, Michael C. Maness, and June Chiu.

On November 8, 2021, the Commission issued an Order Scheduling Additional Public Hearing and Requiring Public Notice.

On November 12, 2021, the Company filed its Letter in Lieu of Rebuttal Testimony.

On November 15, 2021, the Public Staff and the Company filed a Joint Motion to Conduct Evidentiary Hearing by Remote Means and to Excuse Witnesses (Joint Motion). On November 17, 2021, the Company filed a letter correcting the parties consenting to the Joint Motion.

On November 18, 2021, the Commission granted the Joint Motion. The Commission also canceled the expert witness hearing scheduled for November 22, 2021, and accepted into evidence the direct and supplemental testimony and exhibits of witnesses Matzen, Campbell, Hinson, Brookmire, and Stuller, and the Public Staff testimony of witnesses Lawrence, Maness, and Chiu. The prefiled testimony and exhibits were admitted into evidence. The Commission also directed that proposed orders be filed on or before December 20, 2021.

This matter came on for public hearing as scheduled on November 16, 2021, before Hearing Examiner Warren Hicks, and December 16, 2021, before Hearing Examiner Derrick Mertz. No public witnesses appeared at these hearings.

On December 20, 2021, a Joint Proposed Order was filed by DENC and the Public Staff.

Based upon the evidence presented and 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 N.C. Gen. Stat. § 62-133.2.

2. Commodity prices for coal, oil, and natural gas have increased significantly since the Company filed its initial Application in this case.

3. Given the significant increases in commodity prices, and in the interest of mitigating rate impacts to customers resulting from such increases, the Company's request in its Petition to Modify Test Period to include its deferral balance for the months of July, August, and September 2021 in its cost recovery request for purposes of this case is reasonable and appropriate and should be granted.

4. The appropriate test period for purposes of the deferral balance in this proceeding is the 15 months ended September 30, 2021.

5. The Company's fuel procurement practices during the test period were reasonable and prudent.

6. The per books test period system sales are approximately 85,108,915,000 kilowatt-hours (kWh).

7. The per books test period system generation is 87,943,932 megawatt-hours (MWh), which includes various types of generation as follows:

Generation Types	MWh
Nuclear	27,163,019
Coal	9,177,429
Heavy Oil	77,546
Wood and Natural Gas Steam	911,298
Combined Cycle and Combustion Turbine	39,182,136
Solar, Wind, and Hydro – Conventional and Pumped	3,407,723
Net Power Transactions	10,486,986
Less: Energy for Pumping	(2,462,204)

8. The Company's baseload plants were managed prudently and efficiently during the test period so as to minimize fuel and fuel-related costs.

9. The nuclear capacity factor appropriate for use in this proceeding is 92.5%, which is the estimated nuclear capacity factor for the 12 months beginning February 1, 2022.

10. The adjusted test period system sales for use in this proceeding are 85,281,501,429 kWh.

11. The adjusted test period system generation for use in this proceeding is 88,116,518 MWh, which is categorized as follows:

Generation Types	MWh
Nuclear	26,836,870
Coal (including wood and natural gas steam)	10,127,238
Heavy Oil	77,843
Combined Cycle and Combustion Turbine	39,331,703
Hydro	2,794,839
Solar/Wind	883,206
Net Power Transactions	10,527,023
Less: Energy for Pumping	(2,462,204)

12. 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 72% should be applied in this proceeding to approximate the projected fuel cost of such power purchases.

13. The adjusted test period system fuel expense for use in this proceeding is $1,820,197,534.

14. The reasonable and appropriate North Carolina retail class-specific base fuel factors as approved in Docket No. E-22, Sub 562, including the regulatory fee, are as follows:

Customer Class	Base Fuel Factor
Residential	2.118 ¢/kWh
SGS &PA	2.115 ¢/kWh
LGS	2.098 ¢/kWh
Schedule NS	2.036 ¢/kWh
6VP	2.065 ¢/kWh
Outdoor Lighting	2.118 ¢/kWh
Traffic	2.118 ¢/kWh

15. The reasonable and appropriate prospective North Carolina retail class-specific Rider A fuel factor including the regulatory fee, are as follows:

Customer Class	Prospective Fuel Factor
Residential	0.0436 ¢/kWh
SGS & PA	0.0441 ¢/kWh
LGS	0.0436 ¢/kWh
Schedule NS	0.0421 ¢/kWh
6VP	0.0430 ¢/kWh
Outdoor Lighting	0.0436 ¢/kWh
Traffic	0.0436¢/kWh

16. The appropriate North Carolina retail test period jurisdictional fuel expense under-collection is $8,217,462 and the adjusted North Carolina retail jurisdictional test period system sales are 4,360,969,262 kWh.

17. The appropriate Experience Modification Factors (EMF or Rider B) for this proceeding (including the regulatory fee) are as follows:

Customer Class	EMF Billing Factor
Residential	0.1908 ¢/kWh
SGS &PA	0.1906 ¢/kWh
LGS	0.1890 ¢/kWh
Schedule NS	0.1834 ¢/kWh
6VP	0.1861 ¢/kWh
Outdoor Lighting	0.1908 ¢/kWh
Traffic	0.1908 ¢/kWh

18. The total fuel factors to be billed to the Company's North Carolina retail customers during the February 1, 2022 through January 31, 2023 fuel charge billing period, including the regulatory fee, are as follows:

Customer Class	Total Fuel Factor
Residential	2.3524 ¢/kWh
SGS &PA	2.3497 ¢/kWh
LGS	2.3306 ¢/kWh
Schedule NS	2.2615 ¢/kWh
6VP	2.2941 ¢/kWh
Outdoor Lighting	2.3524 ¢/kWh
Traffic	2.3524 ¢/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 FINDINGS OF FACT NOS. 2-4

North Carolina General Statute Section 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 Application was based on the 12 months ended June 30, 2021.

In its Petition to Modify Test Period, the Company requested authority to modify the test period in this proceeding to include DENC's deferral balance for the months of July, August, and September 2021, in order to help mitigate a projected significant under-recovery for the 2022 fuel factor adjustment proceeding due to a recent rise in commodity fuel prices. The Company submitted that including the additional months of fuel costs in its deferral request in this case is consistent with N.C. Gen. Stat. § 62-133.2(d) and Rule R8-55(d)(3), and in the public interest. The Company asserted that inclusion of the additional months of fuel costs in its deferral request also mitigates the projected significant under-recovery for the 2022 fuel factor adjustment proceeding and would increase the requested annual fuel revenue increase from approximately $22 million to $26.2 million. The Company noted that pursuant to the Commission's Order on Petition for Declaratory Ruling issued on September 29, 2021, in Docket No. E-22, Sub 601, the Company removed Regional Greenhouse Gas Initiative (RGGI) costs from its cost recovery request in this proceeding.

The Petition to Modify Test Period was supported by the Supplemental Testimony of Company witnesses Hinson, Campbell, Matzen, and Stuller. In his supplemental testimony, witness Hinson stated that recent experience showed that fuel commodity price increases are not limited to the test period in this case, and that the Company continues to experience relatively high fuel commodity prices for coal, oil, and natural gas. Witness Matzen testified that since his direct testimony was filed, the actual and forecast commodity prices for all fuel types have significantly increased. He stated that in an effort to mitigate the expected future rate increases for customers, the Company proposed an incremental commodity adjustment, which will offset a portion of the significant rate increase anticipated in the Company's next fuel proceeding. Witness Matzen stated that the impact of the commodity increases on the system fuel expense is currently estimated to be an increase of approximately $600 million, and that the proposed commodity adjustment represents approximately 20% of this amount. Witness

Campbell updated the Company's actual system fuel expenses during the fifteen months ending September 30, 2021, to be $2,278,767,791, as compared to $1,683,673,319 for the twelve months ending June 30, 2021, as presented in his direct testimony. Witness Campbell also presented the Company's North Carolina recovery experience as of September 30, 2021, of $104,214,124, with a resulting under-recovery position of $8,217,462 on a North Carolina jurisdictional basis for the fifteen-month period. Witness Stuller presented the Company's updated proposed EMF Rider B based on actual system fuel expenses for the fifteen-month period ending September 30, 2021, and recovery experience as of September 30, 2021.

Public Staff witness Lawrence testified that the commodity price for natural gas has increased substantially and that the Company's initial application severely understates the fuel costs likely to be realized during the rate year. Witness Lawrence presented data demonstrating the increases in the average natural gas price at the Henry Hub from the end of June 2021 through October 2021. He noted that the Public Staff and the Company began discussing the projected impacts of the increased commodity prices and a preferred path forward once it became apparent that the higher natural gas prices would likely be sustained for an extended period. He stated that the Public Staff reviewed the Company's analysis of its expected under-recovery based on updated natural gas pricing, which was similar to witness Lawrence's own analysis. He concluded that the Public Staff supports the Company's supplemental testimony and rates filed on October 28, 2021, which results in an increased EMF (Rider B) in this proceeding, in order to lessen the customer impact of expected under-recovery of fuel costs in the Company's 2022 fuel rider.

Witness Lawrence testified that the Company removed the costs associated with RGGI from its deferral request, and requests the same amount of revenue for the rate year as in the original filing to help offset the increase in fuel prices. He stated that the Public Staff believes the Company appropriately removed the RGGI costs, and given the current fuel costs and estimated projections from multiple sources, supports increasing the billing period fuel costs as presented in the Company's supplemental testimony. He stated that the system under-recovery for July, August, and September 2021 was $146,386,924, which is $7,495,340 on a North Carolina basis (for a total under-recovery for the 15-month period ending September 30, 2021, of $8,217,462). He noted that, while current gas price forecasts are estimates, which could be impacted by a variety of factors, based on current projections, the total expected North Carolina jurisdictional cost will be approximately $14.66 million higher than the expected revenues in the updated filing. Witness Lawrence explained that the Public Staff believes the rates requested in the Company's supplemental filing are appropriate, taking into account that markets may stabilize sooner than expected, which could lead to an over-recovery if the fuel rate is set too high. The Public Staff also considered the potential for rate shock if an additional $14.66 million was recovered in this case. He stated that the Company's approach spreads out cost recovery over two years as opposed to one. He noted that just as there is a chance that the markets stabilize, there is also a chance of severe weather during the winter that causes a further increase in the gas prices resulting in a larger under-recovery for the 2022 fuel rider.

N.C. Gen. Stat. § 62-133.2(d) provides that "the Commission shall consider all evidence required under subsection (c) of this section and all other competent evidence that may assist the Commission in reach its decision including changes in the cost of fuel consumed and fuel-related costs that occur within a reasonable time, as determined by the Commission, after the test period is closed." This statute and Commission Rule R8-55(d)(3) provide further that "[u]pon request of the electric public utility, the Commission shall also incorporate in this determination the experienced over-recovery or under-recovery of costs of fuel and fuel-related costs through the date that is 30 calendar days prior to the date of the hearing, provided that the reasonableness and prudence of these costs shall be subject to review in the utility's next annual hearing pursuant to this section."

Based on its authority under Section 62-133.2(d), the Commission can consider competent evidence regarding the cost of fuel consumed and fuel-related costs during the months of July, August, and September of 2021, which represent the three months following the close of the test period as defined by Commission Rule R8-55(b). The evidence presented by the Company and the Public Staff indicate a continued increase in natural gas costs that has become more pronounced since the Company filed its Application, that if not addressed will likely result in a significant increase in costs to customers from the 2022 fuel factor adjustment proceeding. The Commission finds reasonable the Company's request to modify the Test Period in this proceeding to include the Company's deferral balance for the months of July, August, and September 2021 for recovery. As noted by the Public Staff's testimony, projections can change, and this approach achieves an appropriate balance between allowing room for conditions to improve from current estimates, while lessening the potential increase in rates, and subsequent rate shock, in the 2022 fuel rider

In addition, Rule R8-55(d)(3) requires the Commission, upon request of the utility, to consider the Company's experienced under-recovery of fuel and fuel-related costs up through 30 days before the hearing date, which in this case was to be November 22, 2021. The Company's updated cost evidence reflects the period ending September 30, 2021, which is well within this time frame. The Commission notes that as also provided by Rule R8-55(d)(3), the reasonableness and prudence of the Company's updated fuel costs will be subject to review in its 2022 fuel factor adjustment proceeding.

Based on the foregoing, the Commission grants the Company's request to modify the test period in this proceeding to include DENC's deferral balance for the months of July, August, and September 2021, in order to help mitigate a projected significant under-recovery for the 2022 fuel factor adjustment proceeding due to a recent rise in commodity fuel prices.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 5

The evidence for this finding of fact is contained in the direct testimony and exhibits of Company witnesses Hinson 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, Mr. Hinson discussed the trends that affected fuel commodity markets during the Test Period, stating that during this time frame natural gas, coal, and oil commodity prices increased as Winter 2020/21 temperatures and post-COVID 19 recovery played key roles. He 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.

Regarding natural gas procurement, Mr. Hinson explained that the Company employs a disciplined natural gas procurement plan to ensure a reliable supply of natural gas at competitive prices. He stated that through periodic solicitations and the open market, the Company serves its natural gas-fired fleet using a combination of day-ahead, monthly, seasonal, and multiyear physical gas supply purchases. Witness Hinson also described how the Company evaluates its diverse portfolio of pipeline 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 to augment its transportation portfolio and enhance reliability at a reasonable cost.

Witness Hinson testified that Company-owned natural gas-fired generation accounted for as much as 53% and, on average, 44% of the Company's electricity generation, during the test period.

Witness Hinson also testified that the Company continues to experience significant interstate pipeline constraints negatively affecting the flexibility of its natural gas-fired generation fleet, which have limited the Company's ability to handle natural gas consumption swings typically caused by various factors including, but not limited to, PJM Interconnection, L.L.C. (PJM) directives, unforeseen outages, system emergencies, and electric generation variability. He explained that pipeline constraints that limit the Company's ability to handle natural gas consumption swings to accommodate the variability of electric power generation requirements ultimately limits the Company's electric dispatch efficiencies and related costs and exposes the Company to PJM capacity performance risk.

Regarding coal procurement, Mr. Hinson 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. Hinson 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 both short and long-term agreements, which enables the Company to increase the reliability of its biomass supply by diversifying its supplier base. He also noted that the Company continues to purchase long-term fuel supply through one primary supplier for its Altavista Power Station, and to procure biomass needs for the Virginia City Hybrid Energy Center via short and long-term contracts with various suppliers.

Finally, Mr. Hinson 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.

In his supplemental testimony, Mr. Hinson attributed the relatively high fuel commodity prices for coal, oil, and natural gas that the Company continues to experience to factors including but not limited to fuel inventories (ahead of Winter 2021/2022), increased fuel supply competition from outside the United States, fuel production lagging demand, supply chain delays, and the unabated, full subscribed pipeline capacity situation affecting Mid-Atlantic and East Coast natural gas markets. Mr. Hinson explained that, comparing the test period with the July 2021 – June 2022 period, using both actual prices and futures (as of September 29, 2021), the Company notes several fuel commodity price trends: natural gas price increases of approximately 98%; coal price increases of approximately 50%; and oil price increases of approximately 37%.

In his direct testimony, Company 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. He also testified that the nuclear fuel market has softened considerably since 2011, with uranium, conversion, and enrichment markets all showing varying levels of decreased price trends during this period. In addition to the reduced demand impacts in Japan following the March 2011 earthquake and tsunami, Germany shut down eight reactors, several U.S. reactors have announced shut-downs, and Chinese reactor startups have occurred at a somewhat slower pace than anticipated pre-Fukushima. He noted that there have been some reductions in supply, but generally lagging demand side reductions. He also noted that since 2018, there has been a gradual reduction of excess fuel inventory levels and that market prices for uranium and enrichment have increased somewhat, and that market prices for conversion have increased significantly but prices for all three segments are relatively stable. Witness Brookmire indicated that the price for conversion services has experienced significant upward price lift in the last three years due to production cuts in the United States, and that term and spot conversion prices are relatively stable. He also noted that the cost for enrichment services has increased somewhat during the last couple of years and is expected to continue increasing as nuclear generating companies begin to contract for additional future supply. Witness Brookmire stated that uranium concentrate prices bottomed in 2017 and have been increasing in the past year, though they remain below the point required for miners to restart idled production or develop new sources. He also 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, and 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 China's nuclear energy program continues to be a significant factor in supply and demand for uranium, and that there were no reactor restarts in Japan in 2020.

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 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 executed some market-based and fixed price contracts that allow the Company to take advantage of current lower prices.

Witness Brookmire also testified that that the President of the United States decided to take no action with regard to the Department of Commerce's recommendation on the Section 232 petition filed by two U.S. miners in January

2018. He explained that, in lieu thereof, the President formed the United States Nuclear Fuel Working Group consisting of certain cabinet members and other high-level agency staff. The Working Group was requested to examine the current state of domestic nuclear fuel production to reinvigorate the entire nuclear fuel supply chain, consistent with U.S. national security and nonproliferation goals. Witness Brookmire testified that the Working Group's report was issued on April 23, 2020, but to date no significant market impacts have been realized. He stated further that while sanctions resulting from the Iran Nuclear Deal could affect nuclear fuel costs in the United States, it is not clear at this point if any sanctions would be imposed.

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. 6-7

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

Company witness Campbell's Schedule 3 identified that the Company's per books test period system sales were approximately 85,108,915,000 kWh, and witness Matzen's Schedule 3 identified that the Company's per books test period system generation was 87,943,932 MWh. Witness Matzen's Schedule 3 identified that the per books test period system generation is categorized as follows:

Generation Types	MWh
Nuclear	27,163,019
Coal	9,177,429
Heavy Oil	77,546
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Combined Cycle and Combustion Turbine	39,182,136
Solar, Wind, and Hydro – Conventional and Pumped	3,407,723
Net Power Transactions	10,486,986
Less: Energy for Pumping	(2,462,204)

No other party offered 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. 8

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

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 Matzen testified to the performance of the Company's major generating units during the test period. Witness Matzen also testified that the Company's net capacity factors during the test period for its four nuclear units were:

North Anna Unit 1	86.1%
North Anna Unit 2	91.7%
Surry Unit 1	90.6%
Surry Unit 2	102.3%

The aggregate capacity factor for the Company's nuclear units during the test period and the preceding year was 93.5%, which exceeded the five-year industry weighted average capacity factor of 92.8% for the period 2015-2019 for 800-999 megawatt (MW) units, as reported by NERC in its latest Generating Availability Report. Based on these figures, he stated that the Company's nuclear fleet performance during the test period and the preceding year was higher than the industry five-year average for comparable units based on the two-year simple average metric. Mr. Matzen noted in addition that, for the same five-year period (i.e., 2015-2019), the Company's net nuclear capacity factor was 94.1%, compared to the national average of 92.8%, and that the Company's nuclear units' aggregate capacity factor during the test period of 92.4% was similar to the industry five-year average for comparable units.

Public Staff witness Lawrence testified that the Company met the standards of Commission Rule R8-55(k) for the test period.

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. 9

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

Witness Matzen testified that for the 12-month rate period ending January 31, 2023, North Anna Unit 1 is projected to operate at a net capacity factor of 88.7%, North Anna Unit 2 is projected to operate at a net capacity factor of 89.1%, Surry Unit 1 is projected to operate at a net capacity factor of 92.8%, 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 92.5% nuclear capacity factor, which is what DENC anticipates for the 12 months from February 1, 2022 through January 31, 2023, 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 92.5% is reasonable and appropriate for use in this proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 10

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

Witness Stuller testified that he was sponsoring the calculation of the adjustment to the Company's system sales for the 12 months ended June 30, 2021, due to changes in usage, weather normalization, and customer growth. Mr. Stuller stated the adjustment is consistent with the methodology used in the Company's last general rate case (Docket No. E-22, Sub 562) and the last fuel charge adjustment case (Docket No. E-22, Sub 590).

Witness Stuller adjusted total system Company sales by 172,586,429 kWh. 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, 2021, are 85,281,501,429 kWh.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 11

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

Company witness Matzen presented an adjustment to per books MWh generation for the 12-month period ended June 30, 2021, 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 88,116,518 MWh, which is categorized as follows:

Generation Types	MWh
Nuclear	26,836,870
Coal (including wood and natural gas steam)	10,127,238
Heavy Oil	77,843
Combined Cycle and Combustion Turbine	39,331,703
Hydro	2,794,839
Solar/Wind	883,206
Net Power Transactions	10,527,023
Less: Energy for Pumping	(2,462,204)

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 88,116,518 MWh is reasonable and appropriate for use in this proceeding.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 12

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

In his direct testimony, Company witness Matzen testified that consistent with the Commission's conclusions in the 2019 base rate case in Docket No. E-22, Sub 562 (Sub 562 Order), the Company updated the calculation of the marketer percentage based on the PJM State of the Market Reports for 2019 and 2020, using the same averaging method that was applied in the 2018 fuel case and the 2019 general rate case. He stated that the updated marketer percentage of 72% approximates the percentage of unreported power purchase costs related to fuel. Therefore, witness Matzen utilized the updated 72% marketer percentage to calculate the Company's costs associated with purchases of power from the PJM market and dispatchable non-utility generators.

Public Staff witness Chiu testified that the Public Staff verified the Company's calculation of the updated marketer percentage and did not propose any adjustment to the proposed 72% marketer percentage.

Consistent with the Sub 562 Order and based on the evidence in this proceeding, the Commission concludes that it is reasonable for the Company to apply a 72% 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.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 13-15

The evidence for these findings of fact is contained in the direct and supplemental testimony of Company witnesses Matzen and Stuller, and the testimony of Public Staff witness Lawrence.

In his direct testimony, Company witness Matzen presented the Company's system fuel expense for the test period and the normalized system fuel expenses for the upcoming rate period of $1,820,197,534. He 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 2023. 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 and solar generation. He stated that this methodology for normalizing the test period generation resulted in adjusted annual system energy requirements of 88,116,518 MWh.

Witness Matzen also testified that during the test period the 135 MW (nominal alternating current (AC)) Spring Grove Solar Facility located in Surry County was placed in service in November 2020. In addition, the 128 MW (nominal AC) Sadler Solar Facility located in Greensville County was placed in service in May 2021. He also testified that the Company retired Possum Point Unit 5 in June 2021. Witness Matzen also noted that the Company anticipates adding additional solar facilities totaling approximately 113 MW AC during the next 12 months. He testified that the Company anticipates a benefit to system fuel expense from these changes and an adjustment of $6.9 million was included on his Schedule 4 showing the calculation of the system projected fuel expense.

In his direct testimony, Company witness Stuller presented the Company's calculation of the base fuel component for the North Carolina jurisdiction and each customer class. He first determined the average system fuel factor of $0.021371/kWh, based on system fuel expenses of $1,820,197,534, and system sales of 85,281,501,429 kWh, that reflected adjustments for changes in usage, weather normalization, and customer growth. Witness Stuller 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 590.

The Company did not present any changes to its proposed base fuel factors and updated Rider A in its Supplemental Testimony.

Public Staff witness Lawrence testified that the Public Staff recommended approval of the base fuel factors as shown in his Table 4 and as follows for each of the Company's North Carolina retail customer classes:

Customer Class	Base Fuel Factor
Residential	$0.02118 /kWh
SGS &PA	$0.02115 /kWh
LGS	$0.02098 /kWh
Schedule NS	$0.02036 /kWh
6VP	$0.02065 /kWh
Outdoor Lighting	$0.02118 /kWh
Traffic	$0.02118 /kWh

Witnesses Stuller and Lawrence testified to the proposed Rider A as set forth in Lawrence Table 4 as follows:

Customer Class	Prospective Factor
Residential	$0.000436 /kWh
SGS & PA	$0.000441 /kWh
LGS	$0.000436 /kWh
Schedule NS	$0.000421 /kWh
6VP	$0.000430 /kWh
Outdoor Lighting	$0.000436 /kWh
Traffic	$0.000436 /kWh

No other party offered or elicited testimony on the adjusted test period system fuel expense for use in this proceeding.

In the Sub 562 Order, the Commission approved the system base fuel factor and the North Carolina retail class-specific base fuel factors. Based upon that approval and the evidence presented in this proceeding, 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 $1,820,197,534, the appropriate prospective system average base fuel factor (including regulatory fee) is $0.021371 per kWh, and the appropriate class-specific prospective base fuel factors (including regulatory fee) are as set forth in Table 4 of Public Staff witness Lawrence's testimony in this case.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 16- 17

The evidence for these findings of fact is contained in the Company's Application, the direct and supplemental testimonies and exhibits of Company witnesses Campbell, Matzen, and Stuller, and the direct testimony of Public Staff witnesses Lawrence and Chiu.

Company witness Matzen's direct testimony pointed to commodity price spikes and a slight upward movement in all commodity prices, in addition to RGGI costs, as resulting in an under-recovery of fuel costs. Company witness Campbell's direct testimony presented a total of $86,410,097 in fuel costs allocated to North Carolina jurisdictional customers, while the Company received fuel revenues totaling $82,398,324. The difference between the fuel costs and the fuel revenues resulted in an under-recovery of $4,011,772 for the test period. To determine the EMF (Rider B), Company witness Stuller divided this net balance by the adjusted jurisdictional test period sales of 4,360,969,262 kWh. He then used customer class expansion factors to differentiate the uniform factor by voltage to determine the North Carolina retail jurisdictional voltage differentiated EMF fuel factors at the sales level applicable to each class.

As discussed above, in his supplemental testimony, Witness Matzen testified to the significant increase in actual and forecast commodity prices for all fuel types that has occurred since his direct testimony was filed. In his supplemental testimony, witness Campbell updated the Company's actual system fuel expenses during the fifteen months ending September 30, 2021, to be $2,278,767,791. Witness Campbell presented an updated total of $83,120,446 in fuel costs, excluding RGGI costs, allocated to North Carolina jurisdictional customers, while the Company received fuel revenues totaling $104,214,124. The difference between the fuel costs and the fuel revenues resulted in an under-recovery of $722,122 for the test period. Witness Campbell testified that pursuant to the Commission's determination in the Order on Petition for Declaratory Ruling that RGGI costs are not recoverable from North Carolina customers, the Company removed RGGI costs from its cost recovery request. In his supplemental testimony, witness Stuller presented the Company's updated derivation of its proposed EMF

Rider B for the North Carolina jurisdiction and each customer class to become effective February 1, 2022, based on the Company's actual system fuel expenses and recovery experience for the fifteen months ended September 30, 2021.

Public Staff witness Chiu's testimony presented the results of the Public Staff's investigation of the Company's proposed EMF. She recommended that the Company's EMF increment rates for each customer class be based on total net fuel and fuel-related cost under-recoveries of $8,217,462 and the Company's pro forma North Carolina retail sales of 4,360,969,262 kWh, consistent with the Company's supplemental testimony. She stated that this produces an EMF increment rider (Rider B), of $0.001886 per kWh, including the regulatory fee, for all North Carolina retail customer classes.

Witness Maness testified to update the Commission regarding the Public Staff's continued review of the cost of intersystem sales as quantified in transactions involving the PJM. Witness Maness described the Public Staff's perspective on a conceptual mismatch of "inputs" and "outputs" created by the inclusion of a positive or negative margin over/under fuel costs in the costs initially allocated to the North Carolina retail jurisdiction for the electricity used to supply these sales, as compared with the lack of the margin in the costs directly deducted from the overall total as being associated with the intersystem sales themselves. He stated that for the test year in this proceeding, the Company's analysis indicated that the potential mismatch amounts to a relatively small amount. He stated further that if the mismatch is determined to have been reflected in the last general rate case, the solution would be to remove any non-fuel dollars from the base fuel rate and establish a non-fuel rider in the same amount, and to prospectively cease including any non-fuel costs in annual estimated and actual fuel costs and fuel revenues. He noted that alternatively the matter could rest until the Company's next general rate case, if the net amounts are insubstantial. He testified that because the determination of the fuel and other costs associated with intersystem sales is intertwined with the complex cost calculations performed by PJM, and set forth in its billings to the Company, and due to time constraints imposed by work on other matters, the Public Staff has not been able to reach a definitive conclusion on this matter. Witness Maness stated that the Public Staff intends to continue working with the Company to reach a resolution and will provide a further report in next year's fuel and fuel-related cost proceeding. He stated that the Company has indicated to the Public Staff that it is willing to consider changes in the next general rate case to resolve this matter.

Based on the evidence in this proceeding, the Commission concludes that the appropriate North Carolina retail test period jurisdictional fuel expense under-collection is $8,217,462 and that the adjusted North Carolina jurisdictional test period sales appropriate for computing the EMF (Rider B) are 4,360,969,262 kWh.

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

Customer Class	EMF Billing Factor
Residential	0.1908 ¢/kWh
SGS &PA	0.1906 ¢/kWh
LGS	0.1890 ¢/kWh
Schedule NS	0.1834 ¢/kWh
6VP	0.1861 ¢/kWh
Outdoor Lighting	0.1908 ¢/kWh
Traffic	0.1908 ¢/kWh

The Commission appreciates the update provided by witness Maness regarding the Public Staff's continued evaluation of the Company's intersystem sales and the Company's willingness to consider changes to resolve the matter in its next general rate case. To the extent this issue arises in future proceedings the Commission will consider it based on the evidence presented at that time.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 18

The evidence supporting this finding of fact is cumulative and is contained in the direct and supplemental testimony and exhibits of Company witnesses Matzen, Campbell, Hinson, Brookmire, and Stuller, and the testimony of Public Staff witnesses Lawrence, Maness, and Chiu.

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

Customer Class	Total Net Fuel Factor
Residential	2.3524 ¢/kWh
SGS &PA	2.3497 ¢/kWh
LGS	2.3306 ¢/kWh
Schedule NS	2.2615 ¢/kWh
6VP	2.2941 ¢/kWh
Outdoor Lighting	2.3524 ¢/kWh
Traffic	2.3524 ¢/kWh

IT IS THEREFORE ORDERED as follows:

1. That effective beginning with usage on and after February 1, 2022, the Company shall implement a Fuel Cost Rider A for all classes as approved and set forth in the Evidence and Conclusions for Finding of Fact No. 15 above;

2. That EMF Rider increments (Rider B) as approved and set forth in the Evidence and Conclusions for Findings of Fact Nos. 16 and 17 above, shall be instituted and remain in effect for usage from February 1, 2022 through January 31, 2023;

3. 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.

4. 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 ________, 20__.

NORTH CAROLINA UTILITIES COMMISSION

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing *Joint Proposed Order of Dominion Energy North Carolina and the Public Staff*, as filed in Docket No. E-22, Sub 605, was served electronically or via U.S. mail, first-class, postage prepaid, upon all parties of record.

This, the 20th day of December, 2021.

/s/Andrea R. Kells
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