STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-22, SUB 644

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application by Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina, for Authority to Adjust its Electric Rates and Charges and Revise its Fuel Factor Pursuant to N.C. Gen. Stat. 62-133.2 and NCUC Rule R8-55	)	ORDER APPROVING FUEL CHARGE ADJUSTMENT

HEARD: Wednesday, November 9, 2022, at 10:00 a.m. in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE: Karen M. Kemerait, Presiding; and Chair Charlotte A. Mitchell and Commissioners ToNola D. Brown-Bland, Daniel G. Clodfelter, Kimberly W. Duffley, Jeffrey A. Hughes, and Floyd B. McKissick, Jr.

APPEARANCES:

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

Mary Lynne Grigg, McGuireWoods LLP, 501 Fayetteville Street, Suite 500, Raleigh, North Carolina 27601

For Carolinas Industrial Group for Fair Utility Rates I:

Christina Cress, Bailey & Dixon, LLP, 434 Fayetteville Street, Suite 2500, Raleigh, North Carolina 27601

For Nucor Steel-Hertford:

Joseph W. Eason and Christopher J. Blake, Nelson, Mullins, Riley & Scarborough, LLP, 4140 Parklake Avenue, Suite 200, Raleigh, NC 27622

Damon E. Xenopoulos, Stone Mattheis Xenopoulos & Brew, PC, 1025 Thomas Jefferson Street, N.W., Suite 800 West, Washington, DC 20007

For the Using and Consuming Public:

William E. H. Creech and William S. F. Freeman, Staff Attorneys, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, North Carolina 27699-4300

BY THE COMMISSION: On August 9, 2022, Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (DENC or the Company), filed its application (Application) in the above-captioned docket requesting a change in its fuel charges effective for service rendered on and after February 1, 2023. The Application was accompanied by the testimony and exhibits of witnesses Jeffrey D. Matzen, Ronnie T. Campbell, Dale E. Hinson, Christopher D. Clemens, and Timothy P. Stuller.

On September 16, 2022, the Commission issued an Order Scheduling Hearing, Requiring Filing of Testimony, Establishing Discovery Guidelines, and Requiring Public Notice (Scheduling Order). Among other things, the Scheduling Order established deadlines for the filing of petitions to intervene, intervenor testimony and exhibits, and Company rebuttal testimony and exhibits.

Petitions to intervene were filed by and granted for Carolina Industrial Group for Fair Utility Rates I (CIGFUR I) and Nucor Steel-Hertford (Nucor). The intervention of the Public Staff is recognized pursuant to N.C. Gen. Stat. § 62-15(d) and Commission Rule R1-19(e).

On October 17, 2022, DENC filed a Petition to Modify Test Period, which among other things requested authority to include in its request for recovery the deferral balance for the months of July, August, and September 2022.

On October 18, 2022, the Company filed the supplemental testimonies and exhibits of witnesses Ronnie T. Campbell, Dale E. Hinson, Jeffrey D. Matzen, and Timothy P. Stuller.

On October 19, 2022, the Commission issued an Order Requiring Second Public Notice.

On October 24, 2022, the Public Staff filed the testimony of witnesses Evan D. Lawrence and Fenge Zhang.

Also on October 24, 2022, CIGFUR I filed the testimony and exhibits of Brian C. Collins.

On November 1, 2022, the Company filed the rebuttal testimony and exhibits of Ronnie T. Campbell and Timothy P. Stuller.

On November 2, 2022, DENC filed an affidavit of publication of the initial public notice.

On November 8, 2022, DENC filed an agreement and stipulation of settlement (Stipulation) between the Company, the Public Staff, CIGFUR I, and Nucor (Stipulating Parties), along with the testimony of witness Timothy P. Stuller in support of the Stipulation.

Also on November 8, 2022, DENC, the Public Staff, and CIGFUR I filed a joint motion requesting that the Commission excuse their witnesses from attending the hearing, accept their testimony and affidavit into evidence, and cancel the expert witness portion of the hearing.

Further on November 8, 2022, DENC filed an affidavit of publication of the second public notice.

On November 9, 2022, the Commission issued an Order Excusing Witnesses, Accepting Testimony, Canceling Expert Witness Hearing, and Setting Date for Briefs and Proposed Orders.

Also on November 9, 2022, the public witness hearing was held as scheduled. Public witnesses Brian Ennis, Tim Conway, and Andrew Waters appeared and gave testimony.

On December 9, 2022, DENC, the Public Staff, CIGFUR I, and Nucor filed a joint proposed order.

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 under the laws of the State of North Carolina, is engaged in the business of developing, generating, transmitting, distributing, and selling electric power to the public in North Carolina, and is subject to the jurisdiction of the Commission as a public utility. The Company is lawfully before this Commission based upon its Application filed pursuant to N.C.G.S. § 62-133.2.

2. Recent commodity prices for purchased power and natural gas have continued to be elevated, contributing to significantly greater expenses in the test year in this case than in previous years.

3. Given the significant increases in commodity prices, and in the interest of mitigating rate impacts to customers resulting from such increases, the Stipulation between the Company, the Public Staff, CIGFUR I, and Nucor is just and reasonable for customers and should be accepted in its entirety. For the same reasons, the Company's request in its Petition to Modify Test Period, as modified by the Stipulation, to include its deferral balance for the months of July and August 2022 in its cost recovery request for purposes of this case is reasonable and appropriate and should be granted. It is also

reasonable and appropriate to adopt for purposes of this proceeding the stepped rate structure and multi-year cost recovery approach provided in the Stipulation.

4. The test period for purposes of the deferral balance in this proceeding is the 12 months ending August 31, 2022 (test period).

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

6. The test period per book system sales are approximately 87,177,719,000 kilowatt-hours (kWh).

7. The test period per book system generation is 90,604,164 megawatt-hours (MWh), categorized as follows:

Generation Types	MWh
Nuclear	27,938,486
Coal	8,008,268
Heavy Oil	64,195
Wood and Natural Gas Steam	1,130,102
Combined Cycle and Combustion Turbine	33,561,880
Solar, Wind, and Hydro – Conventional and Pumped	3,501,664
Net Power Transactions	19,274,978
Less: Energy for Pumping	(2,875,409)

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 appropriate nuclear capacity factor for use in this proceeding is 95.0%, which is the estimated nuclear capacity factor for the 12 months beginning February 1, 2023.

10. The adjusted test period system sales for use in this proceeding are 89,626,866,688 kilowatt-hours (kWh).

11. The adjusted test period system generation for use in this proceeding is 88,155,015 MWh, which is categorized as follows:

Generation Types	MWh
Nuclear	27,835,490
Coal (including wood and natural gas steam)	8,692,425
Heavy Oil	61,057
Combined Cycle and Combustion Turbine	31,924,132
Hydro	2,675,157
Solar/Wind	1,372,659
Net Power Transactions	18,469,504
Less: Energy for Pumping	(2,875,409)

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 71% 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 $2,748,663,416.

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	0.9861 ¢/kWh
SGS & PA	0.9849 ¢/kWh
LGS	0.9792 ¢/kWh
Schedule NS	0.9482 ¢/kWh
6VP	0.9621 ¢/kWh
Outdoor Lighting	0.9861 ¢/kWh
Traffic	0.9861 ¢/kWh

16. The appropriate North Carolina retail test period jurisdictional fuel expense undercollection is $66,729,993 and the adjusted North Carolina retail jurisdictional test period system sales are 4,182,769,972 kWh.

17. The appropriate Experience Modification Factors (EMF or Rider B) for this proceeding (including the regulatory fee) for the February 1, 2023 through July 31, 2023 fuel charge billing period are as follows:

Customer Class	EMF Billing Factor
Residential	0.4816 ¢/kWh
SGS & PA	0.4810 ¢/kWh
LGS	0.4773 ¢/kWh
Schedule NS	0.4630 ¢/kWh
6VP	0.4697 ¢/kWh
Outdoor Lighting	0.4816 ¢/kWh
Traffic	0.4816 ¢/kWh

18. The appropriate EMF for this proceeding (including the regulatory fee) for the August 1, 2023 through January 31, 2024 fuel charge billing period are as follows:

Customer Class	EMF Billing Factor
Residential	1.6147 ¢/kWh
SGS & PA	1.6126 ¢/kWh
LGS	1.6008 ¢/kWh
Schedule NS	1.5524 ¢/kWh
6VP	1.5747 ¢/kWh
Outdoor Lighting	1.6147 ¢/kWh
Traffic	1.6147 ¢/kWh

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

Customer Class	Total Fuel Factor
Residential	3.5857 ¢/kWh
SGS & PA	3.5809 ¢/kWh
LGS	3.5545 ¢/kWh
Schedule NS	3.4472 ¢/kWh
6VP	3.4968 ¢/kWh
Outdoor Lighting	3.5857 ¢/kWh
Traffic	3.5857 ¢/kWh

20. The total fuel factors to be billed to the Company's North Carolina retail customers during the August 1, 2023 through January 31, 2024 fuel charge billing period, including the regulatory fee, are as follows:

Customer Class	Total Fuel Factor
Residential	4.7188 ¢/kWh
SGS & PA	4.7125 ¢/kWh
LGS	4.6780 ¢/kWh
Schedule NS	4.5366 ¢/kWh
6VP	4.6018 ¢/kWh
Outdoor Lighting	4.7188 ¢/kWh
Traffic	4.7188 ¢/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

The evidence for these findings of fact is contained in the testimony of Company witnesses Hinson, Campbell, Matzen, and Stuller, Public Staff witnesses Lawrence and Zhang, and CIGFUR I witness Collins, and the entire record in this proceeding.

N.C.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 Application was based on the 12 months ending June 30, 2022.

In his direct testimony, Company witness Hinson discussed the trends that natural gas commodity markets experienced during the test period. Witness Hinson stated that natural gas prices rose on average 124% during this period compared to the same period last year. He described the recent increases in natural gas production and the factors offsetting those increases and contributing to the current domestic natural gas supply and demand imbalance, including domestic natural gas storage inventory, pipeline bottlenecks, and increases in liquefied natural gas (LNG) exports. Witness Hinson also described similar inflationary pressures on coal and oil prices for the test period.

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 2022, to help mitigate a projected significant underrecovery for the 2023 fuel factor adjustment proceeding due to continued elevated commodity fuel prices. The Company stated that including the additional months of fuel costs in its deferral request in this case is consistent with N.C.G.S. § 62-133.2(d) and Commission

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 underrecovery for the 2023 fuel factor adjustment proceeding and would increase the requested annual fuel revenue increase from approximately $57.5 million to $80.5 million.

DENC's 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 Hinson noted that when considering test period actual prices in the July 2022 through June 2023 time period, natural gas prices increased approximately 38%, coal prices increased approximately 70%, and oil prices decreased approximately 6%. Witness Matzen testified that since he filed his direct testimony, the growth and weather normalization factor increased slightly, resulting in slightly lower system fuel expense. Witness Campbell updated the Company's actual system fuel expenses during the 15 months ending September 30, 2022, to be $4,087,391,414, as compared to $2,871,025,098 for the 12 months ending June 30, 2022, as presented in his direct testimony. Witness Campbell also presented the Company's North Carolina recovery experience as of September 30, 2022, of $105,676,327, with a resulting underrecovery amount of $76,008,873 on a North Carolina jurisdictional basis for the 15-month period. Witness Stuller presented the Company's updated derivation of the proposed Fuel Cost Rider A for the North Carolina jurisdiction and for each customer class based on the Company's actual system fuel expenses for the 12 months ending June 30, 2022, and the proposed EMF Rider B for the North Carolina jurisdiction and for each customer class based on the Company's North Carolina recovery experience as of September 30, 2022. Witness Stuller also described an alternative proposal discussed with the Public Staff and presented calculations to mitigate the impact of the total fuel factor increase by recovery through Rider A and a mitigated recovery balance through Rider B. In this alternative proposal, the total cost recovery equals the total two-step mitigated fuel cost recovery through Rider A and Rider B provided in the Company's supplemental update (Alternative Rider B Stepped Mitigation Proposal).

Public Staff witness Lawrence testified that over the last year, unexpected high fuel prices resulted in the underrecovery of fuel and fuel-related costs, leaving a substantial monetary balance to recover. Witness Lawrence stated that continued elevated natural gas and coal commodity prices have contributed to significantly greater expenses in the test year than in previous years. Witness Lawrence noted the increases in the average natural gas price at the Henry Hub from July 2019 through October 18, 2022. He also noted that NYMEX natural gas futures averaged $5.14 per million British thermal units (MMBtu) for 2023, with a minimum monthly price of $4.61/MMBtu for May 2023 and a maximum price of $6.23/MMBtu for January 2023, while noting the NYMEX quotes have been dynamic and changing dramatically day over day. Witness Lawrence stated that in an unmitigated or traditional cost recovery approach, a residential customer would see a bill increase of $25.91 for every 1,000 kWh consumed, or approximately 23%. He stated that would result

in a substantial cost increase to recover the test period costs that have already been incurred (the EMF costs) and to recover projected costs during the billing period.

Witness Lawrence testified that in addition to reviewing the Company's filed materials and the testimony of Public Staff witness Zhang, he conducted numerous conference calls with DENC, CIGFUR I, and Nucor. He explained that after these discussions, the Company agreed to include the Alternative Rider B Stepped Mitigation Proposal. He noted that both Rider A and Rider B rates require substantial increases to recover expenses in this case if the expenses are spread over multiple years. He stated that the rate mitigation strategies are intended to help reduce rate shock to all ratepayers. He noted that while the increase is primarily driven by the EMF underrecovery amount, which is known, the prospective amount is an estimate of costs that are expected to occur during the billing period. He testified that if rates are not set to recover the full projected billing period expense, there is risk of another significant underrecovery of costs during the next two billing periods, further compounding the EMF balance not fully recovered in this case. Witness Lawrence concluded that in order to mitigate the substantial rate increase to the customer classes, the Public Staff supported the proposed Alternative Rider B Stepped Mitigation Proposal approach, which includes a stepped approach for Rider B, with Rider A set at the projected full recovery amount for the full billing period. Witness Lawrence recommended approval of the stepped rate structure and the Company's requested multi-year cost recovery.

Public Staff witness Zhang recommended EMF increment rates for each customer class and recommended allowing the Company to mitigate the recovery of the EMF period under the Alternative Rider B Stepped Mitigation Proposal strategy. She noted the Company's commitment that it will not seek interest in any recovery period for any portion of the EMF underrecovery balance and recommended, based on that assurance, that no interest accrue on any of the EMF underrecovery balance.

CIGFUR witness Collins recommended a two-pronged strategy to mitigate what he characterized as rate shock to DENC's industrial customers. First, he advocated that any increase be spread to classes on an equal percentage basis and recommended a shift to the uniform percentage method for future fuel proceedings. Second, witness Collins recommended a deferral or spreading out of the increase, particularly for the underrecovery amount from the previous period, at least for industrial customers. He calculated rates using the uniform equal percentage and a three-year deferral approach.

In rebuttal testimony, witness Stuller testified that the Company is sensitive to the concerns of large industrial customers. However, witness Stuller stated that the Company believes the prior period underrecovery in this case is too large to shift to the equal percentage method at this time. He noted that if the equal percentage methodology was applied to the rate year, there would be significant shifting of the already incurred prior period fuel expense from the large industrial classes to the residential, small general service, and lighting classes. He specified that a shift to the equal percentage method at this time would result in the residential class being allocated an additional $8.8 million of the underrecovery balance when compared to the present allocation method. He also

stated that the equal percentage methodology has merit and may be worth considering when the prior period recovery is closer to zero or when there are other revenue apportionment decisions to be made, such as in a base rate case proceeding. He noted that the equal percentage method has the advantage of providing rate stability to high load factor customers over time and could be considered in the future.

Witness Stuller also noted the substantial difference in the typical bill impact for a residential customer under the Alternative B Stepped Mitigation Proposal of 22.9% as compared to the 41.2% impact to industrial customers. To address this difference, he presented the Company's proposal of a separate, three-year deferral approach that would apply only to the LGS, 6VP, and NS classes (LGS Classes). He explained that under the LGS Class deferral approach the LGS Classes would forego the Alternative B Stepped Mitigation Proposal strategy for the residential, SGS, and lighting classes in favor of a three-year deferral of the prior period balance attributed to the LGS Classes. The Rider A increase would be applied to the LGS Classes on February 1, 2023, in total, as it is for all classes under the Alternative B Stepped Mitigation proposal presented in his supplemental testimony. Instead of phasing in the Rider B rate over two six-month periods, compared to the stepped mitigation alternative, the deferral for the LGS Classes will be spread over three years. The LGS Classes will have a Rider B rate that recovers one-third of the classes' underrecovery balance in the rate year with the remaining two-thirds recovered over the next two years. In the 2025 fuel proceeding, the Company will address any remaining over- or underrecovery of the original balance and propose a plan for recovery of such amounts from the LGS Classes. Witness Stuller explained that while the Company is willing to voluntarily forego carrying costs on the unrecovered balances due to the Alternative B Stepped Mitigation, if the Commission adopts the three-year LGS Class Deferral approach, the Company respectfully requests carrying cost recovery on the portion to be carried for three years. Due to the magnitude of the current fuel deferral balance and overall financial market conditions with high inflation and rising interest rates, he explained that the Company will incur significant financing costs under the LGS Class Deferral mitigation proposal. He proposed a 50-50 cost sharing of the prudently incurred carrying costs under the LGS Class Deferral approach.

Company witness Campbell described in rebuttal testimony the special accounting treatment to be utilized with the LGS Class Deferral approach.

Witness Stuller's testimony in support of the Stipulation described the provisions of the Stipulation. The Stipulating Parties agreed that recent natural gas and coal commodity prices have been elevated, contributing to significantly greater expenses in the test year in this case than in previous years. The Stipulating Parties also agreed that such unexpected high fuel prices resulted in an underrecovery of fuel and fuel-related costs, leaving a substantial monetary balance to recover. The Stipulating Parties further agreed that, as proposed, the projected rate increases to the LGS Classes would be significantly more than the increase to other customer classes as a percentage of the total bill. The fuel expense in this case is elevated to the extent that the Stipulating Parties agreed and believe it is reasonable to utilize alternative cost recovery mechanisms to help mitigate the increase for all classes of customers. Regarding the test period in this case,

the Stipulating Parties agreed that it is reasonable and appropriate to revise DENC's request to modify the test period to remove September 2022 from the test period deferral balance, which defers approximately $9.2 million of recovery of that balance until the next fuel proceeding. The Stipulating Parties also agreed that for all retail customer classes, the stepped rate structure and requested multi-year recovery should be approved. The stepped approach would apply for Rider B only without interest, with Rider A set at the projected full recovery amount for the full billing period for all retail customer classes. The Stipulating Parties agreed that with respect to the base fuel factor and Rider A and Rider B billing factors, the Company shall in its next general rate case include the uniform percentage allocation methodology as an alternative for the Commission's consideration, in addition to the allocation methodology used in this proceeding. Finally, the Stipulating Parties agreed that the deferral balance for the months of July and August 2022 shall be subject to Commission review in the Company's 2023 annual fuel and fuel-related costs adjustment proceeding.

Witness Stuller testified that he believes the Stipulation presents a just and reasonable approach to mitigating the rate impact to customers of the Company's significant underrecovery of test period fuel and fuel-related costs for purposes of this proceeding. He stated that the mitigation strategy presented in the Stipulation represents an appropriate give-and-take of the Stipulating Parties which will mitigate impacts to customers. He concluded that the Company believes, therefore, that the total fuel factors contained in the Stipulation are reasonable and appropriate for purposes of this proceeding and fair to customers and that the Commission should approve the total fuel factors, Rider A, and Rider B, as presented in the Stipulation.

N.C.G.S. § 62-133.2(d) provides, in pertinent part, 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 reaching 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) further provide that

> [u]pon request of the electric public utility, the Commission shall also incorporate in this determination the experienced over-recovery or underrecovery 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 and August of 2022, which represent the two 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 indicates 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 in the 2023 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 and August 2022 for recovery. As noted by the Public Staff in its 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 2023 fuel rider.

In addition, Rule R8-55(d)(3) requires the Commission, upon request of the electric utility, to consider the Company's experienced underrecovery of fuel and fuel-related costs up through 30 days before the hearing date, which in this case was held on November 9, 2022. The Company's updated cost evidence reflects the period ending August 31, 2022, which falls within this time frame. The Commission also notes that as 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 2023 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 the Company's deferral balance for the months of July and August 2022, in order to help mitigate a projected significant underrecovery for the 2023 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 Clemens.

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 most recent Fuel Procurement Practices Report was filed with the Commission in Docket No. E-100, Sub 47A, on December 20, 2013.

As noted above, witness Hinson in his direct testimony discussed the trends that affected fuel commodity markets during the test period and explained the additional importance of events that occurred prior to this time window, including the unprecedented uncertainty of fuel commodity markets over the past two years. He described the Company's fuel procurement practices and explained that the Company continues to follow the same procurement practices as it has in the past in accordance with its report filed in Docket No. E-100, Sub 47A. Witness Hinson also testified that the Company continues to implement its fuel hedging program as discussed in its Fuel Procurement Practices Report, and that the Company believes its comprehensive approach to hedging (e.g., price hedging, diverse fuel supply access, and diverse generation portfolio) has and continues to have a material mitigating effect on fuel cost volatility. He also discussed how DENC mitigates fuel cost expenses in addition to the hedging program and explained

that the Company's diverse pipeline portfolio provides access to multiple natural gas supply locations such that the generation fleet is not solely dependent on a single supply location and associated market price.

Regarding natural gas procurement, witness 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 multi-year 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 short-term, interstate pipeline capacity markets, buying capacity when available during times of need or selling during low generation periods or power station outages.

Witness Hinson testified that Company-owned natural gas-fired generation accounted for as much as 54% and, on average, 47% of the Company's electricity generation during the test period.

Regarding coal procurement, witness 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 nonperformance.

Witness 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, witness 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 direct testimony, Company witness Clemens 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 uranium,

conversion and enrichment (UCE) markets saw some moderate increases in spot and term uranium pricing and modest increases in enrichment pricing during calendar year 2021 through late February 2022, and some softening in spot conversion pricing during this period.

Witness Clemens testified that the Russian/Ukrainian conflict has had a dramatic impact on the UCE markets. He explained that spot and term prices are up significantly, and price stabilization will likely take considerable time to resolve. He testified that the increase in pricing is largely due to the prospect of Russian supply not being available to or limited for Western markets. He further testified that Russia is a major global nuclear fuel supplier, particularly uranium enrichment, and while supply to the United States is limited by the Russian Suspension Agreement, impacts to global supply will affect global market pricing. Witness Clemens stated that the potential for an immediate and indefinite cutoff of Russian supply to the U.S. and potentially other Western utilities through sanctions, bans, or other government actions would have certain and near immediate impacts on conversion and enrichment supply to the U.S. and other Western markets.

Witness Clemens 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 Clemens 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.

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 are approximately 87,177,719,000 kWh, and witness Matzen's Schedule 3 identified that the Company's per books test period system generation is 90,604,164 MWh. Witness Matzen's Schedule 3 identified that the per books test period system generation is categorized as follows:

Generation Types	MWh
Nuclear	27,938,486
Coal	8,008,268
Heavy Oil	64,195
Wood and Natural Gas Steam	1,130,102
Combined Cycle and Combustion Turbine	33,561,880
Solar, Wind, and Hydro – Conventional and Pumped	3,501,664
Net Power Transactions	19,274,978
Less: Energy for Pumping	(2,875,409)

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	98.2%
North Anna Unit 2	91.7%
Surry Unit 1	101.8%
Surry Unit 2	89.3%

The aggregate capacity factor for the Company's nuclear units during the test period and the preceding year was 93.8%, which exceeded the five-year industry weighted average capacity factor of 93.15% for the period 2016-2020 for 800-999 megawatt (MW) units, as reported by NERC in its latest Generating Availability Report. Based on these figures, witness Matzen stated that the Company's nuclear fleet performance was higher than the industry five-year average for comparable units based on the two-year simple average metric. Witness Matzen noted that for the same five-year period (i.e., 2016-2020), the Company's net nuclear capacity factor was 94.6%, compared to the national average of 93.15%, and that the Company's nuclear units' aggregate capacity factor during the test period was 95.2%. He concluded that based on these figures, the Company's nuclear fleet performance during the test period was better than 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 the Company 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, 2024, North Anna Unit 1 is projected to operate at a net capacity factor of 99.8%, North Anna Unit 2 is projected to operate at a net capacity factor of 91.9%, Surry Unit 1 is projected to operate at a net capacity factor of 100.2%, and Surry Unit 2 is projected to operate at a net capacity factor of 87.6%. 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 95.0% nuclear capacity factor, which is what DENC anticipates for the 12 months from February 1, 2023, through January 31, 2024, the period 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 95.0% 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 and supplemental testimony of Company witness Stuller and the testimony of the Public Staff.

Witness Stuller testified in his direct testimony that he was sponsoring the calculation of the adjustment to the Company's system sales for the 12 months ending June 30, 2022, due to changes in usage, weather normalization, and customer growth. Witness 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 605).

In his supplemental testimony, witness Stuller updated the change in usage adjustment to total system Company sales to reflect a correction to the methodology as applied to Schedule NS. Witness Stuller adjusted total system Company sales by 2,449,147,688 kWh. The Public Staff reviewed and accepted this adjustment. No other party offered or elicited testimony on the adjustment.

Based on the foregoing, the Commission concludes that the adjustment for changes in usage, weather normalization, and customer growth is reasonable and appropriate for use in this proceeding. The adjusted system sales for the 12 months ending June 30, 2022, are 89,626,866,688 kWh.

EVIDENCE AND CONCLUSION 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 ending June 30, 2022, 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 88,155,015 MWh, which is categorized as follows:

Generation Types	MWh
Nuclear	27,835,490
Coal (including wood and natural gas steam)	8,692,425
Heavy Oil	61,057
Combined Cycle and Combustion Turbine	31,924,132
Hydro	2,675,157
Solar/Wind	1,372,659
Net Power Transactions	18,469,504
Less: Energy for Pumping	(2,875,409)

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 88,155,015 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 Public Staff witness Zhang.

Public Staff witness Zhang testified that based on a data request response, the marketer percentage has decreased from 72% to 71%, calculated in the same manner as the percentage was calculated in Docket No. E-22, Sub 562, and accepted by the Commission in its February 24, 2020 Order Accepting Public Staff Stipulation in Part, Accepting CIGFUR Stipulation, Deciding Contested Issues, and Granting Partial Rate Increase in that docket (Sub 562 Order). Witness Zhang stated that because the decreased percentage would have a minimal financial impact on the test year rates, the Public Staff recommended that DENC include 71% of the reasonable and prudent energy costs for the power purchased through markets administered by PJM and from dispatchable nonutility generators (NUGs) that do not provide DENC with actual fuel costs for purchases to arrive at a fuel cost component for the next EMF period.

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 71% 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 for the next EMF period.

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

The evidence for these findings of fact is contained in the 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 $2,751,114,104. 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, he explained the following. 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 2024. Other sources of generation were then normalized for the test period. The total of coal, heavy oil, combustion turbine and combined cycles, 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 the Company's solar generation.

Witness Matzen stated that this methodology for normalizing the test period generation resulted in adjusted annual system energy requirements of 88,213,197 MWh. In his supplemental direct testimony, witness Matzen updated the normalized system fuel expense for the rate period to $2,748,663,416 and updated adjusted annual system energy requirements to 88,155,015 MWh to reflect the change in the growth and weather normalization factor since the Company's filing of direct testimony.

Witness Matzen also testified in his direct testimony that during the test period, the 100 MW (nominal alternating current (AC)) Sadler Solar Facility located in Greenville County was placed into service in July 2021. Witness Matzen also noted that the Company anticipates adding additional solar facilities totaling approximately 156 MW_{AC} during the next 12 months. He testified that the Company anticipates a benefit to system fuel expense from these changes and that an adjustment of $23.0 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 $0.030758/kWh, based on system fuel expenses of $2,751,114,104, and system sales of 89,568,685,945 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 in Docket No. E-22, Sub 605. Witness Stuller updated the average system fuel factor in his supplemental testimony to be $0.030711/kWh, based on the updated normalized system fuel expense for the rate period of $2,748,663,416 and updated adjusted system sales for the 12 months ending June 30, 2022, of 89,626,866,688.

Public Staff witness Lawrence testified that the Public Staff recommended approval of the base fuel factors as shown in the tables set forth on pages 11 and 12 of his direct testimony and as follows for each of the Company's North Carolina retail customer classes for the entire rate year:

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

The base fuel factors remain the same as provided in the Stipulation.

As supported by the Stipulation testimony of witness Stuller, Section II.I of the Stipulation provides for the following class-specific Rider A fuel factors, including the regulatory fee:

Customer Class	Prospective Factor
Residential	$0.009861 /kWh
SGS & PA	$0.009849 /kWh
LGS	$0.009792 /kWh
Schedule NS	$0.009482 /kWh
6VP	$0.009621 /kWh
Outdoor Lighting	$0.009861 /kWh
Traffic	$0.009861 /kWh

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 $2,748,663,416, the appropriate prospective system average base fuel factor (including regulatory fee) is $0.030711 per kWh, and the appropriate class-specific prospective base fuel factors (including regulatory fee) are as set forth in Section II.I of the Stipulation.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 16-18

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

In his direct testimony, Company witness Matzen noted major commodity price increases resulting in a significant underrecovery of fuel costs. Company witness Campbell testified to a total of $126,627,630 in fuel costs allocated to North Carolina jurisdictional customers, with the Company receiving fuel revenues totaling $80,926,684, resulting in an underrecovery of $45,700,946 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 4,124,589,229 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. He presented both a full recovery set of EMF fuel factors and a stepped mitigation proposal, which would phase in the overall fuel increase over the course of the 2023 rate year.

In his supplemental testimony, witness Campbell updated the Company's actual system fuel expenses during the 15 months ending September 30, 2022, to be $4,087,391,414. Witness Campbell presented an updated total of $181,685,201 in fuel costs allocated to North Carolina jurisdictional customers, with the Company receiving fuel revenues totaling $105,676,327, resulting in an underrecovery of $76,008,873 for the test period. 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, 2023, for both the full recovery and stepped mitigation proposals, based on the Company's actual system fuel expenses and recovery experience for the 15 months ending September 30, 2022. Witness Stuller also presented the Alternative Rider B Stepped Mitigation Proposal, as discussed above.

Public Staff witness Zhang'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 underrecoveries of $76,008,873 and the Company's pro forma North Carolina retail sales of 4,182,769,972 kWh, consistent with the Company's supplemental testimony. She supported allowing the Company to mitigate its recovery of the EMF period as presented in witness Stuller's supplemental testimony.

Witness Zhang updated her testimony to state that due to the complex cost calculations performed by PJM and the time constraints in this fuel proceeding, the Public Staff intends to continue working with the Company on the issue of determining fuel and other costs associated with intersystem sales and will report to the Commission once the Company and the Public Staff reach a resolution. She also noted that the Company has informed the Public Staff that DENC will consider any changes in the next general rate case to resolve this matter.

Witness Stuller's rebuttal testimony recommended a deferral methodology for the LGS Classes that would involve a three-year deferral of the EMF underrecovery attributed to the LGS Classes. As discussed above, his stipulation testimony supported removing September 2022 from the test period deferral balance for purposes of this proceeding, resulting in an undercollection through August 31, 2022, of $66,729,993.

Based on the evidence in this proceeding, the Commission concludes that the appropriate North Carolina retail test period jurisdictional fuel expense undercollection is $66,729,993 and that the adjusted North Carolina jurisdictional test period sales appropriate for computing the EMF Rider B are 4,182,769,972 kWh.

The Commission concludes that the appropriate EMF Rider B factors for this proceeding, including the regulatory fee and without interest (as the Company has agreed to not recover any associated interest from ratepayers for a period of two years), are as follows:

Customer Class	EMF Billing Factor	
	Step 1: Feb. 1, 2023-Jul. 31, 2023	Step 2: Aug. 1, 2023-Jan. 31, 2024
Residential	0.4816 ¢/kWh	1.6147 ¢/kWh
SGS & PA	0.4810 ¢/kWh	1.6126 ¢/kWh
LGS	0.4773 ¢/kWh	1.6008 ¢/kWh
Schedule NS	0.4630 ¢/kWh	1.5524 ¢/kWh
6VP	0.4697 ¢/kWh	1.5747 ¢/kWh
Outdoor Lighting	0.4816 ¢/kWh	1.6147 ¢/kWh
Traffic	0.4816 ¢/kWh	1.6147 ¢/kWh

The Commission appreciates the update provided by witness Zhang 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 upon the evidence presented at that time.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 19-20

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, Clemens, and Stuller, the testimony of Public Staff witnesses Lawrence and Zhang, and the testimony of CIGFUR I witness Collins.

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 Fuel Factor	
	Feb. 1, 2023-Jul. 31, 2023	Aug. 1, 2023-Jan. 31, 2024
Residential	3.5857 ¢/kWh	4.7188 ¢/kWh
SGS & PA	3.5809 ¢/kWh	4.7125 ¢/kWh
LGS	3.5545 ¢/kWh	4.6780 ¢/kWh
Schedule NS	3.4472 ¢/kWh	4.5366 ¢/kWh
6VP	3.4968 ¢/kWh	4.6018 ¢/kWh
Outdoor Lighting	3.5857 ¢/kWh	4.7188 ¢/kWh
Traffic	3.5857 ¢/kWh	4.7188 ¢/kWh

IT IS, THEREFORE, ORDERED as follows:

1. That the Stipulation between DENC, the Public Staff, CIGFUR I, and Nucor is approved in its entirety;

2. That effective beginning with usage on and after February 1, 2023, 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;

3. 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, 2023 through July 31, 2023;

4. The EMF Rider increments (Rider B) as approved and set forth in the Evidence and Conclusions for Findings of Fact Nos. 16 and 18, above, shall be instituted and remain in effect for usage from August 1, 2023 through January 31, 2024;

5. 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; and

6. 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, as well as in Docket No. E-22, Subs 643 and 645, and the Company shall file such notice for Commission approval as soon as practicable, but not later than five working days after the Commission issues orders in all three dockets.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the 13th day of January, 2023.

NORTH CAROLINA UTILITIES COMMISSION

Erica N Green

Erica N, Green, Deputy Clerk