

October 26, 2018

VIA ELECTRONIC FILING

Ms. Martha Lynn Jarvis
Chief Clerk
North Carolina Utilities Commission
430 North Salisbury Street
Dobbs Building
Raleigh, NC 27603-5918

**RE: In the Matter of: Application of Virginia Electric and Power Company, d/b/a Dominion North Carolina Power for Authority to Adjust its Electric Rates and Charges and Revise its Fuel Factor Pursuant to N.C.G.S. § 62-133.2 and NCUC Rule R8-55
Docket No. E-2, Sub 558**

Dear Ms. Jarvis:

Enclosed for filing in the above-referenced docket is the Direct Testimony of Nicholas Phillips, Jr. on Behalf of the Carolina Industrial Group for Fair Utility Rates (CIGFUR) I. Pursuant to Commission Rule R1-28(e), we are also submitting fifteen (15) paper copies of the testimony and accompanying exhibits for delivery on Monday, October 29, 2018.

By copy of this letter, I am serving all parties of record to this docket. Please let me know if you have questions about this filing.

Respectfully submitted,

BAILEY & DIXON, LLP

/s/Warren K. Hicks

Enclosure

Copy: Parties of Record

BEFORE THE
NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)
)
)

Application by Virginia Electric and)
Power Company, d/b/a Dominion)
Energy North Carolina, for Authority to)
Adjust its Electric Rates and Charges)
and Revise its Fuel Factor Pursuant to)
N.C.G.S. § 62-133.2 and NCUC Rule)
R8-55)
_____)

Docket No. E-22, Sub 558

Direct Testimony of
Nicholas Phillips, Jr.

On behalf of
CIGFUR I

October 26, 2018



1 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

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

7 **Q HAVE YOU PRESENTED TESTIMONY IN PRIOR PROCEEDINGS BEFORE THE**
8 **NORTH CAROLINA UTILITIES COMMISSION (“COMMISSION”)?**

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

13 **Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

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

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

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

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

7 **Q PLEASE DESCRIBE DENC’S PENDING FUEL APPLICATION.**

8 A The Company requests an increase for the February 1, 2019 through January 31, 2020
9 Rate Period of \$24,301,249.00, which includes a fuel recovery increase of
10 \$16,200,832.00. As explained by DENC, the fuel under-recovery was largely driven by
11 abnormally cold weather for an extended period and high commodity prices that
12 occurred in January 2018. For the North Carolina jurisdiction, this results in the
13 following change over current total average rates:

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

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

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

2 A Rate shock refers to a large increase, particularly when it is unexpected. For reference,
3 in Docket No. E-22, Sub 515, DENC 2014 Fuel Adjustment proceeding, the Company
4 requested a large increase which would increase residential rates by 5.3% and Rate
5 6VP by 8.5%. The Public Staff referenced that level of increase as rate shock and
6 approved DENC's mitigation plan (Commission Order E-22, Sub 515, December 18,
7 2014, page 26). In this proceeding, DENC's full increase would result in a residential
8 increase of 5.4% and a Rate 6VP increase of 9.7%. If the 2014 fuel increase was rate
9 shock, the larger fuel increase in this case must be considered as rate shock. Rate
10 shock constitutes a large level of increase, not included in budgets, which can cause a
11 harmful impact on customers and should be avoided.

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

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

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

6VP

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

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

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

10 **A** The northeastern portion of North Carolina, which includes DENC's service area, is a
11 traditionally disadvantaged area in terms of jobs, wages and income. In its recently
12 filed 2018 Integrated Resource Plan (filed in Docket No. E-100, Sub 157 on May 1,
13 2018), DENC's Appendix 2C shows that the industrial class will decrease by 50,000
14 MWh or about 2.9% from actual 2017 to projected 2033. The industrial base in DENC's
15 service area has been shrinking in this century and is not expected to return to prior
16 levels during DENC's current planning horizon.

17 CIGFUR members constitute a significant portion of the industrial base of
18 DENC's service area. CIGFUR members are major employers in the counties where

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

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

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

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

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

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

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

17 **A** Yes. DENC recognizes the adverse impact on its customers of such a large increase
18 in fuel rates, as is stated in its Fuel Application and the testimony of Company witness
19 George G. Beasley. Therefore, as an alternative to full recovery of the underrecovered
20 amount over the upcoming Rate Period, the Company voluntarily proposes the
21 mitigation alternative, which offers to amortize the balance of the underrecovery over
22 two years without financing charges and with a final true-up to be implemented in the
23 2021 fuel case. The Company's proposed mitigation alternative will levelize the

⁴Wright Study, pp. 11-12.

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

NC Jurisdiction

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

6VP

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

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

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

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

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

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

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

12 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

13 A Yes.

Qualifications of Nicholas Phillips, Jr.

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

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

4 **Q PLEASE STATE YOUR OCCUPATION.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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