

**Virginia State Corporation Commission  
eFiling CASE Document Cover Sheet**

201120013

**Case Number (if already assigned)** PUR-2020-00169

**Case Name (if known)** Petition of Virginia Electric and Power Company, For approval of a rate adjustment clause, designated Rider RGGI, under § 56-585.1 A 5 e of the Code of Virginia

**Document Type** EXPE

**Document Description Summary** Petition of Virginia Electric and Power Company and Request for Limited Waivers

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**WITNESS DIRECT TESTIMONY SUMMARY**

Witness: Paul B. Haynes

Title: Director, Regulation

Summary:

Company Witness Paul B. Haynes discusses and sponsors the development of the tariff and associated rate of the proposed Rider RGGI to be effective for usage on and after August 1, 2021, based on the revenue requirement presented by Company Witness John C. Ingram. Mr. Haynes discusses the allocation of costs based on energy to the Virginia Jurisdiction and the development of a uniform charge per kilowatt-hour ("kWh") applicable to all bundled service customers in the Virginia jurisdiction.

The implementation of the proposed Rider RGGI on August 1, 2021, will increase the typical residential customer's monthly bill, based on 1,000 kWh per month, by \$2.39.

**DIRECT TESTIMONY  
OF  
PAUL B. HAYNES  
ON BEHALF OF  
VIRGINIA ELECTRIC AND POWER COMPANY  
BEFORE THE  
STATE CORPORATION COMMISSION OF VIRGINIA  
CASE NO. PUR-2020-00169**

1   **Q.**    Please state your name, business address, and position with Virginia Electric and  
2           Power Company (“Dominion Energy Virginia” or the “Company”).

3   **A.**    My name is Paul B. Haynes and I am Director – Regulation for the Company. My  
4           business address is 120 Tredegar Street, Richmond, Virginia 23219. A statement of my  
5           background and qualifications is attached as Appendix A.

6   **Q.**    **Mr. Haynes, what is the purpose of your testimony in this proceeding?**

7   **A.**    I am testifying in support of the Company’s petition for approval of a rate adjustment  
8           clause (“RAC”), designated Rider RGGI, under § 56-585.1 A 5 e (“Subsection A 5 e” or  
9           “A 5”) of the Code of Virginia (“Va. Code”) to recover projected and actual costs related  
10          to the purchase of allowances through the Regional Greenhouse Gas Initiative (“RGGI”)  
11          market-based trading program for carbon dioxide (“CO<sub>2</sub>”) emissions. Specifically, I  
12          sponsor Rider RGGI based on the revenue requirement presented by Company Witness  
13          John C. Ingram to be effective for usage on and after August 1, 2021. In addition, I will  
14          discuss the allocation of these costs to the Virginia Jurisdiction and the development of a  
15          uniform charge per kilowatt-hour (“kWh”) applicable to all bundled service customers in  
16          the Virginia jurisdiction, as well as the impact that the proposed Rider RGGI rate will  
17          have on customer bills. Finally, I support the Company’s request for billing purposes a  
18          rate effective date for usage on and after the first day of the month that is at least fifteen

1 (15) days following the date of any State Corporation Commission of Virginia  
2 (“Commission”) order approving Rider RGGI.

3 **Q. During the course of your testimony, will you introduce an exhibit?**

4 A. Yes. Company Exhibit No. \_\_, PBH, consisting of Schedules 1 through 5, was prepared  
5 under my supervision and direction, and is accurate and complete to the best of my  
6 knowledge and belief. Also, I am sponsoring Filing Schedule 46C, Statement 1, which  
7 provides information required by Rules 60 and 90 of the Commission’s Rules Governing  
8 Utility Rate Applications and Annual Informational Filings. This statement provides  
9 details of the Company’s methodology for allocating the Rider RGGI revenue  
10 requirement and the development of a uniform charge per kWh applicable to all bundled  
11 service customers in the Virginia jurisdiction.

12 **Q. Please explain how the Company proposes to allocate the projected revenue**  
13 **requirement to the Virginia Jurisdiction.**

14 A. Company Witness C. Eric McMillan provides an overview of RGGI. As explained by  
15 Mr. McMillan, regulated emission sources must acquire CO<sub>2</sub> allowances equal to their  
16 CO<sub>2</sub> emissions over each three-year RGGI control period. Company Witness Shane T.  
17 Compton describes the projected volume of CO<sub>2</sub> allowances the Company will need to  
18 meet its obligation under RGGI during the rate year of August 1, 2021 to July 31, 2022  
19 based on projected CO<sub>2</sub> emissions for each Company-owned CO<sub>2</sub>-emitting resource  
20 located in Virginia. Based upon this understanding, to allocate the costs of participation  
21 in RGGI to the Company’s jurisdictions and customer classes, an allocation based upon  
22 energy is reasonable.

1 **Q. Have you prepared a schedule showing the development of the allocation factor to**  
2 **allocate the costs of RGGI to the Virginia jurisdiction?**

3 A. Yes. In my Schedule 1, I develop the allocation using the forecasted energy usage for the  
4 rate year, which is the twelve months ended July 31, 2022. The allocation to the Virginia  
5 jurisdiction is 80.3494%.

6 **Q. Would you please discuss the methodology for calculating the Rider RGGI rate?**

7 A. I propose that the costs be recovered through a uniform charge per kWh from all bundled  
8 service customers in the Virginia jurisdiction. I show the calculation of this charge in my  
9 Schedule 2.

10 **Q. Have you included in your exhibit a schedule that shows Rider RGGI?**

11 A. Yes. The tariff sheet for Rider RGGI is presented in my Schedule 3.

12 **Q. If the Commission approves Rider RGGI as filed, what is the impact on a typical**  
13 **residential customer's bill?**

14 A. Schedule 4 provides typical bill comparisons (base and fuel) for customers on Rate  
15 Schedules 1, GS-1, GS-2, GS-3, GS-4, and 5C at representative levels of consumption  
16 based on the proposed Rider RGGI. As shown on Schedule 4, Page 1, for a residential  
17 customer using 1,000 kWh per month, the typical bill would increase \$2.39. For  
18 reference, page 10 of Schedule 4 provides a workpaper showing the billing components  
19 of the 1,000 kWh residential bill for the rate proposed to take effect by August 1, 2021. A  
20 summary of the impacts to the typical residential customer's monthly bill as of August 1,  
21 2021, from the Company's proposed RACs is detailed in my Schedule 5.

1 Q. Does this conclude your pre-filed direct testimony?

2 A. Yes, it does.

**BACKGROUND AND QUALIFICATIONS  
OF  
PAUL B. HAYNES**

Paul B. Haynes received a Bachelor of Science degree in Business Administration from the University of Richmond in 1984 and a Master of Business Administration with a Concentration in Quantitative Methods from Virginia Commonwealth University in 1989.

Mr. Haynes started his career with the Company as a meter reader. He went through the Company's Customer Service Representative training program for three-and-a-half years, during which time he designed distribution facilities to serve residential and non-residential customers. In 1990, Mr. Haynes joined the Rate Department to work in the Rate Design section, where he assisted with regulatory filings and the design of rates, and performed analysis related to the Company's Virginia and North Carolina service territories. He has held various staff analyst positions within the Customer Rates Department, formerly the Cost Allocation and Pricing Department. In 2006, Mr. Haynes became Project Manager of Regulatory Research and Analysis, and then became Manager of Regulatory Analysis, Research and Support in 2007. On June 1, 2009, Mr. Haynes became Manager – Regulation with responsibility for cost allocation and cost of service studies, and on January 1, 2013, he assumed his current position as Director – Regulation with responsibility for Cost of Service and Rate Design.

Mr. Haynes has previously filed testimony with the State Corporation Commission of Virginia and the North Carolina Utilities Commission.

VIRGINIA ELECTRIC AND POWER COMPANY  
RIDER RGGI  
FOR THE RATE YEAR TWELVE MONTHS ENDED JULY 31, 2022

	<u>System</u>	<u>Virginia Jurisdiction</u>	<u>Virginia Non-jurisdiction</u>	<u>FERC Jurisdiction</u>	<u>North Carolina Jurisdiction</u>
Projected Rate Year Energy Usage (kWh)	87,708,774	70,473,497	11,284,352	1,623,239	4,327,687
System Allocation of RGGI Costs	100.0000%	80.3494%	12.8657%	1.8507%	4.9342%



20112013

Company Exhibit No. \_\_\_\_  
 Witness: PBH  
 Schedule 2  
 Page 1 of 1

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**RIDER RGGI**  
**RATE YEAR TWELVE MONTHS ENDED JULY 31, 2022**  
**(Rates in Dollars per Kilowatt-hour)**

LINE

1.	VA JURISDICTIONAL REVENUE REQUIREMENT (1)	\$ 168,260,000
2.	ESTIMATED VIRGINIA JURISDICTIONAL KWH SALES (2)	70,473,496,704
3.	RIDER RGGI COST RECOVERY RATE (LINE 1 / LINE 2)	\$ 0.002388 per kWh

Note

- 1) From Testimony of Company Witness John C. Ingram, Schedule 1, Page 1  
 2) From Company Exhibit No. \_\_\_\_, PBH, Schedule 1

RIDER-RGGI

The charge for service under Virginia Electric and Power Company's Filed Rate Schedules 1, 1G, 1P, 1S, 1T, 1W, DP-R, 1EV, EV, 5, 5C, 5P, 6, GS-1, DP-1, GS-2, DP-2, GS-2T, GS-3, GS-4, 6TS, 7, 8, 10, 24, 25, 27, 28 and 29, as well as applicable energy charges specified in any special rates, contracts or incentives approved by the State Corporation Commission pursuant to Virginia Code § 56-235.2 shall be increased by 0.2388 cents per kilowatt-hour.<sup>1</sup>

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<sup>1</sup> For Schedule MBR, this charge will be used to allocate a portion of the Generation Charge to Rider RGGI per Section II.B.1.b.

20200123

VIRGINIA ELECTRIC AND POWER COMPANY  
 TYPICAL BILLS - RESIDENTIAL - SCHEDULE 1

SUMMER MONTHS

KWH	EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				DIFFERENCE	PERCENT DIFFERENCE
	BASIC RATE #	APPLICABLE NON-FUEL RIDERS##	FUEL *	TOTAL BILL	BASIC RATE #	APPLICABLE NON-FUEL RIDERS###	FUEL*	TOTAL BILL		
500	\$39.88	\$14.79	\$8.51	\$63.18	\$39.88	\$15.98	\$8.51	\$64.37	\$1.19	1.9%
750	\$58.54	\$22.18	\$12.77	\$93.49	\$58.54	\$23.97	\$12.77	\$95.28	\$1.79	2.0%
1,000	\$75.10	\$29.59	\$17.02	\$121.71	\$75.10	\$31.98	\$17.02	\$124.10	\$2.39	2.0%
1,500	\$113.17	\$44.35	\$25.53	\$183.05	\$113.17	\$47.93	\$25.53	\$186.63	\$3.58	2.0%
2,000	\$151.24	\$59.13	\$34.04	\$244.41	\$151.24	\$63.91	\$34.04	\$249.19	\$4.78	2.0%
2,500	\$189.31	\$73.95	\$42.55	\$305.81	\$189.31	\$79.92	\$42.55	\$311.78	\$5.97	2.0%
3,000	\$227.38	\$88.72	\$51.06	\$367.16	\$227.38	\$95.88	\$51.06	\$374.32	\$7.16	2.0%
5,000	\$379.67	\$147.90	\$85.11	\$612.68	\$379.67	\$159.84	\$85.11	\$624.62	\$11.94	1.9%

BASE MONTHS

KWH	EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				DIFFERENCE	PERCENT DIFFERENCE
	BASIC RATE #	APPLICABLE NON-FUEL RIDERS##	FUEL *	TOTAL BILL	BASIC RATE #	APPLICABLE NON-FUEL RIDERS###	FUEL*	TOTAL BILL		
500	\$39.88	\$14.79	\$8.51	\$63.18	\$39.88	\$15.98	\$8.51	\$64.37	\$1.19	1.9%
750	\$58.54	\$22.18	\$12.77	\$93.49	\$58.54	\$23.97	\$12.77	\$95.28	\$1.79	2.0%
1,000	\$69.73	\$29.59	\$17.02	\$116.34	\$69.73	\$31.98	\$17.02	\$118.73	\$2.39	2.1%
1,500	\$94.36	\$44.35	\$25.53	\$164.24	\$94.36	\$47.93	\$25.53	\$167.82	\$3.58	2.2%
2,000	\$119.00	\$59.13	\$34.04	\$212.17	\$119.00	\$63.91	\$34.04	\$216.95	\$4.78	2.3%
2,500	\$143.63	\$73.95	\$42.55	\$260.13	\$143.63	\$79.92	\$42.55	\$269.10	\$5.97	2.3%
3,000	\$168.27	\$88.72	\$51.06	\$308.05	\$168.27	\$95.88	\$51.06	\$315.21	\$7.16	2.3%
5,000	\$268.82	\$147.90	\$85.11	\$499.83	\$268.82	\$159.84	\$85.11	\$511.77	\$11.94	2.4%

# Basic rate includes base distribution, generation and embedded transmission rates.

## Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 without proposed Rider RGGI change.

### Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 with proposed Rider RGGI change.

\* Reflects total current fuel level of \$0.017021 per kWh.

VIRGINIA ELECTRIC AND POWER COMPANY  
 TYPICAL BILLS - SCHEDULE GS-1

SUMMER MONTHS

20210923

BILL KW	KWH	PHASE	LOAD FACTOR	EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				DIFFERENCE	PERCENT DIFFERENCE
				BASIC RATE #	APPLICABLE NON-FUEL RIDERS##	FUEL *	TOTAL BILL	BASIC RATE #	APPLICABLE NON-FUEL RIDERS###	FUEL*	TOTAL BILL		
5	500	1	14%	\$39.78	\$12.08	\$8.51	\$80.35	\$39.78	\$13.25	\$8.51	\$81.54	\$1.19	2.0%
		3	14%	\$43.54	\$12.08	\$8.51	\$84.11	\$43.54	\$13.25	\$8.51	\$85.30	\$1.19	1.9%
	1,000	1	28%	\$68.78	\$24.10	\$17.02	\$109.90	\$68.78	\$26.49	\$17.02	\$112.29	\$2.39	2.2%
		3	28%	\$72.54	\$24.10	\$17.02	\$113.66	\$72.54	\$26.49	\$17.02	\$116.05	\$2.39	2.1%
	1,500	1	42%	\$98.31	\$36.14	\$25.53	\$159.98	\$98.31	\$39.72	\$25.53	\$163.56	\$3.58	2.2%
		3	42%	\$102.07	\$36.14	\$25.53	\$163.74	\$102.07	\$39.72	\$25.53	\$167.32	\$3.58	2.2%
	2,000	1	56%	\$129.92	\$48.17	\$34.04	\$212.13	\$129.92	\$52.95	\$34.04	\$216.91	\$4.78	2.3%
		3	56%	\$133.68	\$48.17	\$34.04	\$215.89	\$133.68	\$52.95	\$34.04	\$220.67	\$4.78	2.2%
	15	1	14%	\$98.31	\$36.14	\$25.53	\$159.98	\$98.31	\$39.72	\$25.53	\$163.56	\$3.58	2.2%
		3	14%	\$102.07	\$36.14	\$25.53	\$163.74	\$102.07	\$39.72	\$25.53	\$167.32	\$3.58	2.2%
	3,000	1	28%	\$193.15	\$72.30	\$51.06	\$316.51	\$193.15	\$79.46	\$51.06	\$323.67	\$7.16	2.3%
		3	28%	\$196.91	\$72.30	\$51.06	\$320.27	\$196.91	\$79.46	\$51.06	\$327.43	\$7.16	2.2%
15	4,500	1	42%	\$267.99	\$108.43	\$76.59	\$473.01	\$267.99	\$119.18	\$76.59	\$483.76	\$10.75	2.3%
		3	42%	\$281.75	\$108.43	\$76.59	\$476.77	\$281.75	\$119.18	\$76.59	\$487.52	\$10.75	2.3%
	6,000	1	56%	\$382.83	\$144.56	\$102.13	\$629.52	\$382.83	\$158.89	\$102.13	\$643.85	\$14.33	2.3%
		3	56%	\$386.59	\$144.56	\$102.13	\$633.28	\$386.59	\$158.89	\$102.13	\$647.61	\$14.33	2.3%
	25	1	14%	\$161.54	\$60.26	\$42.55	\$264.35	\$161.54	\$66.23	\$42.55	\$270.32	\$5.97	2.3%
		3	14%	\$165.30	\$60.26	\$42.55	\$268.11	\$165.30	\$66.23	\$42.55	\$274.08	\$5.97	2.2%
	5,000	1	28%	\$319.60	\$120.49	\$85.11	\$525.20	\$319.60	\$132.43	\$85.11	\$537.14	\$11.94	2.3%
		3	28%	\$323.36	\$120.49	\$85.11	\$528.96	\$323.36	\$132.43	\$85.11	\$540.90	\$11.94	2.3%
	7,500	1	42%	\$477.67	\$180.74	\$127.66	\$786.07	\$477.67	\$198.65	\$127.66	\$803.98	\$17.91	2.3%
		3	42%	\$481.43	\$180.74	\$127.66	\$789.83	\$481.43	\$198.65	\$127.66	\$807.74	\$17.91	2.3%
	10,000	1	56%	\$635.73	\$240.93	\$170.21	\$1,046.87	\$635.73	\$264.81	\$170.21	\$1,070.75	\$23.88	2.3%
		3	56%	\$639.49	\$240.93	\$170.21	\$1,050.63	\$639.49	\$264.81	\$170.21	\$1,074.51	\$23.88	2.3%

# Basic rate includes base distribution, generation and embedded transmission rates.

## Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 without proposed Rider RGGI change.

### Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 with proposed Rider RGGI change.

\* Reflects total current fuel level of \$0.017021 per kWh.

202120013

VIRGINIA ELECTRIC AND POWER COMPANY  
 TYPICAL BILLS - SCHEDULE GS-1

BASE MONTHS

BILL KW	KWH	PHASE	LOAD FACTOR	EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				DIFFERENCE	PERCENT DIFFERENCE
				BASIC RATE #	APPLICABLE NON-FUEL RIDERS##	FUEL *	TOTAL BILL	BASIC RATE #	APPLICABLE NON-FUEL RIDERS###	FUEL*	TOTAL BILL		
5	500	1	14%	\$38.78	\$12.08	\$8.51	\$80.35	\$39.78	\$13.25	\$8.51	\$81.54	\$1.19	2.0%
		3	14%	\$43.54	\$12.08	\$8.51	\$84.11	\$43.54	\$13.25	\$8.51	\$85.30	\$1.19	1.9%
	1,000	1	28%	\$88.78	\$24.10	\$17.02	\$109.90	\$88.78	\$28.49	\$17.02	\$112.29	\$2.39	2.2%
		3	28%	\$72.54	\$24.10	\$17.02	\$113.66	\$72.54	\$28.49	\$17.02	\$116.05	\$2.39	2.1%
	1,500	1	42%	\$95.88	\$38.14	\$25.53	\$157.53	\$95.88	\$39.72	\$25.53	\$161.11	\$3.58	2.3%
		3	42%	\$99.62	\$38.14	\$25.53	\$161.29	\$99.62	\$39.72	\$25.53	\$164.87	\$3.58	2.2%
	2,000	1	56%	\$115.22	\$48.17	\$34.04	\$197.43	\$115.22	\$52.95	\$34.04	\$202.21	\$4.78	2.4%
		3	56%	\$118.98	\$48.17	\$34.04	\$201.19	\$118.98	\$52.95	\$34.04	\$205.97	\$4.78	2.4%
	15	1	14%	\$95.88	\$38.14	\$25.53	\$157.53	\$95.88	\$39.72	\$25.53	\$161.11	\$3.58	2.3%
		3	14%	\$99.62	\$38.14	\$25.53	\$161.29	\$99.62	\$39.72	\$25.53	\$164.87	\$3.58	2.2%
	3,000	1	28%	\$153.95	\$72.30	\$51.06	\$277.31	\$153.95	\$79.48	\$51.06	\$284.47	\$7.16	2.6%
		3	28%	\$157.71	\$72.30	\$51.06	\$281.07	\$157.71	\$79.48	\$51.06	\$288.23	\$7.16	2.5%
	4,500	1	42%	\$212.04	\$108.43	\$76.59	\$397.06	\$212.04	\$119.18	\$76.59	\$407.81	\$10.75	2.7%
		3	42%	\$215.80	\$108.43	\$76.59	\$400.82	\$215.80	\$119.18	\$76.59	\$411.57	\$10.75	2.7%
	6,000	1	56%	\$270.14	\$144.58	\$102.13	\$516.83	\$270.14	\$158.89	\$102.13	\$531.16	\$14.33	2.8%
		3	56%	\$273.90	\$144.58	\$102.13	\$520.59	\$273.90	\$158.89	\$102.13	\$534.92	\$14.33	2.8%
	25	1	14%	\$134.59	\$60.28	\$42.55	\$237.40	\$134.59	\$66.23	\$42.55	\$243.37	\$5.97	2.5%
		3	14%	\$138.35	\$60.28	\$42.55	\$241.16	\$138.35	\$66.23	\$42.55	\$247.13	\$5.97	2.5%
	5,000	1	28%	\$231.41	\$120.49	\$85.11	\$437.01	\$231.41	\$132.43	\$85.11	\$448.95	\$11.94	2.7%
		3	28%	\$235.17	\$120.49	\$85.11	\$440.77	\$235.17	\$132.43	\$85.11	\$452.71	\$11.94	2.7%
	7,500	1	42%	\$328.23	\$180.74	\$127.68	\$636.63	\$328.23	\$198.65	\$127.68	\$654.54	\$17.91	2.8%
		3	42%	\$331.99	\$180.74	\$127.68	\$640.39	\$331.99	\$198.65	\$127.68	\$658.30	\$17.91	2.8%
	10,000	1	56%	\$425.05	\$240.93	\$170.21	\$836.19	\$425.05	\$264.81	\$170.21	\$880.07	\$23.88	2.9%
		3	56%	\$428.81	\$240.93	\$170.21	\$839.95	\$428.81	\$264.81	\$170.21	\$883.83	\$23.88	2.8%

# Basic rate includes base distribution, generation and embedded transmission rates.

## Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 without proposed Rider RGGI change.

### Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 with proposed Rider RGGI change.

\* Reflects total current fuel level of \$0.017021 per kWh.

## SUMMER MONTHS

# Basic rate includes base distribution, generation and embedded transmission rates.  
 ### Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 without proposed Rider RGGI change.  
 #### Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 with proposed Rider RGGI change.  
 \* Reflects total current fuel level of \$0.0170201 per kWh.  
 \*\* The rates used in this schedule are based on the revenue requirements as filed in each case.

VIRGINIA ELECTRIC AND POWER COMPANY  
TYPICAL BILLS - SCHEDULE GS-2

BASE MONTHS

BILL KW	KWH	LOAD FACTOR	EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				DIFFERENCE	PERCENT DIFFERENCE
			APPLICABLE				APPLICABLE					
			BASIC RATE #	NON-FUEL RIDERS##	FUEL *	TOTAL BILL	BASIC RATE #	NON-FUEL RIDERS##	FUEL *	TOTAL BILL		
30	4,500	21%	\$339.75	\$171.07	\$76.59	\$587.41	\$339.75	\$181.82	\$76.59	\$598.16	\$10.75	1.8%
	9,000	42%	\$500.56	\$220.88	\$153.19	\$874.63	\$500.56	\$242.37	\$153.19	\$896.12	\$21.49	2.5%
	15,000	69%	\$552.40	\$249.18	\$255.32	\$1,056.90	\$552.40	\$285.00	\$255.32	\$1,092.72	\$35.82	3.4%
50	7,500	21%	\$552.98	\$285.13	\$127.66	\$965.77	\$552.98	\$303.04	\$127.66	\$983.68	\$17.91	1.9%
	15,000	42%	\$821.01	\$368.15	\$255.32	\$1,444.48	\$821.01	\$403.97	\$255.32	\$1,480.30	\$35.82	2.5%
	25,000	69%	\$907.41	\$415.29	\$425.53	\$1,748.23	\$907.41	\$474.99	\$425.53	\$1,807.93	\$59.70	3.4%
100	15,000	21%	\$1,086.08	\$570.23	\$255.32	\$1,911.63	\$1,086.08	\$606.05	\$255.32	\$1,947.45	\$35.82	1.9%
	30,000	42%	\$1,622.13	\$736.24	\$510.63	\$2,869.00	\$1,622.13	\$807.88	\$510.63	\$2,940.64	\$71.64	2.5%
	50,000	69%	\$1,794.93	\$830.55	\$851.05	\$3,476.53	\$1,794.93	\$949.95	\$851.05	\$3,595.93	\$119.40	3.4%
150	22,500	21%	\$1,619.17	\$855.34	\$382.97	\$2,857.48	\$1,619.17	\$909.07	\$382.97	\$2,911.21	\$53.73	1.9%
	45,000	42%	\$2,423.25	\$1,104.39	\$765.95	\$4,293.59	\$2,423.25	\$1,211.85	\$765.95	\$4,401.05	\$107.46	2.5%
	75,000	69%	\$2,682.45	\$1,245.84	\$1,276.58	\$5,204.87	\$2,682.45	\$1,424.94	\$1,276.58	\$5,383.97	\$179.10	3.4%
250	37,500	21%	\$2,685.35	\$1,425.52	\$638.29	\$4,749.16	\$2,685.35	\$1,515.07	\$638.29	\$4,838.71	\$89.55	1.9%
	75,000	42%	\$4,025.48	\$1,840.63	\$1,276.58	\$7,142.69	\$4,025.48	\$2,019.73	\$1,276.58	\$7,321.79	\$179.10	2.5%
	125,000	69%	\$4,457.48	\$2,076.39	\$2,127.63	\$8,661.50	\$4,457.48	\$2,374.89	\$2,127.63	\$8,960.00	\$298.50	3.4%
450	67,500	21%	\$4,817.72	\$2,565.91	\$1,148.92	\$8,532.55	\$4,817.72	\$2,727.10	\$1,148.92	\$8,693.74	\$161.19	1.9%
	135,000	42%	\$7,229.95	\$3,313.11	\$2,297.84	\$12,840.90	\$7,229.95	\$3,635.49	\$2,297.84	\$13,163.28	\$332.38	2.5%
	225,000	69%	\$8,007.55	\$3,737.49	\$3,829.73	\$15,574.77	\$8,007.55	\$4,274.79	\$3,829.73	\$16,112.07	\$537.30	3.4%

# Basic rate includes base distribution, generation and embedded transmission rates.

## Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 without proposed Rider RGGI change.

### Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 with proposed Rider RGGI change.

\* Reflects total current fuel level of \$0.07021 per kWh.

\*\* The rates used in this schedule are based on the revenue requirements as filed in each case.

**VIRGINIA ELECTRIC AND POWER COMPANY  
TYPICAL BILLS - SCHEDULE GS-3  
CALCULATED FOR 40% AND 60% ON-PEAK KWH USAGE**

BILL KW	LOAD FACTOR	ON-PEAK KWH	OFF-PEAK KWH	EFFECTIVE FOR USAGE ON AND AFTER				EFFECTIVE FOR USAGE ON AND AFTER				DIFFERENCE	PERCENT DIFFERENCE
				BASIC RATE #	APPLICABLE NON-FUEL RIDERS##	FUEL *	TOTAL BILL	BASIC RATE #	APPLICABLE NON-FUEL RIDERS##	FUEL *	TOTAL BILL		
500	28%	40,000	60,000	\$7,677.34	\$3,810.50	\$1,702.10	\$13,189.94	\$7,677.34	\$4,049.30	\$1,702.10	\$13,428.74	\$238.80	1.8%
	28%	60,000	40,000	\$7,702.26	\$3,810.50	\$1,702.10	\$13,214.86	\$7,702.26	\$4,049.30	\$1,702.10	\$13,453.66	\$238.80	1.8%
	49%	70,000	105,000	\$7,912.27	\$3,834.88	\$2,978.68	\$14,725.83	\$7,912.27	\$4,252.76	\$2,978.68	\$15,143.73	\$417.90	2.8%
	49%	105,000	70,000	\$7,955.88	\$3,834.88	\$2,978.68	\$14,769.44	\$7,955.88	\$4,252.76	\$2,978.68	\$15,187.34	\$417.90	2.8%
1,000	69%	100,000	150,000	\$8,147.20	\$3,859.25	\$4,255.25	\$16,261.70	\$8,147.20	\$4,456.25	\$4,255.25	\$16,858.70	\$597.00	3.7%
	69%	150,000	100,000	\$8,209.50	\$3,859.25	\$4,255.25	\$16,324.00	\$8,209.50	\$4,456.25	\$4,255.25	\$16,921.00	\$597.00	3.7%
	28%	80,000	120,000	\$15,242.24	\$7,621.00	\$3,404.20	\$26,267.44	\$15,242.24	\$8,098.60	\$3,404.20	\$28,745.04	\$477.60	1.8%
	28%	120,000	80,000	\$15,292.08	\$7,621.00	\$3,404.20	\$26,317.28	\$15,292.08	\$8,098.60	\$3,404.20	\$28,794.88	\$477.60	1.8%
5,000	49%	140,000	210,000	\$15,712.10	\$7,669.75	\$5,957.35	\$29,339.20	\$15,712.10	\$8,505.55	\$5,957.35	\$30,175.00	\$835.80	2.8%
	49%	210,000	140,000	\$15,769.32	\$7,669.75	\$5,957.35	\$29,426.42	\$15,769.32	\$8,505.55	\$5,957.35	\$30,262.22	\$835.80	2.8%
	69%	200,000	300,000	\$16,181.96	\$7,718.50	\$8,510.50	\$32,410.96	\$16,181.96	\$8,912.50	\$8,510.50	\$33,604.96	\$1,184.00	3.7%
	69%	300,000	200,000	\$16,306.56	\$7,718.50	\$8,510.50	\$32,535.56	\$16,306.56	\$8,912.50	\$8,510.50	\$33,729.56	\$1,184.00	3.7%
10,000	28%	400,000	600,000	\$75,761.30	\$38,105.00	\$17,021.00	\$130,887.30	\$75,761.30	\$40,493.00	\$17,021.00	\$133,275.30	\$2,388.00	1.8%
	28%	600,000	400,000	\$76,010.50	\$38,105.00	\$17,021.00	\$131,136.50	\$76,010.50	\$40,493.00	\$17,021.00	\$133,524.50	\$2,388.00	1.8%
	49%	700,000	1,050,000	\$78,110.60	\$38,348.75	\$29,786.75	\$146,246.10	\$78,110.60	\$42,527.75	\$29,786.75	\$150,425.10	\$4,179.00	2.9%
	49%	1,050,000	700,000	\$78,546.70	\$38,348.75	\$29,786.75	\$146,682.20	\$78,546.70	\$42,527.75	\$29,786.75	\$150,861.20	\$4,179.00	2.8%
	69%	1,000,000	1,500,000	\$80,459.90	\$38,592.50	\$42,552.50	\$161,604.90	\$80,459.90	\$44,562.50	\$42,552.50	\$167,574.90	\$5,970.00	3.7%
	69%	1,500,000	1,000,000	\$81,082.90	\$38,592.50	\$42,552.50	\$162,227.90	\$81,082.90	\$44,562.50	\$42,552.50	\$168,187.90	\$5,970.00	3.7%
	28%	800,000	1,200,000	\$151,410.16	\$76,210.00	\$34,042.00	\$261,662.16	\$151,410.16	\$80,986.00	\$34,042.00	\$266,438.16	\$4,776.00	1.8%
	28%	1,200,000	800,000	\$151,908.56	\$76,210.00	\$34,042.00	\$262,160.56	\$151,908.56	\$80,986.00	\$34,042.00	\$266,936.56	\$4,776.00	1.8%
	49%	1,400,000	2,100,000	\$156,108.76	\$76,697.50	\$59,573.50	\$292,379.76	\$156,108.76	\$85,055.50	\$59,573.50	\$300,737.76	\$8,358.00	2.9%
	49%	2,100,000	1,400,000	\$156,980.96	\$76,697.50	\$59,573.50	\$293,251.96	\$156,980.96	\$85,055.50	\$59,573.50	\$301,609.96	\$8,358.00	2.9%
	69%	2,000,000	3,000,000	\$160,807.36	\$77,185.00	\$85,105.00	\$323,097.36	\$160,807.36	\$89,125.00	\$85,105.00	\$335,037.36	\$11,940.00	3.7%
	69%	3,000,000	2,000,000	\$162,053.36	\$77,185.00	\$85,105.00	\$324,343.36	\$162,053.36	\$89,125.00	\$85,105.00	\$336,283.36	\$11,940.00	3.7%

# Basic rate includes base distribution, generation and embedded transmission rates.  
## Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 without proposed Rider RGGI change.  
### Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 with proposed Rider RGGI change.  
\* Reflects total current fuel level of \$0.017021 per kWh.  
\*\* The rates used in this schedule are based on the revenue requirements as filed in each case.





Company Exhibit No.       
Witness: PBH  
Schedule 4  
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# Basic rate includes base distribution, generation and embedded transmission rates.  
 \* Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 without proposed RGGI change.  
 \*\* Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 with proposed RGGI change.  
 \*\*\* Reflects total current fuel level of \$0.017021 per kWh.  
 ... The rates used in this schedule are based on the revenue requirements as filed in each case.  
 @ on-peak kWh set at maximum level that could be consumed in a base month assuming a 100% on-peak load factor for 30 days.

20112013

20210913

VIRGINIA ELECTRIC AND POWER COMPANY  
 TYPICAL BILLS - CHURCH AND SYNAGOGUE - SCHEDULE 5C

SUMMER MONTHS

KWH	EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				DIFFERENCE	PERCENT DIFFERENCE
	BASIC RATE #	APPLICABLE NON-FUEL RIDERS##	FUEL *	TOTAL BILL	BASIC RATE #	APPLICABLE NON-FUEL RIDERS###	FUEL*	TOTAL BILL		
1,500	\$112.36	\$44.19	\$25.53	\$182.08	\$112.36	\$47.77	\$25.53	\$185.66	\$3.58	2.0%
3,000	\$216.72	\$88.34	\$51.06	\$356.12	\$216.72	\$95.50	\$51.06	\$363.28	\$7.16	2.0%
5,000	\$348.59	\$147.28	\$85.11	\$580.98	\$348.59	\$159.22	\$85.11	\$592.92	\$11.94	2.1%
7,500	\$513.42	\$220.87	\$127.66	\$861.95	\$513.42	\$238.78	\$127.66	\$879.86	\$17.91	2.1%
10,000	\$678.25	\$294.47	\$170.21	\$1,142.93	\$678.25	\$318.35	\$170.21	\$1,166.81	\$23.88	2.1%
15,000	\$1,007.92	\$441.75	\$255.32	\$1,704.99	\$1,007.92	\$477.57	\$255.32	\$1,740.81	\$35.82	2.1%

BASE MONTHS

KWH	EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				EFFECTIVE FOR USAGE ON AND AFTER 8/1/2021				DIFFERENCE	PERCENT DIFFERENCE
	BASIC RATE #	APPLICABLE NON-FUEL RIDERS##	FUEL *	TOTAL BILL	BASIC RATE #	APPLICABLE NON-FUEL RIDERS###	FUEL*	TOTAL BILL		
1,500	\$112.36	\$44.19	\$25.53	\$182.08	\$112.36	\$47.77	\$25.53	\$185.66	\$3.58	2.0%
3,000	\$216.72	\$88.34	\$51.06	\$356.12	\$216.72	\$95.50	\$51.06	\$363.28	\$7.16	2.0%
5,000	\$337.41	\$147.28	\$85.11	\$569.80	\$337.41	\$159.22	\$85.11	\$581.74	\$11.94	2.1%
7,500	\$488.27	\$220.87	\$127.66	\$836.80	\$488.27	\$238.78	\$127.66	\$854.71	\$17.91	2.1%
10,000	\$639.13	\$294.47	\$170.21	\$1,103.81	\$639.13	\$318.35	\$170.21	\$1,127.69	\$23.88	2.2%
15,000	\$940.85	\$441.75	\$255.32	\$1,637.92	\$940.85	\$477.57	\$255.32	\$1,673.74	\$35.82	2.2%

# Basic rate includes base distribution, generation and embedded transmission rates.

## Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 without proposed Rider RGGI change.

### Reflects current and pending applicable non-base rate riders to be effective August 1, 2021 with proposed Rider RGGI change.

\* Reflects total current fuel level of \$0.017021 per kWh.

\*\* The rates used in this schedule are based on the revenue requirements as filed in each case.

20170013

DOMINION VIRGINIA POWER  
 1,000 KWH SEASONALLY WEIGHTED RESIDENTIAL BILL  
 RATE SCHEDULE 1

**BILL COMPONENTS**

August 2021

DISTRIBUTION - BASE	\$	25.84
GENERATION - BASE	\$	35.88
TRANSMISSION	\$	20.29
FUEL	\$	17.02
DISTRIBUTION A5	\$	2.17
GENERATION A5	\$	13.51
ENVIRONMENTAL A5	\$	4.24
DSMEE	\$	1.47
<b>TOTAL BILL</b>	<b>\$</b>	<b>120.52</b>

	RATES	RATES	KWH		WEIGHTED
			1,000	1,000	
<b>BILL COMPONENTS</b>	<b>SUMMER</b>	<b>NON-SUMMER</b>	<b>SUMMER</b>	<b>NON-SUMMER</b>	
Basic Customer Charge	\$8.58	\$8.58	\$ 6.58	\$ 6.58	\$ 6.58
Distribution 800 KWh	\$ 0.021088	\$ 0.021088	\$ 16.87	\$ 16.87	\$ 16.87
Distribution Over 800 KWh	\$ 0.011943	\$ 0.011943	\$ 2.39	\$ 2.39	\$ 2.39
Electricity Supply Service 800 KWh	\$ 0.035826	\$ 0.035826	\$ 28.68	\$ 28.68	\$ 28.68
Electricity Supply Service Over 800 KWh	\$ 0.054500	\$ 0.027632	\$ 10.90	\$ 5.53	\$ 7.32
Base Transmission	\$ 0.009700	\$ 0.009700	\$ 9.70	\$ 9.70	\$ 9.70
Rider A - Fuel Factor	\$ 0.017021	\$ 0.017021	\$ 17.02	\$ 17.02	\$ 17.02
Rider B - Biomass (A5)*	\$ 0.000449	\$ 0.000449	\$ 0.45	\$ 0.45	\$ 0.45
Rider BW - Brunswick County (A5)	\$ 0.001947	\$ 0.001947	\$ 1.95	\$ 1.95	\$ 1.95
Rider C1A - (A5)	\$ 0.000056	\$ 0.000056	\$ 0.06	\$ 0.06	\$ 0.06
Rider C2A - (A5)	\$ 0.000176	\$ 0.000176	\$ 0.18	\$ 0.18	\$ 0.18
Rider C3A - (A5)	\$ 0.001230	\$ 0.001230	\$ 1.23	\$ 1.23	\$ 1.23
Rider GV - Greenville (A5)*	\$ 0.002853	\$ 0.002853	\$ 2.85	\$ 2.85	\$ 2.85
Rider R - Bear Garden (A5)*	\$ 0.001102	\$ 0.001102	\$ 1.10	\$ 1.10	\$ 1.10
Rider S - VCHEC (A5)*	\$ 0.003611	\$ 0.003611	\$ 3.61	\$ 3.61	\$ 3.61
Rider T1 - Transmission (A4)	\$ 0.010591	\$ 0.010591	\$ 10.59	\$ 10.59	\$ 10.59
Rider U - Strategic Underground Program (A5)*	\$ 0.002136	\$ 0.002136	\$ 2.14	\$ 2.14	\$ 2.14
Rider US-2 - 2018 Solar Projects (A5)	\$ 0.000188	\$ 0.000188	\$ 0.19	\$ 0.19	\$ 0.19
Rider US-3 - 2018 Solar Projects (A5)*	\$ 0.000718	\$ 0.000718	\$ 0.72	\$ 0.72	\$ 0.72
Rider W - Warren County (A5)*	\$ 0.002225	\$ 0.002225	\$ 2.23	\$ 2.23	\$ 2.23
Rider E - Environmental Projects (A5)	\$ 0.001668	\$ 0.001668	\$ 1.67	\$ 1.67	\$ 1.67
Rider US-4 - Solar Projects (A5)*	\$ 0.000221	\$ 0.000221	\$ 0.22	\$ 0.22	\$ 0.22
Rider RBB - Rural Broadband Pilot Projects (A5)*	\$ 0.000027	\$ 0.000027	\$ 0.03	\$ 0.03	\$ 0.03
Rider RGGI - (A5)*	\$ 0.002388	\$ 0.002388	\$ 2.39	\$ 2.39	\$ 2.39
Rider RPS - (A5)*	\$ 0.000182	\$ 0.000182	\$ 0.18	\$ 0.18	\$ 0.18
Rider CE - (A5)*	\$ 0.000192	\$ 0.000192	\$ 0.19	\$ 0.19	\$ 0.19
			<b>\$ 124.10</b>	<b>\$ 118.73</b>	<b>\$ 120.52</b>
BLEND (SUMMER x 4 - NON-SUMMER x 6)			\$ 496.40	\$ 948.84	
AVG				\$ 120.52	

\*Pending SCC Approval

**Dominion Energy Virginia**  
**Residential Schedule 1 Typical Bill Based on 1,000 kWh**

Company Exhibit No. \_\_\_\_\_  
 Witness: PBH  
 Schedule 5  
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Seasonally Weighted Bill (September 01, 2020)

\$ 116.87

	Change	Total Bill \$116.87	% Change from 9/01/2020	Notes
Seasonally Weighted Bill				
Rider E (Approved Eff. November 1, 2020)	\$ (0.32)		-0.27%	(1)
Total Changes from September 1, 2020 to November 1, 2020	\$ (0.32)	\$ 116.55	-0.27%	

	Change	Total Bill \$116.55	% Change from 11/01/2020	Notes
Seasonally Weighted Bill				
Rider B (Proposed Eff. April 1, 2021)	\$ (0.18)		-0.15%	(2)
Rider R (Proposed Eff. April 1, 2021)	\$ 0.22		0.19%	(3)
Rider S (Proposed Eff. April 1, 2021)	\$ (0.23)		-0.20%	(4)
Rider W (Proposed Eff. April 1, 2021)	\$ 0.15		0.13%	(5)
Rider GV (Proposed Eff. April 1, 2021)	\$ 0.25		0.21%	(6)
Rider U (Proposed Eff. April 1, 2021)	\$ 0.74		0.63%	(7)
Total Changes from November 1, 2020 to April 1, 2021	\$ 0.95	\$ 117.50	0.82%	

	Change	Total Bill \$117.50	% Change from 4/01/2021	Notes
Seasonally Weighted Bill				
Rider US3 (Proposed Eff. June 1, 2021)	\$ 0.16		0.14%	(8)
Rider US4 (Proposed Eff. June 1, 2021)	\$ 0.07		0.06%	(9)
Rider CE (Proposed Eff. June 1, 2021)	\$ 0.19		0.16%	(10)
Total Changes from April 1, 2021 to June 1, 2021	\$ 0.42	\$ 117.92	0.36%	

	Change	Total Bill \$117.92	% Change from 6/01/2021	Notes
Seasonally Weighted Bill				
Rider RPS (Proposed Eff. August 1, 2021)	\$ 0.18		0.15%	(11)
Rider RGGI (Proposed Eff. August 1, 2021)	\$ 2.39		2.03%	(12)
Rider RBB (Proposed Eff. August 1, 2021)	\$ 0.03		0.03%	(13)
Total Changes from June 1, 2021 to August 1, 2021	\$ 2.60	\$ 120.52	2.20%	

**1 Proposed Rider E Change**

Current Rider E (PUR-2018-00195)  
 Approved Rider E 11/1/2020 (PUR-2020-00003)  
 Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
Rate per kWh	Bill Impact
\$0.001986	\$ 1.99
\$0.001668	\$ 1.67
	\$ (0.32)

**2 Proposed Rider B Change**

Current Rider B (Approved 4/1/2020 (PUR-2019-00085))  
 Proposed Rider B (Proposed 4/1/2021 (PUR-2020-00099))  
 Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
Rate per kWh	Bill Impact
\$0.000630	\$ 0.63
\$0.000449	\$ 0.45
	\$ (0.18)

**3 Proposed Rider R Change**

Current Rider R (Approved 4/1/2020 (PUR-2019-00087))  
 Proposed Rider R (Proposed 4/1/2021 (PUR-2020-00101))  
 Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
Rate per kWh	Bill Impact
\$0.000877	\$ 0.88
\$0.001102	\$ 1.10
	\$ 0.22

**4 Proposed Rider S Change**

Current Rider S (Approved 4/1/2020 (PUR-2019-00088))  
 Proposed Rider S (Proposed 4/1/2021 (PUR-2020-00102))  
 Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
Rate per kWh	Bill Impact
\$0.003838	\$ 3.84
\$0.003611	\$ 3.61
	\$ (0.23)

201120013

## 5 Proposed Rider W Change

Current Rider W (Approved Proposed 4/1/2020 (PUR-2019-00089))

Proposed Rider W (Proposed 4/1/2021 (PUR-2020-00103))

Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
<u>Rate per kWh</u>	<u>Bill Impact</u>
\$0.002084	\$ 2.08
\$0.002225	\$ 2.23
	\$ 0.15

## 6 Proposed Rider GV Change

Current Rider GV (Approved 4/1/2020 (PUR-2019-00086))

Proposed Rider GV (Proposed 4/1/2021 (PUR-2020-00100))

Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
<u>Rate per kWh</u>	<u>Bill Impact</u>
\$0.002601	\$ 2.60
\$0.002853	\$ 2.85
	\$ 0.25

## 7 Proposed Rider U Change

Current Rider U (2/1/2020 (PUR-2019-00046))

Proposed Rider U (Proposed 4/1/2021 (PUR-2020-00096))

Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
<u>Rate per kWh</u>	<u>Bill Impact</u>
\$0.001403	\$ 1.40
\$0.002136	\$ 2.14
	\$ 0.74

## 8 Proposed Rider US-3

Current Rider US3 (PUR-2019-00104)

Proposed Rider US3 (PUR-2020-00122)

Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
<u>Rate per kWh</u>	<u>Bill Impact</u>
\$0.000559	\$ 0.56
\$0.000718	\$ 0.72
	\$ 0.16

## 9 Proposed Rider US-4

Current Rider US4 (PUR-2019-00105)

Proposed Rider US4 (PUR-2020-00123)

Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
<u>Rate per kWh</u>	<u>Bill Impact</u>
\$0.000147	\$ 0.15
\$0.000221	\$ 0.22
	\$ 0.07

## 10 Proposed Rider CE Change

Current Rider CE

Proposed Rider CE (Proposed 6/1/2021 (PUR-2020-00134))

Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
<u>Rate per kWh</u>	<u>Bill Impact</u>
\$0.000000	\$ -
\$0.000192	\$ 0.19
	\$ 0.19

## 11 Proposed Rider RPS

Current Rider RPS

Proposed Rider RPS (Proposed 8/1/2021 (PUR-2020-00170))

Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
<u>Rate per kWh</u>	<u>Bill Impact</u>
\$0.000000	\$ -
\$0.000182	\$ 0.18
	\$ 0.18

## 12 Proposed Rider RGGI

Current Rider RGGI

Proposed Rider RGGI (Proposed 8/1/2021 (PUR-2020-00169))

Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
<u>Rate per kWh</u>	<u>Bill Impact</u>
\$0.000000	\$ -
\$0.002388	\$ 2.39
	\$ 2.39

## 13 Proposed Rider RBB Change

Current Rider RBB

Proposed Rider RBB (Proposed 8/1/2021 (PUR-2020-00197))

Impact of Change for 1,000 kWh bill

Schedule 1	1,000 kWh
<u>Rate per kWh</u>	<u>Bill Impact</u>
\$0.000000	\$ -
\$0.000027	\$ 0.03
	\$ 0.03

20210013

**Petition of Virginia Electric and Power Company  
For approval of a rate adjustment clause, designated Rider RGGI, under  
§ 56-585.1 A 5 e of the Code of Virginia**

**Projected Costs by Type of Cost**

*Instructions: Applicant shall provide a schedule of all projected costs by type of cost and year associated with each rate adjustment clause pursuant to § 56-585.1 A 4, A 5 b, c and d or A 6 of the Code of Virginia that has been approved by the commission or for which the applicant is seeking initial approval.*

See attached Filing Schedule 46A, Statement 1.

2021120013

Virginia Electric and Power Company  
Rider RGGI -- Actual and Projected Allowance Activity  
For the Period September 1, 2020 to July 31, 2022

	Purchases		Amortization		Ending Balance		W/A Cost
	<u>Dollars</u>	<u>Allowances</u>	<u>Dollars</u>	<u>Allowances</u>	<u>Dollars</u>	<u>Allowances</u>	
Sep-20	\$ 6,797,500	1,000,000	\$ -	-	\$ 6,797,500	1,000,000	\$ 6.80
Oct-20	-	-	-	-	6,797,500	1,000,000	6.80
Nov-20	-	-	-	-	6,797,500	1,000,000	6.80
Dec-20	6,910,000	1,000,000	-	-	13,707,500	2,000,000	6.85
Jan-21	-	-	(9,166,802)	(1,337,487)	4,540,698	662,513	6.85
Feb-21	-	-	(9,514,870)	(1,388,272)	(4,974,173)	(725,759)	6.85
Mar-21	34,550,000	5,000,000	(10,018,745)	(1,447,889)	19,557,082	2,826,351	6.92
Apr-21	-	-	(7,949,021)	(1,148,777)	11,608,061	1,677,574	6.92
May-21	-	-	(9,794,144)	(1,415,430)	1,813,918	262,144	6.92
Jun-21	34,550,000	5,000,000	(11,283,786)	(1,632,852)	25,080,131	3,629,292	6.91
Jul-21	-	-	(14,464,997)	(2,093,198)	10,615,134	1,536,093	6.91
Aug-21	-	-	(14,865,325)	(2,151,129)	(4,250,190)	(615,036)	6.91
Sep-21	34,550,000	5,000,000	(10,500,072)	(1,519,562)	19,799,738	2,865,402	6.91
Oct-21	-	-	(6,033,347)	(873,141)	13,766,390	1,992,261	6.91
Nov-21	-	-	(8,539,382)	(1,235,813)	5,227,008	756,448	6.91
Dec-21	34,550,000	5,000,000	(11,184,563)	(1,618,607)	28,592,444	4,137,841	6.91
Jan-22	-	-	(11,232,421)	(1,625,533)	17,360,023	2,512,308	6.91
Feb-22	-	-	(11,569,060)	(1,674,251)	5,790,964	838,057	6.91
Mar-22	33,450,000	5,000,000	(11,099,753)	(1,651,361)	28,141,210	4,186,696	6.72
Apr-22	-	-	(9,685,594)	(1,440,970)	18,455,616	2,745,726	6.72
May-22	-	-	(8,427,843)	(1,253,849)	10,027,773	1,491,877	6.72
Jun-22	33,450,000	5,000,000	(11,056,885)	(1,650,957)	32,420,887	4,840,920	6.70
Jul-22	-	-	(15,323,476)	(2,288,023)	17,097,411	2,552,898	6.70
Totals	\$ 218,807,500	32,000,000	\$ (201,710,089)	(29,447,103)	\$ 17,097,411	2,552,898	6.70



**Petition of Virginia Electric and Power Company  
For approval of a rate adjustment clause, designated Rider RGGI, under  
§ 56-585.1 A 5 e of the Code of Virginia**

**Documentation Supporting the Projected Costs**

*Instructions: Provide all documents, contracts, studies, investigations or correspondence that support projected costs proposed to be recovered via a rate adjustment clause.*

See attached Filing Schedule 46A, Statement 2.

**RGGI Inc.**



**MARKET MONITOR REPORT  
FOR AUCTION 49**

**Prepared for:**

**RGGI, Inc., on behalf of the RGGI Participating States**

**Prepared By:**

**POTOMAC  
ECONOMICS**

September 4, 2020

This report was prepared by Potomac Economics (the contractor) in the course of performing work contracted for and sponsored by RGGI, Inc. on behalf of states participating in RGGI (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont). The opinions expressed in this report do not necessarily reflect those of RGGI, Inc. or any of the states participating in RGGI, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, RGGI, Inc., the states participating in RGGI, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. RGGI, Inc., the states participating in RGGI, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

The Regional Greenhouse Gas Initiative (RGGI) is the first mandatory market-based regulatory program in the U.S. to reduce greenhouse gas emissions. RGGI is a cooperative effort of New England and Mid-Atlantic states to reduce emissions of carbon dioxide (CO<sub>2</sub>) from the power sector.

RGGI, Inc. is a non-profit corporation created to provide technical and administrative services to the states participating in the Regional Greenhouse Gas Initiative.

## **MARKET MONITOR REPORT FOR AUCTION 49**

As the Market Monitor for the RGGI CO<sub>2</sub> allowance market, Potomac Economics monitors the conduct of market participants in the auctions and in the secondary market to identify indications of market manipulation or collusion. We also review the administration of the allowance auctions by Enel X. This report summarizes our findings regarding RGGI Auction 49, which was held on September 2, 2020.

We observed the auction as it occurred and have completed our review and analysis of its results. Based on our review of bids in the auction, we find no material evidence of collusion or manipulation by bidders.

Fifty-five bidders participated in the offering of CO<sub>2</sub> allowances. Bids were submitted to purchase 2.6 times the available supply of allowances, resulting in a clearing price of \$6.82 per ton. Compliance-Oriented Entities purchased 66 percent of the allowances in the offering. There was no indication of barriers to participation in the auction.

Based on our review of the administration of the market, we found that:

- The auction was administered in a fair and transparent manner in accordance with the noticed auction procedures and limitations.
- The auction results were consistent with the market rules and the bids received.
- Sensitive information was treated appropriately by the auction administrator.
- There were no indications of issues with the auction platform such as hardware or software problems, communications issues, or security breaches.

In summary, the results of our monitoring of RGGI Auction 49 raise no material concerns regarding the auction process, barriers to participation in the auction, or the competitiveness of the auction results. The appendix provides additional information about the market for RGGI CO<sub>2</sub> allowances and outcomes of the auction.

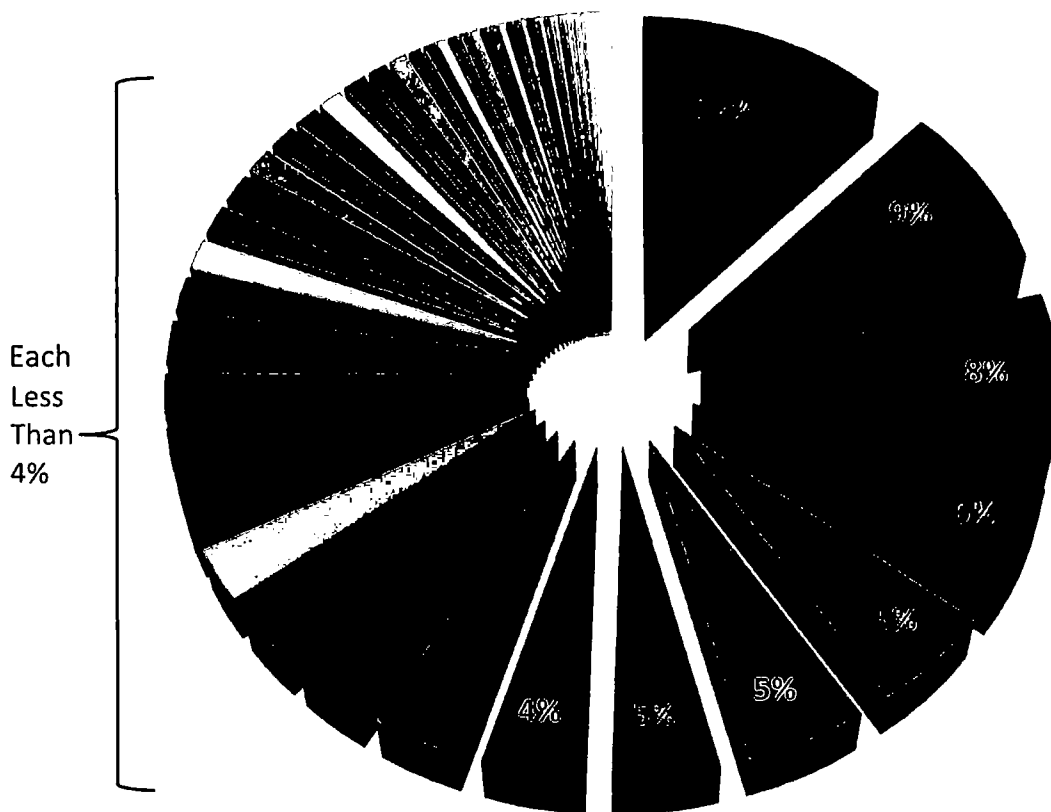
## APPENDIX

### A. DISPERSION OF PROJECTED DEMAND

*The wide dispersion of projected demand for RGGI allowances across compliance entities facilitates the competitive performance of the auction.*

The demand for CO<sub>2</sub> allowances is based on the requirement for each compliance entity in the RGGI footprint to obtain one CO<sub>2</sub> allowance for each short ton of CO<sub>2</sub> that it emits from the sale of electricity. The following figure shows the relative shares of projected demand for RGGI allowances by compliance entity. The largest compliance entity represents only 12 percent of the total projected demand for allowances. Nearly half of the projected demand is composed of entities that each account for less than 4 percent of the total demand. Participation by a large number of entities facilitates the competitive performance of the auction.

**Figure 1: Projected Demand for RGGI Allowances  
Shares by Compliance Entity**

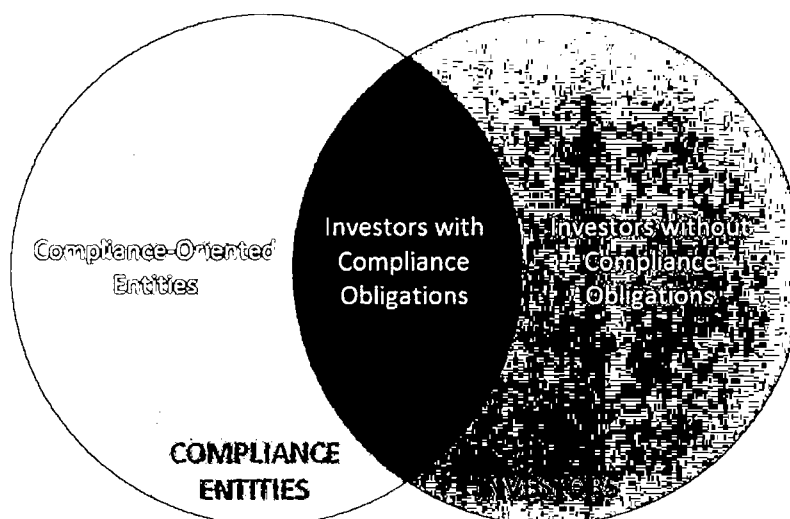


## B. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 49

*Awards were distributed across 34 bidders with six bidders purchasing one million tons or more and 19 bidders purchasing 200,000 tons or more.*

This report summarizes participation in Auction 49. Participation in the RGGI market involves many different firms with various interests in RGGI allowances. Some participate in order to satisfy compliance obligations, others have investment interests, and still others participate for both purposes. To more effectively track the activity of different participants, we use several classifications for participant firms. Figure 2 summarizes the relationship between these classifications.

**Figure 2: Classifications of Participant Firms in the RGGI Marketplace**



- *Compliance-Oriented Entities* are compliance entities that appear to acquire and hold allowances primarily to satisfy their compliance obligations.
- *Investors with Compliance Obligations* are firms that have compliance obligations but which hold a number of allowances that exceeds their estimated compliance obligations by a margin suggesting they also buy for re-sale or some other investment purpose. These firms often transfer significant quantities of allowances to unaffiliated firms.<sup>1</sup>

<sup>1</sup> The assessment of whether a compliance entity holds a number of allowances that exceeds its compliance obligations by a margin that suggests they are also buying for re-sale or some other investment purpose is based on: (a) the entity's forecasted share of the total compliance obligations for the entire RGGI footprint through 2026, (b) the total number of allowances in circulation, and (c) consideration of the pattern of the entity's allowance transfers to unaffiliated firms versus affiliated firms. Since the designation of a compliance entity as an investor is based on a review of its transactions and holdings, the designation of a particular firm may change over time as more information becomes available.

## Market Monitor Report for Auction 49

- *Investors without Compliance Obligations* are firms without any compliance obligations.

These three categories form the basis for two overlapping groups.

- *Compliance Entities* – All firms with compliance obligations<sup>2</sup> and their affiliates.<sup>3</sup> Combines the first and second of the above categories.
- *Investors* – All firms which are assessed to be purchasing for investment rather than compliance purposes. Combines the second and third of the above categories.

In Auction 49, Compliance Entities purchased 74 percent of the allowances sold. In the first 49 RGGI auctions, Compliance Entities purchased 74 percent of the allowances sold. In Auction 49, Compliance-Oriented Entities purchased 66 percent of the allowances sold.

After settlement of allowances sold in Auction 49:

- Fifty-one percent of the allowances in circulation will be held by Compliance-Oriented Entities.
- Fifty-eight percent of the allowances in circulation are believed to be held for compliance purposes. The number of allowances that are believed to be held for compliance purposes includes 100 percent of the allowances held by Compliance-Oriented Entities and a portion of allowances held by Investors with Compliance Obligations.

The following table shows the quantity of allowances purchased by each bidder. The identity of each bidder is masked, and the bidders are ranked according to the amount of allowances awarded, from largest to smallest.

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<sup>2</sup> The Virginia governor has signed legislation providing for it to begin participating in RGGI beginning January 2021. Since this occurred, firms owning Budget Sources in Virginia have been treated as compliance entities in our reports.

<sup>3</sup> Affiliates are firms that: (i) have a parent-subsidary relationship with a compliance entity, (ii) are subsidiaries of a parent company that has a large interest in a compliance entity, (iii) have substantial control over the operation of a budget source and/or responsibility for acquiring RGGI allowances to satisfy its compliance obligations.

**Market Monitor Report for Auction 49**

**Table 1: Quantity of Allowances Awarded by Bidder**

Bidder	Number of Allowances Awarded
Bidder 1	2,805,785
Bidder 2	1,500,000
Bidder 3	1,348,000
Bidder 4	1,078,000
Bidder 5	1,000,000
Bidder 6	1,000,000
Bidder 7	872,000
Bidder 8	865,000
Bidder 9	800,000
Bidder 10	750,000
Bidder 11	500,000
Bidder 12	475,000
Bidder 13	460,000
Bidder 14	428,000
Bidder 15	400,000
Bidder 16	363,000
Bidder 17	300,000
Bidder 18	250,000
Bidder 19	200,000
Bidder 20	142,000
Bidder 21	124,000
Bidder 22	97,000
Bidder 23	95,000
Bidder 24	80,000
Bidder 25	61,000
Bidder 26	50,000
Bidder 27	39,000
Bidder 28	25,000
Bidder 29	25,000
Bidder 30	24,000
Bidder 31	19,000
Bidder 32	10,000
Bidder 33	4,000
Bidder 34	3,000





Market Monitor Report for Auction 49

**D. SUMMARY OF BID PRICES IN AUCTION 49**

*Bids were submitted across a wide range of prices in the auction and the clearing price of \$6.82 was relatively consistent with average bid prices submitted.*

The following table reports several statistics regarding the bid prices for bids submitted in Auction 49. The median and mean bid prices are weighted by the quantity of each bid.

<b>Bid Prices:</b>	
Minimum	\$2.32
Maximum	\$10.00
Average (Median)	\$6.72
Average (Mean)	\$6.67
Clearing Price:	\$6.82

## E. NAMES OF POTENTIAL BIDDERS IN AUCTION 49

In accordance with Sections 2.8 and 3 of the Auction Notice for CO<sub>2</sub> Allowance Auction 49, the Participating States are releasing the names of Potential Bidders in Auction 49. The states defined potential bidders as: "Each Applicant that has been qualified and submitted a complete *Intent to Bid*." The list of 63 Potential Bidders is as follows:

Astoria Energy, LLC	KMC Thermo, LLC
Blue Delta Energy, LLC	Koch Supply & Trading, LP
BP Products North America Inc.	Luminus Capital Partners Master Fund LP
Caithness Long Island, LLC	Macquarie Energy, LLC
Calpine Energy Services, LP	Mercuria Energy America, LLC
Carbon Lighthouse Association	Morgan Stanley Capital Group, Inc.
Castleton Commodities Merchant Trading, LP	National Grid Generation LLC dba National Grid
City of Vineland	Nautilus Power, LLC
Clay Hills Management Ltd.	NextEra Energy Marketing, LLC
Consolidated Edison Comp. of NY, Inc.	NRG Power Marketing LLC
CPV Maryland, LLC	Old Dominion Electric Cooperative
CPV Shore, LLC	Pacific Investment Management Company LLC
CPV Towantic, LLC	PCAF I LLC
CPV Valley, LLC	Pinelawn Power, LLC
Cricket Valley Energy Center, LLC	Pixelle Androscoggin LLC
Delaware City Refining Company, LLC	Power Authority of the State of New York
Dighton Power, LLC	PSEG Energy Resources & Trade LLC
DTE Energy Trading, Inc.	RBC
Dynegy Marketing and Trade, LLC	Revere Power, LLC
ECP Capital LP	Rhode Island State Energy Center, LP
Edgewood Energy, LLC	Selkirk Cogen Partners, LP
Empire Generating Co., LLC	Shell Energy North America (US), LP
Equus Power I, LP	Shoreham Energy, LLC
Exelon Generation Company, LLC	Statkraft US, LLC
Footprint Power Salem Harbor Development LP	Taunton Municipal Lighting Plant
Hawkeye Energy Greenport	Tenaska Power Services Co.
Indeck Energy Serv. of Silver Springs	Tenaska, Inc.
Indeck-Corinth Limited Partnership	Village of Freeport
Indeck-Olean Limited Partnership	Virginia Electric and Power Company
Indeck-Yerkes Limited Partnership	Vitol Inc.
Jamestown Board of Public Utilities	Wallingford Energy, LLC
Kendall Green Energy LLC	

**Petition of Virginia Electric and Power Company  
For approval of a rate adjustment clause, designated Rider RGGI, under  
§ 56-585.1 A 5 e of the Code of Virginia**

**Annual Revenue Requirement for the Rate Year Ending July 31, 2022**

*Instructions: Provide the annual revenue requirement over the duration of the proposed rate adjustment clause by year and by class.*

See attached Filing Schedule 46B, Statement 1.

20112013

Virginia Electric and Power Company  
Rider RGGI Revenue Requirement  
For the Rate Year August 1, 2021 to July 31, 2022  
(000s)

Line  
No.

1	Projected Cost Recovery Factor	\$ 168,260
2	Actual Cost True-Up Factor	<u>-</u>
3	Total Revenue Requirement	<u>\$ 168,260</u>

20112013

Virginia Electric and Power Company  
 Rider RGGI - Projected Cost Recovery Factor  
 For the Rate Year August 1, 2021 to July 31, 2022  
 (000s)

Line No.		Rider RGGI
1	Rate Base	\$ 53,824
2	Weighted Average Cost of Capital	6.876%
3	Net Operating Income	3,701
	Less Interest Expense on Debt	
4	Weighted Average Cost Of Debt	2.056%
5	Weighted Average Debt Component Of JDC Expense	0.009%
6	Total Weighted Average Cost Of Debt	2.065%
7	Rate Base	53,824
8	Revenue Requirement - Interest Expense On Debt	<u>1,111</u>
9	Net Income	2,589
10	Income Tax Gross-up Factor	<u>74.4%</u>
11	Revenue Requirement - Net Income Including Income Taxes	3,481
12	Revenue Requirement - Financing Costs	<u>4,593</u>
13	Revenue Requirement - Operating Expenses	163,668
14	Revenue Requirement Per Projected Cost Recovery Factor	<u>\$ 168,260</u>

Virginia Electric and Power Company  
Rider RGGI Rate Base  
For the Period September 2020 to December 2020  
(000s)

Line No.	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
1 Allowances Inventory	\$ -	\$ 6,798	\$ 6,798	\$ 6,798	\$ 13,708
2 Cash Working Capital	-	(43)	(43)	(43)	(43)
3 Subtotal	-	6,754	6,754	6,754	13,664
4 Factor 3 - Energy Factor	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%
5 Rate Base - Virginia Jurisdiction	-	5,427	5,427	5,427	10,979
6 Unamortized Deferred Costs	\$ -	\$ -	\$ -	\$ -	\$ -
7 Rate Base - Virginia Jurisdiction	\$ -	\$ 5,427	\$ 5,427	\$ 5,427	\$ 10,979

Virginia Electric and Power Company  
Rider RGGI Rate Base  
For the Period January 2021 to December 2021  
(000s)

Line No.	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
1 Allowances Inventory	\$ 4,541	\$ (4,974)	\$ 19,557	\$ 11,608	\$ 1,814	\$ 25,080	\$ 10,615	\$ (4,250)	\$ 19,800	\$ 13,766	\$ 5,227	\$ 28,592
2 Cash Working Capital	(167)	(167)	(167)	(167)	(167)	(167)	19,262	19,262	19,262	19,262	19,262	19,262
3 Subtotal	4,373	(5,142)	19,390	11,441	1,647	24,913	29,877	15,012	39,062	33,029	24,489	47,855
4 Factor 3 - Energy Factor	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%
5 Rate Base - Virginia Jurisdiction	3,514	(4,131)	15,580	9,193	1,323	20,017	24,006	12,062	31,386	26,538	19,677	38,451
6 Unamortized Deferred Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59,601	\$ 54,634	\$ 49,667	\$ 44,701	\$ 39,734	\$ 34,767
7 Rate Base - Virginia Jurisdiction	\$ 3,514	\$ (4,131)	\$ 15,580	\$ 9,193	\$ 1,323	\$ 79,618	\$ 78,641	\$ 61,730	\$ 76,087	\$ 66,272	\$ 54,444	\$ 68,251

Company Exhibit No. \_\_\_\_\_  
Witness: JCI  
Filing Schedule 46B  
Statement 1  
Page 5 of 13

20102102



Virginia Electric and Power Company  
Rider RGGI Rate Base  
For the Period January 2022 to July 2022  
(000s)

Line No.		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
1	Allowances Inventory	\$ 17,360	\$ 5,791	\$ 28,141	\$ 18,456	\$ 10,028	\$ 32,421	\$ 17,097
2	Cash Working Capital	20,607	20,607	20,607	20,607	20,607	20,607	20,607
3	Subtotal	\$ 37,967	\$ 26,398	\$ 48,748	\$ 39,063	\$ 30,635	\$ 53,028	\$ 37,704
4	Factor 3 - Energy Factor	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%	80.3494%
5	Rate Base - Virginia Jurisdiction	\$ 30,506	\$ 21,211	\$ 39,169	\$ 31,387	\$ 24,615	\$ 42,608	\$ 30,295
6	Unamortized Deferred Costs	\$ 29,800	\$ 24,834	\$ 19,867	\$ 14,900	\$ 9,933	\$ 4,967	\$ -
7	Rate Base - Virginia Jurisdiction	\$ 55,340	\$ 41,078	\$ 54,069	\$ 41,320	\$ 29,582	\$ 42,608	\$ 30,295

Virginia Electric and Power Company  
Rider RGGI Operating Expenses  
For the Rate Year August 1, 2021 to July 31, 2022  
(000s)

Line No.	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	System Total	Allocation Factor	Virginia Jurisdiction Total
Allowance Amortization	\$ 14,865	\$ 10,500	\$ 6,073	\$ 8,539	\$ 11,185	\$ 11,232	\$ 11,569	\$ 11,100	\$ 9,686	\$ 8,428	\$ 11,057	\$ 15,323	\$ 129,518	80.3494%	\$ 104,067
Deferred Cost Amortization (VA Jurisdiction)	4,967	4,967	4,967	4,967	4,967	4,967	4,967	4,967	4,967	4,967	4,967	4,967	59,601		59,601
Total Rate Year Expense															\$ 163,668

2017

[illegible]

Virginia Electric and Power Company  
 Rider RGGI Cash Working Capital  
 September 1, 2020 to December 31, 2020  
 (000s)

Line No.		Amount	Average Daily Amount	Expense (Lead) Lag Days	Revenue Lag	Net (Lead) Lag Days	Working Capital (Provided) Required
	Amortization Expense						
3	Allowance Amortization	-	-	-	39.1	39.1	-
4	Amortization of Regulatory Assets (Deferred Costs)	-	-	-	39.1	39.1	-
5	Pre RAC Cost Deferral	-	-	-	39.1	39.1	-
6	Pre RAC Cost Deferral - Debt Interest	(58)	(0.48)	-	39.1	39.1	(19)
7	Pre RAC Cost Deferral - Equity	(182)	(1.49)	(39.1)	39.1	-	-
8	Pre RAC Cost Deferral - JDC	(1)	(0.01)	(39.1)	39.1	-	-
12	Interest Expense	58	0.48	(90.9)	39.1	(51.9)	(25)
13	Preferred Dividends	-	-	(39.1)	39.1	-	-
14	JDC Expense	1	0.01	(39.1)	39.1	-	-
15	Income Available for Common Equity	182	1.49	(39.1)	39.1	-	-
16	Totals	-					(43)
17	Balance Sheet Items (A/P - Allowance Purchases)	13,708	37.55	-	-	-	-
18	System Cash Working Capital						(43)

Virginia Electric and Power Company  
 Rider RGGI Cash Working Capital  
 January 1, 2021 to July 31, 2021  
 (000s)

(000's)

Line No.	Amount	Average Daily Amount	Expense (Lead) Lag Days	Revenue Lag	Net (Lead) Lag Days	Working Capital (Provided) Required	
	Amortization Expense						
3	Allowance Amortization	-	-	-	39.1	39.1	-
4	Amortization of Regulatory Assets (Deferred Costs)	-	-	-	39.1	39.1	-
5	Pre RAC Cost Deferral	-	-	-	39.1	39.1	-
6	Pre RAC Cost Deferral - Debt Interest	(392)	(1.84)	-	39.1	39.1	(72)
7	Pre RAC Cost Deferral - Equity	(1,227)	(5.76)	(39.1)	39.1	-	-
8	Pre RAC Cost Deferral - JDC	(7)	(0.03)	(39.1)	39.1	-	-
12	Interest Expense	392	1.84	(90.9)	39.1	(51.9)	(95)
13	Preferred Dividends	-	-	(39.1)	39.1	-	-
14	JDC Expense	7	0.03	(39.1)	39.1	-	-
15	Income Available for Common Equity	1,227	5.76	(39.1)	39.1	-	-
16	Totals	-					(167)
17	Balance Sheet Items (A/P - Allowance Purchases)	69,100	378.63	-	-	-	-
18	System Cash Working Capital						(167)

20112012

Virginia Electric and Power Company  
Rider RGGI Cash Working Capital  
August 1, 2021 to December 31, 2021  
(000s)

Line No.		Amount	Average Daily Amount	Expense (Lead) Lag Days	Revenue Lag	Net (Lead) Lag Days	Working Capital (Provided) Required
	Amortization Expense						
3	Allowance Amortization	51,123	336.15	-	39.1	39.1	13,130
4	Amortization of Regulatory Assets (Deferred Costs)	24,834	163.29	-	39.1	39.1	6,378
5	Pre RAC Cost Deferral	-	-	-	39.1	39.1	-
6	Pre RAC Cost Deferral - Debt Interest	-	-	-	39.1	39.1	-
7	Pre RAC Cost Deferral - Equity	-	-	(39.1)	39.1	-	-
8	Pre RAC Cost Deferral - JDC	-	-	(39.1)	39.1	-	-
12	Interest Expense	721	4.74	(90.9)	39.1	(51.9)	(246)
13	Preferred Dividends	-	-	(39.1)	39.1	-	-
14	JDC Expense	13	0.08	(39.1)	39.1	-	-
15	Income Available for Common Equity	2,257	14.84	(39.1)	39.1	-	-
16	Totals	78,946					19,262
17	Balance Sheet Items (A/P - Allowance Purchases)	69,100	378.63	-	-	-	-
18	System Cash Working Capital						19,262

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Virginia Electric and Power Company  
Rider RGGI Cash Working Capital  
January 1, 2022 to July 31, 2022  
(000s)

<u>Line No.</u>		<u>Amount</u>	<u>Average Daily Amount</u>	<u>Expense (Lead) Lag Days</u>	<u>Revenue Lag</u>	<u>Net (Lead) Lag Days</u>	<u>Working Capital (Provided) Required</u>
	Amortization Expense						
3	Allowance Amortization	78,395	368.20	-	39.1	39.1	14,382
4	Amortization of Regulatory Assets (Deferred Costs)	34,767	163.29	-	39.1	39.1	6,378
5	Pre RAC Cost Deferral	-	-	-	39.1	39.1	-
6	Pre RAC Cost Deferral - Debt Interest	-	-	-	39.1	39.1	-
7	Pre RAC Cost Deferral - Equity	-	-	(39.1)	39.1	-	-
8	Pre RAC Cost Deferral - JDC	-	-	(39.1)	39.1	-	-
12	Interest Expense	628	2.95	(90.9)	39.1	(51.9)	(153)
13	Preferred Dividends	-	-	(39.1)	39.1	-	-
14	JDC Expense	11	0.05	(39.1)	39.1	-	-
15	Income Available for Common Equity	1,966	9.23	(39.1)	39.1	-	-
16	Totals	115,767					20,607
17	Balance Sheet Items (A/P - Allowance Purchases)	66,900	366.58	-	-	-	-
18	System Cash Working Capital						20,607

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**VIRGINIA ELECTRIC AND POWER COMPANY**  
**Actual Cost of Capital and Capital Structure**  
**As of December 31, 2019**

Line No.	Description	Amount	Percent	Annual Cost	Embedded Cost	Weighted Cost	Pre-Tax Weighted Cost
1	Total long-term debt	\$ 12,085,529,684	44.926%	\$ 538,619,437	4.457%	2.002%	
2	Short-term debt (13-month average)	<u>697,797,692</u>	<u>2.594%</u>	<u>14,591,675</u>	<u>2.091%</u>	<u>0.054%</u>	
3	Total debt	\$ 12,783,327,376	47.520%	553,211,111	4.328%	2.056%	2.056%
4	Total preferred stock	<u>-</u>	<u>0.000%</u>	<u>-</u>	<u>0.000%</u>	<u>0.000%</u>	
5	Common stock	\$ 5,737,401,834	21.328%		9.200%	1.962%	
6	Other paid-in capital	1,112,875,284	4.137%		9.200%	0.381%	
7	Retained earnings	7,168,179,892	26.647%		9.200%	2.452%	
	AOCI	(29,200,805)	-0.109%		9.200%	-0.010%	
8	Adjustments	<u>17,014,963</u>	<u>0.063%</u>		<u>9.200%</u>	<u>0.008%</u>	
9	Total common equity	\$ 14,008,271,168	52.066%		9.200%	4.790%	6.440%
	Job development tax credits						
10	Allocation: debt	\$ 51,492,357	0.191%		4.457%	0.009%	0.009%
11	Allocation: preferred stock	-	0.000%		0.000%	0.000%	
12	Allocation: equity	<u>59,675,987</u>	<u>0.222%</u>		<u>9.200%</u>	<u>0.020%</u>	0.027%
13	Total Job development tax credits	\$ 111,168,344	0.413%		7.003%	0.029%	
14	Total Capital	<u>\$ 26,900,766,888</u>	<u>100.000%</u>			<u>6.8755%</u>	8.533%

20112013



**Petition of Virginia Electric and Power Company  
For approval of a rate adjustment clause, designated Rider RGGI, under  
§ 56-585.1 A 5 e of the Code of Virginia**

**Accounting Procedures and Internal Controls**

*Instructions: Provide a detailed description of all significant accounting procedures and internal controls that the company will institute to identify all costs associated with each rate adjustment clause.*

In accordance with the rules governing utility rate applications and Schedule 46, Virginia Electric and Power Company (the "Company") is providing a description of its accounting procedures and internal controls that it will institute to identify compliance costs associated with the Regional Greenhouse Gas Initiative ("RGGI").

**Operations Procedures Overview**

The Company uses CBL Markets EMA (Environmental Management Account) as its system of record for trading RGGI carbon dioxide ("CO<sub>2</sub>") allowances. EMA captures commercial deal details and facilitates trade life cycle management from deal initiation to completion. EMA also delivers deal details to internal risk and credit management systems and facilitates invoicing and payment processing. The Company creates obligations and tracks progress towards RGGI interim and control period obligations in EMA. The system is also used to create custom reports and notifications.

**Accounting Procedures Overview**

The Company utilizes Excel to track the inventory of purchased allowances at a weighted average cost (WAC) and amortization as the supporting sub-ledger for the balance and activity recorded in the SAP general ledger. The balance of allowances and activity are recorded to an intangible asset account, Emissions CO<sub>2</sub> Allowances Held for Consumption. The WAC is determined monthly based on the total cost of purchased allowances that have not been amortized divided by the number of allowances held. Monthly amortization is based on the then current WAC. Allowances are amortized in the periods the emissions are generated.

The system amortization expense will be allocated to the respective jurisdictions using the energy-usage related allocation factor described in the rate adjustment clause filing. The consumed tons will be retired following each three-year control period. This typically will occur in the second quarter of such year and will include an entry to clear the accumulated amortization account against the intangible asset account. This is necessary to keep the balances in the accounts from growing indefinitely.

### Company Internal Controls

The Company has numerous internal controls in place to verify the accuracy, timeliness, and validity of information recorded in its financial books. These internal controls ensure that costs are properly recorded in accordance with Company policies, FERC's Uniform System of Accounts, and U.S. Generally Accepted Accounting Principles (GAAP). The Company audits its internal controls each year as part of its annual audit of internal control over financial reporting. Due to a permanent exemption under the Dodd-Frank Act, the Company's independent auditors are no longer required to audit and attest to the effectiveness of the Company's internal controls over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). For the Report of Independent Registered Public Accounting Firm on the effectiveness of internal control over financial reporting for Dominion Energy, Inc., the Company's parent company, see the companies' combined Annual Report on Form 10-K filed with the United States Securities and Exchange Commission for the year ended December 31, 2019.

These internal controls include areas such as approval thresholds for performance, payment, and entry into the SAP general ledger system. Multiple levels of review are performed for cut-off, validity, and accuracy of transactional data, account balances, and presentation of the resulting financial information. In addition, various analytics are prepared such as actual costs compared to budget, forecast, and prior year for both income statement and balance sheet and reviewed with management. Depending on the nature and materiality of any items identified, adjustments may be posted in the current or subsequent months.

**Petition of Virginia Electric and Power Company  
For approval of a rate adjustment clause, designated Rider RGGI, under  
§ 56-585.1 A 5 e of the Code of Virginia**

**Allocation of the Revenue Requirement and the Rate Design  
for the Rate Year Ending July 31, 2022**

*Instructions: Provide detailed information relative to the applicant's methodology for allocating the revenue requirement among rate classes and the design of the class rates.*

For the purpose of this filing, the Company has prepared an energy allocation factor. In Schedule 1 of the testimony of Company Witness Paul B. Haynes, an allocation factor is developed using the forecasted energy usage for the rate year, which is the twelve months ended July 31, 2022. The allocation to the Virginia jurisdiction is 80.3494%.

The Company proposes that the costs be recovered through a uniform charge per kWh from all bundled service customers in the Virginia jurisdiction. Schedule 2 of the testimony of Company Witness Haynes provides the calculation of the proposed Rider RGGI recovery rate. The total Virginia jurisdictional estimated Rider RGGI revenue requirement of approximately \$168.3 million provided in Schedule 1 of the testimony of Company Witness John. C. Ingram is divided by the total estimated Virginia jurisdictional kilowatt-hour ("kWh") sales for August 1, 2021 through July 31, 2022. The result is the proposed Rider RGGI of \$0.002388/kWh, which will be applicable to all Virginia jurisdictional bundled service customers.