

October 28, 2019

**VIA ELECTRONIC FILING**

Ms. Kimberley A. Campbell, Chief Clerk  
North Carolina Utilities Commission  
Dobbs Building  
430 North Salisbury Street  
Raleigh, North Carolina 27603

**Re: Docket No. E-100, Sub 157  
2019 Integrated Resource Plan Update Supplemental Filing**

Dear Ms. Campbell:

Enclosed for filing on behalf of Virginia Electric and Power Company, d/b/a Dominion Energy North Carolina (“DENC” or the “Company”) is DENC’s 2019 IRP Update Supplemental Filing.

On August 29, 2019, pursuant to §§ 62-2 and 62-110.1 of the North Carolina General Statutes and Rule R8-60(h)(1) of the Rules and Regulations of the North Carolina Utilities Commission (the “Commission”), DENC filed its 2019 Integrated Resource Plan Update Filing (“2019 Update”). In the cover letter for the 2019 Update, DENC explained that it was “working diligently to complete the rate impact analysis of the Alternative Plans contained in this 2019 Update, and to provide the information regarding savings projections,” and would make a supplemental filing with these two pieces of information within 60 days of the 2019 Update.

The Company is now providing this information in Attachment A and Attachment B, attached hereto. Attachment A contains the rate impact analysis of the Alternative Plans contained in the Company’s 2019 Update. Attachment B contains information regarding the Company’s savings projections. These items were discussed on pages 14 and 19, respectively, of DENC’s Reply Comments filed on July 5, 2019, in this proceeding.

Please do not hesitate to contact me should you have any questions. Thank you for your assistance with this matter.

Very truly yours,

/s/Andrea R. Kells

ARK:mth

Enclosures

cc: Tim Dodge - NC Utilities Commission Public Staff  
Lucy Edmondson - NC Utilities Commission Public Staff

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Oct 28 2019

# **RATE IMPACT OF 2019 UPDATE ALTERNATIVE PLANS**

Note: The results of this analysis reflect the nominal dollar impact and percentage increase for a typical residential customer, using 1,000 kWh per month each year starting in 2020 through 2044.

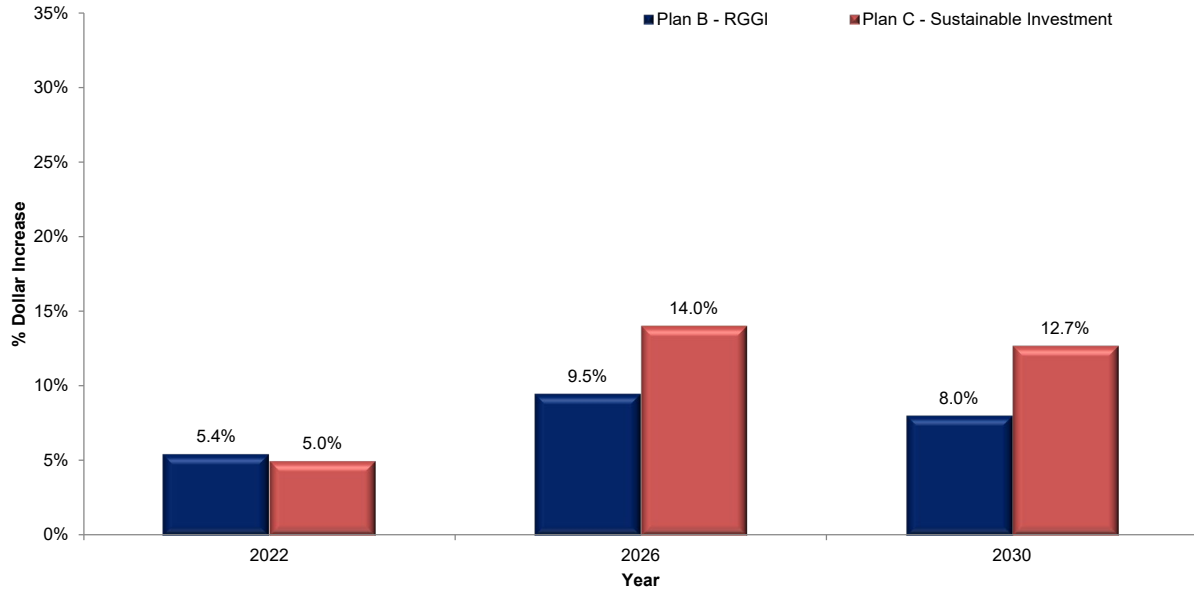
**Figure 6.6.1 – Monthly Rate Increase of Alternative Plans vs Plan A**

	Increase Compared to Plan A: No CO <sub>2</sub> Tax (\$)	
	Plan B - RGGI	Plan C - Sustainable Investment
2020	2.32	3.05
2021	4.72	3.90
2022	6.73	6.19
2023	18.80	18.79
2024	9.59	10.70
2025	16.36	18.68
2026	12.23	18.16
2027	13.39	18.22
2028	13.41	18.28
2029	12.18	17.03
2030	10.55	16.73
2031	10.11	15.47
2032	10.12	15.14
2033	9.49	14.16
2034	9.29	13.75
2035	9.11	13.30
2036	8.90	12.86
2037	8.47	12.40
2038	8.57	12.38
2039	8.44	11.42
2040	9.08	11.57
2041	9.06	11.32
2042	9.31	11.26
2043	9.12	11.01
2044	9.25	10.77

**Figure 6.6.2 – Monthly Rate Increase of Alternative Plans vs Plan A**

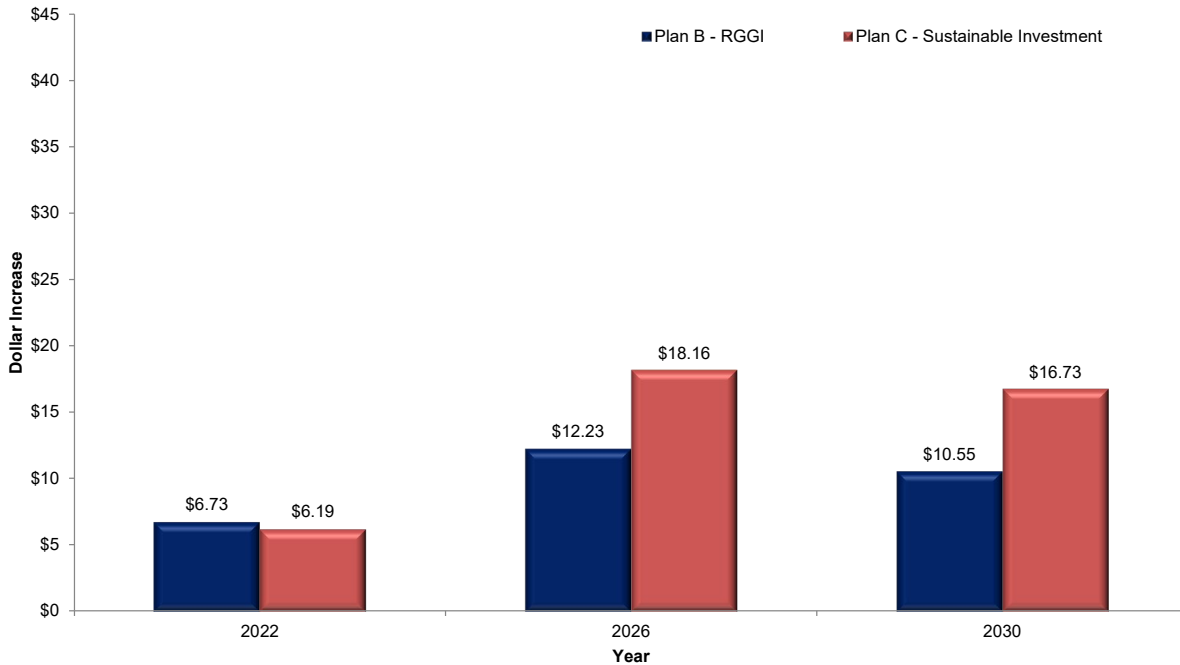
	Increase Compared to Plan A: No CO <sub>2</sub> Tax (%)	
	Plan B - RGGI	Plan C - Sustainable Investment
2020	2.0%	2.7%
2021	3.9%	3.3%
2022	5.4%	5.0%
2023	14.7%	14.7%
2024	7.4%	8.3%
2025	12.7%	14.4%
2026	9.5%	14.0%
2027	10.3%	14.0%
2028	10.3%	14.0%
2029	9.3%	13.0%
2030	8.0%	12.7%
2031	7.5%	11.5%
2032	7.5%	11.3%
2033	7.0%	10.4%
2034	6.8%	10.1%
2035	6.7%	9.8%
2036	6.5%	9.4%
2037	6.2%	9.1%
2038	6.3%	9.1%
2039	6.2%	8.3%
2040	6.7%	8.5%
2041	6.6%	8.3%
2042	6.8%	8.2%
2043	6.7%	8.1%
2044	6.8%	7.9%

**Figure 6.6.3 – Residential Monthly Bill Increase for Alternative Plans compared to Plan A**



\* Relative to Plan A - No CO2 Tax

**Figure 6.6.4 – Residential Monthly Bill Increase for Alternative Plans compared to Plan A**



\* Relative to Plan A - No CO2 Tax

Figure 6.6.5 – Residential Monthly Bill Increase for Alternative Plans compared to Plan A

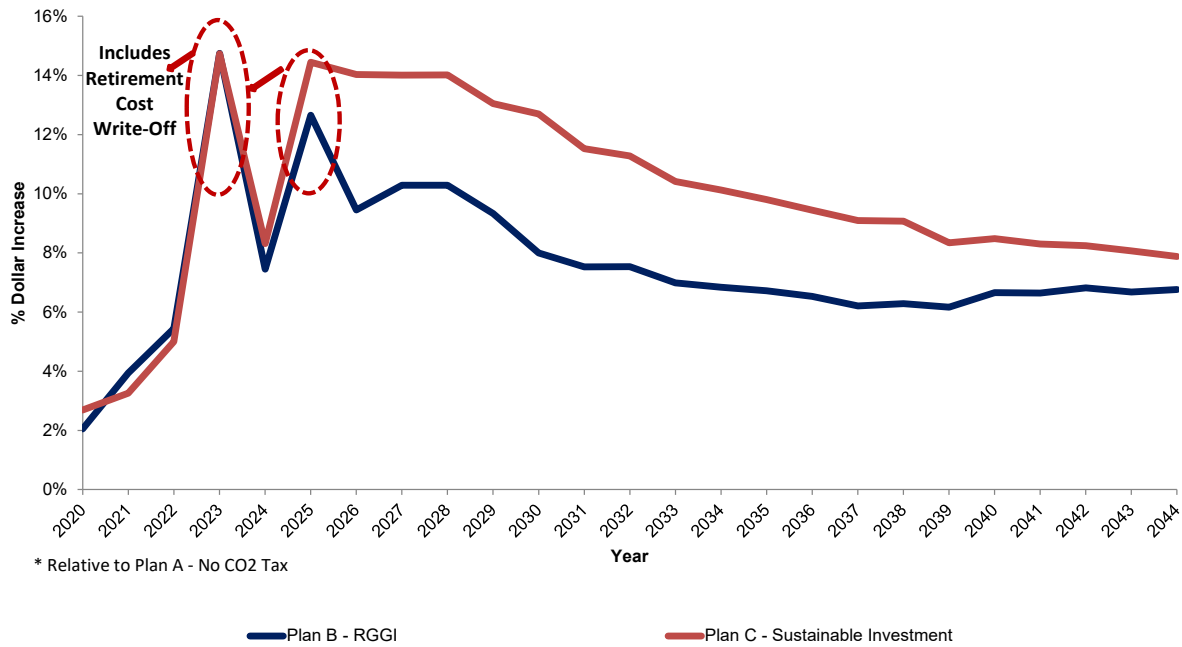
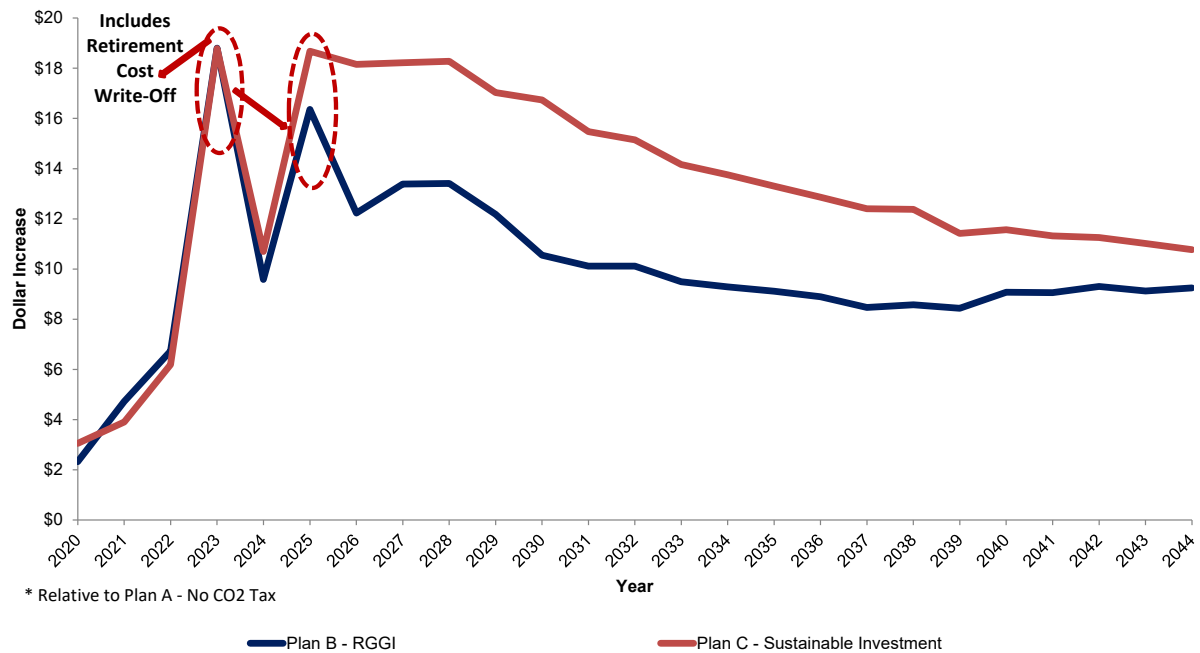


Figure 6.6.6 – Residential Monthly Bill Increase for Alternative Plans compared to Plan A



### SAVINGS PROJECTIONS ANALYSIS

The difference in energy efficiency (“EE”) projected savings between the 2018 Compliance Filing and the 2019 Update exceeds 10%. Accordingly, the Company provides the following explanation.

As an initial matter, the level of EE savings in both the 2018 Compliance Filing and the 2019 Update includes (1) currently active and approved EE programs as well as programs closed to new participation that are still producing energy savings through measures installed prior to program closure; (2) the EE programs that were approved by the Virginia State Corporation Commission in Case No. PUR-2018-00168 (listed as pending approval in the 2018 Compliance Filing); and (3) a “generic” block of EE program(s) to account for the remaining balance of an investment level of \$870 million pursuant to the Virginia State Corporation Commission’s December 7, 2018 Order in Case No. PUR-2018-00065. The generic block of EE was designed using a price of \$200/MWh in both cases. In prior Plans and Updates—including the originally filed 2018 Plan—the Company did not include the third category noted above of the generic block of EE in savings projections.

Focusing on categories (1) and (2) – the Company-identified and specific DSM programs – the capacity reductions projected in the 2019 Update are lower than the projections in the 2018 Compliance Filing. Specifically, the total capacity reduction in 2028 from these identified DSM programs was 357 MW in the 2018 Compliance Filing and is 164 MW in this 2019 Update. This represents approximately a 54% decrease in projected demand reductions. Reasons for this reduction in projected capacity savings stem from the 2019 Update incorporating evaluation, measurement and verification (“EM&V”) results through December 31, 2018, for Company-sponsored programs. The inputs include historical penetrations, as well as revisions to loadshapes and kW and kWh projections for programs. EM&V resulted in the following reductions:

- Penetrations being lower than planned for the Non-residential Window Film and Non-residential Heating & Cooling Efficiency Programs;
- The Non-Residential Prescriptive Program has not realized adoption of high energy and high capacity reduction measures;
- The AC Cycling Program realized a lower peak kW impact; and
- The North Carolina-only LED Lighting Program had a delay in start, resulting in less peak reductions.

The projected energy reductions related to categories (1) and (2) in the 2019 Update are higher as compared to the 2018 Compliance Filing. Specifically, the total energy savings in 2028 from these identified DSM programs were 928 MWh in the 2018 Compliance Filing and are 1,020 MWh in this 2019 Update. This represents approximately a 10% increase in projected energy savings. Again, as a result of using the latest EM&V information, inputs to historical penetrations, loadshapes, and kW and kWh projections for programs were updated. The largest changes related to energy savings are due to greater penetrations and energy savings in the Small Business Improvement Program and greater penetrations in the Income and Age Qualifying Home Improvement Program.

The Company is not currently aware of any changes in EE-related technologies, regulatory standards, or other trends that would impact future projections of EE savings.

## CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing 2019 IRP Update Supplemental Filing, as filed in Docket No. E-100, Sub 157, were served electronically or via U.S. mail, first-class, postage prepaid, upon all parties of record.

This, the 28<sup>th</sup> day of October, 2019.

/s/Nicholas A. Dantonio

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