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November 1, 2019

VIA HAND DELIVERY

Ms. Kimberly B. Pate
Director, Division of Public Utility Accounting & Finance

Mr. William F. Stephens
Director, Division of Energy Regulation

State Corporation Commission
1300 E. Main Street
Richmond, Virginia 23219

Dominion Virginia Power's
Annual Report to the State Corporation Commission on Renewable Energy,
in accordance with § 56-585.2 H of the Code of Virginia

Dear Ms. Pate and Mr. Stephens:

In accordance with§ 56-585.2 H of the Code of Virginia, Virginia Electric and Power Company d/b/a Dominion Energy Virginia ("Dominion Energy" or "the Company") submits its 2018 Annual Report to the State Corporation Commission ("Commission") on Renewable Energy.

In 2018 Dominion Energy Virginia met and exceeded its 2018 Virginia RPS Plan renewable target of 3,032,305 megawatt hours through implementation of its RPS Plan approved by the Commission as illustrated in Exhibit 2 of the attached Annual Report. Renewable generation from the Company's own resources (including through contracts with Non-Utility Generators) provide 31 percent of the Company's 2018 RPS Goal, some of which was banked and/or optimized as permitted by Va. Code § 56-585.2.

Legislation passed by the 2012 Virginia General Assembly provides that utilities participating in a RPS program may meet up to 20 percent of their annual RPS Goals using RECs issued by the Commission for qualified investments in renewable and alternative

energyresearch and development activities. The Company met and exceeded its 2018 Virginia RPS renewable target of 3,032,305 MWh through implementation of its RPS Plan approved by the Commission which is illustrated in Exhibit 3 of the attached report. The Company began 2018 with banked renewable energy and RECs of 4,252,354 MWh and expects to have a bank of approximately 4,113,477 MWh of renewable energy and RECs toward future RPS targets at year – end 2019.

Beyond development of specific projects, the Company continues to encourage its customers to support renewable energy generation resources through voluntary participation in several renewable energy options, including its Rider G Renewable Energy Program, which offers customers a companion rate for purchase and retirement of RECs equal to all or a portion of a customer's monthly consumption.

Thank you for the opportunity to provide this information. If you or your staff members have any questions, please contact me.

Sincerely,

Lauren W. Biskie
Senior Counsel

Virginia Electric and Power Company

d/b/a

Dominion Energy Virginia

Annual Report to the State Corporation Commission

on Renewable Energy, in accordance with

§ 56-585.2.H of the Code of Virginia

November 1, 2019

I. INTRODUCTION

Pursuant to § 56-585.2 H of the Code of Virginia ("Va. Code"), Virginia Electric and Power Company ("Dominion Energy Virginia" or the "Company") submits this Annual Report on Renewable Energy ("Report") to the Virginia State Corporation Commission ("Commission"). Va. Code § 56-585.2 H requires each investor-owned incumbent electric utility in the Commonwealth to report to the Commission annually on (i) its efforts to meet renewable portfolio standard ("RPS") goals ("RPS Goals"); (ii) its generation of renewable energy; and (iii) advances in renewable generation technology that affect the utility's activities. Exhibit 1 to this Annual Report shows the Company's RPS compliance position for meeting its RPS Goals, including 2018 actual compliance and 2019-2029 forecasted compliance. This Annual Report also describes generally the Company's efforts to support renewable energy development as well as advances in renewable generation technology.

2018 RPS Compliance

The Company met and exceeded its 2018 Virginia RPS Plan renewable target of 3,032,305 MWh through implementation of its RPS Plan approved by the Commission as illustrated in Exhibit 2 of this Annual Report (as verified by C. Eric McMillan). Renewable generation from the Company's own resources (including through contracts with Non-Utility Generators ("NUGs")) provided 31 percent of Dominion Energy Virginia's 2018 RPS Goal, some of which was banked and/or optimized as permitted by Va. Code § 56-585.2.

II. EFFORTS TO MEET RENEWABLE PORTFOLIO STANDARD GOALS

A. Statutory Guidance

For the purposes of complying with Virginia's RPS Goals as set forth in Va. Code § 56-585.2 *et seq.*, "renewable energy" is defined (by reference to Va. Code § 56-576) as:

energy derived from sunlight, wind, falling water, biomass, sustainable or otherwise, (the definitions of which shall be liberally construed), energy from waste, land fill gas, municipal solid waste, wave motion, tides, and geothermal power, and does not include energy derived from coal, oil, natural gas, or nuclear power. Renewable energy shall also include the proportion of the thermal or electric energy from a facility that results from the co-firing of biomass.

Va. Code § 56-585.2 further defines how such renewable energy can qualify for compliance with the Virginia RPS Goals. Such renewable energy must be:

- generated in the Commonwealth or in the interconnection region of the regional transmission entity of which the participating utility is a member, as it may change from time to time, and purchased by a participating utility under a power purchase agreement; provided, however, that if such agreement was executed on or after July 1, 2013, the agreement shall expressly transfer ownership of renewable attributes, in addition to ownership of the energy, to the participating utility;

- generated by a public utility providing electric service in the Commonwealth from a facility in which the public utility owns at least a 49 percent interest and that is located in the Commonwealth, in the interconnection region of the regional transmission entity of which the participating utility is a member, or in a control area adjacent to such interconnection region; or

- represented by renewable energy certificates ("RECs").[1]

- "Renewable energy" shall not include electricity generated from pumped storage, but shall include run-of-river generation from a combined pumped-storage and run-of-river facility.

Va. Code § 56-585.2 B provides that "[a]ny investor-owned incumbent electric utility may apply to the Commission for approval to participate in a renewable energy portfolio standard program" and that the "Commission shall approve such application if the applicant demonstrates that it has a reasonable expectation of achieving 12 percent of its base year electric

[1] "Renewable energy certificate" means either (i) a certificate issued by an affiliate of the regional transmission entity of which the participating utility is a member, as it may change from time to time, or any successor to such affiliate, and held or acquired by such utility, that validates the generation of renewable energy by eligible sources in the interconnection region of the regional transmission entity or (ii) a certificate issued by the Commission pursuant to subsection J and held or acquired by a participating utility, that validates a qualified investment made by the participating utility. Va. Code § 56-585.2.

energy sales from renewable energy sources during calendar year 2022, and 15 percent of its base year electric energy sales from renewable energy sources during calendar year 2025 . . . ."

Va. Code § 56-585.2 D sets forth the RPS Goals:

- RPS Goal I: In calendar year 2010, 4 percent of total electric energy sold in the base year.
- RPS Goal II: For calendar years 2011 through 2015, inclusive, an average of 4 percent of total electric energy sold in the base year, and in calendar year 2016, 7 percent of total electric energy sold in the base year.
- RPS Goal III: For calendar years 2017 through 2021, inclusive, an average of 7 percent of total electric energy sold in the base year, and in calendar year 2022, 12 percent of total electric energy sold in the base year.
- RPS Goal IV: For calendar years 2023 and 2024, inclusive, an average of 12 percent of total electric energy sold in the base year, and in calendar year 2025, 15 percent of total electric energy sold in the base year.

B. Dominion Energy Virginia's RPS Plan

On July 28, 2009, the Company submitted its Application for Approval to Participate in a Renewable Energy Portfolio Standard Program Pursuant to Va. Code § 56-585.2 (the "Application"), in Case No. PUE-2009-00082. The Application represented the Company's initial filing for approval of its RPS Plan. On May 18, 2010, the Commission issued its Final Order (the "Final Order") in that initial proceeding, finding that the Company has demonstrated that it has a reasonable expectation of achieving 12 percent of its base year electric energy sales from renewable energy sources during calendar year 2022, and 15 percent of its base year electric energy sales from renewable energy sources during calendar year 2025, and granting Dominion Energy Virginia's Application seeking approval to participate in a RPS program.

Any references to MWh goals, renewable generation and REC transactions set forth in this Annual Report are shown at the Virginia Jurisdictional percentage level and not at the Total

System level. The 2018 Virginia Jurisdictional percentage is 80.2499 percent of the Total System level.[2]

As set forth in the Company's approved RPS Plan, the Company plans to use existing renewable energy sources (including that renewable energy provided by contract with NUGs),[3] to develop new renewable energy generation facilities where feasible, and to purchase RECs to achieve the RPS Goals. Specifically, the renewable energy from existing renewable energy sources identified in the 2018 Integrated Resource Plan, are estimated to be approximately 500 thousand MWh in 2022 and 2025.[4] The Company also plans to develop additional new renewable generation facilities where feasible or purchase approximately 4.7 million RECs in 2022 and 6 million RECs in 2025 to meet and comply with the 2022 and 2025 targets of 5.2 million MWh and 6.5 million MWh, respectively.

The Company met RPS Goal I in 2010[5] as well as RPS Goal II for 2011 through 2015 and RPS Goal III for 2016 and 2017. The Company's RPS Plan will also meet the interim RPS Goals III and IV as described in the RPS Application. Exhibit 1 to this Annual Report shows the Company's RPS compliance position for meeting its RPS Goals, including 2018 actual compliance and 2019-2029 forecasted compliance.

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[2] Rounded for the purposes of this report to 80.25 percent. This percentage is based on the Company's most recent cost of service study for the 12 months ending December 31, 2018. This allocation factor is used as the basis for apportioning existing generation MWh for inclusion in its Virginia RPS Plan.

[3] The Commission approved the Company's use of renewable energy from NUGs where the contract on renewable attributes was silent in its Order on Petition, *Petition of Virginia Electric and Power Company for a declaratory judgment*, Case No. PUE-2010-00132 (June 17, 2011). Legislation passed in 2013 requires "if such agreement was executed on or after July 1, 2013, the agreement shall expressly transfer ownership of renewable attributes, in addition to ownership of the energy, to the participating utility . . . ." Virginia Acts of Assembly, 2013 Session, Chapters 308 and 403.

[4] At this time, most of the NUG contracts have expiration dates prior to 2025.

[5] *Application of Virginia Electric and Power Company for a 2011 biennial review of the rates, terms, and conditions for the provision of generation, distribution, and transmission services pursuant to § 56-585.1 A of the Code of Virginia*, Case. No, PUE-2011-00027, Final Order at 22 (Nov. 30, 2011).

1. Total Electric Energy Sold in the Base Year

Pursuant to Va. Code § 56-585.2 A, "[t]otal electric energy sold in the base year" is "total electric energy sold to Virginia jurisdictional retail customers by a participating utility in calendar year 2007, excluding an amount equivalent to the average of the annual percentages of the electric energy that was supplied to such customers from nuclear generating plants for the calendar years 2004 through 2006." The Company has calculated its total electric energy sold in the base year as follows:

Electric Energy Sold to Retail Customers in 2007 (Virginia Jurisdiction)	64,621,534 MWh
Three-year Average (2004-2006) Nuclear Generation (Virginia Jurisdiction)	21,302,885 MWh
Total Electric Energy Sold in the Base Year (Target Baseline)	43,318,649 MWh

2. RPS Goals for the Years 2011 Through 2025

The Company's RPS Goals were established and approved in Case No. PUE-2009-00082 by multiplying the total electric energy sold in the base year (described above) by the RPS Goals for the years 2011 through 2025.

Pursuant to Va. Code § 56-585.2 D, the RPS Goals II-IV are based on multiyear averages. The Company's RPS Goals for each individual year as represented in MWh (or average MWh for a group of years) are as follows:

Year	**2011- 2015**	**2016**	**2017-2021**	**2022**	**2023-24**	**2025**
Percent	4% Average	7%	7% Average	12%	12% Average	15%
Goal	1,732,746	3,032,305	3,032,305	5,198,238	5,198,238	6,497,797

3. Resources to Fulfill the RPS Goals

a. Existing DEV Renewable Energy Generation Facilities Included in Approved RPS Plan:[6]

Existing Renewable Energy Facilities Owned by Dominion Energy Virginia			
Facility	**State**	**Capacity**	**Fuel**
Gaston	NC	220 MW	Hydroelectric
Roanoke Rapids	NC	95 MW	Hydroelectric
Cushaw[7]	VA	2 MW	Hydroelectric
North Anna	VA	1 MW	Hydroelectric
Pittsylvania[8]	VA	83 MW	Biomass
Subtotal		318 MW	Hydroelectric
Subtotal		83 MW	Biomass
Total		401 MW	

Pursuant to Va. Code § 56-585.2 F, utilities participating in a RPS program are permitted to use a combined 1.5 million green tons of certain tree-based material, as defined in the statute.[9] In its Final Order approving the Company's RPS Plan, the Commission determined that Dominion Energy Virginia's *pro rata* share of the 1.5 million ton restriction for certain green tree-based materials is 73.929 percent or 1,108,940 tons. Since the Company's Pittsylvania biomass facility is grandfathered as an existing facility under the statute, the Company has not burned any incremental tree-based material subject to the 1.5 million ton limitation in 2014.

b. NUG Renewable Energy Resources

In addition to Company-owned resources, Dominion Energy Virginia has existing renewable energy resources in the form of long-term contracts with various renewable energy

[6] Based on the Company's most recent cost of service study for the 12 months ending December 31, 2018, the Virginia Jurisdiction is responsible for approximately 80.25 percent of the Company's electricity demand, and the Company used this allocation factor as the basis for apportioning approximately 80.25 percent of the existing generation MWh for inclusion in its Virginia RPS Plan.
[7] The Cushaw generation facility was sold as of November 20, 2018.
[8] The Company announced retirement of the Pittsylvania generation facility in March 2019.
[9] Va. Code § 56-585.2 F.

NUGs. In its RPS Application, the Company took the position that the NUG contracts for renewable energy include all aspects of that energy, including the renewable attributes. In Case No. PUE-2010-00132, the Commission held that the Company should apply the NUG renewable energy as part of its RPS Plan where the contract was silent on ownership of such renewable attributes. As a result, the Company initially banked the renewable energy generation of 1.9 million MWh produced by qualifying NUGs from 2010-2012. Subsequently, the Company applied approximately 1 million of these MWh toward its 2013 RPS compliance, 0.8 million MWh in 2014, 0.7 million MWh in 2015, and 0.8 million MWh in 2016. The remaining 0.2 million MWh of banked renewable energy from NUGs was applied by the Company towards its 2017 RPS compliance. Because the Commission did not make a specific determination regarding the ownership of the NUG RECs (which may no longer have any value if the Company has the right to use the renewable attributes through application of the renewable energy through it RPS plan), it is unlikely that the Company will be able to optimize the NUG renewable energy where the Company did not also have rights to the RECs.[10] Furthermore, through amendments to Va. Code 56-585.2, PPAs executed on or after July 1, 2013 must expressly transfer ownership of renewable attributes to the utility.[11]

c. New Renewable Energy Sources

As described in the Company's 2019 update ("2019 Update") to its 2018 Integrated Resource Plan,[12] renewable resources are becoming a more cost-effective means of meeting the growing energy demands of customers. All three of the options presented in the 2019 Update call for the potential development of 840 megawatts ("MW") of additional solar capacity by 2022.

[10] *See infra* n.2.
[11] *See* Chapter 308 of the 2013 Acts of the Assembly.
[12] Case No. PUR-2019-00141

The Virginia General Assembly affirmed the growing importance of renewable energy generation in passing the Grid Transformation and Security Act of 2018 (the "GTSA"). The law found that up to 5,000 MW of utility-scale electric generating facilities powered by solar and wind energy statewide is in the public interest, along with up to an additional 500 MW of non-utility scale solar or wind generating facilities, including rooftop solar installations.

In addition, in March 2019 the Company put forth a five-year plan that includes development of renewable resources such as solar photovoltaic ("PV") resources, and offshore wind. Dominion Energy Virginia continues to pursue offshore wind development in a prudent manner for its customers and for the state's economic development. Offshore wind has the potential to provide a scalable renewable resource if it can be achieved at reasonable cost to customers. To help determine how this can be accomplished the Company is involved in two active projects: (i) the Coastal Virginia Offshore Wind (CVOW) project and (ii) commercial development in the Virginia Wind Energy Area (WEA), both of which are located approximately 27 miles off the coast of Virginia.

The development of offshore wind by the Company is discussed in more detail in Section IV.B. of this Report.

d. Purchase of RECs

After counting the MWh from the existing renewable energy sources, the RPS Plan calls for the Company to fulfill any deficit by purchasing lower cost RECs that fit within the definition of Va. Code § 56-585.2. Though Virginia law makes no distinction regarding types of RECs based on the source of renewable energy, most jurisdictions and markets do make such distinctions, and currently these distinctions impact the valuation of the RECs. The market price of individual RECs is based on a variety of factors, including energy source. The Company

expects that it will be able to fully satisfy the RPS Goals III and IV through the Company's existing renewable generation portfolio, new renewable generation facilities and the purchase of lower cost RECs.

e. Banking of Excess Renewable Energy and/or RECs

Under the RPS Plan, the Company will bank any excess amounts of renewable energy and/or RECs for application in future years in which there is a deficit pursuant to Va. Code § 56-585.2 D. Section 56-585.2 D allows a utility to apply renewable energy sales or RECs acquired during the periods covered by any RPS goal that are in excess of the sales requirement for that goal to the sales requirements for a future RPS goal in the five calendar years after the renewable energy was generated or the renewable energy certificates were created, except that a utility shall be able to apply renewable energy certificates acquired by the utility prior to January 1, 2014.

C. Application of the Renewable Resources to meet the Company's RPS Plan

The Company's RPS Plan will permit the Company to meet its RPS Goals.

1. 2018 Renewable Energy Generated & REC Transactions

The Company met and exceeded its 2018 Virginia RPS Plan renewable target of 3,032,305 MWh through implementation of its RPS Plan approved by the Commission as illustrated in Exhibit 2 of this report. The Company achieved compliance by applying 699,481 RECs or Renewable Energy created by Company-owned facilities, 2,201,837 purchased RECs, and 133,987 MWh of renewable energy from NUGs.

Company-generated renewable generation (including NUGs) provided 31 percent of Dominion Energy Virginia's 2018 RPS Goal, of which some of this was banked and/or optimized.

Pursuant to Va. Code § 56-585.2 H the breakdown of the Company's efforts to meet its RPS goals for 2018 is as follows:

- § 56-585.2 H 1.a. – A list of all states where the purchased or owned renewable energy was generated, specifying the number of megawatt hours or renewable energy certificates originating from each state.

State	**Totals**	Applied	Banked	Optimized
PA	**861,538**	637,269	224,269	0
MD	**949,005**	0	949,005	0
NC	**697,532**	697,532	0	0
VA	**4,861,546**	1,700,504	3,079,079	81,963
Total	**7,369,621**	3,035,305	4,252,353	81,963

- § 56-585.2 H 1.b. – A list of the decades in which the purchased or owned renewable energy generating units were placed in service, specifying the number of megawatt hours or renewable energy certificates originating from those units.

Decade	**Totals**	Applied	Banked	Optimized
1910s	**47,607**	16,064	31,543	0
1920s	**986,398**	18,936	967,462	0
1930s	**238,562**	158,608	79271	683
1940s	**19,003**	18,708	295	0
1950s	**299,745**	299,745	0	0
1960s	**397,787**	397,787	0	0
1980s	**740,077**	493,666	246,411	0
1990s	**596,351**	302,269	212,802	81,280
2010s	**4,044,091**	1,329,522	2,714,569	0
Total	**7,369,621**	3,035,305	4,252,353	81,963

- § 56-585.2 H 1.c. – A list of fuel types used to generate the purchased or owned renewable energy, specifying the number of megawatt hours or renewable energy certificates originating from each fuel type.

Fuel Type	**Totals**	Applied	Banked	Optimized
Hydro	**2,377,847**	1,034,481	1,342,683	683
MSW	**847,043**	671,302	175,741	0
Biomass (Wood Waste)	**81,280**	0	0	81,280
Landfill Gas	**19,360**	0	19,360	0
Thermal	**4,044,091**	1,329,522	2,714,569	0
Total	**7,369,621**	3,035,305	4,252,353	81,963

2. *2019 Renewable Energy Generated & REC Transactions*

The Company will meet or exceed its 2019 Virginia RPS Plan renewable target of 3,032,305 MWh through implementation of its RPS Plan approved by the Commission which is illustrated in Exhibit 3.

a. Company-Owned Facilities

Total renewable energy production for 2019, through September 30, 2019, from renewable energy facilities owned by the Company and included in the RPS Plan was 489,222 MWh. The Company estimates the total renewable energy production from these resources for calendar year 2019 will be 577,499 MWh.

b. NUGs

The Company has determined that the renewable energy production from contracted NUGs year-to-date through September 30, 2019 is 114,291 MWh. The Company estimates the total qualified renewable energy production from existing contracted NUGs for calendar year 2019 will be 148,681 MWh. Any renewable energy not needed to meet the 2019 Goal will be banked for future use as permitted by statute.

c. 2019 REC Transactions (Purchase for Virginia RPS Compliance/Sales for Optimization)

The Company's REC transactions for 2019, through September 30, 2019, are summarized as follows:

- 0 Company-generated higher value RECs optimized
- 1,767,250 RECs purchased

d. Banking of Excess Renewable Energy and/or RECs

The Company began 2019 with banked renewable energy and RECs of 4,252,354 MWh and expects to have a bank of approximately 4,113,477 MWh of renewable energy and RECs toward future RPS targets at year-end 2019.

3. Years 2020 Through 2029 Renewable Plan

Exhibit 1 to this Annual Report outlines the Company's Virginia RPS Plan from 2018 through 2029, including actual totals for 2018 and forecasts for the remaining years. This exhibit has been updated to reflect the assumptions used for the 2018 Integrated Resource Plan. For planning purposes, for years 2020 through 2029, no REC optimization is assumed. Based on current information, the Company forecasts that it will continue to be able to fully satisfy the RPS Goals III and IV through the Company's existing renewable generation portfolio, through the purchase of RECs (including optimization) and new renewable generation where economically feasible.

III. OVERALL DEVELOPMENT OF RENEWABLE ENERGY

As discussed in Section II.B.3.a. above, the Company had over 400 MW of renewable energy capacity at its hydroelectric and biomass facilities that were included in the approved RPS Plan. The Company intends to continue prudent development of a number of new renewable energy facilities in addition to potential future renewable energy resources are discussed in Section IV below.

The Company is actively developing certain additional new renewable generation facilities not included in its approved RPS Plan. Decisions to build new renewable generation are primarily determined based on need and as part of the Company's Integrated Resource Planning process, and subject to Commission issuance of a certificate of public convenience and necessity.

Specifically, the Company continues to evaluate renewable development opportunities, such as 61 MW of renewable energy from its Virginia City Hybrid Energy Center ("VCHEC") using biomass co-fired with coal which began in 2013.[13] In addition, the Company previously developed 153 MW of renewable energy as a result of the conversion of the Altavista, Hopewell and Southampton Power Stations from burning coal to biomass (primarily waste wood) ("Biomass Conversions"), which entered commercial operation in 2013. The Biomass Conversions use primarily waste wood, within the parameters of the state's restriction on certain tree-based materials mentioned previously in Section II.B.3.a.

Though not part of the Company's RPS Plan, the Company is also encouraging customers to support renewable energy generation resources in the region through voluntary participation in several renewable energy options. Dominion Energy's Rider G Renewable Energy Program, marketed as "Dominion Energy Green Power®", allows customers to promote renewable energy by purchasing, through the Company, RECs in discrete blocks for a portion or up to 100% of their usage. The Company purchases and retires RECs on behalf of participants. Launched in 2009, the Dominion Energy Green Power® program has 31,741 participants, with

[13] VCHEC is designed to produce up to 120 MW of renewable energy, but the actual amount of renewable energy produced at the facility may vary from year to year, particularly as plant operations continue to develop over the first 8-10 years. In 2013, one percent of the fuel utilized at VCHEC was biomass. It is anticipated that it will provide approximately 7.5 percent of renewable energy in 2018 and gradually increase that level to ten percent of renewable energy starting by 2023.

approximately 44 percent of the participants choosing to match 100 percent of their monthly energy usage with purchases of RECs as of September 30, 2019. The RECs purchased on behalf of customers participating in this voluntary program are not counted toward the Virginia RPS compliance goals. Rather, this program offers Dominion Energy Virginia customers an additional way to support renewable energy above and beyond Dominion Energy's renewable energy initiatives.

Additionally, in 2019 the Company has filed for Commission approval of two new programs designed to provide customers with greater ability to support renewable energy development.

On May 15, 2019 the Company filed Rider REC[14], a voluntary rate, which if approved, would allow participating customers to voluntarily elect to purchase RECs sourced from a broad range of generation facilities across the United States to match all or a portion of their usage.

Also, on May 31, 2019, the Company filed Rider TRG[15] which if approved would allow participating customers to voluntarily elect to purchase 100 percent of their energy and capacity needs from renewable energy resources.

In addition, pursuant to Chapter 771 of the 2011 Virginia Acts of Assembly, the Company has developed a solar distributed generation program consisting of two separate components. On November 28, 2012, the Commission approved the first component, the Solar Partnership Program (formerly the "Community Solar" Program), a demonstration program to study the impact and assess the benefits of distributed solar photovoltaic generation on its distribution system through the construction and operation of Company-owned distributed solar generation installations. Under the Solar Partnership Program, the Company is authorized to

[14] Case No. PUR-2019-00081
[15] Case No. PUR-2019-00094

construct and operate Company-owned solar facilities on leased rooftops or on the grounds of commercial businesses and public properties throughout its Virginia service area, subject to a capacity and cost cap set in the Commission's 2012 Order approving the Program[16]. The Company currently uses the proceeds it receives from selling the RECs obtained from the Solar Partnership Program to offset the costs of the Program.

On March 22, 2013, the Commission approved the Company's Solar Purchase Program, the second component of the Company's Chapter 771 initiatives. The Solar Purchase Program was approved as a five-year demonstration program consisting of a special tariff under which the Company will purchase no more than 3 MW of energy output from customer-owned distributed solar generation installations, offered as an alternative to net energy metering. Participating customers install and own the solar generation system located on their property, but sell the electricity and solar RECs back to Dominion Energy Virginia at a premium rate of 15 cents per kilowatt-hour. Participating customers purchase all of the electricity for their home or business from the Company on their current rate schedule. The term for the Solar Purchase Program rate schedule expired on June 30, 2018. In an Order issued August 23, 2018, the Commission approved closing the Solar Purchase Program to new participants, but the Order allows customers currently enrolled to utilize the rate schedule until such time as they choose to terminate the agreement.[17] The Dominion Green Power® program directly supports the Solar Purchase Program projects through the purchase and retirement of the renewable energy certificates produced through the Solar Purchase Program.[18]

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[16] Case No. PUE-2011-00117
[17] Case No. PUR-2018-00091
[18] The Solar Purchase Program pilot period ended on June 30, 2018, and the pilot program has been closed to new participants pursuant to a Final Order issued by the VA SCC on August 23, 2018 in Docket No. PUR-2018-00091.

On June 30, 2016, the Commission approved the Company's application for certificates of public convenience and necessity (CPCN) to build 56 megawatts ("MW") of large-scale solar facilities that were completed and became operational as scheduled during December 2016. Specifically, the Company was issued certificates of public convenience and necessity for three separate solar projects. The three projects are: **(1) Scott Solar:** This solar project produces about 17 MW of electricity and is located on approximately 180 acres of land in Powhatan County. **(2) Whitehouse Solar:** This solar project generates about 20 MW and is located on a 230-acre site in Louisa County; and **(3) Woodland Solar:** This solar project produces approximately 19 MW of electricity and is located on approximately 200 acres located in Isle of Wight County. The RECs produced by these three solar projects will be sold to reduce the costs of the projects for the benefit of customers and will not be used for RPS compliance.[19]

The Company is actively developing utility scale solar projects and has increased its engagement of third-party solar developers during the last several years. Since the Company's initial RFP in 2015, which led to the 20 MW Essex Solar Center facility that came online for DEV's customers in December 2017, the Company has issued several solicitations that have resulted in the ongoing development of both Company-owned and PPA solar facilities. The Company-owned facilities include the 142 MW Colonial Trail West solar facility, the Spring Grove (98 MW) solar facility and the Sadler (100 MW) solar facility.[20] Additionally, as a result of the Company's solicitations, the Company has signed a PPA for the 80 MW Water Strider solar facility, and, contingent upon receiving Commission approval, the Westmoreland (20 MW)

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[19] *See Application of Virginia Electric and Power Company For approval and certification of the proposed 2016 Solar Projects pursuant to §§ 56-580 D and 56-46.1 of the Code of Virginia, and for approval of a rate adjustment clause, designated Rider US-2, under § 56-585.1 A 6 of the Code of Virginia*, PUE-2015-00104, Application at 14-15. (Final Order June 30, 2016).

[20] Pending Commission approval in Case No. PUR-2019-00105

solar facility.[21] On October 3, 2019, the Company and the Metropolitan Washington Airports Authority announced they will jointly explore the development of a large-scale 100 MW solar project on approximately 1,200 acres at Washington Dulles International Airport. The Company has filed an application with PJM to interconnect the project to the transmission grid. The new project could come online as early as 2023.

On September 11, 2018 the Virginia State Corporation Commission approved the Company's Virginia Community Solar Pilot Program. The voluntary program will allow customers to purchase energy from third-party developed solar facilities located in communities throughout Virginia. Interested customers are encouraged to sign up for pre-enrollment to ensure notification when enrollment is open, and the first project is operational. Participation is available on a first come first serve basis. Legislation enacted by the Virginia General Assembly in 2017 and customer interest in local solar energy generation led to the development of the Community Solar Pilot Program. The legislation is as a result of the Solar Collaborative Workgroup consisting of Dominion Energy, Appalachian Power, the state's electric cooperatives and other interested stakeholders. The goal of the workgroup is to develop consensus on policy changes for renewable energy initiatives.

The Company is also seeking to meet customers' requests for renewable energy options by developing solar projects to serve specific customers. In 2017, the Commission granted CPCNs for the Oceana Solar Facility[22] and the Remington Solar Facility.[23] The Oceana Solar Facility is part of an agreement between Dominion Energy Virginia, the Department of the Navy,

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[21] Case No. PUR-2019-00133

[22] *Petition of Virginia Electric and Power Company For approval and certification of the proposed Oceana Solar Facility pursuant to §§ 56-580 D and 56-46.1 of the Code of Virginia*, PUE-2016-00079, Aug. 1, 2016.

[23] *Petition of Virginia Electric and Power Company For approval and certification of the proposed Remington Solar Facility pursuant to §§ 56-580 D and 56-46.1 of the Code of Virginia*, PUE-2016-00048, May 4, 2016.

and the Commonwealth of Virginia to construct an 18 MW solar facility at Naval Air Station Oceana in Virginia Beach. The Remington Solar Facility, which became operational on October 1, 2017, was developed as a public-private partnership with the Commonwealth of Virginia and Microsoft. The 20 MW facility was built on approximately 125 acres of land owned by Dominion Energy near its Remington Power Station in Fauquier County, Virginia. The Commonwealth purchases the energy output generated from the facility and Microsoft purchases the renewable energy attributes in support of its sustainability goals. The Company has also constructed two additional solar projects for the University of Virginia, which will purchase the power from both under long-term contracts. The UVA Hollyfield project, a 17 MW facility located in King William County, represents about 12 percent of UVA's electric demand. The UVA Puller project is a 15 MW facility in Middlesex County. The UVA Puller project is expected to produce power equivalent to about 9 percent of the University's electric demand. Furthering its renewable energy partnership with the Commonwealth of Virginia, the Company announced on October,18, 2019 that it will supply the Commonwealth with an additional 420 MW of renewable energy through a package of projects slated to come online in stages over the next three years, pending local approvals. The package of projects under development includes the 75 MW Rocky Forge Wind project in Botetourt County, 88 MW Belcher Solar in Louisa County, the 70 MW Bedford Solar in the City of Chesapeake, the 90 MW Walnut Solar in King and Queen County, and a fourth solar project (to be named) will provide the remaining generation. On behalf of the Commonwealth, the Company will purchase the output from the Rocky Forge wind facility from developer Apex Clean Energy.

The Company also announced in April 2019 that it is continuing its joint effort with Facebook to substantially increase renewable energy generation through new solar facilities that

will be dedicated to Facebook. The announcement included six new projects totaling 350 MW with three projects in North Carolina and three projects in Virginia. The Virginia projects are the 20 MW Montross Solar in Westmoreland County, which entered commercial operations in December 2018; the 20 MW Gloucester Solar in Gloucester County, which began operating in April 2019; and the 80 MW Grasshopper Solar in Mecklenburg County, which is expected to become operational in 2020.

IV. ADVANCES IN RENEWABLE GENERATION TECHNOLOGY

As detailed in its 2018 IRP, the Company continues to monitor and stay abreast of developments with respect to viable commercial and utility-scale emerging generation technologies, including renewable energy and energy storage technologies. Dominion's efforts to advance solar and offshore wind technologies in Virginia are discussed further below:

A. Solar

As reported by the Solar Energy Industries Association and Wood Mackenzie Power & Renewables, there were 6.2 gigawatts ("GW") direct current ("dc") of utility solar installed in the U.S. in 2018, accounting for 58 percent of total U.S. annual capacity additions. As of year-end 2018, cumulative operating solar photovoltaic ("PV") capacity in the U.S. totaled 64.2 GWdc, about 75 times more than was operating at the end of 2008. Wood Mackenzie projects 14 percent growth in 2019 compared to 2018, with more than 12 GW of installations anticipated. Total installed U.S. PV capacity will more than double over the coming five years, with yearly installations climbing to 15.8 GWdc in 2021 prior to the expiration of the residential federal investment tax credit ("ITC") and a drop in the commercial tax credit to 10 percent for projects

not yet under construction.[24] Although federal legislation introduced in July would extend the ITC for five years at its full 30 percent value,[25] it is unclear whether the extension will be enacted. Without the extension, the ITC is set to begin its gradual descent in 2019 from 30 percent to 10 percent by 2022. As discussed in Section III above, the Company has been developing solar energy facilities as well as solar and renewable energy customer programs for several years.

B. Offshore Wind

As part of our ongoing commitment to bring cleaner energy to customers, Dominion Energy Virginia is moving forward on the nation's first offshore wind project in a federal lease area. In July 2017, the Company announced that it had signed an agreement and strategic partnership with Ørsted of Denmark, a global leader in offshore wind development, to build two 6-megawatt turbines off the coast of Virginia Beach. As mentioned previously in Section II.B.3.c., Dominion Energy's Coastal Virginia Offshore Wind (CVOW) project is the first phase of a plan to bring more than 2,000 megawatts of wind generated electricity to its Virginia and North Carolina customers.

The CVOW project calls for the development of two 6 megawatt wind turbines on a 2,135 acre site leased by the Virginia Department of Mines, Minerals and Energy. Dominion Energy has an agreement with DMME to build and operate the turbines there. On November 2, 2018, the Virginia State Corporation Commission approved the project and granted a certificate of public convenience and necessity to construct and operate the associated Virginia Interconnect Facilities. The two 6-megawatt turbines should be in operation by late 2020 and will lay the

[24] Solar Energy Industries Association and Wood Mackenzie Power & Renewables, *U.S. Solar Market Insight 2018 Year in Review Executive Summary*, March 2019.
[25] https://www.greentechmedia.com/articles/read/solar-itc-extension-bill-introduced-in-house-and-senate#gs.47yj02 accessed October 24, 2019.

ground work for large-scale development of the 112,800-acre commercial wind site Dominion Energy has leased from the United States Department of the Interior's Bureau of Ocean Energy Management ("BOEM").

The project is an important first step toward offshore wind development for Virginia and the United States. It would be only the second offshore wind project in the nation and the first owned by an electric utility company. Along with clean energy, it will provide Dominion Energy valuable experience in managing offshore wind resources. Specifically, it will provide the critical operational, weather and environmental experience needed for the large scale development.

As also discussed in Section II.B.3.c., Dominion Energy Virginia won the lease for 112,800 acres of federal land off the coast of Virginia to develop an offshore wind turbine facility capable of generating more than 2,600 megawatts of electricity. This commercial offshore wind project would be installed in three phases of approximately 880 megawatts each. Pending regulatory approval, the first phase is expected to begin delivery of renewable energy in 2024, with additional phases coming online in 2025 and 2026. All three phases combined will provide enough energy to serve more than 650,000 customers. This will be the largest single offshore wind project in the nation. Each 880-megawatt phase is expected to bring more than 70 turbines, all of which will be located more than 27 miles off the coast of Virginia Beach. BOEM is the lead federal agency in charge of leasing areas for offshore wind development on the outer continental shelf. Dominion Energy will proceed with the BOEM timetable for development of the commercial wind site while advancing its CVOW research project and looking for ways to lower the cost of bringing offshore wind generation to customers.

V. CONCLUSION

As noted in its 2019 Update to its 2018 Integrated Resource Plan, the Company has a strong commitment to a cost-effective renewable energy program. The Company received Commission approval of its proposed RPS Plan in Case No. PUE-2009-00082, demonstrating that it has a reasonable expectation of achieving 12 percent of its base year electric energy sales from renewable energy sources during calendar year 2022, and 15 percent of its base year electric energy sales from renewable energy sources during calendar year 2025. The Company views its efforts toward its RPS Plan in Virginia in the past year, as well as its overall approach to the development of renewable resources, as successful.

The Company continues to move forward in implementing its cost-effective renewable energy program, as outlined in this Annual Report to the Commission.

EXHIBIT 1
ANNUAL REPORT TO THE SCC ON RENEWABLE ENERGY
DOMINION ENERGY VIRGINIA
RENEWABLE ENERGY PORTFOLIO STANDARD PROGRAM
VIRGINIA GOALS

TOTAL ELECTRIC ENERGY SOLD IN THE BASE YEAR

Total Electric Energy Sold to Virginia Jurisdictional Retail Customers	64,621,534	MWh
Less Three-year Average (2004-2006) Nuclear Generation	21,302,885	MWh
Total Electric Energy Sold in the Base Year	43,318,649	MWh

RENEWABLE PORTFOLIO STANDARD GOALS

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Percent	7%	7%	7%	7%	12%	12%	12%	15%	15%	15%	15%	15%
Goal (MWh)	3,032,305	3,032,305	3,032,305	3,032,305	5,198,238	5,198,238	5,198,238	6,497,797	6,497,797	6,497,797	6,497,797	6,497,797

RENEWABLE PORTFOLIO STANDARD PROGRAM[1]

	2018 [2]	2019 [2]	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Generation Resources (MWh)												
Small Hydro	2,632	1,220	1,714	1,723	1,714	1,714	1,714	1,723	1,714	1,714	1,714	1,723
Large Hydro	697,531	576,277	410,330	411,563	410,330	410,330	410,330	411,563	410,330	410,330	410,330	411,563
Pittsylvania[4]	81,280	0	0	0	0	0	0	0	0	0	0	0
NUGS	149,312	148,681	0	0	0	0	0	0	0	0	0	0
Total	930,755	726,178	412,044	413,286	412,044	412,044	412,044	413,286	412,044	412,044	412,044	413,286
Total Renewable Resources (MWh)	3,750,287 [3]	2,893,428	412,044	413,286	412,044	412,044	412,044	413,286	412,044	412,044	412,044	413,286
VA Bank, Balance Beginning of Year	3,534,372	4,252,354	4,113,477	1,493,216	0	0	0	0	0	0	0	0
Target (MWh)	3,032,305	3,032,305	3,032,305	3,032,305	5,198,238	5,198,238	5,198,238	6,497,797	6,497,797	6,497,797	6,497,797	6,497,797
Net Position (MWh)	4,252,354	4,113,477	1,493,216	(1,125,803)	(4,786,194)	(4,786,194)	(4,786,194)	(6,084,511)	(6,085,753)	(6,085,753)	(6,085,753)	(6,084,511)

NOTES: 1 - Based on the forecast used for the 2019 Update to the 2018 VA IRP and 12/31/2018 Virginia Jurisdictional allocation of DOM load of 80.25%
2 - 2018 is actual and 2019 includes actuals through 9/30/2019 and projections through year-end
3 - Total Renewable Resources includes Company and allowable NUG generated renewable energy, REC purchases and REC Optimization
4 - The Company announced the retirement of the Pittsylvania generation facility in March 2019

EXHIBIT 2
DOMINION ENERGY VIRGINIA
RENEWABLE ENERGY PORTFOLIO STANDARD PROGRAM
2018 SUMMARY

TOTAL ELECTRIC ENERGY SOLD IN THE BASE YEAR (MWh)

Total Electric Energy Sold to Virginia Jurisdictional Retail Customers in 2007	64,621,534
Less Three-year Average Percentages (2004-2006) Nuclear Generation	21,302,885
Total Electric Energy Sold in the Base Year	43,318,649

RENEWABLE ENERGY PORTFOLIO STANDARD GOALS

	2018
Percent	7%
Goal (MWh)	3,032,305

Company RPS Generation Resources (MWh)	Total Energy Generated during 2018	VA Jurisdictional Energy Generated during 2018[1]
Company Owned		
Hydro		
Cushaw	852	683
North Anna	2,429	1,949
Gaston	495,685	397,786
Roanoke Rapids	373,515	299,745
Subtotal Hydro	**872,481**	**700,163**
Biomass		
Pittsylvania	101,284	81,280
Subtotal Biomass	**101,284**	**81,280**
Total Company Owned	**973,765**	**781,443**
NUGS[2]	**186,060**	**149,312**
TOTAL Renewable Energy Generated During 2018	**1,159,825**	**930,755**
Total Company Generated Renewable Energy as a % of goal		**31%**

Less Company Generated Renewable Energy Credits Optimized	**(81,963)**
Total Renewable Energy Available for 2018 Compliance	**848,792**
REC Purchases	**2,904,495**
NUG Renewable Energy and RECs Previously Banked	**3,534,372**
Total Renewable Energy and RECs Available for 2018Compliance	**7,287,659**
Less Renewable Energy and RECs Banked for Future RPS Application	**(4,252,354)**
Renewable Energy and RECs Applied for Compliance[2]	**3,035,305**

Notes: (1) Based on VA jurisdictional allocation of 80.2499%.
(2) Because Goal III is a multi-year average, the Company applied 3,035,305 for RPS Compliance for 2018

EXHIBIT 3

DOMINION ENERGY VIRGINIA

RENEWABLE ENERGY PORTFOLIO STANDARD PROGRAM

2019 SUMMARY

TOTAL ELECTRIC ENERGY SOLD IN THE BASE YEAR (MWh)	
Total Electric Energy Sold to Virginia Jurisdictional Retail Customers in 2007	64,621,534
Less Three-year Average Percentages (2004-2006) Nuclear Generation	21,302,885
Total Electric Energy Sold in the Base Year	**43,318,649**

RENEWABLE ENERGY PORTFOLIO STANDARD GOALS	
	2019
Percent	**7%**
Goal (MWh)	**3,032,305**

Company RPS Generation Resources (MWh)	**Actual through September 30, 2019**	**Projected through Balance of Year**	**Estimated Total 2019[1]**
Company Owned			
Hydro			
North Anna	884	337	1,221
Gaston	247,793	47,014	294,808
Roanoke Rapids	240,545	40,926	281,471
Subtotal Hydro	**489,222**	**88,277**	**577,499**
Biomass			
Pittsylvania	0	0	0
Subtotal Biomass	**0**	**0**	**0**
Total Company Owned	**489,222**	**88,277**	**577,499**
NUG Renewable Energy	**114,291**	**34,390**	**148,681**
TOTAL	**603,513**	**122,667**	**726,180**
Company-Owned Renewables	**489,222**	**88,277**	**577,499**
less REC-Optimized Resources	**0**	**0**	**0**
Net Company-Owned	**489,222**	**88,277**	**577,499**
REC Purchases	**1,767,250**	**400,000**	**2,167,250**
NUG Renewable Energy	**114,291**	**34,390**	**148,681**
TOTAL 2019 Renewable Resources	**2,370,763**	**522,667**	**2,893,430**
2018 Bank Carried Forward			**4,252,354**
Renewable Resources to be Retired (per Target)			**3,032,305**
Company's Estimated Net Renewable Position for 2019 Year-End			4,113,479

Notes: (1) Based on projected VA jurisdictional allocation of 80.25%.

VERIFICATION

Virginia Electric and Power Company's 2018 RPS Goal Compliance

I, C. Eric McMillan, Manager – Power Contracts and Origination, in Energy Supply, for Virginia Electric and Power Company d/b/a Dominion Energy Virginia, do solemnly swear that the information and data in the preceding Exhibit 2 (to the 2019 RPS Annual Report) in reference to Dominion Energy Virginia having met its 2018 RPS Goal, are true and correct to the best of my knowledge and belief.

C. Eric McMillan

ALICE K. CAMPBELL
NOTARY PUBLIC
REG. #223170
MY COMMISSION EXPIRES
10/31/2020
COMMONWEALTH OF VIRGINIA

COMMONWEALTH OF VIRGINIA)
) to wit:
City of Richmond)

The foregoing instrument was sworn to and acknowledged before me this 7th day of October 2019.

Notary Public

My registration number is 223170 and my commission expires: 10/31/2020