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Dominion®

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VIA HAND DELIVERY

October 30, 2009

Mr. Joel H. Peck, Clerk
c/o Document Control Center
State Corporation Commission
Tyler Building, First Floor
1300 East Main Street
Richmond, VA 23219

CLERK'S OFFICE
2009 OCT 30 A 11:05
DOCUMENT CONTROL

RE: Annual Report on Renewable Energy

Dear Mr. Peck:

Please find enclosed for filing an original and fifteen (15) copies of Virginia Electric and Power Company's Annual Report to the State Corporation Commission on Renewable Energy. This report is being submitted in accordance with Virginia Code § 56-585.2.H, which requires each investor-owned incumbent electric utility to report to the Commission annually on (i) its efforts to meet renewable portfolio standard goals, (ii) its generation of renewable energy; and (iii) advances in renewable generation technology that affect the utility's activities.

Please date- and time-stamp the sixteenth (16th) copy of the enclosed, returning it via our courier.

Sincerely,

M. Renae Carter

M. Renae Carter
Senior Counsel

Enclosures

cc: William H. Chambliss, Esq.
C. Meade Browder, Jr., Esq.
William F. Stephens
Cody D. Walker
David R. Eichenlaub



Virginia Electric and Power Company

Annual Report to the State Corporation Commission

on Renewable Energy, in accordance with

§ 56-585.2.H of the Code of Virginia

October 30, 2009

I. INTRODUCTION

Pursuant to § 56-585.2 H of the Code of Virginia (“Va. Code”), Virginia Electric and Power Company (“Dominion Virginia Power” 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 to report to the Commission annually on (i) its efforts to meet renewable portfolio standard goals; (ii) its generation of renewable energy; and (iii) advances in renewable generation technology that affect the utility’s activities.

II. EFFORTS TO MEET RENEWABLE PORTFOLIO STANDARD GOALS

A. Statutory Guidance

For the purposes of complying with Virginia’s Renewable Energy Portfolio Standard (“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, 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 or purchased 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;
- 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 a control area adjacent to such interconnection region; or

- represented by certificates issued by an affiliate of such regional transmission entity, or any successor to such affiliate, and held or acquired by such utility, which validate the generation of renewable energy by eligible sources in such region.
- "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 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 that utilities must meet to qualify for a 50 basis point Performance Incentive.

- 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 Virginia Power's RPS Plan

On July 28, 2009, the Company submitted an application for approval to participate in a RPS program pursuant to Va. Code § 56-585.2. The application represents the Company's initial filing for approval of its RPS Plan. Dominion Virginia Power's RPS application has been docketed by the Commission as Case No. PUE-2009-00082.

The Company anticipates applying existing renewable energy generation, including that renewable energy provided by contract with non-utility generators ("NUGs"), to meet the RPS Goals. The Company plans to meet the remainder of the RPS Goals by applying renewable energy from new generation facilities (where feasible), and with the purchase of renewable energy certificates ("RECs"). Specifically, under its RPS Plan, the Company plans to apply renewable energy from existing renewable energy generating facilities, including contracted NUGs, estimated to be approximately 1.5 million megawatt hours ("MWh") in 2022 and 1.3 million MWh in 2025. The Company will also purchase approximately 3.7 million MWh of RECs in 2022 and 5.2 million MWh of RECs in 2025 (assuming no other new renewable energy generation facilities are constructed beyond the 58.5 megawatts ("MW") at the Virginia City Hybrid Energy Center ("VCHEC") facility).

The Company's RPS Plan will also meet the interim RPS Goals I-IV. The Company calculates that the net present value cost of the RPS Plan (based on the purchase of the RECs) through 2025 will be approximately \$7.9 million. The RPS Plan is described in more detail below.

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

RPS Goals for the Years 2010 Through 2025

Multiplying the total electric energy sold in the base year by the RPS Goals for the years 2010 through 2025, the Company’s RPS Goals for each individual year as represented in MWh (or average MWh for a group of years) are as follows:¹

Year	2010	2011- 2015	2016	2017-2021	2022	2023-24	2025
Percent	4%	4% Average	7%	7% Average	12%	12% Average	15%
Goal	1,732,746	1,732,746	3,032,305	3,032,305	5,198,238	5,198,238	6,497,797

¹ Based on the Company’s most recent cost of service study, Virginia is responsible for approximately 79% of the Company’s electricity demand, and the Company used this allocation factor as the basis for apportioning approximately 79% of the existing generation MWh for inclusion in its Virginia RPS Plan.

Resources to Fulfill the RPS Goals: Existing Renewable Energy Generation Facilities

Dominion Virginia Power owns the following renewable energy facilities in its generation fleet:

Existing Renewable Energy Facilities Owned by Dominion Virginia Power			
Facility	State	Capacity	Fuel
Gaston	NC	225 MW	Hydroelectric
Roanoke Rapids	NC	99 MW	Hydroelectric
Cushaw	VA	2 MW	Hydroelectric
North Anna	VA	1 MW	Hydroelectric
Pittsylvania	VA	83 MW	Biomass
Altavista	VA	6 MW	Biomass co-fired with coal
Subtotal		327 MW	Hydroelectric
Subtotal		89 MW	Biomass
Total		416 MW	

The Company will also include, for modeling purposes, up to 58.5 MW of renewable energy at VCHEC using biomass co-fired with coal for availability starting in 2013.²

In addition to these Company-owned resources, Dominion Virginia Power has existing renewable energy resources in the form of long-term contracts with various renewable energy NUGs. Dominion Virginia Power will evaluate the renewal of these contracts on a case by case basis, and will renew them where it makes economic sense to the ratepayers and shareholders to do so. The Company has included this contracted NUG generated renewable energy as part of its RPS Plan to meet the RPS Goals.

² VCHEC is designed to produce up to 117 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 begin and develop over the first 8-10 years. It is anticipated that it will provide approximately 5% of renewable energy from years 2013-15 and step up to 10% renewable energy starting in 2020. Should the facility produce additional renewable energy beyond the 58.5 MW modeled, the Company will also count this additional renewable generation toward its RPS Goals for that year.

Resources to Fulfill the RPS Goals: New Renewable Energy Sources

The Company intends to develop new renewable generation facilities, but the application of new renewable energy generation facilities is not included in the cost analysis of the RPS Plan because it is too early to accurately quantify what will be built. Decisions to build new generation will be determined based on need and as part of the Company's Integrated Resource Planning process. Each new facility will need to be approved by the Commission and granted a certificate of public convenience and necessity.

The Company is developing a variety of new renewable generation facilities. In 2007, Dominion Virginia Power and BP Alternative Energy North America, Inc. ("BP") initiated wind development commercial discussions, culminating in February 2008, with the establishment of a joint venture agreement, seeking to develop, own, and operate wind energy projects in Virginia. Through this joint venture, the Company and BP are evaluating wind energy projects, and have announced development efforts in Tazewell County and Wise County, Virginia. Overall, the Company is seeking to develop multiple wind projects for a total of up to 245 MW net ownership for availability by 2025, and biomass units or conversions to biomass for a total of up to 100 MW for availability by 2025, as well as the potential for an additional 58.5 MW of biomass at VCHEC (for a total of 117 MW) in the future. Whether such facilities are constructed depends on a variety of factors which cannot be known at this time, including the market for renewable resources, access to capital, environmental laws, siting and permitting issues, federal legislation, and technical innovations.

Resources to Fulfill the RPS Goals: Purchase of RECs

After counting the MWh from the existing renewable energy facilities (including contracted NUG renewable energy), the Company proposes to fulfill any deficit by purchasing RECs. The Company intends to purchase available 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, some jurisdictions and markets do make distinctions, and currently these distinctions affect the valuation of the RECs.

Generally, there are two categories of RECs available for purchase. For purposes of its RPS Plan, the Company refers to the two categories of RECs as Tier I and Tier II. Tier I RECs are typically associated with energy derived from sunlight, wind, sustainable biomass, falling water, wave motion, tides, or geothermal power, while Tier II RECs are typically associated with energy from waste, municipal solid waste, and some hydro facilities. These categories of RECs are consistent with the definition of renewable energy as defined in Va. Code § 56-585.2. Although there is not one price for Tier I RECs and another for Tier II, those generally classified as Tier II will cost less than those in the Tier I category. Currently, there is a significant cost differential between Tier I and Tier II RECs available in the market. The price of individual RECs within a tier is based on a variety of factors, including energy source.

The Company forecasts that, based on current information, the supply of lower cost RECs (that are derived from renewable energy as defined in Va. Code § 56-585.2 A) is adequate to fully satisfy the RPS Goals (I through IV) after including the Company's existing renewable generation portfolio. The Company calculates that the net present

value cost for the purchase of the lower cost RECs through 2025 will be approximately \$7.9 million, assuming no additional renewable energy generation facilities are developed beyond the up to 58.5 MW of biomass from the VCHEC facility. Should the supply of lower cost RECs prove to be insufficient in any particular year, or group of years when averaging is allowed, the Company proposes to purchase more expensive RECs (*viz.* Tier I) to satisfy the RPS Goal(s) for the particular year or group of years. Therefore, Dominion Virginia Power proposes to satisfy any deficiencies, after counting its existing resources (including NUG renewable resources), with the purchase of lower cost RECs that are derived from renewable energy as defined in Va. Code § 56-585.2 A.

Resources to Fulfill the RPS Goals: Banking

Under the RPS Plan, the Company will bank a certain amount of renewable energy and/or RECs and apply it/them to future years in which there is a deficit pursuant to Va. Code § 56-585.2 D.³

III. OVERALL GENERATION OF RENEWABLE ENERGY

The section entitled “Resources to Fulfill the RPS Goals: Existing Renewable Energy Generation Facilities” provides a list of the Company’s current renewable energy generation facilities. Additionally, the section entitled “Resources to Fulfill the RPS Goals: New Renewable Energy Sources” offers information on the Company’s efforts to potentially increase its fleet of renewable energy generation sources.

In addition to these sources, the Company is encouraging customers to invest in renewable energy generation resources generally through voluntary participation in Dominion Virginia Power’s Rider G Renewable Energy Program, commonly referred to

as the “Green Tariff” or “Dominion Green Power.” Effective January 1, 2009, the Company began to offer its customers this companion rate for the purchase and retirement of RECs for all or a portion of a customer’s monthly consumption. The Company’s contractor, 3Degrees Group, Inc., performs REC procurement services (including certification and tracking) and customer education services, and has ensured that the Company’s Green Tariff program has received Green-e[®] Energy certification from the Center for Resource Solutions, a national non-profit organization. As of October 29, 2009, over 3,900 customers have elected to participate in Dominion Green Power, with 70% of participants choosing to match 100% of their energy usage with purchases of RECs.

IV. ADVANCES IN RENEWABLE GENERATION TECHNOLOGY

The Company strives to remain up to date on development in viable commercial and utility scale emerging technologies. This knowledge base has been developed from a variety of sources, both public and private. Recently, Dominion Resources Services, Inc., created a new organization, Alternative Energy Solutions (“AES”), in order to position the Company and other subsidiaries of Dominion Resources, Inc., at the cutting edge of new technologies, by assessing their viability from an operational, financial, regulatory, and policy perspective. AES conducts technology research in renewable generation and conservation load management and facilitates the testing and evaluation of new and emerging technologies. Among other things, AES is currently studying the emerging technologies related to offshore wind.

³ Va. Code § 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.

Offshore Wind

On September 22, 2009, Governor Tim Kaine announced Virginia's intentions to develop offshore wind resources along the coast of Virginia. A formal request has been made to the U.S. Department of the Interior's Minerals Management Service ("MMS") to set up a federal-state-local task force in order to guide and facilitate the process of leasing federal waters off Virginia to develop wind power.

On April 29, 2009, MMS announced five limited leases off the coasts of Delaware and New Jersey, each with a five-year duration, for wind resource data collection. As part of the lease issuance process, MMS sent out a Request for Interest to assess interest for offshore wind development. Based on responses received, MMS will issue commercial or limited leases through a competitive or non-competitive lease issuance process. Commercial leases are for power generation and full project development, whereas limited leases are for resource assessment and technology testing.

At present there are no operational or permitted offshore wind projects in the United States. While offshore wind projects are operational in Europe, significant differences exist in ocean floor geography, wind resource, and sea state, leading to considerable uncertainty of construction and operating costs.

Dominion Virginia Power is evaluating offshore wind technology and will proceed with offshore wind projects as it becomes economically and technologically feasible to do so.

V. CONCLUSION

Dominion Virginia Power has a variety of existing renewable energy generation resources and strives to increase these resources where feasible. The Company also has proposed its RPS Plan, currently under consideration by the Commission, that the Company believes will achieve the RPS Goals of Va. Code § 56-585.2. Finally, the Company is keeping abreast of emerging technologies in the field of renewable energy.