COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

AT RICHMOND, MARCH 16, 2012

CLERK'S OFFICE

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APPLICATIONS OF

VIRGINIA ELECTRIC AND POWER COMPANY

CASE NO. PUE-2011-00073

For approval and certification of the proposed biomass conversions of the Altavista, Hopewell, and Southampton Power Stations under §§ 56-580 D and 56-46.1 of the Code of Virginia and for approval of a rate adjustment clause, designated as Rider B, under § 56-585.1 A 6 of the Code of Virginia

FINAL ORDER

On June 27, 2011, Virginia Electric and Power Company d/b/a Dominion Virginia Power ("Dominion" or "Company") filed with the State Corporation Commission ("Commission") applications and petitions (collectively, "Applications"[1]) to amend and reissue certificates of public convenience and necessity, for approval to convert three electric coal-fired generation facilities owned and operated by the Company into biomass-burning facilities (collectively, "Conversions" or "Biomass Conversions"), and for approval of a rate adjustment clause to recover costs associated with the proposed Biomass Conversions.

Pursuant to §§ 56-580 D and 56-46.1 of the Code of Virginia ("Code"), Dominion seeks approval to convert its coal-fired Altavista, Hopewell, and Southampton Power Stations so that they can burn biomass as the sole fuel for generation from those facilities.[2] Once completed, the Conversions would, according to the Company, decrease the net capacity rating for each facility

[1] The three filings are identical except for one footnote. Thus, citations herein are made collectively to the Applications, which were admitted into the record as Exhibit 2.

[2] In 2001, the Commission approved the Company's purchase of these facilities from LG&E-Westmoreland. *Application of Virginia Electric and Power Company, For a certificate of public convenience and necessity pursuant to the Utility Facilities Act, and authority pursuant to the Utility Transfers Act, to acquire cogeneration facilities in Altavista, Hopewell, and Southampton, Virginia*, Case No. PUE-2000-00745, 2001 S.C.C. Ann. Rept. 504, Final Order (Mar. 2, 2001); Ex. 2 at 6.

from 63 megawatts ("MW") to 51 MW, but increase the expected energy production of the converted power stations compared to continued coal operations.[3] In order to qualify for certain federal production tax credits ("PTCs"), the Company proposes to put the converted power stations in commercial operation by December 31, 2013.[4] The estimated construction cost of the Conversions is approximately $165.8 million, excluding financing costs.[5]

Pursuant to § 56-585.1 A 6 of the Code and the Commission's Rules Governing Utility Rate Applications and Annual Informational Filings,[6] the Company seeks approval of a rate adjustment clause, designated Rider B, for the recovery of costs associated with the Conversions.

As proposed by the Company, Rider B would take effect on April 1, 2012, or fifteen (15) calendar days following Commission approval of Rider B, whichever is later, and the initial rate year would be April 1, 2012 to March 31, 2013.[7]

On July 19, 2011, the Commission entered an Order for Notice and Hearing that, among other things, required the Company to publish notice of its Applications, consolidated review of the Applications into one proceeding, established a procedural schedule, permitted the filing of public comments, and scheduled a public hearing. The Commission conducted a hearing on January 10-12, 2012. The Company, the Commission's Staff ("Staff"), the Attorney General's Division of Consumer Counsel ("Consumer Counsel"), and respondents, the Virginia Committee for Fair Utility Rates, the Virginia Forest Watch, and MeadWestvaco Corporation, participated

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[3] Ex. 2 at 5, 8.

[4] *Id.* at 2.

[5] *Id.* at 7.

[6] 20 VAC 5-201-10 *et seq.*

[7] Ex. 2 at 23.

in the hearing. All case participants filed post-hearing memoranda or briefs addressing legal issues and providing recommendations on the Applications.

NOW THE COMMISSION, having considered this matter, is of the opinion and finds that the Applications are approved subject to the requirements set forth below.

Code of Virginia

Section 56-580 D of the Code states in part as follows:

> The Commission shall permit the construction and operation of electrical generating facilities in Virginia upon a finding that such generating facility and associated facilities (i) will have no material adverse effect upon reliability of electric service provided by any regulated public utility, (ii) are required by the public convenience and necessity, if a petition for such permit is filed after July 1, 2007, and if they are to be constructed and operated by any regulated utility whose rates are regulated pursuant to § 56-585.1, and (iii) are not otherwise contrary to the public interest. In review of a petition for a certificate to construct and operate a generating facility described in this subsection, the Commission shall give consideration to the effect of the facility and associated facilities on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact as provided in § 56-46.1. . . .

Section 56-46.1 A of the Code states in part as follows:

> Whenever the Commission is required to approve the construction of any electrical utility facility, it shall give consideration to the effect of that facility on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact. . . . In every proceeding under this subsection, the Commission shall receive and give consideration to all reports that relate to the proposed facility by state agencies concerned with environmental protection; and if requested by any county or municipality in which the facility is proposed to be built, to local comprehensive plans that have been adopted pursuant to Article 3 (§ 15.2-2223 et seq.) of Chapter 22 of Title 15.2. Additionally, the Commission (i) shall consider the effect of the proposed facility on economic development within the Commonwealth . . . and (ii) shall consider any improvements in service reliability that may result from the construction of such facility.

Sections 56-46.1 A and 56-580 D of the Code also contain nearly identical language explicitly limiting the Commission's authority:

> In order to avoid duplication of governmental activities, any valid permit or approval required for an electric generating plant and associated facilities issued or granted by a federal, state or local governmental entity charged by law with responsibility for issuing permits or approvals regulating environmental impact and mitigation of adverse environmental impact or for other specific public interest issues such as building codes, transportation plans, and public safety, whether such permit or approval is granted prior to or after the Commission's decision, shall be deemed to satisfy the requirements of this section with respect to all matters that (i) are governed by the permit or approval or (ii) are within the authority of, and were considered by, the governmental entity in issuing such permit or approval, and the Commission shall impose no additional conditions with respect to such matters.

Finally, § 56-596 A of the Code states that "[i]n all relevant proceedings pursuant to [the Virginia Electric Utility Regulation] Act, the Commission shall take into consideration, among other things, the goal of economic development in the Commonwealth."

Public Convenience and Necessity

We find that the proposed Biomass Conversions are likely to be cost-effective on a net present value basis. The net present value projections are informed by a number of factors, including: (1) federal PTCs; (2) renewable energy certificate ("REC") revenues; (3) economic value resulting from projected carbon legislation or regulation ("carbon value"); (4) projected fuel prices; and (5) projected capacity factors for the converted units. In this regard, we note that Consumer Counsel reasonably questioned the credibility of many of these assumptions, and we agree that some of the assumptions (including REC revenues and carbon value) may be reasonably questioned and should be discounted at least to some degree. Staff, however, prepared screening curve analyses that remove one-half of the REC value and all of the carbon

value, while incorporating the full impact of the PTCs, which we find reasonable in the context and under the circumstances of this proposed project. These analyses conclude that the converted units are cost-effective on a net present value basis at much lower ranges of production than projected by Dominion (and at ranges of production well below that at which Staff projects the converted units will operate).[8] We find that such analyses are reasonable based on the specific facts in this record, noting especially the effect of the PTCs,[9] and on the current state of the law.

The converted facilities will not adversely impact electric system reliability,[10] and Dominion's forecasted fuel prices are reasonable for purposes of this proceeding.[11] In addition, we find that the fuel study and fuel contracts submitted by Dominion are reasonable and further support our findings herein approving the Conversions.[12]

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[8] *See, e.g.*, Ex. 41 and 41-ES (Tufaro) at 13-17, Attachment MAT-2 (ES); Ex. 43-ES (Tufaro screening curves); Staff's February 15, 2012 Post-hearing Brief at 11.

[9] *See, e.g.*, Ex. 52 (Kelly) at 5, 18 ("First, the Biomass Conversions are expected to qualify for federal [PTCs]. The $11/MWh tax credits will provide approximately $120 million of [net present value] that will be passed directly to customers. . . . Delaying the Biomass Conversions will likely forfeit the availabilities of PTCs and lead to higher project costs (and higher costs for the Company's customers)."); Tr. 311-312 (Eichenlaub) ("The PTC is a big incentive, as witness Kelly pointed out, to allow this unit to run a lot more. And basically when it's available, it's going to run. Now, it could be argued whether it's 92 percent, 90 percent or 85 percent. Either way it's still going to be relatively high compared to other system units, primarily because of that production tax credit."); Tr. 808 (Leopold) ("[N]ow is the right time to do this. . . . PTCs are available now under existing law, much more certain than what the future brings.").

[10] *See, e.g.*, Ex. 3 (Leopold) at 7, 23-24; Staff's February 15, 2012 Post-hearing Brief at 5.

[11] *See, e.g.*, Ex. 33 (Eichenlaub) at 4-7.

[12] *See, e.g.*, Ex. 2-ES at Filing Schedule 46 C. Staff asserts that the fuel supply evidence presented in the instant case "is far more advanced than the information offered in support of" the South Boston biomass application in Case No. PUE-2010-00126. Staff's February 15, 2012 Post-hearing Brief at 12. We also note that the cost analyses provided by Dominion in the instant case are more developed, as well.

The Commission also must consider the effect of the proposed Conversions on economic development within the Commonwealth.[13] Economic development encompasses, among other things, local job creation and tax revenue benefits of the proposed Conversions, as well as the effect on economic development throughout the Commonwealth of any potential rate impacts. Based on such considerations, including our finding that the proposed Conversions are cost-effective for electricity customers, we conclude that the Conversions will have a positive impact on economic development within the Commonwealth.

In sum, based on the record presented in this case, we find that: (i) the public convenience and necessity require the proposed Biomass Conversions; (ii) such Conversions will have no material adverse effect upon reliability of electric service provided by any regulated public utility; and (iii) such Conversions are not otherwise contrary to the public interest.[14]

Environmental Impact

We also must consider environmental impact. The relevant statutes, however, do not require the Commission to find any particular level of environmental benefit, or an absence of environmental harm, as a precondition to approval. Rather, the statutes direct that the Commission "shall give consideration to the effect of the facility and associated facilities on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact."[15]

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[13] Va. Code §§ 56-46.1 A and 56-596 A.

[14] Va. Code § 56-580 D.

[15] Va. Code §§ 56-46.1 A and 56-580 D.

The Department of Environmental Quality ("DEQ") coordinated an environmental review of the proposed Conversions by a number of agencies and submitted a report on each of the proposed Conversions. DEQ made the following recommendations:[16]

> Conduct an on-site delineation of all wetlands and streams within the project area with verification by the U.S. Army Corps of Engineers (Corps), using accepted methods and procedures, and follow DEQ's recommendations to avoid and minimize impacts to wetlands and streams.
>
> Reduce solid waste at the source, reuse it and recycle it to the maximum extent practicable, and follow DEQ's recommendations to manage waste, as applicable.
>
> Coordinate with Department of Conservation and Recreation (DCR) for updates to the Biotics Data System database if a significant amount of time passes before the project is implemented.
>
> Coordinate with the Department of Forestry regarding its recommendations for tree protection as necessary.
>
> Follow the principles and practices of pollution prevention to the maximum extent practicable.
>
> Limit the use of pesticides and herbicides to the extent practicable.
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> Coordinate with the Department of Historic Resources on its recommendations to protect historic and archaeological resources (Altavista and Southampton Power Stations only).
>
> Coordinate with DCR regarding its recommendation to protect recreational resources (Altavista Power Station only).
>
> Coordinate with the Department of Transportation on its recommendations regarding transportation impacts (Altavista Power Station only).
>
> Take all reasonable precautions to limit emissions of volatile organic compounds and oxides of nitrogen, principally by controlling or limiting the burning of fossil fuels (Hopewell Power Station only).

[16] Exs. 44, 45, 46.

Coordinate with the Department of Health on its recommendations regarding water sources (Southampton Power Station only).

We find that requiring Dominion to comply with the above recommendations from the DEQ reports is "desirable or necessary to minimize adverse environmental impact."[17] Thus, as a requirement of our approval herein, the Company shall comply with the DEQ recommendations set forth above.[18]

In addition, we deny Virginia Forest Watch's request to place detailed conditions on Dominion's fuel supply plan for the converted units.[19] The reasonableness, specific impact, structure, and enforcement of such proposed conditions remain uncertain. For example, Virginia Forest Watch has not shown: (1) how its proposed fuel supply limitations may impact rates, reliability, and electric or fuel supply; (2) how a specific verification and enforcement mechanism would be structured; or (3) how a specific verification and enforcement mechanism would be implemented and imposed on a continuing basis.[20]

Rate Adjustment Clause – Rider B

Dominion seeks approval of a rate adjustment clause, Rider B, for the Conversions. To qualify for such treatment, Dominion asserts that the proposed Conversions are "major unit

[17] Va. Code §§ 56-46.1 A and 56-580 D.

[18] The Company shall coordinate with DEQ concerning its implementation of these recommendations.

[19] *See, e.g.,* Virginia Forest Watch's February 15, 2012 Post-hearing Brief at 8-10. For example, Virginia Forest Watch requests that "[a]t least 95% of the fuel must be logging residue and wood waste," and that "[a]n adequate amount of logging residue, on average at least 40%, must be retained on the logging sites to protect soil resources, wildlife habitat, soil health, and water quality." *Id.*

[20] *See, e.g.*, Staff's February 15, 2012 Post-hearing Brief at 13-14.

modifications" under § 56-585.1 A 6 of the Code. The proposed Conversions necessarily will require major unit modifications; no party to this case asserted otherwise.[21]

These "major unit modifications" will convert the existing units into renewable powered facilities – which are afforded a statutorily mandated addition of 200 basis points to the otherwise authorized return on equity ("ROE").[22] As further provided by this statute, "[s]uch enhanced rate of return on common equity shall be applied . . . during the construction phase of the facility and shall thereafter be applied . . . during the first portion of the service life of the facility."[23] The statute further provides that: (a) the first portion of the service life of these renewable powered facilities is between five to fifteen years, and (b) the Commission must determine the first portion of the service life based upon the public interest, how critical the facility may be in meeting energy needs, and the risk involved in development of the facility.[24] Based on such considerations, we establish the "first portion of the service life" for these Conversions at five years. This duration is supported, in part, by record evidence regarding the following: (1) the significant portion of project costs fixed by contract;[25] (2) the modest investment costs as compared to other projects;[26] (3) the generation technology, which is neither new nor experimental in the industry or to the Company;[27] and (4) the use of pre-existing

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[21] *See, e.g.*, Dominion's February 15, 2012 Post-hearing Brief at 63.

[22] Va. Code § 56-585.1 A 6. Contrary to Consumer Counsel's argument, we find that these units will be renewable powered under the statute and, thus, that such statute mandates a 200 basis point adder. *See, e.g.*, Consumer Counsel's February 15, 2012 Post-hearing Brief at 46-48.

[23] Va. Code § 56-585.1 A 6.

[24] *Id.*

[25] *See, e.g.*, Ex. 18 (McKinley) at 18; Tr. 174, 807.

[26] *See, e.g.*, Ex. 2; Staff's February 15, 2012 Post-hearing Brief at 24.

[27] *See, e.g.*, Ex. 17 (Faison) at 2, 9-11; Ex. 18 (McKinley) at 9.

generation sites, with existing and operational infrastructure for generation facilities. Additionally, we do not find that the criticality of these Conversions requires the "first portion of the service life" to extend beyond five years.[28]

The total revenue requirement for Rider B consists of: (a) Projected Cost Recovery Factor; (b) Allowance for Funds Used During Construction ("AFUDC") Cost Recovery Factor; and (c) Actual Cost True-Up Factor. We reject the Company's requested revenue requirement of $6,444,000 for Rider B.[29] Rather, we approve Staff's proposed revenue requirement of $6,433,000.[30] The $11,000 difference between these two proposals results from using a different ROE for AFUDC. We reject the Company's request to use an ROE of 11.3% (from the Stipulation in Case No. PUE-2009-00019)[31] for AFUDC for the period June 2011 through November 2011; we previously rejected such a proposal in Case No. PUE-2011-00042 and similarly reject it herein.[32] Rather, in Case No. PUE-2011-00027 the Commission prescribed an

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[28] Although we find herein that the Conversions are required by the public convenience and necessity, how critical the Conversions may be is a separate statutory consideration for the limited purpose of establishing the "first portion of the service life."

[29] Dominion's February 15, 2012 Post-hearing Brief at 70.

[30] Staff's February 15, 2012 Post-hearing Brief at 16. This equates to less than 14¢ per month for a residential customer using 1,000 kWh per month. *See, e.g.*, Ex. 25 (Swanson) at Schedule 3, p. 1 of 6. This amount also reflects approval of the Company's proposal, which we find reasonable for purposes of this proceeding, to amortize ten months of AFUDC (June 1, 2011 through March 31, 2012) over the period beginning with the commencement of Rider B rates (April 1, 2012) and ending at the projected end of construction for the Conversions. *See, e.g.*, Tr. 291-294 (Pate). We further note that such treatment is consistent with the amortization of AFUDC as approved in Case No. PUE-2011-00042. *See, e.g.*, Dominion's February 15, 2012 Post-hearing Brief at 74.

[31] *Application of Virginia Electric and Power Company, For a 2009 statutory review of 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-2009-00019, 2010 S.C.C. Ann. Rept. 301, Order Approving Stipulation and Addendum (Mar. 11, 2010).

[32] *Application of Virginia Electric and Power Company, For approval and certification of the proposed Warren County Power Station electric generation and related transmission facilities under §§ 56-580 D, 56-265.2, and 56-46.1 of the Code of Virginia and for approval of a rate adjustment clause, designated as Rider W, under § 56-585.1 A 6 of the Code of Virginia*, Case No. PUE-2011-00042, Final Order at 17-18 (Feb. 2, 2012).

ROE of 10.4%.[33] Thus, we will allow an ROE of 12.4% (10.4% plus the statutorily required 200 basis point adder for renewable powered facilities) for calendar year 2011 and until changed.[34] We also note that Dominion has neither alleged nor established that an ROE of 12.4% prevents the Company from recovering its reasonable cost of service applicable thereto.[35] Accordingly, the Commission finds that an ROE of 10.4% plus 200 basis points, for a total of 12.4%, shall be used at this time for determining both (a) the Projected Cost Recovery Factor, and (b) the AFUDC Cost Recovery Factor.

Next, based on the record in this case, we do not find that there are "incremental costs" related to the Biomass Conversions, as that term is used in § 56-585.2 of the Code governing RPS programs. First, we do not find that any incremental costs attendant to these units have been specifically identified and quantified on the current record.[36] Second, it has not been established that the costs of the Biomass Conversions are costs of an RPS program under § 56-585.2; rather, these are costs for baseload generation units under § 56-585.1 A 6 of the Code.

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[33] *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 23 (Nov. 30, 2011) *("Biennial Review")*.

[34] We find that this option, which is permitted by the relevant statute, represents actual cost of equity capital and results in a reasonable ROE for accrued AFUDC.

[35] In addition, as explained in the *Biennial Review*, the ROE approved herein is not further modified by the Company's participation in the Renewable Energy Portfolio Standard ("RPS") program under § 56-585.2 C of the Code. *Biennial Review*, Final Order at 24-26.

[36] *See, e.g.*, Dominion's February 15, 2012 Post-hearing Brief at 74.

Finally, we approve the Company's proposed rate design for Rider B, which we find reasonable and consistent with that proposed and approved in Case No. PUE-2011-00042.[37]

Sunset Provision

As a requirement of our approval herein, we find that the authority granted by this order shall expire on December 31, 2013, if the Conversions have not commenced timely commercial operation so as to receive the PTCs and that Dominion may subsequently petition the Commission for an extension of this sunset provision for good cause shown.

Accordingly, IT IS ORDERED THAT:

(1) Subject to the findings and requirements set forth in this Final Order, the Company is granted approval for the major unit modifications; certificates of public convenience and necessity Nos. ET-69e, ET-104m and ET-110d are hereby cancelled; and certificates of public convenience and necessity Nos. ET-69f, ET-104n and ET-110e are issued to the Company for the Altavista, Hopewell and Southampton Power Stations, as redesigned and reconfigured and as set out in its Applications.

(2) The Company's Applications for approval of a rate adjustment clause, designated as Rider B, are granted in part and denied in part as set forth herein.

(3) The Company shall forthwith file a revised Rider B and supporting workpapers with the Clerk of the Commission and with the Commission's Divisions of Energy Regulation and Utility Accounting and Finance, as necessary to comply with the directives set forth in this Final

[37] *See also* Staff's February 15, 2012 Post-hearing Brief at 19. We do not reach, in this proceeding, ratemaking issues that have been identified for future consideration, including: (1) removal of legacy operation and maintenance costs from base rates as related to Rider B updates; (2) inclusion of RECs in Rider B updates; (3) purchases of low-cost RECs through separate rate adjustment clauses; (4) inclusion of PTC benefits in Rider B updates; and (5) the impact of Internal Revenue Code § 199, Income Attributable to Domestic Production Activities. *See, e.g.*, Staff's February 15, 2012 Post-hearing Brief at 19-20.

Order. The Clerk of the Commission shall retain such filing for public inspection in person and on the Commission's website: http://www.scc.virginia.gov/case.

(4) Rider B, as approved herein, shall become effective on April 1, 2012.

(5) The Company shall file its annual Rider B application on or before August 1 of each year.

(6) This case is dismissed from the Commission's docket and placed in closed status in the records maintained by the Clerk of the Commission.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the State Corporation Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, Virginia 23219. A copy hereof shall also be sent to the Commission's Office of General Counsel and Divisions of Energy Regulation and Utility Accounting and Finance.