



Principles of

Electric Utility

Regulation in Virginia



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INTRODUCTION

The goal of this Guidebook is to provide a plain-English explanation of some of the state laws regulating Virginia’s two largest monopoly electric utilities, Dominion Energy Virginia (“Dominion”) and Appalachian Power Company (“APCo”).

The statutes governing Virginia’s electric utilities, found in Title 56 of the Code of Virginia, are extremely complex. Therefore, the regulatory lawyers at GreeneHurlocker have prepared this Guidebook. As with any effort to condense a complex subject, we have had to make hard choices regarding what to include and what to cut. We hope that we have struck the right balance of clarity versus precision.

Although the statutory language is often dense, it is not indecipherable. This Guidebook and Glossary of Key Terms is intended to be a reference tool for those who want to gain a better understanding of utility regulation and energy policy in Virginia. We hope this document will be useful for legislators and their staff, lobbyists, the media, as well as all citizens.

As a final note, we expect to prepare future versions of this Guidebook. If you have suggestions for clarity or subjects that were not included, please do not hesitate to contact Will Reisinger at WReisinger@GreeneHurlocker.com or 804-672-4546.

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TITLE 56 & VIRGINIA ELECTRIC REGULATION

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BACKGROUND: PRE-1999 REGULATION, DE-REGULATION, AND RE-REGULATION.

Dominion and APCo have traditionally been allowed to operate without any competition in their geographic service territories. But, in exchange for a monopoly, they have agreed to be regulated by the State Corporation Commission (“SCC”). This arrangement is referred to as a “regulatory compact,” a concept that has governed public utility operations in the United States since the 1800s. Each state has a commission similar to the SCC that determines when a utility may raise its rates or build new facilities such as power plants and transmission lines.

Prior to 1999, Virginia’s electric utilities were regulated under Chapter 10 of Title 56 of the code of Virginia. Under Chapter 10 regulation, the SCC had the authority to set electric utility rates based on the utility’s costs of service. The SCC also had the authority to establish a utility’s rate of return, or authorized profit level, after considering factors such as the riskiness of the utility company and general economic conditions. A utility’s rate of return must be set high enough so that the company can attract investors to finance its operations.

In 1999, the General Assembly passed a law that was intended to restructure Virginia’s energy market and bring competition for electric generation to the Commonwealth. After several years, however, the General Assembly determined that sufficient competition had not developed and that retail deregulation of electric generation should not go forward. Therefore, in 2007, the General Assembly passed a comprehensive law “re-regulating” Dominion and APCo.

The 2007 Re-Regulation Act is a regulatory system that is unique to Virginia and is very different than Chapter 10 regulation. The Re-Regulation Act established new procedures for reviewing each utility’s rates and earnings. The law also allowed utilities to recover certain costs, including money spent on new power plants and renewable energy programs, outside of their base rates and through new single-issue rate riders called rate adjustment clauses. Finally, the Re-Regulation Act and numerous amendments have limited the SCC’s ability to cut rates in many circumstances, while authorizing several new financial bonuses for Dominion and APCo.

PART I:

HISTORICAL CONTEXT AND PRINCIPLES OF ELECTRIC UTILITY REGULATION

Historically, Virginia’s monopoly electric utilities were regulated under Chapter 10 of Title 56 of the Code of Virginia. Under Chapter 10, the SCC was permitted to set rates and rates of return (i.e., profits) for utilities. The primary goal of Chapter 10 rate regulation was to ensure that utility rates are just and reasonable. Chapter 10 regulation remains in effect except to the extent that it has been superseded by the 2007 Re-Regulation Act.

The following pages discuss several fundamental regulatory concepts and describe the SCC’s role in granting certificates of public convenience and necessity (“CPCNs”), which give utilities the exclusive right to sell electricity in certain geographical regions. CPCNs are also granted to allow utilities build, own, and operate power plants and transmission lines.

The majority of Virginia’s electric utilities are members of a regional transmission entity (“RTE”), the PJM Interconnection, which is a quasi-governmental organization that controls the interstate electric grid and decides when power plants should be turned on or off.

- §56-234* – *Chapter 10 regulation and traditional rate principles*
- §56-265.3* – *Exclusive service territories and monopoly concept*
- §56-580* – *CPCN concept, approvals for new generation*
- §56-77* – *SCC regulation of relations with affiliate interests*
- §56-577 A* – *Exceptions to monopoly rights of electric utilities*
- §56-579* – *RTOs/PJM*

§ 56-234. Duty to furnish adequate service at reasonable and uniform rates.

A. It shall be the duty of every public utility to furnish reasonably adequate service and facilities at reasonable and just rates ...

B. It shall be the duty of every public utility to charge uniformly therefor all persons, corporations or municipal corporations using such service under like conditions ...

§ 56-234.2. Review of rates.

The Commission shall review the rates of any public utility on an annual basis when, in the opinion of the Commission, such annual review is in the public interest, provided that the rates of a public utility subject to § 56-585.1 shall be reviewed in accordance with subsection A of that section.

§ 56-235.3. Procedures for investigation of rate applications.

At any hearing on the application of a public utility for a change in a rate, toll, charge or schedule, the burden of proof to show that the proposed change is just and reasonable, shall be upon the public utility. The Commission shall be authorized to prescribe all necessary rules and regulations for the conduct of such hearings which shall provide for full and fair participation in such hearings by any interested person subject to such guidelines as the Commission may deem appropriate.

Prior to the enactment of the 2007 Virginia Electric Utility Regulation Act ([Re-Regulation Act](#)), electric utility rates were regulated under [Chapter 10](#) of Title 56.

Chapter 10 regulation is still the law, except to the considerable extent superseded by the [Re-Regulation Act](#).

Under Chapter 10 regulation, utility rates must be determined to be [just and reasonable](#). Chapter 10 is an example of traditional regulation. The [Re-Regulation Act](#) is unique to Virginia.

In a typical rate case, the [SCC](#) will review the utility's [costs of service](#) and determine a [fair rate of return](#) (i.e., profit), which allows the utility to earn on a return on its [rate base](#). Rates are set so the utility can recover its costs plus a fair rate of return.

Rate cases can be initiated by the utility, the SCC, or an interested party, such as the Attorney General's Office.

VA. CODE § 56-265.3

Exclusive Service Territory (i.e., monopoly) Rights of Electric Utilities

56-265.3. Certificate to furnish public utility service; allotment of territory transfers, leases or amendments.

A. No public utility shall begin to furnish public utility service within the Commonwealth without first having obtained from the Commission a certificate of public convenience and necessity authorizing it to furnish such service ...

B. On initial application by any company, the Commission, after formal or informal hearing upon such notice to the public as the Commission may prescribe, may, by issuance of a certificate of convenience and necessity, allot territory for development of public utility service by the applicant if the Commission finds such action in the public interest ...

E. The Commission is authorized to promulgate any rules necessary to implement this section.

In exchange for a [monopoly](#) service territory, utilities agree to rate and profit regulation by the SCC. This arrangement is referred to as a regulatory compact.

Public utility monopolies generally provide essential goods or services that require significant capital investments (e.g., to build and maintain an electric [distribution system](#)).

Under Chapter 10 regulation, utility rates must be determined to be just and reasonable. Chapter 10 is an example traditional regulation. The Re-Regulation Act is unique to Virginia.

In order to provide service, a public utility must get a [certificate of public convenience and necessity](#) ("CPCN") from the SCC. CPCNs are granted if the [SCC](#) determines that an application is "in the public interest."

A CPCN allows a utility to operate as a monopoly in a geographic region. The SCC can change the territory covered by the CPCN.

VA. CODE § 56-580

Certificates of Public Convenience and Necessity for New Facilities

§ 56-580. Transmission and distribution of electric energy.

A. Subject to the provisions of § 56-585.1, the Commission shall continue to regulate pursuant to this title the distribution of retail electric energy to retail customers in the Commonwealth and, to the extent not prohibited by federal law, the transmission of electric energy in the Commonwealth ..

D. 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, unless exempt as a small renewable energy project for which the Department of Environmental Quality has issued a permit by rule pursuant to Article 5 (§ 10.1-1197.5 et seq.) of Chapter 11.1 of Title 10.1.

Both utilities and [non-utility generators](#) (“NUGs”) must get electric generation facilities approved before they can be built.

If the [SCC](#) finds that a proposed generation facility (1) will have no adverse effect on reliability, (2) is “required by the public convenience and necessity,” and (3) is not contrary to the public interest, the SCC must grant a [certificate of public convenience and necessity](#) (“CPCN”), allowing construction.

[Small renewable energy projects](#), which include solar and wind facilities that are 150 MW or smaller in size go through DEQ’s [permit by rule](#) process and do not need a CPCN.

Va. Code § 56-580 only permits the construction and operation of facilities. Another Code section (Va. Code § 56-585.1(1)(6)) provides the means for Dominion or APCo to recover the construction costs and a rate of return.



Power plants built by utilities are paid for by customers, through rates.
Power plants build by NUGs are paid for by investors.

CHAPTER 4 OF TITLE 56 – VA. CODE § 56-77

Regulation of Relations with Affiliated Interests

§ 56-77. Certain contracts must be approved by the Commission.

A. No contract or arrangement providing for the furnishing of management, supervisory, construction, engineering, accounting, legal, financial, or similar services, and no contract or arrangement for the purchase, sale, lease or exchange of any property, right or thing, other than those above enumerated, or for the purchase or sale of treasury bonds or treasury capital stock made or entered into between a public service company and any affiliated interest shall be valid or effective unless and until it shall have been filed with and approved by the Commission.

The [Affiliates Act](#) protects utility customers from paying above-market costs for goods and services provided by affiliates of monopoly utilities.

The SCC must review and approve all proposed transactions between a regulated utility and one of its affiliate companies.

The Affiliates Act is intended to prevent self-dealing among affiliated companies. For example, if [Dominion Energy Virginia](#) (the regulated utility) wanted to purchase a power plant or other asset from its unregulated parent company ([Dominion Energy](#)), the proposed transaction would be subject to review and approval under the Affiliates Act.

VA. CODE § 56-577(A)

Exceptions to Monopoly Rights of Electric Utilities

§ 56-577. A. Retail competition for the purchase and sale of electric energy shall be subject to the following provisions ...

3. ... After the expiration or termination of capped rates, and subject to the provisions of subdivisions 4 and 5, only individual retail customers of electric energy within the Commonwealth ... whose demand during the most recent calendar year exceeded five megawatts but did not exceed one percent of the customer's incumbent electric utility's peak load during the most recent calendar year unless such customer had noncoincident peak demand in excess of 90 megawatts in calendar year 2006 or any year thereafter, shall be permitted to purchase electric energy from any supplier of electric energy licensed to sell retail electric energy within the Commonwealth ...

a. If such customer does not purchase electric energy from licensed suppliers after [January 1, 2004], such customer shall purchase electric energy from its incumbent electric utility...

5. After the expiration or termination of capped rates, individual retail customers of electric energy within the Commonwealth ... shall be permitted:

a. To purchase electric energy provided 100 percent from renewable energy from any supplier of electric energy licensed to sell retail electric energy within the Commonwealth ... if the incumbent electric utility serving the exclusive service territory does not offer an approved tariff for electric energy provided 100 percent from renewable energy ...

Section 56-577 provides the two exceptions to [APCo's](#) and [Dominion's monopoly rights](#). This Code section is part of the Re-Regulation Act and only applies to Dominion and APCo.

Utility customers are generally permitted to purchase generation from [competitive suppliers](#) only in two situations. First, large customers with a [peak demand](#) over 5 MW may shop for competitive energy. Two or more non-residential customers may petition the SCC to be "aggregated" so that, combined, they reach the 5 MW threshold required to shop for generation service. Second, any customer may purchase 100% renewable energy from a licensed supplier if the customer's monopoly utility does not offer 100% renewable energy.

Neither APCo nor Dominion has an approved [tariff](#) offering 100% renewable energy. Therefore, all of their customers are currently permitted to shop for renewable generation from licensed suppliers.



Both APCo and Dominion have filed applications for approval of tariffs consisting of 100% renewable energy. APCo's application was denied in September, 2017, while Dominion's is pending.

VA. CODE § 56-579

Regional Transmission Entities

§ 56-579. Regional transmission entities.

A. [E]ach incumbent electric utility ... shall join or establish a regional transmission entity, which hereafter may be referred to as "RTE," to which such utility shall transfer the management and control of its transmission assets ...

2. The Commission shall develop rules and regulations under which any such incumbent electric utility owning, operating, controlling, or having an entitlement to transmission capacity within the Commonwealth, may transfer all or part of such control, ownership or responsibility to an RTE, upon such terms and conditions that the Commission determines will:

a. Promote:

(1) Practices for the reliable planning, operating, maintaining, and upgrading of the transmission systems and any necessary additions thereto; and

(2) Policies for the pricing and access for service over such systems that are safe, reliable, efficient, not unduly discriminatory and consistent with the orderly development of competition in the Commonwealth ...

d. Generally promote the public interest, and are consistent with (i) ensuring that consumers' needs for economic and reliable transmission are met and (ii) meeting the transmission needs of electric generation suppliers both within and without this Commonwealth, including those that do not own, operate, control or have an entitlement to transmission capacity.

The Regulation Act required Dominion and APCo to join [Regional Transmission Entities](#) ("RTEs"). RTEs are quasi-governmental organizations that control the operation of the interstate electric grid. Most of the country is covered by an RTE.

Both Dominion and APCo are members of the [PJM Interconnection](#) ("PJM") RTE.

PJM covers all or part of 13 states, including Virginia, West Virginia, Pennsylvania, Maryland, and New Jersey.

PJM is in charge of [dispatching](#) generation facilities in order to ensure that electric demand is always satisfied. For example, PJM tells member utilities when to ramp up or ramp down their power plants. PJM also operates a [wholesale energy market](#), which allows generators and utilities to buy and sell energy.



All electricity generated by Dominion is sold into the PJM interstate market. All of Dominion's energy requirements are then separately purchased from PJM.

PART II: THE 2007 RE-REGULATION ACT

“A new rate setting regime for Dominion Energy and Appalachian Power”

In the 1990s, many states began to deregulate their electricity markets. In deregulated states, customers are not required to buy energy from their incumbent monopoly utility. Instead, customers in these markets can shop for generation service from competitive suppliers. Beginning in 1999, the General Assembly enacted a law intended bring competition to Virginia. But in 2007, after competition failed to materialize, the General Assembly enacted a comprehensive “Re-Regulation Act.”

The Re-Regulation Act established a new rate setting regime for APCo and Dominion that is both unique to Virginia and very different than traditional utility regulation under Chapter 10. The Re-Regulation Act established biennial review rate cases in which the utilities’ rates and earnings are reviewed every two years. The law also established new procedures for increasing or decreasing utility rates. Finally, the Re-Regulation Act contained various financial incentives and bonuses for the utilities, including rate adjustment clauses (“RACs”); enhanced rate of return bonuses for the construction of certain types of generation facilities; and limitations on the SCC’s ability to reduce a utility’s rates or rate of return.

- §56-585.1 A* – *Biennial reviews for “Phase I” and “Phase II” utilities*
- §56-585.1* – *RACs*
- §56-585.1 A 6* – *ROE bonuses for fossil and renewable generation*
- §56-585.1 A 2* – *ROE peer group*
- §56-585.1* – *Allowed earnings band and refunds*
- §56-585.1* – *When rates can be cut*
- §56-585.1* – *When rates can be increased*

VA. CODE § 56-585.1(A)

Biennial Review Proceedings for “Phase I” and “Phase II” Utilities

§ 56-585.1(A). Generation, distribution, and transmission rates after capped rates terminate or expire.

Commencing in 2011, the Commission ... shall conduct biennial reviews of the rates, terms and conditions for the provision of generation, distribution and transmission services by each investor-owned incumbent electric utility ...

1. Rates, terms and conditions for each service shall be reviewed separately on an unbundled basis, and such reviews shall be conducted in a single, combined proceeding. The first such review shall utilize the two successive 12-month test periods ending December 31, 2010. However, the Commission may, in its discretion, elect to stagger its biennial reviews of utilities by utilizing the two successive 12-month test periods ending December 31, 2010, for a Phase I Utility, and utilizing the two successive 12-month test periods ending December 31, 2011, for a Phase II Utility, with subsequent proceedings utilizing the two successive 12-month test periods ending December 31 immediately preceding the year in which such proceeding is conducted. For purposes of this section, a Phase I Utility is an investor-owned incumbent electric utility that was, as of July 1, 1999, not bound by a rate case settlement adopted by the Commission that extended in its application beyond January 1, 2002, and a Phase II Utility is an investor-owned incumbent electric utility that was bound by such a settlement.

2. [F]air rates of return on common equity applicable separately to the generation and distribution services of such utility, and for the two such services combined, shall be determined by the Commission during each such biennial review.

As a general rule, a utility is permitted to have rates that allow it the [opportunity to recover](#) its costs plus a fair [rate of return](#).

The [Re-Regulation Act](#), including the [biennial review](#) provisions contained in Va. Code § 56-585.1(A), only applies to APCo and Dominion. In the Re-Regulation Act, APCo is referred to as a [Phase I utility](#), and Dominion is referred to as a [Phase II utility](#).

In a biennial review case, the [SCC](#) reviews a utility's expenses and earnings from the previous two-year period and its projected future expenses so it can develop a [revenue requirement](#).

The SCC also determines the [cost of equity](#) and [fair rate of return on common equity](#) (i.e., a profit) appropriate for each utility, based on factors such as interest rates and general economic conditions and the utility's [peer group](#).

VA. CODE § 56-585.1(A) Rate Adjustment Clauses

§ 56-585.1(A). Rate adjustment clauses

5. A utility may at any time, after the expiration or termination of capped rates, but not more than once in any 12-month period, petition the Commission for approval of one or more rate adjustment clauses for the timely and current recovery from customers of the following costs ...

b. Projected and actual costs for the utility to design and operate fair and effective peak-shaving programs...

c. Projected and actual costs for the utility to design, implement, and operate energy efficiency programs, including a margin to be recovered on operating expenses ...

d. Projected and actual costs of participation in a renewable energy portfolio standard program...

e. Projected and actual costs of projects that the Commission finds to be necessary to comply with state or federal environmental laws or regulations applicable to generation facilities...

6. To ensure the generation and delivery of a reliable and adequate supply of electricity, to meet the utility's projected native load obligations and to promote economic development, a utility may at any time, after the expiration or termination of capped rates, petition the Commission for approval of a rate adjustment clause for recovery on a timely and current basis from customers of the costs of [various generation facilities]...

Rate adjustment clauses ("RACs"), sometimes called "riders" or "trackers," allow [APCo](#) and [Dominion](#) to recover certain costs and make a profit outside of [base rates](#).

The utilities may recover several categories of costs through RACs, including: (1) generation, (2) environmental compliance, (3) energy efficiency, (4) [renewable portfolio standard program](#) costs, and (5) [transmission costs](#).

If a project's costs are recovered through a RAC, the utility is guaranteed to recover all costs – plus a rate of return on any capital investments.

Unlike [base rates](#), which are calculated and set to give utilities the opportunity to recover their costs plus a rate of return, RACs guarantee that utilities can fully recover all costs plus a rate of return.

A typical customer's bill includes both base rate and RAC charges. In 2017, base rates currently account for about 60% of a typical customer bill.

VA. CODE § 56-585.1(A)(6)

Bonuses for the Construction and Acquisition of Generation Facilities

§ 56-585.1(A) Generation, distribution, and transmission rates after capped rates terminate or expire.

To ensure the generation and delivery of a reliable and adequate supply of electricity, to meet the utility's projected native load obligations and to promote economic development, a utility may at any time, after the expiration or termination of capped rates, petition the Commission for approval of a rate adjustment clause for recovery on a timely and current basis from customers of the costs of (i) a coal-fueled generation facility that utilizes Virginia coal and is located in the coalfield region of the Commonwealth ... [and] (ii) one or more other generation facilities...

[An] enhanced rate of return on common equity shall be applied to allowance for funds used during construction and to construction work in progress during the construction phase of the facility and shall thereafter be applied to the entire facility during the first portion of the service life of the facility. The first portion of the service life shall be as specified in the table below; however, the Commission shall determine the duration of the first portion of the service life of any facility ... which determination shall be consistent with the public interest and shall reflect the Commission's determinations regarding how critical the facility may be in meeting the energy needs of the citizens of the Commonwealth and the risks involved in the development of the facility. After the first portion of the service life of the facility is concluded, the utility's general rate of return shall be applied to such facility for the remainder of its service life...

Section 56-585.1(A)(6) allows Dominion or APCo to recover costs of generation facilities through [rate adjustment clauses](#) ("RACs"). The statute also allows the utilities to receive an "[enhanced rate of return](#) on common equity."

RACs allow for "timely and current" recovery of generation facility costs. Thus a utility can begin recovering costs before the facility is in service.

The enhanced rate of return is a bonus of between 100 and 200 [basis points](#) (i.e., 1%-2%), which is applied on top of the utility's [fair rate of return](#) determined in a biennial review case. In 2013, the bonuses were rescinded for most generation facilities except for new nuclear and offshore wind facilities.

The SCC determines the "[first portion of the facility's service life](#)" (e.g., between 5 and 15 years), which is the time period that the bonus is applied.



RACs are not part of base rates. For example, a utility's base rates may stay the same, but a customer's total bill may go up due to costs recovered through RACs.

VA. CODE § 56-585.1(A)(2)(A-B)

Consideration of “Peer Utilities” When Setting Electric Utility Rates of Return (i.e., allowed profit levels)

[S]uch return shall not be set lower than the average of the returns on common equity reported to the Securities and Exchange Commission for the three most recent annual periods for which such data are available by not less than a majority, selected by the Commission as specified in subdivision 2 b, of other investor-owned electric utilities in the peer group of the utility subject to such biennial review

In selecting such majority of peer group investor-owned electric utilities, the Commission shall first remove from such group the two utilities within such group that have the lowest reported returns of the group, as well as the two utilities within such group that have the highest reported returns of the group, and the Commission shall then select a majority of the utilities remaining in such peer group. In its final order regarding such biennial review, the Commission shall identify the utilities in such peer group it selected for the calculation of such limitation. For purposes of this subdivision, an investor-owned electric utility shall be deemed part of such peer group if (i) its principal operations are conducted in the southeastern United States east of the Mississippi River in either the states of West Virginia or Kentucky or in those states south of Virginia, excluding the state of Tennessee, (ii) it is a vertically-integrated electric utility providing generation, transmission and distribution services whose facilities and operations are subject to state public utility regulation in the state where its principal operations are conducted, (iii) it had a long-term bond rating assigned by Moody’s Investors Service of at least Baa at the end of the most recent test period subject to such biennial review, and (iv) it is not an affiliate of the utility subject to such biennial review.

The [regulatory compact](#) provides that an electric utility monopoly is granted all the business in a territory, but in exchange it must let the [SCC](#) set the rates it charges.

The SCC must set a [rate of return on common equity](#) (“ROE”) for utility base rates. This means the SCC sets the percentage return that utilities get on the value of their property (their [rate base](#)).

Utility rates are based in part on the ROE authorized by the SCC. For example, if Dominion is authorized to earn an ROE of 10.0%, the company sets its rates so it can (1) recover the full costs of providing service and (2) earn an ROE “profit” of 10.0% on top of the cost of providing service.

When setting an ROE, the SCC must consider earnings of the [peer group](#) of other southeastern electric utilities. The SCC cannot set a return lower than the average returns from this peer group. This means the SCC could be required to set rates higher than it would have under a traditional [cost of equity analysis](#).



An ROE is also applied to certain RACs, such as RACs that recover generation facility costs.

VA. CODE § 56-585.1(A)(8)

Biennial Review Proceedings: When Refunds May be Given to Customers

§ 56-585.1(A)(8). Generation, distribution, and transmission rates after capped rates terminate or expire.

If the Commission determines as a result of such biennial review that ...

b. The utility has, during the test period or test periods under review, considered as a whole, earned more than 50 basis points above a fair combined rate of return on its generation and distribution services or, for any test period commencing after December 31, 2012, for a Phase II Utility and after December 31, 2013, for a Phase I Utility, more than 70 basis points above a fair combined rate of return on its generation and distribution services ... without regard to any return on common equity or other matters determined with respect to facilities described in subdivision 6, the Commission shall, subject to the provisions of subdivision 9, direct that 60 percent of the amount of such earnings that were more than 50 basis points, or, for any test period commencing after December 31, 2012, for a Phase II Utility and after December 31, 2013, for a Phase I Utility, that 70 percent of the amount of such earnings that were more than 70 basis points, above such fair combined rate of return for the test period or periods under review, considered as a whole, shall be credited to customers' bills. Any such credits shall be amortized over a period of six to 12 months, as determined at the discretion of the Commission, following the effective date of the Commission's order, and shall be allocated among customer classes such that the relationship between the specific customer class rates of return to the overall target rate of return will have the same relationship as the last approved allocation of revenues used to design base rates;

During a [biennial review base rate case](#), the [SCC](#) may order refunds to customers of [APCo](#) (a [Phase I Utility](#)) and [Dominion](#) (a [Phase II Utility](#)) only in certain circumstances.

If the SCC finds that base rate earnings during the two-year test period were more than 70 basis points (0.7%) above authorized earnings, the SCC will order the utilities to refund 70% of the excess earnings to customers. Dominion and APCo can keep the remaining 30%. The monopolies also keep all excess earnings within this 70 basis points [earnings band](#).

Even if the SCC finds overearnings and orders refunds, that does not necessarily mean that rates will be cut. A separate part of the statute, Va. Code § 56-585.1(A)(8)(c), explains when rates may be reduced.

VA. CODE § 56-585.1(A)(8)

Biennial Review Proceedings: When Rates May Be Reduced

§ 56-585.1(A)(8). Generation, distribution, and transmission rates after capped rates terminate or expire.

If the Commission determines as a result of such biennial review that ...

c. Such biennial review is the second consecutive biennial review in which the utility has, during the test period or test periods under review, considered as a whole, earned more than 50 basis points above a fair combined rate of return on its generation and distribution services or, for any test period commencing after December 31, 2012, for a Phase II Utility and after December 31, 2013, for a Phase I Utility, more than 70 basis points above a fair combined rate of return on its generation and distribution services, as determined in subdivision 2, without regard to any return on common equity or other matter determined with respect to facilities described in subdivision 6, the Commission shall, subject to the provisions of subdivision 9 and in addition to the actions authorized in subdivision b, also order reductions to the utility's rates it finds appropriate. However, the Commission may not order such rate reduction unless it finds that the resulting rates will provide the utility with the opportunity to fully recover its costs of providing its services and to earn not less than a fair combined rate of return on its generation and distribution services, as determined in subdivision 2, without regard to any return on common equity or other matters determined with respect to facilities described in subdivision 6, using the most recently ended 12-month test period as the basis for determining the permissibility of any rate reduction under the standards of this sentence, and the amount thereof.

Base rates are calculated and set at a level that will give utilities the opportunity to recover their costs plus a rate of return, based on expected electric sales volumes.

Only in certain circumstances is the SCC allowed to order base rate reductions for utilities during a biennial review case.

If the SCC finds that earnings were more than 70 basis points (0.7%) above authorized earnings for two consecutive biennial review periods, the SCC will order base rate reductions. The rates must still allow the utilities to fully recover their costs of service plus a rate of return.

The Code requires that base rates must be found to be excessive for two consecutive biennial review periods before they can be cut. However, base rates may be increased if a utility's earnings is ever more than 70 basis points below its authorized return.



Utility base rates have not been reduced since the enactment of the Re-Regulation Act.

VA. CODE § 56-585.1(A)(8)

Biennial Review Proceedings – When Rates May Be Increased

§ 56-585.1(A)(8). Generation, distribution, and transmission rates after capped rates terminate or expire.

If the Commission determines as a result of such biennial review that ...

a. The utility has, during the test period or periods under review, considered as a whole, earned more than 50 basis points below a fair combined rate of return on its generation and distribution services or, for any test period commencing after December 31, 2012, for a Phase II Utility and after December 31, 2013, for a Phase I Utility, more than 70 basis points below a fair combined rate of return on its generation and distribution services, as determined in subdivision 2, without regard to any return on common equity or other matters determined with respect to facilities described in subdivision 6, the Commission shall order increases to the utility's rates necessary to provide the opportunity to fully recover the costs of providing the utility's services and to earn not less than such fair combined rate of return, using the most recently ended 12-month test period as the basis for determining the amount of the rate increase necessary. However, the Commission may not order such rate increase unless it finds that the resulting rates are necessary to provide the utility with the opportunity to fully recover its costs of providing its services and to earn not less than a fair combined rate of return on both its generation and distribution services, as determined in subdivision 2, without regard to any return on common equity or other matters determined with respect to facilities described in subdivision 6, using the most recently ended 12-month test period as the basis for determining the permissibility of any rate increase under the standards of this sentence, and the amount thereof.

During a [biennial review case](#), the [SCC](#) may order [base rate](#) increases for utilities in certain circumstances.

If the SCC finds that [APCo's](#) or [Dominion's](#) earnings during the two-year biennial review test period were 70 basis points (0.7%) below the amount the company was authorized to earn, the SCC must increase [base rates](#) to allow the utilities to fully recover their [costs of service](#) plus a [rate of return](#).

PART III:

AMENDMENTS TO THE RE-REGULATION ACT AFFECTING UTILITY EARNINGS AND CUSTOMER REFUNDS

The General Assembly has amended the Re-Regulation Act several times since 2007 for the purpose of changing the way APCo's and Dominion's earnings are calculated during biennial review rate cases.

Two major amendments to the law – in 2013 and 2014 – required the SCC to allow APCo and Dominion to recover certain costs from customers during a particular earnings review period. These laws reduced the utilities' reported earnings, and thus limited the SCC's ability to reduce rates or order the utilities to disgorge some of their overearnings. According to the Virginia Attorney General's Office, for example, the 2014 amendment allowed Dominion to avoid refunding customers at least \$188 million in excess profits.

Finally, a 2015 amendment to the Re-Regulation Act, Senate Bill 1349, also prohibited the SCC from cutting APCo's or Dominion's rates for several years, even if the SCC determined that their base rates were too high. A report released by the SCC on September 1, 2017, found that in 2016 APCo earned excess profits above its authorized rate of return of approximately \$28 million, while Dominion earned excess profits of approximately \$252 million.

- §56-585.1 A 8** – *2013 storm/coal plant closure write off*
- §56-585.1** – *2014 North Anna 3 write off*
- §56-585.1:1** – *SB 1349 base rate freeze*

VA. CODE § 56-585.1(A)(8)

Write Offs for Storm Expenses and Coal Plant Retirements

56-585.1(A)(8). In any biennial review proceeding, [the following costs] not proposed for recovery under any other subdivision of this subsection ... shall be attributed to the test periods under review: costs associated with asset impairments related to early retirement determinations made by the utility prior to December 31, 2012, for utility generation plant; costs associated with severe weather events; and costs associated with natural disasters. Such costs shall be deemed to have been recovered from customers through rates ... in effect during the test periods under review unless such costs ... result in the utility's earned return on its generation and distribution services for the combined test periods under review to fall more than 50 basis points below the fair combined rate of return authorized under subdivision 2 for such periods or, for any test period commencing after December 31, 2012, for a Phase II Utility and after December 31, 2013, for a Phase I Utility, to fall more than 70 basis points below the fair combined rate of return authorized under subdivision 2 for such periods. In such cases, the Commission shall ... authorize deferred recovery of such costs and allow the utility to amortize and recover such deferred costs over future periods as determined by the Commission. The aggregate amount of such deferred costs shall not exceed an amount that would, together with the utility's other costs, revenues, and investments to be recovered through rates for generation and distribution services, cause the utility's earned return on its generation and distribution services to exceed the fair rate of return authorized under subdivision 2, less 50 basis points, for the combined test periods under review or, for any test period commencing after December 31, 2012, for a Phase II Utility and after December 31, 2013, for a Phase I Utility, to exceed the fair rate of return authorized under subdivision 2 less 70 basis points.

In 2013, the [Re-Regulation Act](#) was amended to allow utilities to write off costs of storm recovery efforts and the early retirement of coal plants.

These write offs, or accelerated recovery, may occur only if they don't reduce the utilities' earnings to 50 basis points below their authorized [fair rate of return](#). (The 50 basis points threshold is increased to 70 basis points for future review periods.)

If the write offs would reduce earnings by more than this amount, the SCC must allow the utilities to recover these costs over future periods.

In the utilities' subsequent biennial reviews, the accelerated recovery reduced Dominion's and APCo's reported earnings by approximately \$400 million and \$55 million, respectively. As a result, Dominion and APCo were found to have not overearned, and the SCC was not permitted to reduce rates or order that refunds be provided to customers.

VA. CODE § 56-585.1(A)(6) Dominion's 2014 Nuclear Expenditure Write Off

§ 56-585.1(A)(6) Nuclear cost recovery

Thirty percent of all costs of [a] facility utilizing nuclear power that the utility incurred between July 1, 2007, and December 31, 2013, and all of such costs incurred after December 31, 2013, may be deferred by the utility and recovered through a rate adjustment clause ... at such time as the Commission provides in an order approving such a rate adjustment clause. The remaining 70 percent of all costs of such a facility that the utility incurred between July 1, 2007, and December 31, 2013, shall not be deferred for recovery through a rate adjustment clause under this subdivision; however, such remaining 70 percent of all costs shall be recovered ratably through existing base rates as determined by the Commission in the test periods under review in the utility's next biennial review filed after July 1, 2014.

In 2014, the General Assembly required the SCC to let [Dominion](#) recover money spent developing a third nuclear reactor at its North Anna facility ([North Anna 3](#)).

The amendment permitted Dominion's recovery of 70% of its expenditures during 2007 through 2013, with the remaining 30% deferred for future recovery. The amount Dominion was allowed to recover was approximately \$320 million.

As a result, Dominion's earnings during its 2015 [biennial review](#) were \$320 million less than they would have otherwise been.

Even with the \$320 million charge against earnings, the SCC determined that Dominion still overearned and was ordered to provide \$20 million in refunds to customers after its 2015 biennial review case.



The Attorney General's Office concluded that, without the North Anna 3 write off, Dominion would have been required to refund customers at least \$188 million in excess profits in 2015. Dominion has since suspended development of the project, so it may never provide power to customers.

VA. CODE § 56-585.1:1

Freeze of Dominion and APCo Rates and Refunds

§ 56-585.1:1 – Transitional Rate Period

A. No biennial reviews ... [for a] a Phase I Utility ... shall be conducted at any time by the State Corporation Commission for the four successive 12-month test periods beginning January 1, 2014, and ending December 31, 2017. No biennial reviews [for a] Phase II Utility ... shall be conducted at any time by the State Corporation Commission for the five successive 12-month test periods beginning January 1, 2015, and ending December 31, 2019. Such test periods beginning January 1, 2014, and ending December 31, 2017, for a Phase I Utility, and beginning January 1, 2015, and ending December 31, 2019, for a Phase II Utility, are collectively referred to herein as the “Transitional Rate Period” ... Any biennial review of the rates, terms, and conditions for any service of a Phase II Utility occurring in 2015 during the Transitional Rate Period shall be solely a review of the utility’s earnings on its rates for generation and distribution services for the two 12-month test periods ending December 31, 2014, and a determination of whether any credits to customers are due for such test periods pursuant to subdivision A 8 b of § 56-585.1. After the conclusion of the Transitional Rate Period, biennial reviews shall resume for a Phase I Utility in 2020 [and] shall resume for a Phase II Utility ... in 2022, ... Consistent with this provision, (i) no biennial review filings shall be made by an investor-owned incumbent electric utility in the years 2016 through 2019, inclusive, and (ii) no adjustment to an investor-owned incumbent electric utility’s existing tariff rates ... shall be made between the beginning of the Transitional Rate Period and the conclusion of the first biennial review after the conclusion of the Transitional Rate Period, except as may be provided pursuant to § 56-245 or 56-249.6 or subdivisions A 4, 5, or 6 of § 56-585.1.

2015 Senate Bill 1349 ([SB 1349](#)) suspended the [biennial review](#) process for several years. [APCo’s base rates](#) cannot be adjusted until after the company’s 2020 biennial review. [Dominion’s](#) base rates cannot be adjusted until after its 2022 biennial review.

The law prevents any base rate adjustments – up or down – during the [Transitional Rate Period](#). [Fuel costs](#), expenses recovered through [RACs](#), and emergency rate increases are exempt from the freeze. This means total rates paid by customers can go up or down.

SB 1349 prevented the SCC from reducing Dominion’s [base rates](#), even though they had previously been found by the SCC to be too high by approximately \$300 million per year.

SB 1349 also prevents the SCC from requiring the utilities to refund customers for overearnings.



SB 1349 provided that any costs associated with coal plant retirements incurred due to the federal Clean Power Plan regulation would not be charged to customers. This regulation, however, is being rescinded by the Trump administration. A report released by the SCC on September 1, 2017, found that in 2016 APCo earned excess profits above its authorized rate of return of approximately \$28 million, while Dominion earned excess profits of approximately \$252 million.

PART IV

CLEAN ENERGY DEVELOPMENT AND RESOURCE PLANNING, EARNINGS AND CUSTOMER REFUNDS

The Re-Regulation Act contained a voluntary renewable energy portfolio standard (“RPS”) program for APCo and Dominion. An RPS law usually requires utilities to obtain a certain percentage of their power sales from renewable energy sources. While Virginia’s RPS is not mandatory, the law provides that it is in the public interest for the two utilities to satisfy the RPS goals, and the utilities are allowed to recover their reasonable costs of participation.

The Re-Regulation Act also gave customers the right to participate in renewable energy net metering programs. Virginia’s net metering law permits customers to operate renewable energy facilities (such as rooftop solar panels) on their property for the purpose of offsetting all or part of their energy usage.

In 2008, the General Assembly also required APCo and Dominion to submit integrated resource plans (“IRPs”). IRPs are required to be filed annually and include a forecast of the utility’s future load obligations and a plan to meet customer demand over the next 15 years. The SCC must review each utility’s IRP and determine whether it is reasonable and in the public interest. Consumer advocates, environmental organizations, and other interested parties are permitted to review and comment on the utility’s IRP in a formal evidentiary hearing process at the SCC.

- §56-585.2* – *RPS*
- §56-594* – *Net metering*
- §56-599* – *IRPs*

VA. CODE § 56-585.2

Virginia's Renewable Portfolio Standard Program

56-585.2 B. Any investor-owned incumbent electric utility may apply to the Commission for approval to participate in a renewable energy portfolio standard program ... 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 ...

C. It is in the public interest for utilities that seek to have a renewable energy portfolio standard program to achieve [RPS goals]...

E. [Participating utilities] shall have the right to recover all incremental costs incurred for the purpose of such participation in such program, as accrued against income, through rate adjustment clauses as provided in subdivisions A 5 and A 6 of § 56-585.1, including, but not limited to, administrative costs, ancillary costs, capacity costs, costs of energy represented by certificates described in subsection A, and, in the case of construction of renewable energy generation facilities, allowance for funds used during construction until such time as an enhanced rate of return, as determined pursuant to subdivision A 6 of § 56-585.1, on construction work in progress is included in rates, projected construction work in progress, planning, development and construction costs, life-cycle costs, and costs of infrastructure associated therewith, plus an enhanced rate of return, as determined pursuant to subdivision A 6 of § 56-585.1 ...

The [Re-Regulation Act](#) established a voluntary [renewable portfolio standard](#) ("RPS") program for utilities. The legislation states that it is "in the public interest" for utilities to participate. Participating utilities are expected, though not obligated, to obtain a certain percentage of their power sales from renewable energy sources.

Utilities can comply with RPS goals by building new renewable generation facilities or by purchasing [renewable energy certificates](#) ("RECs"). Each REC represents the equivalent of one [megawatt hour](#) of renewable generation.

The statute provides that [incremental costs](#) incurred complying with RPS goals can be recovered through [RACs](#).

Participating Virginia utilities are expected, though not obligated, to obtain an increasing percentage of their [base year](#) (2007) electric sales from renewable sources.

VA. CODE § 56-594

Virginia's Net Metering Program

§ 56-594. Net energy metering provisions.

A. The Commission shall establish by regulation a program that affords eligible customer-generators the opportunity to participate in net energy metering...

“Eligible customer-generator” means a customer that owns and operates, or contracts with other persons to own, operate, or both, an electrical generating facility that (i) has a capacity of not more than 20 kilowatts for residential customers and not more than one megawatt for nonresidential customers on an electrical generating facility placed in service after July 1, 2015; (ii) uses as its total source of fuel renewable energy, as defined in § 56-576; (iii) is located on the customer’s premises and is connected to the customer’s wiring on the customer’s side of its interconnection with the distributor; (iv) is interconnected and operated in parallel with an electric company’s transmission and distribution facilities...

“Net energy metering” means measuring the difference, over the net metering period, between (i) electricity supplied to an eligible customer-generator or eligible agricultural customer-generator from the electric grid and (ii) the electricity generated and fed back to the electric grid by the eligible customer-generator or eligible agricultural customer-generator...

F. Any residential eligible customer-generator or eligible agricultural customer-generator who owns and operates, or contracts with other persons to own, operate, or both, an electrical generating facility with a capacity that exceeds 10 kilowatts shall pay to its supplier, in addition to any other charges authorized by law, a monthly standby charge ...

The [Re-Regulation Act](#) established a [net metering program](#) for electric utility customers. Net metering customers, called [customer-generators](#), may install and operate (or contract with others to install and operate) renewable energy facilities, such as solar panels, on their property.

Any “surplus” energy generated by a customer-generator at any point in time flows back into the [electric grid](#).

Net metering allows customers to offset all or part of their electricity usage. Customer-generators only pay for their “net” energy usage. For example, if a customer uses 1000 [kilowatt-hours](#) (“kWh”) in a month and generates 500 kWh from a rooftop solar facility, the customer only pays the utility for 500 kWh.

Residential customer-generators may install systems that are 20 [kilowatts](#) (kW) or smaller in size, and non-residential customers may install facilities that are one [megawatt](#) (MW) or smaller. Residential customers with facilities larger than 10 kW must pay a [standby charge](#) to compensate for costs to maintain the [distribution system](#).

VA. CODE § 56-599

Integrated Resource Plans

§ 56-599. Integrated resource plan required

A. Each electric utility shall file an updated integrated resource plan by July 1, 2015. Thereafter, each electric utility shall file an updated integrated resource plan annually by May 1 ... Each integrated resource plan shall consider options for maintaining and enhancing rate stability, energy independence, economic development including retention and expansion of energy-intensive industries, and service reliability.

B. In preparing an integrated resource plan, each electric utility shall systematically evaluate, and may propose:

1. Entering into short-term and long-term electric power purchase contracts;
2. Owning and operating electric power generation facilities;
3. Building new generation facilities;
4. Relying on purchases from the short term or spot markets;
5. Making investments in demand-side resources, including energy efficiency and demand-side management services;
6. Taking such other actions, as the Commission may approve, to diversify its generation supply portfolio and ensure that the electric utility is able to implement an approved plan;
7. The methods by which the electric utility proposes to acquire the supply and demand resources identified in its proposed integrated resource plan;

C. The Commission shall analyze and review an integrated resource plan and, after giving notice and opportunity to be heard, the Commission shall make a determination as to whether an IRP is reasonable and is in the public interest ...

Electric utilities must file annual [Integrated Resource Plans](#) ("IRPs") with the [SCC](#) by May 1. An IRP is the utility's proposal to provide reliable service over the next 15 years. For example, the utilities may propose to build new power plants, implement energy efficiency measures, or enter into [power purchase agreements](#).

The SCC reviews each IRP and usually schedules an evidentiary hearing on the plan. Interested parties, including the Attorney General and other parties representing retail customers, may participate in the case to support or object parts of the IRP.

The SCC must make a finding as to whether the IRP is "reasonable and in the public interest."

IRPs are non-binding forecasts. Even if the SCC determines an IRP to be "reasonable," any future construction projects must still be approved.



To date, the SCC has never found a utility IRP to be unreasonable.

GLOSSARY OF TERMS

Affiliates Act – The Affiliates Act statute, Va. Code § 56-77, requires utilities to get SCC approval prior to entering into contracts with affiliate companies. The purpose of the Affiliates Act is to prevent utilities from favoring their own affiliate companies to the detriment of ratepayers.

American Electric Power (“AEP”) – AEP is the unregulated parent company of Appalachian Power Company (“APCo”). AEP owns several regulated electric utilities, including APCo, as well as numerous unregulated generation and transmission companies. AEP is based in Columbus, Ohio.

Appalachian Power Company (“APCo”) – APCo, a subsidiary of American Electric Power, is a monopoly electric utility company serving western Virginia, southern West Virginia, and northeastern Tennessee. APCo’s rates are regulated by the SCC. APCo serves approximately 500,000 Virginia customers and is based in Charleston, West Virginia.

Base rates – Base rates recover all operating costs of a utility, with the exception of costs recovered through rate adjustment clauses, fuel expenses, and purchased power costs. A typical customer bill includes base rate, rate adjustment clause, and fuel recovery charges.

Basis points – Basis points are a common unit of measure used in finance. 100 basis points equals 1.0%. This term is often used in the context of interest rates and utility rates of return.

Base year – Under Virginia’s renewable portfolio standard (“RPS”) program, 2007 is the base year used to measure utilities’ progress towards their RPS goals. Virginia’s RPS, Va. Code § 56-585.2, includes goals for utilities to obtain an amount of energy equivalent to 15% of their 2007 energy sales from renewable energy sources.

Biennial review – Under the Re-Regulation Act, Dominion and APCo are subject to biennial rate review rate cases in which the SCC reviews the rates and earnings of each utility and sets a fair rate of return that the utility is authorized to earn. The SCC must find overearnings above the authorized earnings band for two consecutive biennial review periods before it may cut rates.

Capped rate period – 1999 legislation passed by the General Assembly froze or “capped” electric utility rates in order to allow competition for electric generation to develop. The capped rate period ended when the General Assembly abandoned the planned transition to deregulation by passing the 2007 Re-Regulation Act.

Certificate of public convenience and necessity (“CPCN”) – A CPCN issued by the SCC authorizes utilities to take certain actions necessary to serve customers. For example, Virginia utilities must receive CPCNs in order to provide service in a certain geographic region or to build generation facilities.

Chapter 10 of Title 56 (“Chapter 10”) – Prior to the enactment of the 2007 Re-Regulation Act, utility rate setting was governed by Chapter 10. Chapter 10 allowed the SCC set utility rates and rates of return that it determined to be reasonable based on the utility’s costs of service and current market conditions. Chapter 10 regulation remains in effect except to the extent superseded by the Re-Regulation Act.

Competitive supplier – Competitive suppliers, also referred to as competitive service providers, are companies that are authorized to provide generation service to customers in deregulated markets. Virginia’s energy market has not been deregulated, but Virginia law allows competitive suppliers to serve certain large customers and customers who desire to purchase 100 percent renewable energy.

Cost of equity – A utility’s cost of equity refers to the percentage return a theoretical investor would require in order to purchase utility stock. The utility’s cost of equity is based on the level of risk associated with the utility’s business. Public utilities commissions set rates of return on equity (“ROE”) after determining a utility’s cost of equity.

Cost of equity analysis – The process whereby a public utilities commission analyzes the riskiness of a utility and current market conditions to determine a utility’s cost of equity, and thereby establish its rate of return.

Costs of service – A utility is permitted to recover through rates the costs necessary to provide service to customers plus a fair rate of return.

GLOSSARY (CONT...)

Customer generator – Virginia’s net metering law, Va. Code § 56-594, refers to net metering customers as customer generators. Customer-generators are customers who own and operate (or contract with another party to own and operate) a renewable facility located on their premises, which offsets all or part of the customer’s energy usage.

Depreciation – In calculating a utility’s rate base and revenue requirement, public utilities commissions will take into account the depreciation of a utility’s assets. Depreciation compensates the utility for the reduction in value of its assets over time, which may eventually have to be replaced.

Deregulated electricity market – In deregulated electricity markets, including many northeast states, customers do not have to purchase generation service from their incumbent electric utility, but may shop for generation supply from competitive suppliers. Generation service often represents the largest portion of a customer’s bill. Customers in deregulated markets generally must still purchase distribution service from their incumbent distribution utility.

Dispatch – To dispatch a generation facility means to turn the facility on so that it is providing electricity to the grid. The dispatch of generating facilities in Virginia is controlled by PJM, which manages the regional transmission system. Power plants that can be turned on or off relatively quickly when needed (such as fossil- fuel-powered plants) are called “dispatchable resources.” Generating facilities that cannot be dispatched (such as solar and wind facilities) are referred to as “non-dispatchable” resources.

Distribution system – An electric utility’s distribution system consists of various facilities and low- voltage power lines that deliver electricity to homes and businesses. Distribution systems are generally under the jurisdiction of state public utilities commissions such as the SCC, while the interstate transmission system is regulated by FERC.

Dominion Energy – is the unregulated parent company of Dominion Energy Virginia. In addition to Dominion Energy Virginia, Dominion Energy owns numerous unregulated generation and transmission companies. Dominion is based in Richmond, Virginia.

Dominion Energy Virginia – Dominion Energy Virginia (“Dominion”), a subsidiary of Dominion Energy, is the regulated electric utility serving most of eastern and northern Virginia. Dominion’s rates are regulated by the SCC. Dominion’s full legal name is Virginia Electric and Power Company and was historically referred to as “VEPCO.”

Earnings band – In a biennial review case under the Re-Regulation Act, a utility’s rates may be increased or decreased only if the utility’s earnings exceed a certain “earnings band” of 70 basis points (0.7%) above or below its authorized combined rate of return.

Electric grid – The electric grid, or “the grid,” generally refers to the interstate network of transmission and distribution lines and related facilities that bring energy from generating facilities to customers. PJM operates the interstate transmission system of which Virginia is a member.

Enhanced rate of return – The Re-Regulation Act authorized enhanced rates of return (i.e., rate of return bonuses) of between 100 and 200 basis points (1.0% to 2.0%) for certain types of new generation facilities. When these bonuses apply, utilities are permitted to recover their full construction costs, including a rate of return that includes their general rate of return and an additional 100 to 200 basis points.

Fair rate of return – A fair rate of return refers to an authorized profit level that, in theory, will allow a utility to attract capital necessary to finance its operations. A fair rate of return is a percentage return established by a public utilities commission and is based on the level of risk faced by investors in the utility’s stock.

Federal Energy Regulatory Commission (“FERC”) – FERC regulates wholesale electric sales and the interstate transmission of electricity and fuel. This includes the siting of interstate transmission lines and pipelines and setting the rates that may be charged for transmission services. State public utilities commissions, meanwhile, generally regulate intrastate energy market activities.

GLOSSARY (CONT...)

First portion of the facility's service life –

The Re-Regulation Act provides that an enhanced rate of return for certain generation facilities will only be applied to the facility's construction and operations costs for the "first portion of the facility's service life." The Code specifies a range, in years, and allows the SCC to determine the length of time that the enhanced rate of return may be applied.

Fuel costs – A utility's fuel costs include the costs to procure fuel for generation facilities, such as coal, oil, natural gas, and biomass. Costs of power purchase agreements are also treated as fuel costs under Virginia law. All reasonable fuel costs may be recovered from customers through the utility's fuel factor charge.

Fuel factor – The Virginia Code allows utilities to recover all reasonable fuel costs, which include the cost of power purchase agreements, from customers through the fuel factor charge. Fuel costs are recovered with no rate of return or profit margin added.

General rate of return – Under the Re-Regulation Act, a utility's general rate of return is the rate of return on common equity determined by the SCC. Utilities may set their rates at a level that will allow them to recover their costs of service plus a fair rate of return. The utility's general rate of return does not include any basis points bonuses.

Generation service – In deregulated electricity markets, including many northeast states, customers do not have to purchase generation service from their incumbent electric utility, but may shop for generation supply from competitive suppliers. Generation service costs, which include the costs to operate power plants, often represent the largest portion of a customer's bill.

Incremental costs – Incremental costs are the premium, or costs above business as usual, of a utility contract or program. For example, utilities are permitted to recover any incremental costs they incur to participate in Virginia's renewable portfolio standard program.

Integrated Resource Plan ("IRP") – An IRP is a plan produced by a utility that includes a forecast of its future load obligations and a plan to meet customer demand over the next 15 years. APCo and Dominion must file IRPs with the SCC each year. The SCC must review each utility's IRP and determine whether the plan is reasonable and in the public interest.

Incumbent utility – An incumbent utility has monopoly rights to provide utility services in a particular geographic region. In Virginia, APCo and Dominion and rural cooperatives are examples of incumbent electric utilities with defined service territories.

Just and reasonable – Under traditional ratemaking principles, utility rates must be just and reasonable. Rates must be set high enough to allow a utility to recover its costs of service, plus a fair rate of return.

Kilowatt ("kW") – A kW, equal to 1,000 watts, is a unit of electric power or capacity. For example, a small rooftop solar facility may have a capacity of 5 kW or less. The quantity of electricity produced by a 1kW electric generating facility equals one kilowatt-hour.

Kilowatt-hour ("kWh") – A kWh is the common unit of measure for electricity usage and billing. According to the Department of Energy, the average residential electric utility customer in the United States uses about 900 kWh of electricity per month.

Megawatt hour ("MWh") – A MWh, equal to 1,000 kWhs, is a unit of electricity usage. The quantity of electricity produced by a 1 MW electric generating facility in one hour is one megawatt-hour.

Megawatt ("MW") – A MW, equal to 1,000 kW, is a unit of electric power or capacity. A typical coal or nuclear power plant may have a capacity of 1,000 MW or more. The quantity of electricity produced by a 1 MW electric generating facility during an hour is one megawatt-hour.

Monopoly utility – A monopoly utility has the exclusive right to provide utility services to customers in a particular geographic area. Under the regulatory compact, a public utility receives a monopoly service territory, but must serve all customers and agrees to be regulated by state public utilities commissions.

Net metering – Virginia's net metering law, Va. Code § 56-594, allows net metering customers, referred to in the Code as customer-generators, to own and operate (or contract with another party to own and operate) renewable facilities located on their premises that offset all or part of their energy usage.

GLOSSARY (CONT...)

Non-utility generator (“NUG”) – A NUG is a non-utility company that sells power from its own generating facility. Utilities may purchase energy from NUGs through power purchase agreements.

North Anna 3 – North Anna 3 is the proposed third nuclear reactor at Dominion’s North Anna nuclear facility in Mineral, Virginia. Although Dominion has already recovered over \$300 million dollars in development costs from its customers, construction of the proposed facility has not yet been approved by the SCC.

Opportunity to recover – Public utilities are generally only entitled to have an opportunity to recover their costs of service, including a rate of return. If a utility does not sell enough kWhs, however, due to mild weather or an economic downturn, the utility might not fully recover its costs of service and a fair rate of return.

Overearnings (or excess profits) – The Re-Regulation Act provides a mechanism whereby a portion of a utility’s excess profits may be refunded to customers in certain circumstances. SB 1349 suspended biennial review rate cases as well as refunds of overearnings for APCo and Dominion for several years.

Peak demand – Peak demand refers to the time period when demand for electricity is highest during the year. The peak demand for many utilities occurs during the summer months, when air conditioning use is highest.

Peer group – Under the Re-Regulation Act, APCo’s and Dominion’s rate of return on common equity cannot be set lower than the average returns earned by a group of peer utilities operating in the southeast. Therefore, under the Re-Regulation Act, the SCC could be required to set a utility’s return on equity higher than it would have under a traditional cost of equity analysis.

Permit by rule – The Virginia Department of Environmental Quality administers a permit by rule program for small renewable energy facilities, which include solar and wind facilities that are 150 MW or less in size. The permit by rule program streamlines the process for approving generation facilities. Small renewable energy facilities do not need to receive a CPCN from the SCC.

Phase I Utility – “Phase I Utility” means Appalachian Power Company in the Re-Regulation Act.

Phase II Utility – “Phase II Utility” means Dominion Energy Virginia in the Re-Regulation Act.

PJM Interconnection (“PJM”) – PJM is the regional transmission entity with operational control over Virginia’s generation facilities and transmission system. PJM monitors the regional demand for electricity and determines when to dispatch generation facilities. PJM also operates a wholesale electric market.

Power purchase agreement (“PPA”) – A PPA is a contract for the sale of electric generation. Electric utilities can obtain the power necessary to serve customers through PPAs or from generation facilities they own and operate. Virginia electric utilities recover PPA costs through their fuel factor, with no rate of return markup applied.

Public utilities – including electric, natural gas, and water distribution companies – generally provide essential goods or services and have a monopoly service territory. Public utilities are subject to the regulatory compact.

Rate adjustment clauses (“RACs”) – The Code allows utilities to recover various categories of costs through RACs, including generation facility costs and costs necessary to comply with environmental laws and regulations. Recovering costs through RACs, as opposed to through base rates, benefits utilities because they are guaranteed to recover all costs, plus a fair rate of return.

Rate base – A utility’s rate base is the value of all the assets it uses to provide service to customers (including buildings, power plants, transmission lines and distribution facilities). Utilities are permitted to receive a rate of return on the value of their rate base.

Rate of return – Public utilities are permitted to receive a fair rate of return on their investments. A rate of return, expressed in a percentage, is intended to allow the utility to raise the capital necessary to finance its operations. A rate of return on common equity (“ROE”) authorizes utilities to receive a certain percentage return on the stock issued by the company.

Rate of return on common equity (“ROE”) – Utilities are permitted to receive a fair rate of return on their investments. An approved ROE authorizes utilities to receive a certain percentage return on the stock issued by the company. An ROE must be set at a level that compensates investors for their risks of owning utility stocks.

GLOSSARY (CONT...)

Re-Regulation Act – The Re-Regulation Act was a comprehensive legislative package passed by the General Assembly in 2007 after Virginia abandoned the planned deregulation of generation supply services. The Re-Regulation Act established biennial review rate cases, rate adjustment clauses, and Virginia’s voluntary renewable portfolio standard program.

Regulatory compact – The regulatory compact generally refers to the bargain whereby public utilities are granted a monopoly in a particular geographic region, but in exchange agree to be regulated by state commissions. Public utilities are allowed to recover their costs of service, including a fair rate of return, but must provide non-discriminatory service to all customers at just and reasonable rates. The regulatory compact has governed public utility operations in the United States since the 1800s.

Regional Transmission Entities (“RTEs”) – RTEs, sometimes referred to as regional transmission organizations, operate regional electric grids and control the dispatch of generation facilities. PJM is the RTE with operational control over the majority of Virginia’s electric transmission grid.

Renewable energy certificates (“RECs”) – RECs are tradable commodities that represent the generation of 1 MWh of renewable energy. Many state RPS programs allow utilities to purchase RECs in order to comply with the RPS targets.

Renewable portfolio standard (“RPS”) – An RPS is a state policy that requires electric utilities to obtain a certain percentage of their power sales from renewable resources. About 30 states have some form of an RPS. Virginia’s RPS program includes voluntary targets.

Revenue requirement – Utility rates are designed to allow utilities to recover their costs of service, including a fair rate of return. A utility’s revenue requirement includes expenses such as operations and maintenance expenses, taxes, depreciation, and an authorized rate of return on the utility’s rate base.

2015 Senate Bill 1349 (“SB 1349”) – SB 1349 suspended biennial review rate cases for APCo and Dominion from 2015 until 2020 and 2022, respectively. During this time period, referred to as the Transitional Rate Period, the SCC is generally not permitted to adjust the utilities’ base rates.

Small renewable energy project – In Virginia, small renewable energy projects include solar and wind generation facilities with rated capacities of 150 MW or less. Small renewable energy facilities are able to use the Department of Environmental Quality’s permit by rule program and do not need to receive a CPCN from the SCC.

Standby charge – A standby charge is a fee certain net metering customers must pay to their incumbent electric utility. The fee is intended to compensate utilities for their investments to maintain the distribution system. In Virginia, utilities may assess a standby charge to residential net metering customers with systems larger than 10 kW in size.

State Corporation Commission (“SCC”) – In addition to other functions, the SCC regulates the rates and facilities of Virginia’s public utilities.

Tariff – An electric utility tariff provides the terms and conditions, including price per kWh, of service.

Transitional Rate Period – The Transitional Rate Period is the time period during which biennial review rate cases are suspended and the base rates of APCo and Dominion are frozen pursuant to Senate Bill 1349. APCo’s rates are frozen until at least 2020, and Dominion’s rates are frozen until at least 2022.

Transmission system – The electric transmission system consists of high-voltage power lines that move electricity long distances. A utility’s distribution system, by contrast, delivers power in lower-voltages directly to homes and businesses. PJM controls the transmission system for most of Virginia.

Used and useful – Traditionally, utilities were not permitted to recover the costs of projects, such as new power plants, until the assets were placed into service, i.e., “used and useful.” In Virginia, utilities are now permitted to recover many construction costs through RACs before the facilities are completed.

Wholesale energy markets – Wholesale energy transactions are sales for resale, rather than sales directly to retail customers. PJM operates a wholesale energy market.