

**Virginia State Corporation Commission
eFiling CASE Document Cover Sheet**

16030203

Case Number (if already assigned)

PUE-2016-00096

Case Name (if known)

Virginia Citizens Consumer Council v. Virginia Electric
and Power Company

Document Type

EXPE

Document Description Summary

Petition for Declaratory Judgment

Total Number of Pages

45

Submission ID

11798

eFiling Date Stamp

8/30/2016 9:46:11AM



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August 30, 2016

Via Electronic Filing

Mr. Joel H. Peck, Clerk
State Corporation Commission
1300 East Main Street
Tyler Building, First Floor
Richmond, VA 23219

**RE: Virginia Citizens Consumer Council v. Virginia Electric and Power
Company
Case No. PUE-2016-00096**

Dear Mr. Peck:

Please find the enclosed *Petition for Declaratory Judgement*, filed electronically today by the Virginia Citizens Consumer Council.

Please contact me should you have any questions about this filing.

Sincerely,

/s/ William T. Reisinger

William T. Reisinger

Attachment

cc: Certificate of Service

Virginia ratepayers from hundreds of millions or billions of dollars in expenditures for development of a wasteful and unnecessary nuclear power plant project. At an estimated total cost of at least \$19.2 billion, North Anna 3 would be the most expensive power plant ever built in the United States and could raise customers' rates by 26% or more according to the Virginia Attorney General.¹ While Dominion claims that North Anna 3 is needed for compliance with the federal Clean Power Plan, it would be far more costly than the low-carbon alternative of combined renewables, demand-side management, and efficiency.²

2. To date, Dominion has spent approximately \$600 million on project development and preliminary construction of North Anna 3 (excluding financing costs),³ but has not yet sought or obtained Commission approval for those expenditures. While Dominion has represented to the Commission that it is incurring these costs at the risk of its stockholders, the Company has also stated that eventually it intends to seek recovery before the Commission.⁴ Approximately \$310 million of North Anna 3 development costs have already been charged to Virginia customers.⁵

3. As demonstrated below, in Section V, Dominion has not complied with Virginia law by failing to seek SCC approval before making expenditures on project development and beginning preliminary construction of North Anna 3. The plain language of Virginia Code Section 56-234.3 directs monopoly utilities such as Dominion to file a petition seeking formal approval from the Commission prior to constructing, or making financial commitments in

¹ See *In re: Virginia Electric and Power Company's Integrated Resource Plan filing pursuant to Va. Code § 56-597* (hereinafter "DVP 2015 IRP"), Case No. PUE-2015-00035, Ex. 13 (Norwood) at 7.

² See Comments of Dr. Mark Cooper (July 12, 2016), submitted by the Council in *In re: Virginia Electric and Power Company's Integrated Resource Plan filing pursuant to Va. Code § 56-597* (hereinafter DVP 2016 IRP), Case No. PUE-2016-00049.

³ See DVP 2015 IRP, Final Order at 8.

⁴ See ¶ 28 below.

⁵ See ¶ 28 below.

furtherance of, generation projects larger than 100 MW. This statutory requirement applies to the North Anna 3 project. Virginia Code Section 56-580 D also requires utilities to seek Commission approval prior to beginning construction of any generation facility in Virginia. As explained below, Dominion has begun construction of North Anna 3, and thus must comply with the requirements of Va. Code § 56-580 D.

4. Prior approval of the need for, and expenditures related to, North Anna 3 is not only required by law, but constitutes sound regulatory policy. Indeed, this review is essential to the preservation of the Commission's ability to protect ratepayers from unreasonable expenditures with very large impacts on customers and the Virginia economy by monopoly utilities. As discussed in the attached Declaration by Peter A. Bradford, (Attachment A), requiring prior approval of large generation projects is necessary to ensure that consideration of reasonable alternatives will not be foreclosed by unapproved commitments and expenditures. A former commissioner of the U.S. Nuclear Regulatory Commission and a former chair and commissioner of the New York Public Service Commission and the Maine Public Utilities Commission, Mr. Bradford states that, in his experience, statutes requiring monopoly utilities to obtain commission approval prior to commencing construction of generating facilities serve at least two purposes: (1) protecting customers by assuring that utilities choose generating options that provide the best combinations of bill impacts, service impacts, environmental impacts and other economic and social impacts on the state, and (2) providing a high degree of assurance to the utility that prudently incurred construction costs will be included in rates (in many states as long as the facility becomes "used and useful" to customers).

5. As demonstrated by Mr. Bradford's Declaration, immediate Commission review of the North Anna 3 project is critical because, in the Council's view, Dominion cannot

demonstrate that the costs associated with North Anna 3 would be just and reasonable or eligible for approval by the Commission under any applicable standard.

6. Sections 56-234.3 and 56-580 D of the Code of Virginia require Dominion to seek and receive Commission approval prior to constructing North Anna 3 or making financial commitments therefore. Dominion has begun construction of North Anna 3, and has made significant financial commitments towards the project, but has not received the necessary approvals from the Commission. Accordingly, the Council requests a declaration from the Commission that Dominion must receive approval of its project development and preliminary construction expenditures pursuant to Virginia Code Sections 56-234.3 and 56-580 D prior to further development of the North Anna 3 project.

7. The Council requests that Dominion be directed to seek and obtain Commission approval prior to further development of the North Anna 3 project. The Council's request is based on the plain language of the Code of Virginia, and is rooted in Article IX of the Constitution of Virginia.

II. PARTIES

8. The Council is a 501(c)(3) grassroots organization that has represented the interests of Virginia ratepayers in proceedings and hearings before the Commission and the Virginia General Assembly, as well as other state and federal courts and administrative agencies, since the 1960s.

9. Dominion is a for-profit monopoly electric utility serving over 2.4 million commercial, industrial, and residential customers in the Commonwealth of Virginia. It is a subsidiary of Dominion Resources, Inc. and has its corporate headquarters at 120 Tredegar Street, Richmond, Virginia 23219.

III. JURISDICTION

10. The Commission has the power and the duty to regulate, supervise, and control the conduct, rates, and facilities of public service companies, including monopoly electric utilities operating in the Commonwealth. Article IX, § 2 of the Constitution of Virginia provides that the Commission “shall have power and be charged with the duty of regulating” the rates, charges, services, and facilities of public service companies, including monopoly electric utilities. The Supreme Court of Virginia has held that the Commission’s constitutional power and duty to regulate and control the conduct of monopoly electric utilities is “broad, general, and extensive.”⁶ The Commission’s constitutional obligation to regulate and control monopoly electric utilities is mandatory, not permissive.

11. Numerous statutes provide that the Commission has the authority and obligation to regulate the conduct, rates, and facilities of monopoly electric utilities. The Commission, for example, is charged with the duty “of supervising, regulating and controlling all public service companies ... in all matters relating to the performance of their public duties ... and of correcting abuses therein by such companies.”⁷ The Commission has the power to administer and enforce all laws within its jurisdiction and to issue temporary and permanent injunctions.⁸ The Commission has the authority, under Rule 100 B and 100 C of the Commission’s Rules of

⁶ *Board of Supervisors v. Appalachian Power Co.*, 216 Va. 93, 105 (1975).

⁷ Va. Code § 56-35.

⁸ Va. Code § 12.1-13. Moreover, Va. Code § 56-6 provides that “any person aggrieved by anything done or omitted in violation of any of the provisions of [Title 56] by any public service corporation chartered or doing business in this Commonwealth, shall have the right to make complaint of the grievance and seek relief by petition against such public service corporation before the State Corporation Commission” and that the Commission “shall have jurisdiction, by injunction, to restrain such public service corporation from continuing the same, and to enjoin obedience to the requirements of this law, and the Commission, sitting as a court of record, shall also have jurisdiction, by mandamus, to compel any public service corporation to observe and perform any public duty imposed upon public service corporations by the laws of this Commonwealth.”

Practice and Procedure, to consider petitions for declaratory judgment.

12. In addition to its general powers to regulate the rates and facilities of monopoly electric utilities, the Commission has very specific duties and obligations to regulate and control the development and construction of new generation facilities, including financial expenditures made therefore. Virginia Code Section 56-234.3 confers upon the Commission the power and duty to regulate the construction and pre-construction development of certain new generation facilities proposed by regulated electric utilities. This statute provides that, prior to constructing a new generation facility larger than 100 MW, or making financial commitments therefore, a regulated electric utility shall file a petition with the Commission. The Commission thereafter “shall order that a public hearing be held” and determine “the necessity of the proposed generation facility.” Virginia Code Section 56-234.3 was enacted in 1976, at a time when nuclear projects around the country were incurring massive cost overruns. Its enactment indicates the General Assembly’s understanding that mere after-the-fact prudence reviews of large generation project expenditures are insufficient to protect customers or the broader public interest.

13. Virginia Code Section 56-580 D, meanwhile, requires public utilities and non-utility companies alike to seek Commission approval prior to constructing generation facilities of any size that are to be located in Virginia. This statute provides that the Commission may authorize the construction of such facilities only after considering several factors, including whether the facilities are required by the public convenience and necessity. Virginia Code Section 56-580 D, unlike § 56-234.3, requires the Commission to consider the potential effects the facilities may have on the environment.

14. Finally, the United States Supreme Court has long recognized that the activities

and facilities of natural monopolies such as Dominion must be subjected to state regulation and control. The Supreme Court has held that when “one devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good.”⁹

IV. BACKGROUND

15. Dominion has been developing North Anna 3 for several years. The proposed facility would have a rated capacity of approximately 1,500 MW and be located adjacent to two existing nuclear units, North Anna 1 and 2, in Mineral, Virginia. Dominion has spent approximately \$600 million, excluding financing costs, on North Anna 3 to date.¹⁰ These expenditures include costs to develop the engineering, procurement, and construction contract for the project and legal fees in pursuit of a combined construction and operating license from the Nuclear Regulatory Commission, which Dominion has yet to obtain. Dominion has selected a reactor design for North Anna 3 and has entered into a Project Development Agreement with GE-Hitachi and Fluor Enterprises, Inc., for continued development of the reactor.¹¹ The Commission has noted that “full build-out costs [of North Anna 3] are currently projected at \$20 billion.”¹²

16. In addition, Dominion has begun the physical construction of North Anna 3. The Company, for example, has begun site preparation for the North Anna 3 facility and activities to physically separate the existing North Anna 1 and 2 sites from the North Anna 3 facility site. Dominion has spent at least \$58.6 million specifically on North Anna 3 facilities and

⁹ *Munn v. Illinois*, 94 U.S. 113, 126 (U.S. 1877).
¹⁰ DVP 2015 IRP, Final Order at 8.
¹¹ See DVP 2015 IRP, Ex. 31 (Mitchell Rebuttal) at 5.
¹² DVP 2015 IRP, Final Order at 23.

infrastructure.¹³ Dominion has constructed and re-located certain buildings, including “newly built craft and other service support buildings,” on the North Anna 3 site.¹⁴ Dominion has represented to the Commission that these costs “would not have been incurred *but for* the development of North Anna 3”¹⁵ and that they constitute “costs of the [North Anna 3] facility.”¹⁶ Dominion has previously argued that administrative and security buildings and other infrastructure associated with a generation facility should be considered part of the generation facility for purposes of cost recovery.¹⁷ The Commission and the Supreme Court of Virginia have also held that infrastructure associated with a generation facility will be considered a part of the generation facility under the Regulation Act.¹⁸

V. REQUEST FOR DECLARATORY JUDGMENT

17. The Council requests that the Commission declare that Dominion is required to receive approval pursuant to Va. Code § 56-234.3 and 56-580 D prior to undertaking further development activities or making additional financial commitments related to the North Anna 3 project. As more fully described below, an actual controversy exists, and the Council has no other adequate remedy other than a declaration from the Commission as requested herein.

¹³ See, e.g., *Application of Virginia Electric and Power Company, For a 2015 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-2015-00027, Dominion Post-Hearing Brief at 4 (emphasis original) (hereinafter referred to as “DVP 2015 Biennial Review”).

¹⁴ DVP 2015 Biennial Review, Ex. 47 (Stevens Rebuttal) at 34.

¹⁵ DVP 2015 Biennial Review, DVP Post-Hearing Brief at 4 (emphasis original).

¹⁶ DVP 2015 Biennial Review, Ex. 47 (Stevens Rebuttal) at 34.

¹⁷ See *Application of Virginia Electric and Power Company, For approval and certification of the proposed Brunswick County Power Station and related transmission facilities*, Case No. PUE-2012-00128, Dominion Response to Staff Motion for Ruling at 11-12 (April 4, 2013).

¹⁸ See *Office of the AG v. State Corp. Comm’n*, 288 Va. 183, 193 (2014) (“[C]osts of associated infrastructure are a cost of the [generation] facility”); see also *Application of Virginia Electric and Power Company, For approval and certification of the proposed Brunswick County Power Station and related transmission facilities*, Case No. PUE-2012-00128, Order on Reconsideration at 7 (Nov. 18, 2013).

A. **Va. Code § 56-234.3 Requires Dominion to Seek Prior Approval of Financial Commitments for North Anna 3.**

18. The plain language of Virginia Code Section 56-234.3 requires any regulated electric utility to file a petition requesting Commission approval prior to commencing construction of a generation facility that is 100 MW or larger in capacity or making “financial commitments therefore”:

Prior to construction or financial commitments therefor, any electric utility subject to the jurisdiction of the State Corporation Commission intending to construct any new generation facility capable of producing 100 megawatts or more of electric energy shall submit to the State Corporation Commission a petition setting forth the nature of the proposed construction and the necessity therefor in relation to its projected forecast of programs of operation. Such petition shall include (i) the utility's preliminary construction plans, (ii) the methods by which the work will be contracted, by competitive bid or otherwise, (iii) the names and addresses of the contractors and subcontractors, when known, proposed to do such work, and (iv) the plan by which the public utility will monitor such construction to ensure that the work will be done in a proper, expeditious and efficient manner. The Commission, upon receipt of the petition, shall order that a public hearing be held to assist it in accumulating as much relevant data as possible in reaching its determination for the necessity of the proposed generation facility. The Commission shall review the petition, consider the testimony given at the public hearing, and determine whether the proposed improvements are necessary to enable the public utility to furnish reasonably adequate service and facilities at reasonable and just rates.¹⁹

19. Virginia Code Section 56-234.3 remains a valid and enforceable statute despite arguments made by Dominion in a legal memorandum filed in the Company’s pending Integrated Resource Plan proceeding.²⁰ Specifically, the 2007 Virginia Electric Utility Regulation Act, Va. Code § 56-576, et seq. (“Regulation Act”), does not supplant or otherwise invalidate Chapter 10 of Title 56 of the Code of Virginia, § 56-232 et seq., including § 56-234.3.

¹⁹ Emphasis added.

²⁰ See DVP 2016 IRP, Legal Memorandum at 9 (April 29, 2016).

In Virginia, as a general matter, “the repeal of statutes by implication is not favored.”²¹ A later act will repeal a prior act only when the legislature has indicated its clear intent.²² Nothing in the Regulation Act indicates that the General Assembly intended to abrogate the provisions of Chapter 10, including § 56-234.3. To the contrary, the Regulation Act explicitly states that the Commission shall retain its authority to regulate utilities pursuant to Chapter 10:

Except as otherwise provided in this section, the Commission shall exercise authority over the rates, terms and conditions of investor-owned incumbent electric utilities for the provision of generation, transmission and distribution services to retail customers in the Commonwealth pursuant to the provisions of Chapter 10 (§ 56-232 et seq.)²³

20. The Commission has recognized the continuing applicability of § 56-234.3 after the passage of the 2007 Regulation Act:

We further note that the Commission has additional authority over public utilities under various other provisions of Chapter 10 of Title 56. For example, § 56-234.3 of the Code contains specific provisions related to construction projects such as the one approved herein, including the requirement that ‘the Commission shall investigate and monitor the major construction projects of any public utility to assure that such projects are being conducted in an economical, expeditious, and efficient manner.’²⁴

The Commission Staff has also previously argued that the Regulation Act does not supplant § 56-234.3. The Staff has stated that “[t]he Commission has the authority to initiate a prudency review for North Anna 3 costs pursuant to multiple sources of statutory authority, including ... §

²¹ 1977-78 Op. Va. Att’y Gen. 351, 353; see also *S. Norfolk v. Norfolk*, 190 Va. 591, 601, 58 S.E.2d 32, 36 (1950) (“[A] later act does not by implication repeal an earlier act unless there is such a clear, manifest, controlling, necessary, positive, unavoidable, and irreconcilable inconsistency and repugnancy, that the two acts cannot, by a fair and reasonable construction, be reconciled.”)

²² See *id.*

²³ Va. Code § 56-585.1 C.

²⁴ *Application of Virginia Electric and power Company, For a certificate of public convenience and necessity to construct and operate an electric generation facility in Wise County, Virginia, and for approval of a rate adjustment clause under §§ 56-585.1, 56-580 D, and 56-46.1 of the Code of Virginia*, Case No. PUE-2008-00066, Final Order at 10, n.19 (March 31, 2008).

56-234.3.”²⁵ The Attorney General, likewise, has argued that Va. Code § 56-234.3 “requires the Company to file a petition with the Commission ‘prior to construction or financial commitments’ related to a new generation facility of 100 megawatts or more.” The Attorney General has stated that “[t]he Regulation Act of Chapter 23 of Title 56 does not diminish the applicability of § 56-234.3” and that “[n]othing in the [Regulation Act] sets aside § 56-234.3.”²⁶

21. Additionally, § 56-580 D does not supplant or invalidate § 56-234.3. As mentioned above, “the repeal of statutes by implication is not favored” in Virginia,²⁷ and a later act will repeal a prior act only when the General Assembly has indicated its clear intent.²⁸ The two statutes at issue apply different obligations to different types of entities in order to achieve different regulatory policy objectives. Section 56-234.3 imposes obligations only upon electric utilities regulated by the Commission, while § 56-580 D applies to any entity that proposes to construct a generation facility in Virginia. The statutory requirements of § 56-234.3 are only triggered by larger generation projects – those 100 MW or larger. Virginia Code § 56-580 D, meanwhile, applies more broadly to any entity that wishes to construct a generation facility of any size in the Commonwealth. The Commission’s authority under § 56-234.3 over the activities of regulated utilities includes oversight of projects within and outside of Virginia. Another important distinction is that Virginia Code § 56-234.3 imposes requirements on regulated utilities “prior to [making] ... financial commitments” in furtherance of generation projects, while § 56-580 D merely requires Commission approval before “construction and operation” of a generation facility in Virginia. With regard to larger generation projects of

²⁵ DVP 2015 Biennial Review, Staff Brief at 63.

²⁶ DVP 2015 Biennial Review, Brief of Attorney General at 40-41.

²⁷ 1977-78 Op. Va. Att’y Gen. 351, 353; see also *S. Norfolk v. Norfolk*, 190 Va. 591, 601, 58 S.E.2d 32, 36 (1950) (“[A] later act does not by implication repeal an earlier act unless there is such a clear, manifest, controlling, necessary, positive, unavoidable, and irreconcilable inconsistency and repugnancy, that the two acts cannot, by a fair and reasonable construction, be reconciled.”)

²⁸ See *id.*

regulated electric utilities, therefore, the Commission’s regulatory authority under § 56-234.3 is broader than it is under § 56-580 D. For all of these reasons, it is clear that Va. Code § 56-234.3 remains in effect today and was not supplanted by § 56-580 D.

22. The remaining question for the Commission is whether Dominion’s spending on the North Anna 3 project constitutes “construction or financial commitments” in furtherance of a “new generation facility capable of producing 100 megawatts or more of electricity.” North Anna 3, with an estimated capacity of approximately 1,500 MW, would qualify as a new generation facility capable of producing 100 MW or more of electricity. Indeed, North Anna 3 would be the largest nuclear power plant in the country in terms of capacity. It would also be the most expensive power plant of any kind ever constructed in the United States. And it cannot be disputed that Dominion has made significant “financial commitments” in furtherance of the North Anna 3 project. Dominion has reported to the Commission that it has spent approximately \$600 million to date on the project²⁹ and plans to spend at least \$647 million, excluding financing costs, before seeking approval from the Commission to construct the facility.³⁰ The Company has also begun construction of infrastructure for the North Anna 3 facility.³¹ For these reasons, Dominion must request and receive approval pursuant to § 56-234.3 before continuing North Anna 3 development activities.

B. Va. Code § 56-580 D Requires Dominion to Seek Commission Approval Prior to Beginning Construction of North Anna 3.

23. Even if the Commission were to determine that § 56-234.3 does not apply to the North Anna 3 project, Dominion is still required to seek Commission approval prior to beginning construction of the facility pursuant to § 56-580 D. Under this Code section, the Commission

²⁹ DVP 2015 IRP, Final Order at 8.

³⁰ DVP 2016 IRP, Plan at 108-109.

³¹ See ¶ 24 below.

may permit the construction of “electrical generating facilities in Virginia” only after considering several factors:

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.

24. Construction of North Anna 3 has begun. As discussed above, Dominion has spent approximately \$600 million on the North Anna 3 project to date. The Company has spent at least \$58.6 million on such infrastructure, costs which the Company says “would not have been incurred *but for* the development of North Anna 3”³² and thus, Dominion has represented, constitute “costs of the [North Anna 3] facility.”³³ These expenditures include site preparation activities and the construction of administrative buildings and other infrastructure specifically for North Anna 3, including “newly built craft and other service support buildings,” on the North Anna 3 site.³⁴ Any reasonable definition of “construction” in § 56-580 D would include Dominion’s North Anna 3 expenditures to date. Additionally, for purposes of cost recovery, both Dominion and the Commission have previously interpreted the term “generation facility” to include infrastructure that is associated with a generation plant.³⁵ The Company has, in past Commission cases, successfully argued that administrative and security buildings and other

³² DVP 2015 Biennial Review, DVP Post-Hearing Brief at 4 (emphasis original).

³³ DVP 2015 Biennial Review, Ex. 47 (Stevens Rebuttal) at 34 (emphasis added).

³⁴ DVP 2015 Biennial Review, Ex. 47 (Stevens Rebuttal) at 34.

³⁵ The Commission has previously noted that costs of “infrastructure associated with [a generation facility], such as certain water and sewer lines, roads, administrative and security buildings, and other power lines” are considered part of the generation facility costs which may be recovered pursuant to Va. Code § 56-585.1 A 6. *Application of Virginia Electric and Power Company, For approval and certification of the proposed Brunswick County Power Station and related transmission facilities*, Case No. PUE-2012-00128, Order on Reconsideration at 7 (Nov. 18, 2013).

infrastructure associated with a generation facility should be considered part of the generation facility for purposes of cost recovery.³⁶ The Virginia Supreme Court has also ruled that costs of infrastructure “associated with” a generation facility constitute “costs of the facility” under the Regulation Act.³⁷ For these reasons, Dominion’s development activities at the North Anna 3 project constitutes “construction ... of [an] electrical generating facilit[y] in Virginia” for purposes of § 56-580 D.

C. Commission Review of the North Anna 3 Project Is Not Only Required by Law, But Is Also in the Public Interest.

25. Commission review of the North Anna 3 project is not only required by law, but is in the public interest. As discussed in the attached Bradford Declaration, as a general matter, prior review of utility expenditures on major electric generation projects is necessary for the protection of both ratepayers and the utility.

26. In this case, customers have already been unlawfully charged approximately \$310 million for the North Anna 3 project even though it has not been approved by the Commission. Dominion projects that it will spend millions more on North Anna 3 before seeking Commission approval of the project, and the Company maintains that these pre-approval expenditures will ultimately be recoverable from its customers – even if the facility is never constructed. Every additional dollar spent by Dominion on the North Anna 3 project increases the financial risk borne by its customers. And, as discussed in Mr. Bradford’s Declaration, as Dominion spends more money on North Anna 3, it may become more difficult for the expenditures to be

³⁶ *Application of Virginia Electric and Power Company, For approval and certification of the proposed Brunswick County Power Station and related transmission facilities*, Case No. PUE-2012-00128, Dominion Response to Staff Motion for Ruling at 11-12 (April 4, 2013).

³⁷ “[C]osts of associated infrastructure are a cost of the [generation] facility.” *Office of the AG v. State Corp. Comm’n*, 288 Va. 183, 193 (2014).

disallowed without causing financial harm to the utility.³⁸

27. Further, there is no indication that the North Anna 3 project – currently projected to cost approximately \$20 billion – would ever be cost-competitive or approved by the Commission. As the Council’s public comments in Dominion’s pending IRP proceeding establishes, Virginia’s future electricity needs – including any needs resulting from the Clean Power Plan or other carbon reduction initiatives – can be met more quickly and at far lower costs without North Anna 3.³⁹

28. While Dominion has represented to the Commission that North Anna 3 project development and preliminary construction costs “are incurred solely at the risk of the Company’s stockholders,”⁴⁰ the Company has made it clear that at some point in the future, it intends to seek recovery of those expenditures, whether or not the project is ever completed. According to Dominion, “[t]he assessment is we’re acting prudently, so we’ll recover it.”⁴¹ The Company is treating all ongoing expenditures as “recoverable” for accounting purposes.⁴² And, as the Commission has recognized, approximately \$310 million of North Anna 3 development costs have already been charged to Dominion’s Virginia customers.⁴³ North Anna 3 development

³⁸ See Bradford Declaration at 13. The Commission has also noted that, as North Anna 3 costs accumulate, the large amount invested may be used as a justification by Dominion to support approval of cost recovery: “[s]hould Dominion come to this Commission in a future [certificate] or [rate adjustment clause] proceeding having already incurred multiple billions of dollars in costs on North Anna 3, it is entirely foreseeable that the amount of costs already incurred will be argued in that proceeding as a compelling reason for the Commission to approve the application.” *In re: Virginia Electric and Power Company’s Integrated Resource Plan filing pursuant to Va. Code § 56-597 et seq.*, Case No. PUE-2015-00035, Final Order at 9 (December 30, 2015).

³⁹ See Comments of Dr. Mark Cooper (July 12, 2016), submitted by the Council in *In re: Virginia Electric and Power Company’s Integrated Resource Plan filing pursuant to Va. Code § 56-597*, Case No. PUE-2016-00049.

⁴⁰ DVP 2016 IRP at 109; see also DVP 2016 IRP, DVP Legal Memorandum at 7.

⁴¹ See DVP 2015 IRP, Final Order 8, n.23 (citing Tr. 497-498).

⁴² See DVP 2016 IRP, Final Order 8, n.23 (citing Tr. 497-498). The Attorney General has estimated that if the North Anna 3 development costs had not been recovered, customers would have received refunds of at least \$188 million. See DVP 2015 Biennial Review, Attorney General’s Brief at 8.

⁴³ Dominion’s North Carolina customers have not been charged for any North Anna 3 development costs.

3 project.

Request for Relief

WHEREFORE, the Council respectfully requests that the Commission enter an order that (1) declares that Dominion is required to receive approval pursuant to Va. Code §§ 56-234.3 and 56-580 D prior to further developing or making further expenditures related to the North Anna 3 project; (2) directs Dominion to make a filing pursuant to §§ 56-234.3 and 56-580 D seeking approval to continue North Anna 3 development and construction activities; and (3) grants any additional relief that the Commission may deem appropriate.

Respectfully submitted,

VIRGINIA CITIZENS CONSUMER COUNCIL

By Counsel

/s/ William T. Reisinger

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Counsel for the Virginia Citizens Consumer Council

160830209

CERTIFICATE OF SERVICE

I hereby certify that on this 30th day of August, 2016, a true and correct copy of the foregoing was sent by U.S. Mail upon the following:

William H. Chambliss, Esq.
State Corporation Commission
Office of General Counsel
P.O. Box 1197
Richmond, Virginia 23218

Mark. O. Webb, Esq.
General Counsel
Dominion Resources, Inc.
120 Tredegar Street
Richmond, Virginia 23219

C. Meade Browder, Jr., Esq.
Office of the Attorney General
202 North 9th Street
Richmond, Virginia 23219

Virginia Electric and Power Company
d/b/a Dominion Virginia Power
CT Corporation System
4701 Cox Road, Suite 285
Glen Allen, Virginia 23060

/s/ William T. Reisinger

ATTACHMENT A

Declaration of Peter A. Bradford

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

VIRGINIA CITIZENS CONSUMER COUNCIL,)	
)	
Petitioner,)	
)	
v.)	Case No. PUE-2016-00_____
)	
VIRGINIA ELECTRIC AND POWER COMPANY,)	
)	
Defendant.)	

For a declaratory judgment and an order
requiring a filing pursuant to §§
56-234.3 and 56-580 D of the Code of Virginia

Declaration of Peter A. Bradford

I, Peter A. Bradford, declare as follows:

1. I am the CEO of Bradford Brook Associates, a consulting firm specializing in energy, water and telecommunications regulatory policy. I have prepared this declaration in support of the Virginia Citizens Consumer Council petition asking the Virginia State Corporation Commission (“SCC” or “Commission”) to require Virginia Electric and Power Company, d/b/a Dominion Virginia Power (“Dominion” or “Company”), to obtain the approval of the Commission before spending more money on the proposed North Anna 3 nuclear power plant.

2. I am qualified by training and experience to evaluate the economic and regulatory implications of Dominion’s failure to obtain SCC approval for its expenditures on North Anna 3. A copy of my curriculum vitae is attached.

Statement of Expert Qualifications

3. My regulatory experience includes serving as chair of the New York Public Service Commission (1987-95), chair and commissioner of the Maine Public Utilities Commission (1971-1977 and 1982-1987) and commissioner of the U.S. Nuclear Regulatory Commission (1977-1982). I also served briefly as Maine's Public Advocate in 1982.

4. I am an Adjunct Professor at Vermont Law School, where I have been teaching a course entitled "Nuclear Power and Public Policy". I also have taught or co-taught courses entitled "The Law of Electric Restructuring" at Vermont Law School and "Energy Policy and Environmental Protection" at the Yale School of Forestry and Environmental Studies. I am a graduate of Yale University and Yale Law School.

5. I was a member of the National Association of Regulatory Utility Commissioners ("NARUC") from 1971 until 1995 and served as its president in 1987. I served on NARUC's Electric, Gas and Communications Committees as well as on the Subcommittees on Nuclear Waste and Nuclear Economics. I was also the liaison between the Nuclear Regulatory Commission and NARUC and have testified before the U.S. Congress at least 50 times on issues relating to nuclear power.

6. More recently, I participated in a 2005 panel of the National Research Council of the National Academy of Sciences evaluating the alternatives to continued operation of the Indian Point nuclear units in New York. I was also a member of the 2007 Keystone Center Nuclear Power Joint Fact Finding project, which identified points of agreement among a broad range of constituencies, including nuclear power plant owners and builders, on issues relating to

nuclear power costs and the role of nuclear power in combating climate change. I also served on the State of Vermont Public Oversight Panel evaluating the reliability of the Vermont Yankee Nuclear Power Plant. I am one of Vermont's two representatives on the Texas/Vermont Low Level Radioactive Waste Compact Commission.

7. In other countries, I have participated in evaluating the need for new nuclear units as a Chernobyl replacement option in Ukraine for the European Bank for Reconstruction and Development, in evaluating new nuclear power and decommissioning costs in Armenia and in evaluating the regulatory structure to oversee the Mochovce nuclear plant in Slovakia.

8. During my terms on the New York and Maine utility commissions, these commissions implemented competitive power procurement, starting with the Public Utility Regulatory Policy Act of 1978 and related state laws and continuing through the early stages of electric utility restructuring in the 1990s. The New York Public Service Commission published its initial electric restructuring principles in December, 1994.

9. While in New York, I served on the New York State Energy Planning Board, the Board of the New York State Energy Research and Development Administration, the New York Environmental Board and as chair of the New York State Energy Facilities Siting Board. These bodies had extensive responsibility for the reliability and affordability of New York's power supply, which was at all times adequate during my term.

10. My first experience with regulating rate impacts of nuclear power came when the Maine Yankee nuclear power plant came on line in 1972. Like the operating Virginia plants, Maine Yankee was a relatively inexpensive unit, and the impacts were not large. The same was

true for Maine's investments in other early New England units. However, early good experiences turned out not to guarantee that later ones would go well.

11. In New York and Maine, I chaired utility regulatory commissions that decided cases involving power supply, rate implications and prudence concerning the Seabrook plant in Maine as well as the Shoreham and Nine Mile Point II plants in New York. I chaired the New York and Maine commissions when those states disengaged from the Shoreham and Seabrook plants respectively, in ways that resulted in adequate power supplies, improved economic development and electric rate impacts lower than would otherwise have occurred. We also decided several proceedings allocating the costs of cancelled nuclear plants, including Seabrook 2 and Shoreham.

12. After leaving the New York Public Service Commission in early 1995, I testified in electric restructuring proceedings on the development of competitive electricity markets in many state regulatory proceedings. I also participated and advised in developing regulatory institutions for competitive power procurement in several other countries.

13. As a utility regulator, I was involved in deciding many cases concerning the costs and risks of nuclear power, some of which included consideration of alternatives to nuclear power plants. In recent years, I have testified in nuclear power plant certification proceedings before utility commissions in Florida, South Carolina and North Carolina. I have also testified regarding energy resource procurement in California, Maryland, Delaware and Maine.

14. As a member of the U.S. Nuclear Regulatory Commission between 1977 and 1982, I took part in the issuance of construction permits and operating licenses to some 20

nuclear power plant owners. This is a greater degree of participation in nuclear power plant licensing than almost every NRC commissioner who has served since that time.

Summary of Expert Opinion

15. I have prepared this declaration in support of the Virginia Citizens Consumer Council petition asking the Virginia State Corporation Commission to require Dominion Resources to obtain the approval of the Commission before spending more money on the proposed North Anna 3 nuclear power plant

16. When I first became a utility regulator in 1971, many states either did not require utilities to obtain a certificate of need for power plant construction, or issued such certificates following cursory reviews of utility petitions. Economies of scale and technological improvements had caused new plants to lower costs and rates throughout the 1950s and 1960s, so after-the-fact review of the prudence of construction costs was assumed to be a fully adequate way to safeguard customers.

17. The massive and unprecedented nuclear plant cost overruns of the 1970s and 1980s called this paradigm into question. These overruns contributed to a trebling of U.S. average electric costs between 1970 and the 1980s. Actual or potential disallowances of recovery of hundreds of millions of dollars already spent at such plant sites as Seabrook, Shoreham, Indian Point, Millstone, Nine Mile Point and Diablo Canyon were unprecedented and left customers and shareholders dissatisfied. Proceedings under new or existing laws to certify the need for new power plants, especially new nuclear plants, often replaced after-the-fact

reviews of the prudence of nuclear construction expenditures as the first line of defense of the just and reasonable rates required by most state statutes.

18. These proceedings became the regulators' best opportunity to prevent utility managements from choosing expensive power plant investments that increased utility profits more than less costly alternatives would have done, a longtime challenge to cost-of-service regulation known as "the Averch-Johnson effect". As Alfred Kahn described the Averch-Johnson effect in his treatise *The Economics of Regulation*, "this combination of circumstances may induce utility companies to make investments the social benefits of which fall short of their social costs because (1) such investments will expand the rate base on which the companies are entitled to a return in excess of the cost of capital."¹

19. The Averch-Johnson effect creates a powerful incentive for managements of utilities like Dominion to expand their rate base through large capital investments like North Anna 3 even when measures such as power purchases, energy efficiency, or smaller investments in renewables or natural gas would fully meet energy, environmental and other societal goals.

20. In addition to increased state emphasis on proceedings for issuing certificates for new power plants, Congress responded to widespread public dissatisfaction with the impact of nuclear plant cost overruns and cancellations by requiring that utilities buy power from third party producers whenever that power was less costly than the utility construction programs would provide. The requirement was codified in the Public Utilities Regulatory Policies Act of 1978 ("PURPA").

¹ (Volume II, p. 49).

21. The success of PURPA and the subsequent expansion of transmission access – together with the negative impact of nuclear power plant construction – all contributed to the electric restructuring reforms that paved the way for competitive power markets for much of the U.S. in the 1990s.

22. No company has successfully bid a new nuclear unit into a competitive all-source market solicitation for new generation anywhere in the world. Such units are just too expensive to compete.

23. In my experience, statutes requiring that utilities obtain regulatory approval prior to making significant financial commitments to generating facilities include among their purposes (1) protecting customers by assuring that utilities choose generating options providing the best combinations of bill impacts, service impacts, environmental impacts and other economic and social impacts on the state, and (2) providing a high degree of assurance to the utility that prudently incurred construction costs will be included in rates (in many states as long as the facility becomes “used and useful” to customers).

24. The first of these purposes will be severely, perhaps fatally, undermined if the utility is allowed to spend several hundred million dollars on a generation project before the commission has conducted the proceeding and issued the approvals required by law. It is unrealistic to believe that all alternatives will be impartially evaluated when the full economic and political resources of the applicant have already been deployed to further a particular outcome. The SCC, in fact, seems to have acknowledged this risk. In its final order approving Dominion’s 2015 Integrated Resource Plan, the SCC noted that “[s]hould Dominion come to this Commission in a future [certificate] or [rate adjustment clause] proceeding having already

incurred multiple billions of dollars in costs on North Anna 3, it is entirely foreseeable that the amount of costs already incurred will be argued in that proceeding as a compelling reason for the Commission to approve the application.”²

25. Nor is there any apparent reason to rush these expenditures ahead of the required approval process. The North Anna 3 project cannot come on line for at least a decade. Dominion has made no showing that electric service reliability or other public interests will be compromised if it is forced to comply with Va. Code §§ 56-234.3 and 56-580 D before proceeding further.

26. The potential harm to customers from spending hundreds of millions of dollars on a plant that may well never be built is clear. Dominion has already spent some \$600 million and projects expenditures of several billion dollars more through 2020 if the project continues. By way of perspective, North Anna 1 was originally estimated to cost some \$515 million and North Anna 2 was estimated to cost \$445 million.³ So more money (albeit in dollars worth less) has already been spent on the unapproved North Anna 3 than the original cost estimate for either of the two reactors already on the site. Because the Commission is precluded from conducting biennial rate reviews between now and 2022, it could be confronted with a situation in which disallowance of imprudently incurred costs would be argued to affect Dominion’s credit quality to the potential detriment of its customers.

² *In re: Virginia Electric and Power Company’s Integrated Resource Plan filing pursuant to Va. Code § 56-597 et seq.*, Case No. PUE-2015-00035, Final Order at 9 (December 30, 2015).

³ See Benjamin K. Sovacool, “Questioning a Nuclear Renaissance,” Global Public Policy Institute, http://old.gppi.net/fileadmin/gppi/GPPiPP8-Sovacool-Questioning_a_Nuclear_Renaissance.pdf, Table 3, p. 6.

27. Dominion’s major spending on North Anna 3 inevitably forecloses spending comparable funds on alternatives that may be able to produce larger benefits at lower cost in less time. Widespread experience shows that as utilities become increasingly committed to a nuclear construction project, their willingness to pursue alternatives (especially alternatives provided by independent vendors) declines⁴. This was certainly Maine’s experience during the years its utilities pursued involvement in the Seabrook nuclear power plant⁵. There is good reason for this. No company wants to make a massive long-term commitment at the same time that it also spends money to make that project obsolete before it comes on line.

28. The economic impact of North Anna 3 on Virginia will be immense. Dominion’s construction cost estimate of \$19.2 billion dollars (including financing costs) for the proposed 1470 MW power plant would be a commitment of about \$2400 for every citizen of Virginia, or \$9,600 per family of four, and – of course – the impact is even greater because it is confined to Dominion customers. Not all of this will be reflected in residential customer bills, of course. Much of it will be passed through to Virginia citizens in the costs of goods and services provided by entities paying utility bills that reflect the costs of North Anna 3.

29. While this \$19.2 billion amount appears remarkably high in relation to other ways of meeting Virginia’s electric needs, it is in the same range as the only other project involving a

⁴ The “crowding out” behavior is extensively documented by Mark Cooper. See Cooper, “Policy Challenges of Nuclear Reactor Construction, Cost Escalation and Crowding out Alternatives”.

⁵ This story is recounted in detail in “Energy Choices Revisited: An Examination of the Costs and Benefits of Maine’s Energy Policy”, a 1994 paper done for the Mainewatch Institute by Economic Research Associates, the American Council for an Energy Efficient Economy and the Tellus Institute. This study also documents the extent to which the Maine economy was much better off in terms of jobs, taxes and electricity prices than would have been the case had the Maine utilities retained their ownership in Seabrook and continued to resist investment in renewable energy.

new “generation 3” nuclear power plant currently being proposed (but not yet being built) in the West. The Hinkley Point project in Britain is estimated to cost \$31 billion for two 1600 MW units, including financing costs. To support this expenditure if it goes forward, British customers are committed to pay three times the current market price of electricity for 35 years.

30. To the extent that the cost of North Anna 3 is higher than the cost of alternative ways of meeting Virginia’s need for electric services, it will undermine the state’s competitive position, leading to a net loss of jobs and tax base as Virginia companies must compete with companies in other states under the burden of unnecessarily high electricity costs. Indeed, production shifts from Virginia plants to affiliated facilities in states with lower power costs may take place even if particular firms do not lose the business itself.

31. While the costs and technologies of many types of renewable energy, load management and energy savings have been improving dramatically, the costs and uncertainties of new nuclear power plants have grown significantly over the same period of time. Cost estimates for North Anna 3 have risen by at least 55% since 2011.⁶ The only two U.S reactor projects likely to be completed in the next decade (Vogtle in Georgia and Summer in South Carolina) have experienced the same type of dramatic cost overruns and delays that plagued nuclear construction in the 1970s and 1980s. Even TVA’s newly completed Watts Bar 2 project (on which construction began in the early 1970s) went from a cost-to-complete estimate of 2.5 billion in 2007 to \$4.4 billion in 2016.

⁶ See Pre-filed Direct Testimony of Scott Norwood on behalf of Office of the Attorney General, Division of Consumer Counsel, *Application of Virginia Electric and Power Company for a 2015 biennial review*, Case No. PUE-2015-00027, Ex. 17 (Norwood) at 11.

32. The very large economic risks to customers from nuclear construction have been well known for many years. Approximately one half of all the nuclear projects ever announced in the U.S. ended in cancellation. Many others experienced nine-figure cost overruns. A February 11, 1985, cover story in Forbes entitled “Nuclear Follies” called the U.S. nuclear power plant construction “the largest managerial disaster in business history....Only the blind, or the biased, can now think that most of (the \$125 billion spent to date) has been well spent. It is a defeat for the U.S. consumer and for the competitiveness of U.S. industry, for the utilities that undertook the program and for the private enterprise system that made it possible.”

33. Many senior utility executives have made clear that construction of new nuclear power plants cannot be justified under present circumstances. John Rowe, the former CEO of Exelon, the company owning the largest U.S. nuclear fleet, said in 2011 “At today’s [natural] gas prices, a new nuclear power plant is out of the money by a factor of two. It’s not 20%, it’s not something where you can go sharpen the pencil and play. It’s economically wrong. Gas trumps it,” he said.⁷ Gas prices are lower now than when Mr. Rowe made this statement.

34. More pertinently, former Dominion CEO Thomas Capps said in 2005 that “We aren’t going to build a nuclear plant anytime soon.” “Standard & Poor’s and Moody’s would have a heart attack,” said Mr. Capps, referring to the debt-rating agencies. “And my chief financial officer would, too.”⁸ Of course, the case for new nuclear plants has worsened

⁷ “New Calvert Cliffs nuke 'almost inconceivable': Exelon CEO,” Platts (Nov. 9, 2011) <http://www.platts.com/latest-news/electric-power/washington/new-calvert-cliffs-nuke-almost-inconceivable-6659340>.

⁸ “Interest in Building Reactors, But Industry Is Still Cautious,” New York Times (May 2, 2005) <http://www.nytimes.com/2005/05/02/politics/interest-in-building-reactors-but-industry-is-still-cautious.html>.

dramatically in the decade since Mr. Capps said that Dominion wouldn't be building a plant "anytime soon". Cost estimates for new reactors have at least doubled. Gas, efficiency and renewable prices have fallen significantly. Gas prices are projected to stay down for many years, while efficiency and renewable prices may fall further. U.S. electricity demand has declined for most of the decade. What stands between Dominion's CFO (and the rating agencies) and the cardiac ward is not that new reactors look like a better deal for Virginia today but that all of the vastly increased risks are being transferred from Dominion's shareholders to its customers even as investor reward potential has increased. The CFO answers to the shareholders. It is the SCC that has a legal duty to protect the customers. It is hard to imagine how a decision to pursue North Anna 3 any time soon could be deemed reasonable for customers just a few years after Mr. Capps's statement.

35. Cancellations ran even higher for the 31 plant applications that were said to make up the "nuclear renaissance" as of early 2009 than they did throughout nuclear history. Only four of the 31 renaissance reactor applications are actually being built.

36. All of the "renaissance" plants in competitive power market regions were canceled because they could not compete with alternative ways of meeting electricity needs despite the production tax credits, loan guarantees and other subsidies offered to new reactors.

37. In Florida, more than a billion dollars was spent on the Levy County units before they were canceled. Florida customers will have to pay this money in rates even though they will get no electricity from the project.

38. Dominion customers lack even the minimal protections afforded to Florida customers. Because the Company has not come to the SCC for certification, the Commission

has had no chance to compare the project to the alternatives or to determine the need for the power at the price the project will need to charge. And because the General Assembly has suspended Dominion's biennial base rate reviews until 2022, opportunities for SCC scrutiny will be reduced accordingly.

39. Dominion asserts that costs incurred to date are "solely at the risk of the company's stockholders". This cannot be reconciled with the Company's assertion that stockholders are entitled to full recovery of these costs even if the plant is never built. No approach that claims assurance of recovery of costs of a canceled plant from customers can possibly be "solely at the risk of the Company's stockholders".

40. Even the risk of regulatory disallowance of recovery of some expenses is not solely born by shareholders, since many utilities have argued that large disallowances will impair their credit quality and increase their borrowing costs, thereby inflicting substantial economic harm on their customers.

Need for SCC Review

41. Expenditures on North Anna 3 will represent a commitment of funds that might otherwise go to different types of generation, including renewable sources, and to load management and energy efficiency. Such expenditures would begin producing low-carbon electricity or electricity savings within the next year at costs well below those of North Anna 3, whereas North Anna 3 expenditures will produce no electricity and displace no greenhouse gas emissions until the plant comes on line many years from now.

42. North Anna 3 would be the largest and the most expensive nuclear plant ever built in the U.S. In addition to the unit's direct construction and financing cost, it may well increase Dominion's operating costs by raising the reserve requirement needed to guard against the sudden shutdown of a unit substantially larger than any now operating in Virginia.

43. Need for power from a proposed generating unit cannot be demonstrated without proof that the cost of the power will be reasonable in relation to the alternatives. An electric system may have a large need for power with an average cost of one cent per kWh, but no need for power averaging 20 cents per kWh. Both the customers and the utility would benefit from a clear statement as to the highest acceptable price for the power from the unit.

44. The need for a project the size and consequence of North Anna 3 can best be established through the use of open and transparent competitive all source generation procurement processes. Dominion to my knowledge has a limited history of using such processes in recent years, so the Commission has scant basis for determining what other suppliers could supply at what prices. A certification could provide a basis for a Commission order that such an auction process to be employed before any certificate could be issued or become effective.

45. A certification proceeding could also provide a basis for the Commission to establish a ceiling for the costs recoverable for North Anna 3, thereby protecting Virginia customers from runaway cost escalation that has occurred in nuclear construction in the U.S. and elsewhere while making clear to Dominion how much money it could expect to recover in the event that it decided to proceed with North Anna 3. Such caps have been employed in past nuclear construction reviews including Limerick in Pennsylvania, Nine Mile Point 2 in New

York, and Seabrook in Maine. The existence of such a cap has saved customers billions of dollars in cost overruns at a first-of-a-kind reactor project at Olkiluoto.

46. Perhaps the most important overall lesson that I can offer from my own experience is the need to use the certification process to avoid consumer commitments to costs that are open-ended and unlimited. Such commitments have exposed customers to paying for a cancelled nuclear plant in Florida and substantial cost overruns in Georgia and South Carolina. Investors have proven unwilling to shoulder such exposure. This is the reason that the nuclear industry has sought state regulatory changes laying the unlimited exposure off on the customers (as well as federal loan guarantees assigning similar exposure to the taxpayers). Regulators should be clear as to the limits on the amounts that can be charged to the customers, and those limits should not exceed the costs of the next best alternatives. By setting and enforcing such limits, the Commission will be benefiting both customers and utility investors as well as the Virginia economy. Costs above those limits would not be recoverable from the customers.

47. Both the Nine Mile Point 2 and the Limerick 2 nuclear power plants were subject to cost caps by their regulatory commissions in the 1980s. The cost cap obtained by the Finnish purchasers of the output of the Olkiluoto 3 nuclear power plant curtails the exposure of Finnish customers to the substantial cost overruns that have occurred.

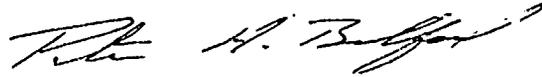
48. Because of the strong likelihood that energy efficiency is available at lower cost than the proposed nuclear station, the Commission should require a showing that programs are in place to capture all cost-effective energy efficiency before it accepts as prudent any decision to build a nuclear unit.

49. Ample precedent exists for the Commission requiring that Dominion stop spending money on North Anna 3 until a certificate has been issued. Regulatory involvement has terminated a substantial number of nuclear project involvements in order to protect customers from excessive nuclear costs or other state concerns. The Tyrone units in Wisconsin, Shoreham in New York, Seabrook in Maine and Vermont, Marble Hill in Indiana and Midland in Michigan each involved state regulatory action that terminated a nuclear plant involvement.

50. This concludes my declaration.

I declare that the foregoing is true and correct to the best of my knowledge.

Dated: August 30, 2016



Peter A. Bradford

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PROFESSIONAL EXPERIENCE:

March 1998 – present – Adjunct Professor, Vermont Law School

*Teaching courses on “Nuclear Power and Public Policy” and “The Law of Electric Restructuring”;
 participating in VLS Energy Law Center programs*

March 2011 – present – Commissioner, Texas-Vermont Low-Level Radioactive Waste Compact
 Commission,

One of two Vermont commissioners on this two-state compact

May 2014 – Present – Member Advisory Council, Bipartisan Policy Center Project on Nuclear Waste.

March 1996- present - consultant on energy and utility regulatory policy

Advising and teaching utility regulation, restructuring, power supply procurement, nuclear power and energy policy in the U.S. and abroad. Has been a visiting lecturer in energy policy and environmental protection at Yale University. Served on State of New York Moreland Commission on Utility Storm Response and Renewable Energy Procurement (2012-13) and as a member and co-chair on Vermont’s 2008-10 Public Oversight Panel on the Comprehensive Reliability Audit of the Vermont Yankee nuclear power plant; Served on a 2007 Keystone Center fact finding collaboration on nuclear power and a 2006 National Academy of Sciences panel evaluating the alternatives to continued operation of the Indian Point nuclear power plants in New York. Also affiliated with the Regulatory Assistance Project, which provides assistance to state and federal energy regulatory commissions regarding economic regulatory policy and environmental protection.

Has advised on regulatory and restructuring issues and has testified on aspects of energy and telecommunications regulation in many U.S. states. In recent years (2007-present) has testified in regulatory and legislative proceedings in California, Delaware, Maine, Maryland, Indiana, Florida, North Carolina, South Carolina and Vermont as well as before the U.S. Nuclear Regulatory Commission and in U.S. federal district court.

International - Taught and/or advised abroad on energy and water issues and electric restructuring in China, Japan, Canada, Armenia, Azerbaijan, Russia, India, Indonesia, Turkey, Kazakhstan, Kyrgyzstan, Czech Republic, Mongolia, St. Lucia, Kosovo, South Africa, Georgia, Trinidad and Tobago, New Zealand, Bangladesh and Samoa. Former Member, Policy Advisory Committee of the Packard Foundation’s China Sustainable Energy Project. Served as one of two U.S. representatives on international panel advising European Bank for Reconstruction & Development on least cost energy alternatives in Ukraine to

continued operation of the Chernobyl Nuclear Station (1996-97) and on an international expert panel assessing the safety of the Mochovce Nuclear Power Station in Slovakia (1998);

February 1995 - March 1996 Fellow, Regulatory Assistance Project

Project funded by the U.S. Dept. of Energy, the Environmental Protection Agency and foundations to provide assistance to state and federal regulatory commissions on energy and environmental matters.

June 1987- January 1995 Chairman, New York State Public Service Commission, Albany, New York

CEO of state agency charged with overseeing \$29 billion annual revenues of New York utilities. Responsible for developing and implementing consumer and environmental protection policies, transitions from monopoly to competition in energy and telecommunications industries. 700 employees, \$65 million budget.

July 1982- June 1987 Chairman, Maine Public Utilities Commission, Augusta, Maine

CEO of state agency charged with overseeing \$2 billion annual revenues of Maine utilities. Responsible for developing and implementing consumer and environmental protection policies, including competitive bidding for independent power production and energy conservation services as well as adjusting to the break-up of AT&T. 60 employees, \$4 million budget.

March 1982-June 1982 State of Maine Public Advocate

First full-time Maine public advocate; intervened on consumers' behalf in telephone and energy cases; oversaw staff of 6; prepared briefs; cross-examined witnesses.

Aug. 1977-March 1982 Commissioner, United States Nuclear Regulatory Commission, Washington, D.C.

One of five commissioners of the federal agency whose responsibilities include safety of nuclear power plants and other nuclear facilities; preparing licensing criteria for a nuclear waste repository; licensing exports of nuclear fuel and reactors pursuant to Nuclear Nonproliferation Act; assisted in major upgrades of regulatory and enforcement processes in wake of Three Mile Island accident. 3000 employees, \$250 million budget.

Dec. 1971-Aug. 1977 Commissioner, Maine Public Utilities Commission, Chairman (9/74-7/75).

Sept. 1968- Dec. 1971 Federal-State Coordinator, State of Maine

Responsible for many oil, power, environmental and housing matters. Assisted in preparation of landmark Maine laws relating to oil pollution and industrial site selection. Staff Director, Governor's Task Force on Energy, Heavy Industry and the Coast of Maine.

Aug. 1964-June 1965 Athens College, Greece, Teaching Fellowship

PROFESSIONAL AFFILIATIONS:

1999-2015 - Member, Policy Advisory Committee, China Sustainable Energy Project (funded by the David and Lucille Packard Foundation and the Energy Foundation).

1998-2002 - Member, Advisory Council, New England Independent System Operator

Nov. 1986-Nov. 1987 President, National Association of Regulatory Utility Commissioners

1977-1995 NARUC positions, Member, Executive Committee; Member, Electricity Committee (1977-1989); Member, Gas Committee (1989-1993); Member, Communications Committee (1975-1977); Board of Directors, National Regulatory Research Institute (1985-1987).

1975-1977, 1982-1986. Advisory Council, Electric Power Research Institute

1987-1995, Member of New York State Energy Planning Board

1987-1995, Member, Board of Directors, New York State Energy Research and Development Administration

1987-1995, Member, New York State Environmental Board;

1987-1995, Chair, New York State Energy Facilities Siting Board

1992-1994, State co-chair, New York State Task Force on Telecommunications Policy

Vice-chair, Board of Directors, Union of Concerned Scientists

EDUCATION:

1964 B.A. History, Yale University, New Haven, CT

1968 L.L.B., Yale University School of Law, New Haven, CT

PERSONAL:

Married (Susan Symmers Bradford)

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PUBLICATIONS of Peter A. Bradford

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