Virginia State Corporation Commission eFiling CASE Document Cover Sheet

Case Number (if already assigned)

PUR-2022-00124

Case Name (if known)

Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 of the Code of Virginia and related requests

Document Type

REEX

Document Description Summary

Environmental Respondent's Comments on the Hearing Examiner's Report of March 1, 2023

Total Number of Pages

25

Submission ID

27044

eFiling Date Stamp

3/14/2023 4:50:00PM

Telephone 434-977-4090 Facsimile 434-993-5549 @

March 14, 2023

VIA ELECTRONIC FILING

Mr. Bernard Logan, Clerk c/o Document Control Center State Corporation Commission Tyler Building - First Floor 1300 East Main Street Richmond, Virginia 23219

> RE: Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 of the Code of Virginia and related requests

Case No. PUR-2022-00124

Dear Mr. Logan:

Attached for filing in the above-referenced docket please find Comments on the Hearing Examiner's Report of March 1, 2023, submitted on behalf of Appalachian Voices ("Environmental Respondent"). This filing is being completed electronically, pursuant to the Commission's electronic document filing system.

As authorized by Rule 140 of the Commission's Rules of Practice and Procedure, Environmental Respondent is providing, and agrees to accept, service of documents in this case exclusively via email unless parties request otherwise.

If you should have any questions regarding this filing, please do not hesitate to contact me at (434) 977-4090.

Regards,

E. Grayson Holmes

G. Dunyer Milmer

cc: Parties on Commission's Service List

COMMONWEALTH OF VIRGINIA

STATE CORPORATION COMMISSION

PETITION OF)
VIRGINIA ELECTRIC AND POWER COMPANY)) Case No. PUR-2022-00124
For approval of its 2022 RPS Development)
Plan under § 56-585.5 D 4 of the Code of)
Virginia and related requests)

ENVIRONMENTAL RESPONDENT'S COMMENTS ON HEARING EXAMINER'S REPORT

Pursuant to the Hearing Examiner's Report¹ ("Report") of March 1, 2023, Appalachian Voices ("Environmental Respondent") submits the following comments.

INTRODUCTION

The Virginia Clean Economy Act ("VCEA") ² mandates that monopoly utilities transition electric power generation away from carbon-emitting facilities. Such an undertaking has never been done in Virginia and may take decades to achieve. Policymakers, customers, and the Commission deserve to see credible plans for how utilities will implement the VCEA in a reasonable, prudent, and least-cost manner, especially since the utility's choices directly affect the costs that customers must pay—a key consideration in the Commission's review and approval of these projects.

This is the third proceeding for Virginia Electric and Power Company ("Dominion" or "Company") pursuant to § 56-585.5 D 4, in which the utility seeks approval both of specific

¹ Report of Matthias Roussy, Jr., Hearing Examiner, *Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 of the Code of Virginia and related requests*, Case No. PUR-2022-00124 (Mar. 1, 2023) ("Report").

² 2020 Va. Acts chs. 1193 and 1194.

renewable generation and energy storage projects, and also of its long-term Renewable Portfolio Standard ("RPS") Development Plan to implement provisions of the VCEA. Unfortunately, as in prior proceedings, Dominion has failed to conduct credible modeling to support its proposals.

As the Hearing Examiner recognized in his report, Dominion's modeling—incorporated from its 2022 Integrated Resource Plan ("IRP") update—relies on several faulty assumptions, including (a) imposing an otherwise nonexistent shadow price for the social cost of carbon, (b) incorrectly assuming the Commonwealth would leave the Regional Greenhouse Gas Initiative at the end of last year (which directly violates the Commission's prior directive to model compliance with applicable carbon regulations), (c) failing to incorporate energy efficiency assumptions past 2025, and (d) not accounting for the fact that a significant amount of current and future load growth from data centers is likely to come from accelerated renewable energy buyers ("ARBs") and thus would be excluded from RPS obligations. In addition, Dominion failed to model the VCEA's statutorily-mandated retirement dates for multiple fossil fuel-fired power plants in three of its plans. Instead, Dominion assumed these plants would continue operation past the mandated closure dates, without any analysis to support this assumption.

Critically, Dominion continues to assume that the VCEA requires that the utility obtain exactly 35% of new renewable generation from third party power purchase agreements ("PPAs"), rather than company owned projects. In fact, § 56-585.5 D sets a minimum capacity for solar and onshore wind PPAs but does not limit it to 35%. Therefore, Dominion's assumption improperly constricts its potential plan options.

Environmental Respondent has consistently raised this issue in prior RPS proceedings, but the Commission has yet to rule on the matter. Evidence from this year's proceeding, however, makes clear that Dominion's erroneous legal view is hurting customers right now. The evidence clearly shows that Dominion did not select numerous conforming PPA bids because doing so would have put them over the utility's artificially set 35% limit for PPAs. All of these conforming-but-not-selected PPA bids were lower cost than the company-owned projects submitted for approval in this case. Not only were these other PPAs lower cost, but PPAs are also lower risk to customers and can even be converted to company-owned resources when it makes sense to do so.

While it is too late to pursue these other PPAs in this proceeding, the Commission must expressly rule on this disputed issue and order Dominion to remove the 35% cap on PPAs in future modeling runs and resultant project proposals so that customers are not similarly hurt going forward. The Hearing Examiner, too, acknowledged that Dominion's choice about which PPAs to move forward with and which Company-owned facilities to develop, "is influenced by the Company's legal position."

All of these flaws, discussed in more detail herein, are not merely abstract procedural complaints. These problems go directly to the foundation of Dominion's justification for these projects and mean that customers are likely being forced to pay more than is required for compliance. With every year that Dominion is allowed to proceed using its flawed approach, these unreasonable costs will continue to grow. Thus, it is critical that the identified problems be corrected in future RPS proceedings, ensuring that costs and benefits are being optimized for customers.

With respect to the specific projects proposed here, Environmental Respondent takes no position.

³ Report at 161.

COMMENTS TO REPORT

I. SECTION 56-585.5 D REQUIRES DOMINION TO PETITION FOR A MINIMUM OF 35 PERCENT PPAS, BUT PERMITS MORE, AND DOMINION MUST MODEL AND PETITION ACCORDINGLY.

A. Section 56-585.5 D sets a 35% PPA floor, not a 35% cap.

Although the issue has been raised and extensively briefed in prior RPS proceedings (including by Environmental Respondent),⁴ the Commission has yet to rule on whether Dominion's (or Appalachian Power's) petitions for approval of solar or onshore wind resources pursuant to § 56-585.5 D may include more than 35% of the generating capacity from power purchase agreements.⁵ In the absence of such a ruling, Dominion has consistently aimed to procure exactly 35% of its petitioned capacity from PPAs—and thus declined to pursue any PPAs that would take them above that 35% threshold. Because Company-owned projects are typically more expensive than PPAs, Dominion's strict reading of this provision is resulting in higher bills for customers. Recognizing the importance of this issue in current and future RPS proceedings, the Hearing Examiner solicited post-hearing briefs from the parties about the topic.⁶

⁴ See, e.g., Environmental Respondent's Post-Hearing Brief, Application of Virginia Electric and Power Company for approval of the RPS Development Plan, approval and certification of the proposed CE-2 Solar Projects pursuant to §§ 56-580 D and 56-46.1 of the Code of Virginia, revision of rate adjustment clause, designated Rider CE, under § 56-585.1 A 6 of the Code of Virginia, and a prudence determination to enter into power purchase agreements pursuant to § 56-585.1:4 of the Code of Virginia, Case No. PUR-2021-00146 (Jan. 19, 2022) at 2, 12–15; Environmental Respondent's Comments on Hearing Examiner's Report dated 6/3/22, Application of Appalachian Power Company for approval of its 2021 RPS Plan under § 56-585.5 of the Code of Virginia and related requests, Case No. PUR-2021-00206 (June 21, 2022) at 3–10.

⁵ The statute refers to "purchase of energy, capacity, and environmental attributes from solar facilities owned by persons other than a utility, including utility affiliates and deregulated affiliates." Va. Code § 56-585.5 D 2. While PPAs are the most common form at present for making such purchases, other options may arise in the future. For simplicity's sake, this brief uses the term "PPA" to encompass all such purchases of capacity, energy, or environmental attributes from non-utility third parties.

⁶ Hearing Transcript, Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests, Case No. PUR-2022-00124 (Jan. 31, 2023) ("Hearing Transcript") at 363:18-365:5.

As further discussed in Environmental Respondent's post-hearing brief⁷ (and in its submissions in earlier cases referenced *supra*), § 56-585.5 D 2 requires Dominion's petitions to include at least 35% of the generating capacity come from PPAs and does not bar Dominion from having PPAs make up part of the remaining 65%—effectively setting a 35% PPA floor on such petitions. For example, Section D 2 of § 56-585.5 states that a petition must include 35% of generating capacity from PPAs but is entirely silent as to the source for the remaining 65%.

Similarly, the subsections of D 2 state that a utility petition must include 35% of capacity from PPAs, but those provisions also include some description for the 65% remainder, noting that "the remainder, in the aggregate," should "be[] from construction or *acquisition* by such Phase II Utility." PPAs are undoubtedly forms of acquisition by a utility and thus can be part of that 65% "remainder." While the utility does not own the underlying generating facility in a PPA agreement, the utility contractually acquires the energy, capacity, and renewable energy certificates ("RECs") generated by that third-party facility. Dominion's own witness in last year's RPS proceeding agreed that such contractual agreements are considered acquisitions, as have Appalachian Power's witnesses in their RPS proceedings. ¹⁰

⁷ Environmental Respondent's Brief on § 56-585.5 D, Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 of the Code of Virginia and related requests, Case No. PUR-2022-00124 (Feb. 6, 2023).

⁸ "By December 31, 2035, each Phase II Utility shall petition the Commission for necessary approvals to (i) construct, acquire, or enter into agreements to purchase the energy, capacity, and environmental attributes of 16,100 megawatts of generating capacity located in the Commonwealth using energy derived from sunlight or onshore wind, which shall include 1,100 megawatts of solar generation of a nameplate capacity not to exceed three megawatts per individual project and 35 percent of such generating capacity procured shall be from the purchase of energy, capacity, and environmental attributes from solar facilities owned by persons other than a utility, including utility affiliates and deregulated affiliates" Va. Code § 56-585.5 D 2. Section D 1 contains similar language relating to Appalachian Power.

⁹ Va. Code §§ 56-585.5 D 2 a, b, c, & d (emphasis added). These four subsections all set forth requirements for Dominion's petitions in certain timeframes. The language in each subsection is identical, apart from the relevant dates. See Va. Code § 56-585.5 D 2 a, b, c & d.

¹⁰ See Hearing Transcript, Application of Virginia Electric and Power Company for approval of the RPS Development Plan, approval and certification of the proposed CE-2 Solar Projects pursuant to §§ 56-580 D and 56-46.1 of the Code of Virginia, revision of rate adjustment clause, designated Rider CE, under § 56-585.1 A 6 of the Code of

The energy storage provisions of § 56-585.5 further confirm that PPAs are a form of acquisition. ¹¹ Section 56-585.5 E requires Dominion to "petition the Commission for necessary approvals to *construct* or *acquire* new, utility-owned energy storage resources" and capacity, ¹² and then notes that at least 35 percent of those new facilities must be PPAs. ¹³ In other words, the energy storage provisions make clear that PPAs are necessarily a subset of acquisitions; otherwise these provisions would be internally inconsistent. ¹⁴ Moreover, since the same word used in the same section of the Virginia Code must have the same meaning, the energy storage provisions demonstrate that to "acquire" necessarily encompasses PPAs in § 56-585.5 D as well. ¹⁵

Dominion's own actions in this case confirm that the utility itself must view PPAs as forms of acquisition. Since it is petitioning for approval for two stand-alone energy storage PPAs in order "to comply with the VCEA," Dominion must understand that those PPAs represent "construct[ion] or acqui[sition]" of energy storage resources, as those are the only two options

Virginia, and a prudence determination to enter into power purchase agreements pursuant to § 56-585.1:4 of the Code of Virginia, Case No. PUR-2021-00146 (Dec. 14, 2021) ("Dominion 2021 Hearing Transcript") at 167:4-168:1 (Cross Examination of Company Witness Compton on Direct); Hearing Transcript, Petition of Appalachian Power Company for approval of its 2021 RPS Plan under § 56-585.5 of the Code of Virginia and related requests, Case No. PUR-2021-00206 (Apr. 21, 2022) ("APCo 2021 Hearing Transcript") at 669:2-670:2 (Cross Examination of Company Witness Castle on Rebuttal).

¹¹ See Va. Code § 56-585.5 E.

¹² Va. Code §§ 56-585.5 E & E 2.

¹³ Va. Code § 56-585.5 E 5 ("After July 1, 2020, at least 35 percent of the energy storage facilities placed into service shall be (i) purchased by the public utility from a party other than the public utility or (ii) owned by a party other than a public utility, with the capacity from such facilities sold to the public utility.").

¹⁴ This fact is reinforced by the regulations implementing the energy storage provisions. *See* 20 VAC 5-335-30. The regulations set forth the petition requirements to "construct or acquire" the specified interim targets of energy storage facilities, 20 VAC 5-335-30 B, and then provide that the 35% third-party requirement—which expressly includes PPAs—"shall also apply to each interim target." 20 VAC 5-335-30 C. In other words, the regulations make clear that PPAs are encompassed by the "construct or acquire" terminology.

¹⁵ See IBP, Inc. v. Alvarez, 546 U.S. 21, 34 (2005) ("[1]dentical words used in different parts of the same statute are generally presumed to have the same meaning."); see also Finnerty v. Thornton Hall, Inc., 593 S.E.2d 568, 571 (Va. App. 2004) ("[W]hen the legislature uses the same word or phrase 'in different parts of the same statute, the presumption is that it is used in the same sense throughout the statute, unless a contrary intention clearly applies."") (quoting Bridgewater Mfg. Co. v. Funkhouser, 79 S.E. 1074, 1076 (Va. 1913)).

¹⁶ Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests, Case No. PUR-2022-00124 (Oct. 14, 2022) at ¶¶ 42–43.

permitted by the Code.¹⁷ Given that Dominion is not constructing the facilities, Dominion must then view energy storage PPAs as an acquisition.

In prior briefings on this issue, Dominion has advanced several claims in support of its position. These arguments are flawed and should not be accepted. For example, Dominion argues that "the Commission has already considered and rejected similar arguments" regarding § 56-585.1:4 D in the 2018 IRP proceeding. While § 56-585.1:4 D and § 56-585.5 D have a similar structure in some respects, their respective descriptions of "remainder" are different in a critical way. § 56-585.1:4 D limits the "remainder" to construction or purchase of an entire generating facility—an ownership transfer that cannot be accomplished by a PPA. Section 56-585.5 D, by contrast, does not define the "remainder" in terms of an entire "facility," and instead discusses the "remainder" in terms of capacity—an attribute that can be conveyed through a PPA. Thus, the "remainder" requirement under § 56-585.1:4 is distinct and fails to upend the plain language of § 56-585.5 D.

Dominion has also argued that because the energy storage provisions use the term "at least" and the provisions at issue here do not say "at least," then the 35% must be an exact target. ¹⁹ It is inapposite that § 56-585.5 D does not use the phrase "at least." The General Assembly made clear that Dominion's petition must include 35% PPAs; Dominion cannot, by law, include less than 35%. But the Code leaves open the possibility of additional PPAs through its use of the broad term to "acquire." ²⁰

¹⁷ Va. Code § 56-585.5 E.

¹⁸ Limited Issue Brief of Virginia Electric and Power Company, *Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2021-00124 (Feb. 6, 2022) ("2022 Dominion RPS Brief") at 7.

¹⁹ 2022 Dominion RPS Brief at 4-5.

²⁰ Dominion has also pointed to the Hearing Examiner's report in Appalachian Power's 2021 RPS Case as support for its position. *See* 2022 Dominion RPS Brief at 6–7. In that earlier case, though, the Commission did not rule on this issue in its final order.

For all of the reasons discussed above, the law plainly requires a utility to petition for a minimum of 35% of capacity coming from solar or onshore wind PPAs, but in no way precludes a higher PPA percentage.

B. Dominion's unreasonable interpretation of Section 56-585.5 D is harming customers.

Dominion clearly believes that § 56-585.5 D "sets a 35% target for PPAs—not a floor or a ceiling." It thus designed its 2022 RPS Development Plan to "target[] a ratio of 65% Companyowned projects to 35% PPAs as set forth in the VCEA" and "intends to continue to do so" going forward, unless and until the Commission directs it to do otherwise. 22

As the Hearing Examiner acknowledged, Dominion's legal position is influencing its decision-making process. ²³ Several witnesses provided testimony on this decision-making process, including Environmental Respondent Witness Gregory Abbott, all of whom showed that Dominion appears to be selecting solar and onshore wind PPAs until it reaches a MW total representing exactly (or very close thereto) 35% PPAs, and then refusing to accept any more PPAs. ²⁴ Instead, with its claimed 35% PPA limit reached, Dominion fills the remaining capacity with utility-owned projects. In this case, the evidence shows that Dominion passed over eight conforming PPA bids—all of which were lower cost and lower risk to customers—in favor of

²¹ 2022 Dominion RPS Brief at 2.

²² *Id.* at 8–9.

²³ Report at 161.

²⁴ See Ex. 43, Direct Testimony of Gregory L. Abbott, Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests, Case No. PUR-2022-00124 (Dec. 21, 2022) ("Abbott Direct") at 29:2–30:5; see also Ex. 63, Rebuttal Testimony of Brian Keefer, Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests, Case No. PUR-2022-00124 (Jan. 11, 2023) ("Keefer Rebuttal") at 7:7–11 (agreeing with Staff Witness Kuleshova's similar description of Dominion's decision-making process regarding PPA approval).

more expensive utility-owned projects.²⁵ The net effect is that customers will be forced to pay higher costs than if Dominion had pursued those PPAs. This result flowed directly from Dominion's erroneous legal interpretation of the petition requirement.²⁶

Because Dominion's practice is harming customers now, Environmental Respondent requests a Commission ruling in this case. As Dominion has acknowledged, it intends to continue this practice unless and until the Commission tells it otherwise.²⁷ In other words, customers will continue to face potentially unnecessary and imprudent costs until the Commission weighs in.

In his report, the Hearing Examiner notes that "the Commission . . . has the discretion to determine whether to decide the 65%/35% issue." Respectfully, Environmental Respondent believes this issue is not simply a matter of discretion, but an issue that requires immediate attention to prevent ongoing customer harm. Dominion is currently deciding what specific utility-owned projects and PPAs to include in its petition—for CPCNs and cost recovery—based on its erroneous view that the law requires an exact split of 35% PPAs and 65% utility-owned solar and onshore wind projects, and it will continue to do so in future RPS proceedings absent direction otherwise.

C. The Commission should require Dominion to model and include in its petition any PPAs with lower LCOEs than Company-owned projects.

Several participants noted in closing arguments that § 56-585.5 D is a petition requirement and not an approval requirement. Environmental Respondent agrees. This section of the Code does

²⁵ See Ex. 43, Abbott Direct at 28:16–22. Dominion's refusal to pursue lower-cost PPAs is particularly egregious since, according to the Hearing Examiner, some of the proposed Company-owned projects involve "unreasonable and imprudent" costs. Report at 146–147, 165.

²⁶ See Ex. 43, Abbott Direct at 29:2-9.

²⁷ 2022 Dominion RPS Brief at 8-9.

²⁸ Report at 161.

not dictate what the Commission must approve, including the megawatts of capacity actually needed to serve customers, and the relative amount coming from PPAs.

But simply recognizing that § 56-585.5 D is a petition requirement and not an approval requirement, does not remedy the ongoing customer harm. This harm flows from the fact that Dominion is developing and presenting its petition based on an incorrect reading of the legal requirements for its petition. Once the flawed petition is put before the Commission, the Commission has very limited tools to remedy the harms to customers that flow from the flawed petition. As Company Witness Keefer explained in rebuttal, for example, it is too late for Dominion to pursue the eight conforming PPA bids that the utility already passed over in favor of more expensive utility-owned projects.²⁹ At this late stage, the only option for the Commission is to reject the more expensive utility-owned projects as being unreasonable and imprudent, given that there were lower cost options available. But if the Commission accepts Dominion's evidence of need in this case—capacity, energy, or REC need—the Commission has little choice but to approve the proposals in Dominion's petition, including the more expensive utility-owned projects. If the Commission does not, then customers may also be harmed due to potentially inadequate capacity, energy, and RECs.

Thus, there is a clear need to require Dominion to fix the flawed petition process itself. Unless and until the Commission weighs in on what Dominion is required to petition for, Dominion will continue to request approvals for exactly 35% PPAs, forcing unnecessary and unreasonable costs on customers, with limited recourse available to the Commission.

²⁹ See Ex. 63, Keefer Rebuttal at 7:7–14.

For that reason, Environmental Respondent requests a ruling that Dominion be required to present petitions that comply with the plain language of § 56-585.5 D. In particular, Environmental Respondent requests that the Commission:

- Hold that the law requires petitions to include a minimum of 35% PPAs but allows for more;
- Direct Dominion to change its procurement and petition processes in all future RPS proceedings to comply with this legal requirement, including by directing Dominion to diligently pursue all conforming PPAs that are lower-cost than the Company-owned options and needed to fulfill energy, capacity, or REC needs;
 and
- Direct Dominion that, to the extent it deviates from the lowest-cost mix of
 Company-owned resources and PPAs in a petition, Dominion must provide a
 detailed justification with supporting analysis as to why it believes such
 deviation is nonetheless reasonable and prudent.

To be clear, Environmental Respondent is not suggesting that PPAs should fulfill 100% of capacity, energy and REC needs moving forward. There could be valid reasons to include higher-cost utility-owned resources. But Dominion should not be permitted to limit the number of solar and onshore wind PPAs in its petition in order to hit a 35% threshold when the Code imposes no such limit, and the evidence shows that Dominion's imposition of this limit is harming customers right now.

II. THE COMMISSION SHOULD DIRECT DOMINION TO REVISE ITS MODELING TO REFLECT REASONABLE ASSUMPTIONS.

As part of its petition, Dominion claims that the proposed projects and PPAs are needed for capacity, energy, and RECs. Dominion supports this claimed need by performing modeling

(or reusing modeling from IRP updates) with numerous underlying assumptions. Since this modeling forms the foundation for its claims of need, it is important for Dominion to make reasonable assumptions and perform reasonable modeling runs.

Unfortunately, there are numerous flaws in Dominion's modeling. As set forth herein, Environmental Respondent respectfully requests that the Commission direct Dominion to remedy these problems in future RPS proceedings, as well as in IRP proceedings, which involve similar modeling.

A. Dominion's baseline modeling must assume Virginia is part of RGGI.

The Commission's prior RPS orders have required Dominion to model a least cost plan that "meets applicable carbon regulations" and "include[s] only reasonable inputs and assumptions." Virginia currently is a member of the Regional Greenhouse Gas Initiative ("RGGI"), a regional carbon trading market that requires fossil-fuel emitting power plants to obtain allowances for every ton of carbon they emit. Although the administration has proposed withdrawing Virginia from RGGI, that effort has not yet been finalized and may never be finalized given the significant questions concerning the legal authority for such action.

Nevertheless, all of Dominion's modeling in this case includes the baseline assumption that Virginia exited RGGI before January 1, 2023, and that there thus would be no costs associated with RGGI compliance after that date.³¹ That did not happen; Virginia did not withdraw from

³⁰ Final Order, Petition of Virginia Electric and Power Company for approval of the RPS Development Plan, approval and certification of the proposed CE-2 Solar Projects pursuant to §§ 56-580 D and 56-46.1 of the Code of Virginia, revision of rate adjustment clause, designated Rider CE, under § 56-585.1 A 6 of the Code of Virginia, and a prudence determination to enter into power purchase agreements pursuant to § 56-585.1:4 of the Code of Virginia, Case No. PUR-2021-00146 (Mar. 15, 2022) at 8.

³¹ See Ex. 64, Rebuttal Testimony of Victoria A. Drummond, *Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2022-00124 (Jan. 11, 2023) at 15–16; Ex. 59, Direct Testimony of Amanda A. Ricketts, *Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2022-00124 (Dec. 21, 2022) ("Ricketts Direct") at 14:15–19.

RGGI before January 1, 2023, and in fact is still a participating state. Thus, this assumption is unreasonable on its face and fails to comply with the Commission's directive to model a least cost plan that meets applicable carbon regulations. Dominion simply failed to include the applicable carbon regulation in its baseline modeling.

While Dominion performed a "sensitivity" around RGGI in its 2022 IRP Update, ³² which Dominion relied on extensively for its RPS Plan, the sensitivity provides little if any useful information and is quite different than assuming RGGI as a baseline modeling requirement. Evidence from the hearing indicates that for the sensitivity, Dominion just added RGGI costs on top of the hypothetical and unrealistic federal carbon tax, as well as the assumed social cost of carbon price, both costs that were already incorporated in its baseline model runs. ³³ In other words, nowhere in the record has Dominion provided modeling that simply models RGGI compliance, which is the only "applicable carbon regulation" as it stands currently.

Environmental Respondent respectfully requests the Commission direct Dominion to model Virginia's participation in RGGI as part of its baseline modeling. So long as Virginia is still participating in RGGI, it is an "applicable carbon regulation" that must be incorporated into Dominion's baseline modeling.

The Hearing Examiner appears to agree that improvements are needed in Dominion's modeling of RGGI and recommends "directing Dominion to include in its next RPS plan filing the results of modeling showing the Commonwealth both in RGGI and out of RGGI." The Hearing Examiner does not specify whether RGGI compliance should be modeled as a baseline assumption. Environmental Respondent continues to recommend that RGGI compliance

³² See Ex. 59, Ricketts Direct at 14:13–19; see also Virginia Electric and Power Company, 2022 Update to the 2020 Integrated Resource Plan, Case No. PUR-2022-00147 (Sep. 1, 2022) at 6.

³³ Hearing Transcript at 493:18–494:7 (Cross Examination of Amanda Ricketts on Direct).

³⁴ Report at 94.

specifically be required as a baseline assumption. Baseline assumptions are supposed to provide a realistic view of current reality, so Dominion must assume continued RGGI participation as the baseline. Dominion may obviously model scenarios where Virginia leaves RGGI; however, they are merely predictions and thus should be run as sensitivities and not incorporated into baseline modeling.

B. Dominion's baseline modeling must not incorporate a federal carbon tax when none exists.

Even though there currently is no federal carbon tax, nor any indication that one is forthcoming in the near-term, Dominion's model runs incorporated costs from such a tax as part of the carbon "shadow price" beginning in 2026.³⁵ As Staff noted, this assumption increased the modeling dispatch costs of fossil fuel units and thus unrealistically increased the NPV of the CE-3 Projects.³⁶ The Hearing Examiner determined that the record evidence did not support Dominion's inclusion of a federal carbon tax and recommended that "the Commission direct Dominion to exclude from its baseline analysis its carbon shadow price."³⁷

Environmental Respondent supports this recommendation, which is consistent with the Commission's requirement that Dominion's baseline modeling reflect current environmental regulations. ³⁸

³⁵ Ex. 59, Ricketts Direct at 16:5–18:9. The Company's shadow price includes only costs associated with a direct federal carbon tax from 2026 to 2030. *See id.* When modeling the period from 2031 to 2046, it blended those costs with the forecasted social cost of carbon. *See id.*

³⁶ Ex. 59, Ricketts Direct at 17:3–9; Ex. 50, Direct Testimony of Katya Kuleshova, *Petition of Virginia Electric and Power Company for approval of its 2022 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2022-00124 (Dec. 21, 2022) ("Kuleshova Direct") at 62:20–63:19.

³⁷ Report at 94–95.

³⁸ As the Hearing Examiner noted, Dominion would still be permitted to run sensitivity analyses that assume a future federal carbon tax. *See id*.

C. Dominion baseline modeling must incorporate VCEA mandated closure dates for its fossil fuel facilities.

The VCEA requires Dominion to retire all of its carbon-emitting electric generating units by 2045. ³⁹ Despite that clear mandate, three of the Alternative Plans included in Dominion's RPS Development Plan (including Alternative A, its least cost plan, as well as Plans B and C) assume that its fossil fuel plants would continue operating after 2045. ⁴⁰

The mandatory retirement dates set forth in the VCEA are legal requirements that Dominion must follow, so not incorporating them into the baseline inherently skews the results. 41 As Staff Witness Ricketts testified, it is important and useful for the Company to model those instances to provide a more realistic point of comparison for possible future capacity, energy, and REC positions. 42 Moreover, Dominion has provided no evidence to support the reasonableness of this assumption—*i.e.*, specific analysis to show that it is reasonable at this point in time to believe that more than 20 years from now, specific fossil fuel-fired facilities will require a reliability exception and be allowed to continue operations post-2045.

Simply put, Dominion should be required to plan for compliance with the law. If Dominion is allowed to plan for the exception to the law, then the exception will become the reality.

For these reasons, Environmental Respondent respectfully requests the Commission order Dominion to incorporate into its baseline modeling the VCEA-mandated retirement dates for all of its facilities. 43

³⁹ See Va. Code § 56-585.5 B 3.

⁴⁰ Ex. 59, Ricketts Direct at 6:4–15, 25:7–10; Hearing Transcript at 478:16–479:8 (Direct Examination of Amanda A. Ricketts).

⁴¹ The VCEA does allow Dominion to petition for relief from these mandatory retirement requirements on a case-by-case basis. *See* Va. Code § 56-585.5 B 4. Dominion effectively is assuming the Commission would grant such exceptions, even though Dominion has not even applied for them yet.

⁴² Hearing Transcript at 478:16–484:13 (Direct Examination of Amanda A. Ricketts).

⁴³ For clarity, Environmental Respondent notes that the Hearing Examiner's thorough report does not directly address this issue.

D. Dominion should be required to model reasonable increases to the energy efficiency savings standard.

Section 56-596.2 sets forth mandatory energy efficiency savings standards through 2025. 44
Beginning in 2026, the code directs the Commission to set new savings standards for three-year periods. 45

Despite the fact that in less than three years, the Commission will set new efficiency savings standards, "Dominion held energy efficiency at the statutory 2025 level in 2026 and beyond" and "does not plan to change this assumption until a future Commission decision on new energy efficiency savings targets for 2026 and beyond." This is not a reasonable assumption. Dominion can and should make reasonable assumptions about what increases may be made to the energy efficiency savings standard. These changes will occur in just a few years, and Dominion certainly has the ability to perform the required analysis to make these sorts of near-term projections. Dominion's refusal to make a reasonable assumption until the 2026-2028 standards are actually set by the Commission stands in stark contrast to Dominion's willingness to assume that the Commission will grant reliability exceptions to power plants in 2045 in three of its plans. ⁴⁷

The Hearing Examiner appears to agree that more is required of Dominion with respect to its energy efficiency assumptions, recommending that "Dominion be directed to address its energy efficiency assumptions in its next RPS plan filing, which will be considered concurrently with Dominion's next IRP filing." Environmental Respondent agrees with this recommendation, but requests that the Commission directive include more specificity. In particular, Environmental

⁴⁴ See Va. Code § 56-596.2 B 1, 2.

⁴⁵ See Va. Code § 56-596.2 B 3.

⁴⁶ Report 95–96; see also Ex. 60 (Company Response to Staff Set 9-116).

⁴⁷ Hearing Transcript at 484:25–489:24 (Cross Examination of Amanda Ricketts on Direct).

⁴⁸ Report at 96.

Respondent requests that the Commission direct Dominion to include reasonable increases to the energy efficiency savings standards, with supporting analysis, for the years 2026 and beyond. This assumption and supporting analysis should be included in future RPS and IRP proceedings.

E. The Commission should direct Dominion to improve its load forecast, including by fixing its data center forecast methodology and accounting for the effects of accelerated renewable energy buyers.

Environmental Respondent has significant concerns about the load forecast used to justify this petition. ⁴⁹ As Mr. Abbott testified, for example, Dominion continues to project significant increases to its peak load, while actual peak loads have yet to follow this trend for over a decade. ⁵⁰ Data center growth represents almost all of the projected growth in peak load and energy sales through 2035, with peak load from data centers projected to roughly triple from 2020 to 2026 alone (1,808 MWs to 5,153 MWs). ⁵¹ If data center growth is not sustained, then customers may very well "be required to pay for resources that are not needed." ⁵² Importantly, Dominion is the source of the data center forecast; Dominion provides the data center forecast to PJM, which then incorporates it into the PJM load forecast. ⁵³

Environmental Respondent acknowledges that load forecasting is a complicated issue and RPS cases happen every year with a short timeline. Nonetheless, Dominion uses the load forecast to justify its RPS petition. As the Hearing Examiner found, "the load forecast used by the Company is within the scope of this RPS Plan proceeding." Environmental Respondent continues to believe that improvements must be made to the load forecast and, in particular, the data center

⁴⁹ Report at 103 (citing Ex. 43, Abbott Direct at 13).

⁵⁰ Ex. 43, Abbott Direct at 9:4–14:9.

⁵¹ Ex. 43, Abbott Direct at 22:4–11.

⁵² Ex. 43, Abbott Direct at 22:4–23:5.

⁵³ Ex. 43, Abbott Direct at 13:8-16.

⁵⁴ Report at 104.

forecast that underlies Dominion's internal forecast and is also incorporated into PJM's forecast. Consistent with the recommendations made by Environmental Respondent witness James F. Wilson in the 2020 IRP, ⁵⁵ Environmental Respondent recommends that in future IRP and RPS proceedings, the Commission direct Dominion to support its data center forecast with forward-looking research and analysis, which would include showing multiple scenarios of data center growth given the uncertainties about the sustainability of such growth. While Environmental Respondent intends to engage on forecasting issues during the upcoming IRP proceeding, a clear directive concerning the data center forecast would help advance this key issue in RPS cases moving forward.

In addition, in this proceeding, Environmental Respondent raised a significant deficiency in the data center forecast surrounding accelerated renewable energy buyers that requires correction going forward. According to Environmental Respondent Witness Gregory Abbott, most of the technology companies that own those data centers have zero-carbon policies and are likely to become ARBs. ⁵⁶ Under the VCEA, any energy sales to ARBs are excluded from RPS Program requirements and the aggregate amount of ARB nameplate capacity offsets Dominion's procurement requirements. ⁵⁷ Given the amount of new data center load currently being forecast, this could mean that a significant amount of Dominion's forecasted load is excluded from RPS obligations. Yet even though this issue may have a dramatic effect on Dominion's future RPS needs, it gave little consideration to the topic in its modeling and RPS Development Plan, other

⁵⁵ See Direct Testimony of James F. Wilson, Application/Petition of Virginia Electric and Power Company, In re: Virginia Electric and Power Company's Integrated Resource Plan filing pursuant to Va. Code § 56-597 et seq., Case No. PUR-2020-00035 (Sep. 15, 2020) at 8.

⁵⁶ Ex. 43, Abbott Direct at 22:12–19; see also § 56-585.5 G (ARB provision of VCEA).

⁵⁷ Ex. 43, Abbott Direct at 22:12–19.

than noting that ARBs already have approximately 1,301 MW of solar and onshore wind generation resources under contract.⁵⁸

Dominion needs to adjust its forecasting to account for potential data center related ARBs; otherwise, its forecasts may exaggerate future REC, energy, and capacity needs, creating the risk of customers paying for unnecessary buildout and compliance costs. Mr. Abbott recommends that the Commission direct Dominion to make reasonable assumptions about the amount of future data center load coming from ARBs and adjust the PJM load forecast accordingly. ⁵⁹ He also recommends that Dominion conduct sensitivity runs to determine the effect of such adjustments on RPS program requirements. ⁶⁰

The Hearing Examiner largely agrees with Mr. Abbott's concerns about the potential implications of data center related ARBs, including that Dominion "should assume some level of projected data center load will become ARB(s)." In light of this, he recommends that the Commission require Dominion "to address in its next RPS plan filing . . . the load forecast, modeling, and planning implications of projecting (and conversely not projecting) a portion of data center load increases coming from ARBs." 62

Environmental Respondent agrees that these issues must be a focus in future RPS plans, but requests the Commission provide a more specific directive in this case. Environmental Respondent requests that the Commission require Dominion in future forecasts and RPS modeling to incorporate reasonable assumptions, with detailed support and analysis, about the effects of

⁵⁸ Report at 17.

⁵⁹ Hearing Transcript at 306:13–25 (Direct Examination of Gregory L. Abbott).

⁶⁰ Hearing Transcript at 307:1–7 (Direct Examination of Gregory L. Abbott).

⁶¹ Report at 95.

⁶² Report at 98, 166.

ARBs, along the lines of what Mr. Abbott recommended.⁶³ This quantitative information would provide the Commission, Dominion, and other interested parties with a fuller picture of the potential effects of ARBs on REC, capacity, and energy needs.

F. The Commission should direct Dominion to more accurately model expired PPAs.

During the proceeding, Environmental Respondent raised two issues relating to Dominion's failure to appropriately account for expired PPAs.⁶⁴ The Hearing Examiner acknowledged these issues but deferred them to future proceedings.⁶⁵

First, Mr. Abbott explained that PJM may not have the ability to accurately capture the effect of expired PPA agreements in its forecast. PJM, for example, may not know when to switch a PPA facility from a Dominion capacity resource to load reducer status. ⁶⁶ While the degree of harm from this potential inaccuracy may not be imminent, there is no reason to delay the analysis required to better understand the scope of the issue. For that reason, Environmental Respondent continues to recommend that the Commission direct Dominion to provide an analysis and discussion of potential ways in which future expired solar PPA contracts can be factored into its load forecast in the upcoming 2023 IRP case.

Second, Mr. Abbott explained that Dominion is not properly modeling its ability to purchase PPA facilities.⁶⁷ As Dominion acknowledged as recently as 2020, the ability to convert PPAs to Company-owned resources is an "important benefit for customers."⁶⁸ For that reason,

⁶³ For example, Dominion's baseline model could assume that a low percentage (perhaps 10–20%) of future data center growth would be ARBs and then do sensitivity runs for higher percentages.

⁶⁴ See Report at 96.

⁶⁵ See Report at 96.

⁶⁶ See Hearing Transcript at 287:22-25, 288:10-20 (Direct Examination of Gregory L. Abbott).

⁶⁷ See Hearing Transcript at 289:3–290:8 (Direct Examination of Gregory L. Abbott). Up until recently, Dominion included an express purchase option in its PPAs. But even without an express option, Dominion testified that it can always negotiate a purchase with the third-party developer. See Hearing Transcript at 287:15–21 (Direct Examination of Gregory L. Abbott); Ex. 63, Keefer Rebuttal at 10.

⁶⁸ See Ex. 54 (Excerpt of C. Eric McMillan's Testimony from Case No. PUR-2020-00134).

Environmental Respondent continues to recommend that Dominion enable its model to allow for the conversion of existing PPAs to company-owned resources on an economic basis. Once again, there is no reason to delay implementing this recommendation.

III. THE COMMISSION SHOULD ENSURE THAT RESPONDENTS CAN REASONABLY ANALYZE AND VET THE MODELING ASSUMPTIONS DOMINION USES IN RPS PROCEEDINGS.

Throughout these proceedings, Dominion has objected to efforts by Environmental Respondent and others to probe its modeling assumptions, arguing that those topics are better left for IRP proceedings.

Although RPS proceedings are distinct from IRP proceedings, it is vital that respondents should be able to examine certain IRP aspects in RPS proceedings. Dominion uses the load forecast modeling and other components of the IRP to inform its RPS Plan and justify claims of need for the proposed projects and PPAs. For example, the IRP modeling forms the basis for Dominion's REC, capacity, and energy projections and, correspondingly, helps Dominion determine what composition of renewable energy projects to petition the Commission for approval under § 56-585.5 D 4. A full evaluation of the RPS Plan thus inherently involves looking at the modeling assumptions made in the IRP. That is particularly true given that Dominion updates its IRP assumptions annually but formal IRP proceedings are conducted triennially. Thus, if Dominion makes changes as part of an IRP update, respondents may not have the opportunity to probe those changes (including their implications for RPS proceedings) for another year or two. Meanwhile, those unprobed changes are affecting Dominion's RPS decisions in the present.

Given this, it is essential that respondents have access to the full IRP for these proceedings and be allowed to conduct reasonable discovery on IRP topics relevant to the RPS proceedings. The Hearing Examiner recommends that Dominion be required to upload to the eRoom "any recent IRP on which the RPS plan is based," but not require Dominion to include the IRP as part of its

RPS Plan itself.⁶⁹ Assuming that recommendation includes both IRPs and IRP Updates, Environmental Respondent has no objection to that approach, which as the Hearing Examiner notes, "would provide case participants with access to relevant information – including any relevant color charts and appendices – while also maintaining Dominion's right to object in the event a case participant seeks discovery or admission of information that is beyond the scope of an RPS plan proceeding."⁷⁰

CONCLUSION

For the reasons described above, Environmental Respondent respectfully requests the Commission enter an order that:

- Rules that in petitions made pursuant to § 56-585.5 D, the law requires a minimum of 35% capacity come from PPAs but does not prohibit more;
- Directs Dominion in future petitions to cease its practice of limiting its PPAs to no more than 35% of generating capacity, and instead plan and petition for a least-cost mix of PPAs and utility-owned projects that includes a minimum of 35% capacity from PPAs;
- Directs Dominion that, to the extent it deviates from the lowest-cost mix of Companyowned resources and PPAs in a petition, Dominion must provide a detailed justification with supporting analysis as to why it believes such deviation is nonetheless reasonable and prudent;
- Requires Dominion in future RPS proceedings to have its baseline model assume continued participation in RGGI;

⁶⁹ Report at 98. In the event that the Commission decides to consolidate future RPS and IRP cases, this approach would be unnecessary.

⁷⁰ Report at 97.

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• Requires Dominion in future RPS proceedings to not include a federal carbon tax in its baseline modeling;

baseline modeling;

• Requires Dominion in future RPS proceedings to model reasonable increases to the

energy efficiency savings standard;

• Requires Dominion in future RPS proceedings to improve its data center forecast and

analyze the likely effects of ARBs on its RPS and load requirements and to realistically

incorporate those effects into its modeling; and

• Requires Dominion to provide an analysis and discussion of potential ways in which

future expired solar PPA contracts can be factored into its load forecast and enable its

model to select PPAs for conversion to company-owned PPAs.

• Requires Dominion to provide a full copy of its most recent Integrated Resource Plan

(including updates) to the eRoom for future RPS proceedings and to cease objecting to

reasonable discovery relating to assumptions made in the IRP that are relevant to RPS

proceedings.

March 14, 2023

Respectfully submitted,

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