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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 2023
RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and
related requests**

Case No. PUR-2023-00142

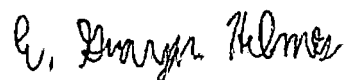
Dear Mr. Logan:

Attached please find Appalachian Voices' Comments on the Hearing Examiner's Report in the above-referenced docket. This notice is being filed 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

COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION

PETITION OF)

VIRGINIA ELECTRIC AND POWER)
 COMPANY)

Case No. PUR-2023-00142

*For approval of its 2023 RPS Development)
 Plan under § 56-585.5 D 4 of the Code of)
 Virginia and related requests)*

APPALACHIAN VOICES' COMMENTS ON HEARING EXAMINER'S REPORT

Pursuant to the Hearing Examiner's Report¹ ("Report") of February 15, 2024, Appalachian Voices submits the following comments.

INTRODUCTION

This is the fourth proceeding in which Virginia Electric and Power Company ("Dominion" or the "Company") seeks approval of specific renewable generation projects and of its long-term Renewable Portfolio Standard ("RPS") Development Plan to implement provisions of the Virginia Clean Economy Act ("VCEA"), which mandates that monopoly utilities transition electric power generation away from carbon-emitting facilities.² 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.

¹ Report of D. Matthias Roussy, Jr., Hearing Examiner, *Petition of Virginia Electric and Power Company for approval of its 2023 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2023-00142 (Feb. 15, 2024) ("Report").

² 2020 Va. Acts chs. 1193, 1194; Va. Code § 56-585.5 D 4.

One action that could benefit customers is rejecting Dominion's proposal to consolidate Rider CE and Rider PPA. Those two riders are how Dominion recovers costs associated with Company-owned renewable projects, and with energy acquired via power purchase agreements ("PPAs") with third-party-owned renewable facilities. Based on RPS proceedings to date, PPAs are a much more cost-effective way of obtaining energy than Company-owned facilities—a divide that is borne out by the dramatically different bill impacts of Rider PPA and Rider CE. Combining the two RACs would be bad for customer transparency because it would obscure the relative difference in costs between PPAs and Company-owned resources. For that reason, the Commission should reject Dominion's proposal.

The Commission could take other actions to encourage more cost-effective VCEA compliance. It could encourage Dominion to meet some of its renewable energy certificate ("REC") needs through long-term agreements for unbundled REC purchases from third parties. The Commission also could require Dominion to incorporate more locational analysis in how it selects and sites energy storage resources in order to minimize imbalances between its energy supply and demand needs. Both of those are recommendations endorsed by the Hearing Examiner. Additionally, as in prior proceedings, Dominion has conducted inadequate modeling to support its proposals. Dominion relies on its modeling from its 2023 Integrated Resource Plan ("IRP") to support its claims that the proposed projects are needed to meet its forecasted energy and capacity needs. As Appalachian Voices explained in the 2023 IRP proceeding, that modeling incorporates many problematic assumptions about capacity prices, load growth, the impacts of accelerated renewable energy buyers ("ARBs"), and other topics.³ Without adequate modeling, the

³ See, e.g., Ex. 20, Direct Testimony of Gregory L. Abbott, *Petition of Virginia Electric and Power Company for approval of its 2023 Integrated Resource Plan filing pursuant to Va. Code § 56-597 et seq.*, Case No. PUR-2023-00066 (Aug. 8, 2023) ("2023 IRP Abbott Direct").

Commission cannot accurately assess the necessity of the proposed projects and the adequacy of the RPS Development Plan. If the problems are not fixed, there is a real risk that customers will be forced to pay more than is required for VCEA compliance. It is critical that those identified problems be corrected in future RPS proceedings, ensuring that costs and benefits are being optimized for customers.

Finally, there are three areas where Commission guidance would be beneficial in RPS proceedings. First, the Commission should clarify how Dominion should account for the social cost of carbon in its petitions in order to maximize overall benefits to customers. Second, the Commission should provide guidance to Dominion and other electric utilities regarding how they should incorporate environmental justice into their activities, and otherwise comply with the Virginia Environmental Justice Act. Third, the Commission should clarify that the statutory provision capping at 35% the portion of petitioned RPS capacity that can come from PPAs does not similarly restrict the portion of approved capacity that can come from PPAs; in other words, that the 35% limitation does not limit the Commission's ability to approve or deny particular proposed renewable projects.

With respect to the specific projects proposed here, Appalachian Voices takes no position.

COMMENTS TO REPORT

I. THE COMMISSION SHOULD REJECT DOMINION'S PROPOSAL TO CONSOLIDATE RIDER PPA AND RIDER CE.

As part of these proceedings, Dominion has requested to consolidate, pursuant to Va. Code § 56-585.1 A 7, two existing rate adjustment clauses ("RACs"), Rider CE and Rider PPA. These two RACs are how Dominion recovers costs for Company-owned renewable energy projects and

for the Company's PPAs with third-party renewable energy sources, respectively.⁴ According to Subsection 585.1 A 7, the Commission should consider whether the consolidation would be "in the interest of judicial economy, customer transparency, or other factors the Commission determines to be appropriate."⁵ Because this proposed consolidation would reduce customer transparency and have little judicial economy benefit, the Commission should deny Dominion's request.

A. Consolidation would reduce customer transparency.

Dominion contends that consolidation is in the interest of customer transparency due to "the similarity of the underlying resources."⁶ However, as Appalachian Voices Witness Gregory Abbott explained, there are important distinctions between Company-owned resources and PPAs. While the underlying solar resources are similar, PPAs collectively provide more net benefits at lower risks to customers than Company-owned facilities.⁷ For example, with PPAs, ratepayers are not responsible for cost overruns during project development.⁸ PPAs also typically have much lower costs than Company-owned resources, presumably because the Company pays only for the output of those facilities, and not for their construction, maintenance, and upkeep.⁹

⁴ See *Petition of Virginia Electric and Power Company for approval of its 2023 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2023-00142 (Oct. 3, 2023) ("Petition") at ¶¶ 30, 36, 38.

⁵ Va. Code § 56-585.1 A 7.

⁶ Petition at ¶ 37.

⁷ Ex. 35, Direct Testimony of Gregory L. Abbott, *Petition of Virginia Electric and Power Company for approval of its 2023 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2023-00142 (Dec. 7, 2023) ("2023 Abbott Direct") at 32:13–33:1; 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) ("2022 Abbott Direct") at 23:6–28:6.

⁸ See 2022 Abbott Direct at 25:9–26:5.

⁹ See *id.* at 23:9–10; see also *id.* at 28:19–22 (noting that most solar PPAs considered in the 2022 Dominion RPS proceeding had a lower levelized cost of energy than Company-owned projects); Hearing Transcript, *Petition of Virginia Electric and Power Company for approval of its 2023 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2023-00142 (Jan. 10, 2024) ("Hearing Transcript") at 133:12–

Those lower costs are reflected in the charges associated with Rider CE and Rider PPA. At present, the typical residential customer pays about \$1.70 a month for Rider CE and receives a *credit* of \$0.29 a month for Rider PPA.¹⁰ The same has been true historically, with the Rider CE charge always much higher than Rider PPA.¹¹ In fact, as Witness Abbott noted, “the solar PPAs approved to date are actually lowering customers’ monthly bills.”¹²

Those same trends are borne out in the long-term revenue requirements associated with both RACs. The Company aims to have 35% of the total capacity it petitions for under § 56-585.5 D come from PPAs.¹³ But if the RACs were combined, the Rider PPA share would represent only about 13.5% of the total long-term revenue requirement—about \$354 million out of \$2.623 billion.¹⁴ In other words, PPAs account for approximately 35% of the capacity Dominion has petitioned for, but just 13.5% of the costs. PPAs are thus a much more cost-effective way to achieve VCEA compliance.

However, consolidating the two RACs would make it difficult for customers and policymakers to understand the relative costs and benefits of PPAs and Company-owned facilities. At present, they can quickly and easily find that information based on the values of Rider CE and

24 (Cross Examination of Company Witness Keefer on Direct) (affirming that PPAs are a different construct than Company projects, and due to the defined price in a PPA, cost variances are not anticipated).

¹⁰ Hearing Transcript at 212:10–212:17 (Direct Examination of Appalachian Voices Witness Abbott).

¹¹ *Id.* at 210:23–212:17.

¹² 2023 Abbott Direct at 33:2–3.

¹³ Ex. 18, Direct Testimony of Brian M. Keefer, *Petition of Virginia Electric and Power Company for approval of its 2023 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2023-00142 (Oct. 3, 2023) (“Keefer Direct”) at 5:12–6:4.

¹⁴ Ex. 36, Direct Testimony of Arwen F. Otwell, *Petition of Virginia Electric and Power Company for approval of its 2023 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2023-00142 (Dec. 7, 2023) (“Otwell Direct”) at 14 (Table 3); Hearing Transcript at 230:18–231:21 (Cross Examination of Arwen F. Otwell on Direct). A small amount of this difference may be due to Dominion having to terminate a few distributed solar PPAs. See Keefer Direct at 3:10–4:2.

Rider PPA included in their monthly bills or Commission reports.¹⁵ But if the RACs were consolidated, those same customers and policymakers would have to hunt through lengthy Commission dockets to find the numbers that would then allow them to calculate the relative bill impacts. The Hearing Examiner appears to downplay this challenge, citing the fact that he could replicate the existing rates using information that would be publicly available in the RPS filings post-consolidation.¹⁶ With all due respect, whether this information would be transparent to someone with familiarity with Commission filings should not be the relevant question. As Witness Abbott noted, “the vast majority of typical customers do not have the knowledge and expertise to glean this information from RPS filing schedules.”¹⁷ Customers should not have to resort to a “needle in the haystack” search to understand the relative impacts of PPAs and Company-owned facilities. Consolidation thus clearly would reduce customer transparency.

B. Consolidation would have limited judicial economy benefit relative to other options.

The Hearing Examiner concluded that “consolidation of Riders CE and PPA is in the interest of judicial economy” because it would eliminate the need to hold a separate annual Rider PPA proceeding and “shift[] a relatively limited amount of work to another existing annual proceeding,” namely, this RPS Development Plan proceeding.¹⁸ These benefits are outweighed by the significant customer transparency concerns highlighted above. For that reason alone, the Commission should reject the proposed RAC consolidation.

¹⁵ For example, the Commission’s annual Virginia Electric Utility Regulation Act status report contains a detailed table listing the bill impacts of each Dominion RAC. *See, e.g.,* State Corp. Comm’n, Status Report: Implementation of the Virginia Electric Utility Regulation Act Pursuant to § 56-596 B of the Code of Virginia (Nov. 1, 2023) at 6.

¹⁶ Report at 122.

¹⁷ Hearing Transcript at 210:16–19 (Direct Examination of Appalachian Voices Witness Abbott).

¹⁸ Report at 121.

Moreover, if the Commission is concerned about judicial economy, there are other ways to achieve that goal without sacrificing customer transparency. For example, the Commission could require Dominion to file its Rider PPA petition as part of these annual RPS Plan proceedings, rather than as a separate, stand-alone proceeding. As Company Witness Elizabeth Lecky acknowledged, Dominion annually seeks to update Rider CE as part of the RPS proceedings and could do the same for Rider PPA if the Commission requests.¹⁹ This approach would have largely the same judicial economy benefits as consolidating the RACs. There would be no need for a separate stand-alone Rider PPA proceeding, nor for a separate public notice (and attendant costs) for that rider. There would also be little effect on Staff since Rider PPA involves “a relatively limited amount of work.”²⁰

To be clear, Appalachian Voices is not specifically advocating for a consolidated hearing but simply offers it as an alternative to Dominion’s flawed RAC consolidation proposal. Regardless of whether the Commission chooses to consolidate the hearings, it is clear that consolidating Riders CE and PPA would decrease customer transparency and thus should be rejected.

II. DOMINION MUST SOLICIT LONG-TERM AGREEMENTS FOR UNBUNDLED RECS.

Dominion used the 2023 IRP forecast to project its future RPS program needs. As Witness Abbott explained, much uncertainty surrounds those projections. While Dominion predicts significant load growth, much of it comes from data centers, and much of that data center load is from ARBs. In 2022 alone, the total ARB load from data centers was 9,774,225 MWhs, or 98.7% of Dominion’s overall ARB load.²¹ Under the VCEA, any energy sales to ARBs are excluded from

¹⁹ Hearing Transcript at 482:1–483:5 (Cross Examination of Company Witness Elizabeth B. Lecky on Rebuttal).

²⁰ Report at 121.

²¹ 2023 Abbott Direct at 10:1–3.

RPS Program requirements, and the aggregate amount of ARB nameplate capacity offsets Dominion's procurement requirements.²² Given the large amount of ARB load, this could mean that a significant amount of Dominion's forecasted load growth will ultimately be excluded from its RPS obligations.

Given that uncertainty about future RPS needs, Witness Abbott recommended that Dominion seek out and enter into long-term purchase agreements for unbundled RECs from qualifying facilities.²³ This approach is different than Dominion's current practice, which involves making unbundled REC purchases from the spot market.²⁴ As Witness Abbott explained, having a long-term purchase agreement in place would ensure that Dominion could meet its REC needs in the future in the event that there are insufficient RECs available on the spot market.²⁵

The Hearing Examiner endorsed Witness Abbott's recommendation, noting that "now appears to be an appropriate time for the Company to solicit unbundled REC agreements to better determine whether such agreements could be part of a lower cost compliance portfolio."²⁶ He thus recommended that the Commission direct Dominion to solicit such agreements, "either by expanding its existing RFP process or through a parallel competitive process."²⁷

Appalachian Voices agrees with this recommendation and encourages the Commission to adopt it.

²² Va. Code § 56-585.5 G (ARB provision of VCEA).

²³ 2023 Abbott Direct at 15:7–16:5.

²⁴ Ex. 47, Rebuttal Testimony of Brian M. Keefer, *Petition of Virginia Electric and Power Company for approval of its 2023 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2023-00142 (Dec. 26, 2023) ("Keefer Rebuttal") at 4:5–17.

²⁵ 2023 Abbott Direct at 14:7–15:4.

²⁶ Report at 84.

²⁷ *Id.*

III. THE COMMISSION SHOULD REQUIRE DOMINION TO ADDRESS MODELING AND FORECASTING ISSUES.

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 reusing its modeling from its 2023 IRP proceeding. Since IRP modeling forms the foundation for Dominion's claims of need in RPS proceedings, it is important that Dominion make reasonable assumptions and perform reasonable modeling runs.

Unfortunately, Dominion's modeling contains numerous flaws. Those flaws affect not only future IRPs, but also how Dominion projects, and plans to handle, its future RPS needs. In the IRP proceeding, Appalachian Voices offered a number of suggestions to remedy these problems. It reiterated many of those suggestions here and also highlighted other ways to address some of the RPS-specific concerns raised by that modeling.

As set forth herein, Appalachian Voices respectfully requests that the Commission direct Dominion to remedy these problems in future RPS and IRP proceedings.

A. Dominion should consider locational benefits in the solicitation and selection of future storage resources and any economic analysis it performs to support future RPS energy storage petitions.

The Hearing Examiner recommends Dominion continue to explore ways to value location when selecting potential resource additions,²⁸ but based on the absence of a decision in the IRP, does not recommend the Commission direct Dominion to modify the PLEXOS model.²⁹ Witness Abbott recommended modifying the PLEXOS model as one way for Dominion to improve its consideration of locational benefits of energy storage resources.³⁰ However, his recommendation was not confined to actions that would be taken in the IRP. In fact, he explained that those

²⁸ Report at 85.

²⁹ *Id.* at 86.

³⁰ Abbott Direct at 24:19–27:2; Hearing Transcript at 195:21–196:3 (Direct Examination of Gregory L. Abbott).

modifications would be beneficial to the economic analysis in CPCN or PPA proceedings involving storage resources “to ensure that energy storage resources are placed where they are needed the most and where the maximum economic benefits can be realized.”³¹ While Appalachian Voices supports the Hearing Examiner’s recommendation for Dominion to continue exploring ways to value location when selecting potential resource additions, we believe the Commission should go a step further and adopt the specific RPS recommendations of Witness Abbott.

Solicitation and Selection. In an RPS proceeding, Dominion presents its project selection protocols, identifying what (if any) changes it has undertaken in its RFP process for storage resources and other Company-owned projects and PPAs, and describing if and how the changes impacted the selection process. This information is presented annually, and the Commission has provided guidance in prior RPS proceedings³² for changes it wishes to see in future solicitation and selection efforts. The Commission need not depart from its precedent simply because no storage resources are proposed in this proceeding. The Commission should use this proceeding to require more detailed locational analysis in storage resource solicitation and selection to ensure Dominion optimizes the benefits of this resource type as the Company progresses toward meeting its VCEA storage petition requirements.

Economic Analysis. The record reflects Dominion’s agreement that battery storage has locational benefits and that Dominion is evaluating how best to incorporate those benefits within

³¹ Abbott Direct at 25:9–21; *see also* Hearing Transcript at 194:9–15 (Direct Examination of Gregory L. Abbott).

³² Final Order, *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 (Apr. 14, 2023) (“2022 Dominion RPS Order”) at 13; Final Order, *Petition of Virginia Electric and Power Company for approval of its 2021 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2021-00146 (Mar. 15, 2022) (“2021 Dominion RPS Order”) at 13.

the Code of Conduct restrictions.³³ However, the record does not reflect the details of Dominion's evaluation. The Commission should be informed about Dominion's efforts if it accepts the Hearing Examiner's recommendation that Dominion evaluate locational benefits.³⁴ If the Commission adopts the Hearing Examiner's recommendation not to require PLEXOS model changes,³⁵ the Commission should simultaneously require Dominion to at least forecast on-peak and off-peak nodal locational marginal prices ("LMPs") to identify areas where the largest spreads between on-peak and off-peak prices are predicted. Such information could better inform Dominion's solicitation and project selection process. Appalachian Voices supports Witness Abbott's recommendation that the Commission direct Dominion to include locational benefits in any economic analysis it performs to support petitions for energy storage resources in future RPS plan cases, and to do so using a model capable of performing such analysis, whether a modified PLEXOS model or some other tool.³⁶ If adjustments to PLEXOS are not feasible at this time, the Commission should direct Dominion to pursue other available methods, as suggested by Witness Abbott.

B. Dominion should use a realistic low-capacity price forecast sensitivity in future RPS filings.

The Hearing Examiner did not make a determination on the issue of whether Dominion should use a realistic low-capacity price forecast sensitivity in future RPS cases. Appalachian Voices raised this issue in the recent IRP proceeding and did not relitigate the issue in the present proceeding, instead recommending that the RPS order reflect the Commission's decision in the IRP. The Commission, however, did not make a determination on this or any issues in the IRP

³³ Hearing Transcript at 190:24-191:22 (Direct Examination of Gregory L. Abbott).

³⁴ Report at 150.

³⁵ *Id.* at 86.

³⁶ Hearing Transcript at 215:19-216:1 (Direct Examination of Gregory L. Abbott).

before closing the case on Feb. 22, 2024.³⁷ Given this, the Hearing Examiner deemed moot all issues that relied on deferring to decisions in the IRP.

But in the absence of a Commission decision on these issues, the Hearing Examiner relied on the results of Dominion's IRP modeling and forecasts to evaluate the CE-4 projects and PPAs. In doing so, the Hearing Examiner implicitly adopted all of Dominion's load and commodity price forecasts as well as all of Dominion's modeling constraints and modeling results. Appalachian Voices believes the Commission's Notification³⁸ of "no decision" in the IRP case does not mean the Commission adopted or rejected any position on Dominion's modeling results, modeling inputs, and forecasts. Considering the absence of Commission direction following the IRP proceeding, Appalachian Voices believes the Commission need not make any findings of facts on the sufficiency of Dominion's modeling in this case.

Should the Commission approve the projects and PPAs Dominion proposed in this proceeding, the Commission should make clear that such approval should not be construed as any finding of fact on the sufficiency of Dominion's modeling inputs and results. Further, the Commission should require Dominion to perform an additional economic analysis based on a realistic low-capacity price forecast. Again, Appalachian Voices does not take a position on any specific projects, but rather provides these recommendations to enhance the information submitted to the Commission for the CE-4 projects and PPAs as well as future projects and PPAs.

³⁷ Notice of Closed Status, *Petition of Virginia Electric and Power Company for approval of its 2023 Integrated Resource Plan* filing pursuant to Va. Code § 56-597 et seq., Case No. PUR-2023-00066 (Feb. 22, 2024).

³⁸ Notification, *Petition of Virginia Electric and Power Company for approval of its 2023 Integrated Resource Plan* filing pursuant to Va. Code § 56-597 et seq., Case No. PUR-2023-00066 (Feb. 1, 2024).

C. The Commission should require Dominion to update its modeling to address problematic inputs identified in the IRP proceeding.

In the 2023 IRP proceeding, Witness Abbott identified a number of modeling assumptions, constraints, and inputs he deemed problematic.³⁹ As Witness Abbott noted here, “[t]he IRP is a purely *theoretical* exercise that tests various plans and scenarios under uncertain forecasts of future markets,” whereas RPS proceedings and CPCN cases for generation resources are where those theoretical plans are then put into practice.⁴⁰ All of the flaws that Witness Abbott identified in the IRP are having real-world implications in this RPS proceeding.

Moreover, because the Commission did not issue a formal order in the 2023 IRP proceeding, Dominion will likely continue to rely on that same flawed modeling in the 2024 IRP and RPS proceedings, and in other similar proceedings, absent Commission direction otherwise. Appalachian Voices thus encourages the Commission to use this opportunity to provide guidance for the modeling that Dominion should use in those proceedings.

In particular, Witness Abbott identified the following issues with Dominion’s modeling in the IRP proceeding⁴¹:

- Dominion’s transmission constraint of 5,200 MWs for importing/exporting power from/to PJM’s energy markets is not supported by recent analysis;
- Dominion excludes the energy produced from Dominion-owned Ring-Fence facilities from the model;
- Dominion excludes the energy produced from renewable facilities under PPAs with bundled ARBs in the model;

³⁹ 2023 IRP Abbott Direct at 14–15.

⁴⁰ 2023 Abbott Direct at 5:15–6:2.

⁴¹ 2023 IRP Abbott Direct at 14–15.

- Dominion's capacity assumption of future data center load that will be bundled ARBs is not realistic;
- Dominion's peak load forecast appears to be biased to the high side and is subject to a high level of uncertainty;
- Dominion's capacity price forecast appears to be biased to the high side and is subject to a high level of uncertainty; and
- Dominion's model assumption for coal unit dispatch may not fully capture the costs associated with actual coal unit dispatch.

Appalachian Voices encourages the Commission to offer guidance to Dominion about how to fix those issues in the modeling it performs for the 2024 IRP and RPS proceedings.

IV. THE COMMISSION SHOULD CLARIFY HOW UTILITIES MUST ACCOUNT FOR THE SOCIAL COST OF CARBON.

The Hearing Examiner recommends that in future RPS petitions that include requests for new Company-owned projects or PPAs, Dominion should not combine the social cost of carbon ("SCoC") value with the net present value ("NPV") when presenting the projects' economic analysis.⁴² The Hearing Examiner seems to take issue with the Company's use of the federal SCoC because it reflects global impacts, not simply Virginia-based costs.⁴³ Additionally, Consumer Counsel suggested that the SCoC should be a qualitative, not quantitative, evaluation; however, the Hearing Examiner did not weigh in on that issue.⁴⁴ Given these concerns about the manner in which the SCoC is presented in project petitions, Appalachian Voices offers the following points for the Commission's consideration.

⁴² Report at 151.

⁴³ Report at 97–98.

⁴⁴ Report at 98 n.554.

By statute, both Dominion and the Commission must consider the SCoC for Dominion's proposed generation projects.⁴⁵ In this proceeding, Dominion calculated the SCoC benefit of its proposed carbon-free solar generation projects by first "multipl[ying] each project's annual solar generation by the marginal CO₂ emissions intensity from the 2023 PJM Emission Report to determine how much carbon the project would displace."⁴⁶ Dominion then "multiplied that amount by the forecasted social cost of carbon published by the federal government (\$51 per metric ton in 2020 [dollars]) to determine the social cost of carbon benefit of the project."⁴⁷ As Company Witness Jarad Morton testified, the federal government's calculation is based on the global effects of CO₂ emissions.⁴⁸

Appalachian Voices agrees with Dominion's use of the federal SCoC value for two reasons. First, the VCEA expressly references the federal Interagency Working Group's SCoC values. Under Va. Code § 56-585.1 A 6, the Commission must "use the best available science and technology, including the Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866, published by the Interagency Working Group on Social Cost of Greenhouse Gases from the United States Government in August 2016, as guidance."⁴⁹ That same statutory provision gives the Commission

⁴⁵ Va. Code § 56-585.1 A 6 ("In any application to construct a new generating facility, the utility shall include, and the Commission shall consider, the social cost of carbon, as determined by the Commission, as a benefit or cost, whichever is appropriate.").

⁴⁶ Ex. 20, Direct Testimony of Jarad L. Morton, *Petition of Virginia Electric and Power Company for approval of its 2023 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2023-00142 (Oct. 3, 2023) ("Morton Direct") at 15:15–17.

⁴⁷ *Id.* at 15:17–20.

⁴⁸ Hearing Transcript at 386:4–25 (Direct Examination of Company Witness Morton on Rebuttal); *see also* Interagency Working Group on Social Cost of Greenhouse Gases, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (Aug. 2016).

⁴⁹ Va. Code § 56-585.1 A 6. After the VCEA was enacted, the federal government issued updated calculations "identical to those reported in the 2016 [technical support document] adjusted for inflation to 2020 dollars." *See* Interagency Working Group on Social Cost of Greenhouse Gases, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide: Interim Estimates Under Executive Order 13990 at 5 n.3 (Feb. 2021). Dominion's \$51 social cost of carbon value comes from this updated guidance. Report at 24 n.125.

discretion to “adopt any rules it deems necessary to determine the social cost of carbon,”⁵⁰ but the Commission has not adopted any rules to date. Appalachian Voices agrees with Company Witness Morton that, in light of the statute and “absent any additional directives from the Commission on how to estimate the social cost of carbon, the federal government published value is the appropriate value to use, even though it is not specific to Virginia.”⁵¹

Second, the federal value is based on the global benefits of CO₂ emissions reductions, which is the appropriate scale at which to measure the costs and benefits of carbon emissions, even in state-level decision-making. If all government entities considered benefits for only those they govern while ignoring positive externalities, the net result would be a massive underinvestment in projects that reduce carbon emissions. Dominion’s ratepayers also have economic interests beyond Dominion’s service territory (and Virginia as a whole) that are affected by climate change, so climate damages occurring elsewhere can spill over and harm Dominion’s ratepayers. Any sub-global metric would fail to account for these considerations, which explains why, as Company Witness Morton noted, there are no “social cost of carbon estimates specific to any region.”⁵² Instead, every state public utility commission that considers the social costs and benefits of carbon does so on a global scale.⁵³

⁵⁰ Va. Code § 56-585.1 A 6.

⁵¹ Hearing Transcript at 387:1–6 (Direct Examination of Company Witness Morton on Rebuttal).

⁵² Hearing Transcript at 387:7–9 (Direct Examination of Company Witness Morton on Rebuttal).

⁵³ See, e.g., Nev. Admin. Code § 704.937 (2024) (when evaluating a utility’s IRP, “the social cost of carbon must be determined by subtracting the costs associated with emissions of carbon internalized as private costs to the utility . . . from the net present value of the future global economic costs resulting from the emission of each additional metric ton of [CO₂]”); Minn. Pub. Utils. Comm’n, Docket No. E-999/CI-93-583, Order Establishing Environmental Cost Values at 15 (Jan. 3, 1997) (“CO₂ . . . causes damages globally rather than regionally or locally [T]his means assessing damage globally”); Minn. Pub. Utils. Comm’n, *In the Matter of the Further Investigation into Environmental and Socioeconomic Costs Under Minnesota Statutes Section 216B.2422, Subdivision 3*, Docket No. E-999/CI-14-643, Order Updating Environmental Cost Values (Jan. 3, 2018), available at <https://perma.cc/G3UT-2CWK> (establishing a social cost of carbon based on the federal value to be used in all resource plan and certificate of need proceedings); Colo. Code Regs. § 723-3-3605(IV)(h) (2024) (requiring IRP to include the “cost of the projected [CO₂] emissions using the carbon cost calculated by the Commission based on the most recent assessment of the social cost of carbon developed by the federal government”).

Finally, Dominion's presentation of the SCoC as a quantitative value is appropriate.⁵⁴ Va. Code § 56-585.1 A 6 requires that the Commission use as guidance the federal Interagency Working Group's Technical Support Document, which provides quantitative SCoC values. The statute also seems to assume the Commission will use a quantitative metric when it requires the Commission to "include a system to adjust the costs established in this section with inflation,"⁵⁵ as the Hearing Examiner noted.⁵⁶ Appalachian Voices believes that, in order to depict complete economic value assessments of proposed projects, it is imperative to include some form of quantified costs or benefits for the SCoC. We encourage the Commission to determine how best to accomplish this after soliciting and considering inputs from interested and informed individuals and entities. Such a determination likely should take place in a separate proceeding given the statutory time constraints placed on the current proceeding, which would not allow the Commission to be fully informed on the issue prior to making a decision.

V. THE COMMISSION MUST PROVIDE GUIDANCE FOR HOW DOMINION SHOULD ADDRESS ENVIRONMENTAL JUSTICE CONCERNS.

The Hearing Examiner recommends that the Commission encourage Dominion "to continue any ongoing environmental justice outreach."⁵⁷ While Appalachian Voices agrees that environmental justice outreach should certainly continue, Appalachian Voices also believes Commission direction is merited to inform *how* environmental justice outreach and analysis is conducted, particularly with respect to how that effort is informed by and fulfills the aims of the Virginia Environmental Justice Act ("VEJA").

⁵⁴ At this time, Appalachian Voices takes no position on Dominion's decision to present a table showing, for each project, the NPV without the social cost of carbon and NPV with the social cost of carbon benefit added. *See, e.g.*, Ex. 22, Morton Direct Schedules 1 and 3 with Only CPCN Projects.

⁵⁵ Va. Code § 56-585.1 A 6.

⁵⁶ Report at 98 n.554.

⁵⁷ Report at 151.

The Hearing Examiner focused on the environmental justice outreach Dominion conducted or encouraged in the context of the specific renewable projects that are before the Commission in this proceeding.⁵⁸ However, Appalachian Voices believes the RPS proceeding affords the Commission the opportunity to evaluate Dominion's case-by-case approach and provide further guidance to Dominion and other electric utilities regarding how they should conduct environmental justice analyses. According to Company Witness Kathryn MacCormick, Dominion employs a standard, case-by-case approach to performing its environmental justice analysis, regardless of the resource type,⁵⁹ so it is appropriate for the Commission to use the record developed here to assess Dominion's standard process for addressing environmental justice in a project-specific context.

For instance, Dominion's approach to evaluating fenceline communities is flawed. The Hearing Examiner observes that the record does not identify a major source of pollution proximate to any of the Company's CE-4 projects, nor does the record identify any existing health risk to nearby residents that "these proposed solar facilities could potentially aggravate."⁶⁰ Respectfully, Appalachian Voices does not believe this is the correct analysis. The record reflects that Dominion attempts to redefine or "explain" the term "fenceline communities," a term already defined in the VEJA as "an area that contains all or part of a low-income community or community of color and that presents an increased health risk to its residents due to its proximity to a major source of pollution."⁶¹ By contrast, Dominion's Environmental Justice Assessments state in a footnote that "[t]he VEJA defines fenceline communities as those adjacent to major sources of pollution" and

⁵⁸ Report at 111-12.

⁵⁹ Hearing Transcript at 449:19-21 (Cross Examination of Company Witness Kathryn E. MacCormick on Rebuttal).

⁶⁰ Report at 113.

⁶¹ Va. Code § 2.2-234.

deems “review of such communities [to be] applicable only when the project is expected to be a major source of pollution (e.g., [i]t requires a CAA permit, or otherwise will generate a significant amount of short-term, un-regulated pollution).”⁶² Company Witness MacCormick acknowledged that “the wording” in Dominion’s footnote “is different” than what is in the VEJA but then said that she “wouldn’t refer to the footnote 4 as a definition; more of an explanation.”⁶³ In fact, Dominion’s “explanation” of fenceline communities omits a key component of the VEJA’s definition, focusing only on whether the addition of the proposed resource *creates* a fenceline community but not attempting to identify whether the proposed resource would be impacting already *existing* fenceline communities.

This approach also does not meet the VEJA’s standards more broadly for how to assess impacts. The VEJA defines “environmental justice” as “the *fair treatment* and *meaningful involvement* of every person, regardless of race, color, national origin, income, faith, or disability, regarding the development, implementation, or enforcement of any environmental law, regulation, or policy.”⁶⁴ The act defines “fair treatment” and “meaningful involvement” as follows:

“Fair treatment” means the equitable consideration of all people whereby no group of people bears *a disproportionate share of any negative environmental consequence* resulting from an industrial, governmental, or commercial operation, program, or policy

and

“Meaningful involvement” means the requirements that (i) affected and *vulnerable community residents* have access and opportunities to participate in the full cycle of the decision-making process about a proposed activity that *will affect their environment or health* and (ii) decision makers will seek out and consider such participation,

⁶² Ex. 54, Attachment to Revised Response to Staff Informal Request 2 (Jan. 4, 2024) at 2 n.4.

⁶³ Hearing Transcript at 459:6–8 (Cross Examination of Company Witness Kathryn E. MacCormick on Rebuttal).

⁶⁴ Va. Code § 2.2-234 (emphasis added).

allowing the views and perspectives of community residents to shape and influence the decision.⁶⁵

Fair treatment thus requires a proportionality assessment. If a community is not identified and the *existing* share of any negative environmental consequences resulting from industrial and other operations, programs, and policies the community faces is not identified, the proportionate share of these consequences cannot be determined. Relatedly, “meaningful involvement” requires that residents have access and opportunities to participate in decision-making on “a proposed activity that will affect their environment or health.”⁶⁶ But whether an activity will “affect” a community cannot be sufficiently understood without first identifying the relevant communities and the health risks currently experienced in those communities. The Hearing Examiner correctly found that the record is devoid of information about whether a major source of pollution is near any of the Company’s CE-4 projects. This is because Dominion’s “explanation” of how it identifies fenceline communities ignores existing fenceline communities, which eliminates consideration of the very communities on which the VEJA places focus.

Because Dominion believes that the VEJA (including its definitions) “does not offer any specific guidance on how an EJ analysis should be conducted, nor have any agencies of the Commonwealth pursued any regulations, rulemakings, or finalized guidance for electric utilities on the topic since the law was passed,”⁶⁷ the Company came up with its own definition of pertinent terms.⁶⁸ Commission guidance is needed to ensure the aims of VEJA are being met.

⁶⁵ *Id.* (emphasis added).

⁶⁶ *Id.*

⁶⁷ Ex. 53, Rebuttal Testimony of Kathryn E. MacCormick, *Petition of Virginia Electric and Power Company for approval of its 2023 RPS Development Plan under § 56-585.5 D 4 of the Code of Virginia and related requests*, Case No. PUR-2023-00142 (Dec. 21, 2023) at 3:1–4.

⁶⁸ For example, Dominion created its own definition of what constitutes an “environmental justice impact” under the VEJA, and the Company uses a different standard for “fenceline communities” than what is in the VEJA. *Id.* at 4:7–10 (defining “environmental justice impact”); Ex. 54, Attachment to Revised Response to Staff Informal Request 2 (Jan. 4, 2024) at 2 n.4 (redefining “fenceline communities”).

VI. THE COMMISSION MUST CLARIFY WHETHER THE STATUTORY 35% CAP ON PPAS APPLIES TO APPROVALS.

In last year's RPS proceeding, the Commission ruled that "Code § 56-585.5 D, as written, does not permit more than 35% of capacity to come from third-party-owned resources."⁶⁹ Consumer Counsel subsequently filed a motion requesting that the Commission clarify that this ruling solely operated as "a constraint on the Company's petitions and not on the Commission's authority to grant or withhold necessary approvals."⁷⁰

The Commission has yet to formally rule on that motion or to offer clarification on this point. Appalachian Voices believes it would be beneficial for the Commission to do so. Based on the Commission's interpretation of Code § 56-585.5 D 2, Dominion continues to aim to have 35% of the generating capacity in its RPS petitions come from PPAs. If the 35% limit also applies to approvals of capacity resources, then the Commission would have to make sure to maintain that ratio in deciding whether to approve particular projects. That means whenever the Commission chooses to deny approval for a particular project, it may have to deny approval for other reasonable and prudent projects solely to maintain the ratio.

Such a result seems absurd on its face and cannot be what the statute intended. Subsection 56-585.5 D 2 is focused on what array of projects should be included in RPS petitions. It is silent on how the Commission should rule on those projects. Moreover, given that the VCEA is meant to encourage the development of zero-carbon resources, interpreting the statute to arbitrarily reject such resources makes little sense.

⁶⁹ 2022 Dominion RPS Order at 17.

⁷⁰ Office of Attorney General, Div. of Consumer Couns., Petition for Clarification or Reconsideration, *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 (May 4, 2023) at 3.

For those reasons, Appalachian Voices encourages the Commission to clarify that the 35% limitation does not limit its ability to approve or deny particular proposed renewable projects.

CONCLUSION

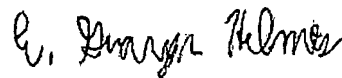
For the reasons described above, Appalachian Voices respectfully requests the Commission enter an order that:

- Rejects Dominion's proposal to consolidate Rider PPA and Rider CE;
- Requires Dominion to develop protocols to consider locational benefits in the solicitation and selection of future energy storage resources contained in petitions for energy storage resources submitted as part of future RPS Plan cases;
- Requires Dominion to include locational benefits in any economic analysis it performs to support petitions for energy storage resources submitted as part of future RPS Plan cases and that it do so using either a modified PLEXOS model capable of performing such analysis or through an analysis performed outside of the PLEXOS model;
- Requires Dominion to perform an additional economic analysis based on a low capacity price forecast sensitivity in future petitions for approval of RPS resources;
- Requires Dominion to solicit unbundled REC agreements to better determine whether such agreements could be part of a lower cost compliance portfolio;
- Requires Dominion to revise its modeling to address the issues that Appalachian Voices Witness Abbott identified in the IRP and RPS proceedings;
- Requires Dominion in future proceedings that involve CPCNs to include estimated social cost of carbon costs/benefits in its economic analysis of the proposed projects;
- Establishes a separate proceeding to develop guidance for Dominion and other monopoly utilities in the Commonwealth to ensure the Virginia Environmental Justice Act is carried out; and

- Clarifies that the 35% limitation on the portion of PPAs that can be included in RPS petitions does not limit the Commission's ability to approve or deny particular proposed renewable projects.

March 1, 2024

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that the following have been served with a true and accurate copy of the foregoing via electronic mail:

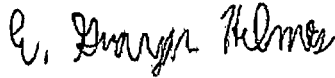
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