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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: Virginia Electric and Power Company's Integrated Resource Plan filing pursuant to Va. Code § 56-597 et seq.

Case No. PUR-2023-00066

Dear Mr. Logan,

Attached please find Appalachian Voices' Post-Hearing Brief. 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, Appalachian Voices 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,

Rachel James

Rachel James

COMMONWEALTH OF VIRGINIA STATE CORPORATION COMMISSION

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PETITION OF)	
)	
VIRGINIA ELECTRIC AND POWER)	
COMPANY)	
)	Case No. PUR-2023-00066
In re: Virginia Electric and Power)	
Company's Integrated Resource Plan)	
filing pursuant to Va. Code § 56-597 et)	
seq.		

APPALACHIAN VOICES' POST HEARING BRIEF

Pursuant to the Commission's Hearing Examiner's direction regarding Post-Hearing Filings, provided at the Evidentiary Hearing on September 21, 2023, Appalachian Voices ("APV") submits the following post-hearing brief.

INTRODUCTION

An IRP must be more than a paper exercise. Sadly, this proceeding proves that the IRP process in Virginia has devolved over time to exactly that:

- Q: So that means that we have not had a State Corporation Commission-approved preferred plan in an IRP process since 2013?
- A: Sounds right.
- Q: Okay. But it is your testimony that this is not a paper exercise?
- A: Absolutely.¹

¹ Hearing Transcript, 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. 2023-00066 (Sept. 19-21, 2023) ("Hearing Transcript") at 584:1-7 (Cross Examination of Dominion Witness Compton on Rebuttal).

Absolutely wrong. If this IRP process, which consumes hundreds of hours of valuable time is to have any purpose, it must be to provide the Commission and the public with a clear idea of what investments Dominion is planning to make to reliably keep the lights on while complying with all relevant and applicable laws. This IRP is a complete failure in that regard,

Virginia Electric and Power Company ("Dominion" or "the Company") is seeking approval of its 2023 integrated resource plan ("IRP"),² which projects substantial load growth from one customer type, but neglects to plan in a way that addresses the nuance of that customer load profile. This approach should not be approved.

An IRP is indeed a planning document,³ a planning document meant to *plan* for the integration of the resources necessary to meet a utility's projected load while being consistent with the Commonwealth's energy policies⁴. Virginia's IRP Statutes⁵ provide details of both what an IRP should contain and what the utility must evaluate in preparation of the document. Further, the law is clear in its requirement that the Commission determine whether a submitted IRP, the plan itself, is reasonable and is in the public interest. The Commission should start this evaluation by determining whether the plan presented is consistent with relevant laws.

Evaluating whether Dominion's IRP appropriately reflects relevant laws is an analysis the Commission has consistently undertaken. For instance, the Commission reiterated the importance of capturing legally compliant information in the IRP in its review of Dominion's two most recent

² 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. 2023-00066 (May 1, 2023) ("2023 IRP").

³ Va. Code § 56-597; See 2020 IRP Order at 4.

⁴ Va. Code § 56-598 3.

⁵ Va. Code §§56-597 et seq. ("IRP Statutes").

IRPs. In both proceedings, the Commission noted the changed circumstances new legislation presented and held Dominion accountable to adjust its IRP development processes to account for these changes.⁶ Here, the Commission's evaluation of Dominion's 2023 IRP should be similarly scrutinizing.

Dominion argues that the IRP is a "snapshot in time," and that it is not proposing any financial commitments for review in this proceeding. This approach places an artificial limit on the impact of the IRP and does not reflect the real-life practice Dominion undertakes of using information from the IRP to support its petitions in proceedings where financial commitments are being considered. Although the IRP is not a proceeding wherein costs are proposed for approval, the Commission has none the less required realistic depictions of possible future scenarios, because the IRP provides the public and policy makers with projected costs which are likely to be borne by captive customers.⁷

Upon review, the Commission should find that Dominion presents an IRP that departs from legal requirements because it fails to appropriately assess locational system impacts and includes model scenarios that rely on Dominion's preferred timeline and preferred resource selections, like bringing combustion turbines ("CTs") online in 2028. As Dominion Witness Compton admits, Dominion's 2023 IRP does not contain a single least cost Virginia Clean Economy Act ("VCEA")-compliant plan.⁸ Further, Dominion's 2023 IRP does not consider environmental justice, but

⁶ See Final Order, 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 (Feb. 1, 2021) ("2020 IRP Order") at 4-5; 2018 IRP Order at 3-4.

⁷ See Order, 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. 2018-00065 (Dec. 7, 2018) ("2018 IRP Order") at 6.

⁸ Hearing Transcript at 586:3-13 (Cross Examination of Company Witness Compton on Rebuttal).

instead proposes that environmental justice be a consideration left to later decisions in separate proceedings on a project-by-project basis.

The Commission should continue to deeply analyze and review Dominion's IRP, as it has done in the recent past, and in doing so should find that Dominion's 2023 IRP is not reasonable and in the public interest.

BACKGROUND

I. PROCEDURAL HISTORY.

Dominion filed its petition on May 1, 2023, seeking approval that its 2023 IRP is reasonable and in the public interest. Pursuant to the Commission's Order for Notice and Hearing, intervening parties submitted pre-filed testimony on August 8, 2023. Commission Staff Submitted its pre-filed testimony on August 22, 2023. Dominion submitted its pre-filed rebuttal testimony on September 5, 2023. The Commission convened a public witness hearing on September 18, 2023, and the remainder of the evidentiary hearing concluded on September 22, 2023. On the final day of the hearing, the Hearing Examiner directed the parties to file post-hearing briefs and a joint-issues matrix by October 24, 2023.

II. STATUTORY AND REGULATORY FRAMEWORK/LEGAL STANDARD.

Dominion filed its 2023 IRP pursuant to the IRP Statutes. Under § 56-599 the Commission must determine whether an IRP is "reasonable and is in the public interest." Though the IRP Statutes do not explain how the Commission should determine if an IRP is "reasonable" and "in the public interest," the statute does provide an extensive list of elements the utility is required to

10 Va. Code § 56-599 E.

^{9 2023} IRP.

systematically evaluate ¹¹ as well as items that the utility's IRP should contain. ¹² Further, the IRP Statutes specifically incorporate the Commonwealth Clean Energy Policy, ¹³ which incorporates the VCEA and the Virginia Environmental Justice Act ("VEJA"). ¹⁴

When determining an IRP's reasonableness and benefit to the public, the Commission has regularly reviewed the IRP and evaluated whether required subject matter has been included and appropriately addressed in a utility's IRP in accordance with the current and relevant laws. The Commission should not depart from this approach in its review of Dominion's 2023 IRP. Importantly, when evaluating an IRP, the Commission has also investigated whether the information contained in an IRP provides the Commission and the public at large, projected resource planning costs that are as accurate as possible. 15

Additionally, under §56-599, the Commission is permitted to establish "guidelines for the format and contents of updated and revised [IRPs,]" which it established on December 23, 2008 in case number PUE-2008-00099 (the "IRP Guidelines"). 17 The purpose of the IRP Guidelines are to implement the provisions of the IRP Statutes and are "are applicable to all investor-owned utilities responsible for procurement of any or all of its individual power supply resources." 18

¹¹ Va. Code § 56-599 B 1-12.

¹² Va. Code § 56-598.

¹³ Va. Code § 45.2-1706.1.

¹⁴ Va. Code § 56-598 2 a, 3.

^{15 2020} IRP Order at 15.

¹⁶ Va. Code § 56-599 A.

¹⁷ Order Establishing Guidelines for Developing Integrated Resource Plans, Concerning Electric Utility Integrated Resource Planning Pursuant to §§ 56-597 et seq. Code of Virginia, Case No. PUE-2008-00099 (Dec. 23, 2008) ("IRP Guidelines").

¹⁸ IRP Guidelines, Attachment A at 2.

Together, the IRP Statutes and the IRP Guidelines provide detailed and specific requirements for Dominion's IRP and provide the standards upon which the Commission should evaluate whether Dominion's IRP is reasonable and in the public interest.

Dominion's 2023 IRP does not meet these standards.

ARGUMENT

The IRP Statutes plainly direct that an IRP should, among other elements, "[r]eflect a diversity of electric generation supply and cost-effective demand reduction contracts and services so as to reduce the risks associated with an over-reliance on any particular fuel or type of generation demand and supply resources and be consistent with the [Commonwealth Clean Energy Policy]". It stands to reason then, that the Commission must evaluate whether the contents of Dominion's 2023 IRP are in fact consistent with the Commonwealth Clean Energy Policy to determine whether the IRP is reasonable and in the public interest. Appalachian Voices believes that an IRP must, at a minimum, comply with the IRP Statutes. If it does not, the Commission should not find it reasonable and in the public interest.

Among other deficiencies, Dominion's 2023 IRP omits critical locational information, which is necessary for the Commission and the public to understand the actual system need and related costs being driven by the data center growth in Northern Virginia. Locational analysis is also critical to an evaluation of what communities within Dominion's service territory are located near polluting generation facilities to identify any potential health risks related to the increased greenhouse gas emissions proposed in over half of Dominion's Alternative Plans. Further, it

¹⁹ Va. Code § 56-598 3 (emphasis added).

appears that although Dominion asserts it is in regular communication with and is a trusted provider of its data center customers, Dominion's 2023 IRP does not contain a plan that appropriately leverages these customers' clean energy commitments to minimize costs. Dominion's IRP thereby ignores options to pursue public benefits that could otherwise be realized.

Further, Dominion's 2023 IRP is not reasonable and in the public interest because it unjustifiably narrows its approach to addressing environmental justice to the detriment of environmental justice and fenceline communities. Additionally, the 2023 IRP's load forecasting, and its data center load forecasting in particular is not sufficiently supported to be credible. Finally, Dominion's modeling approach presents Dominion's preferred approach to resource planning instead of the legally required approach.

The Commission should find that Dominion's 2023 IRP is not reasonable and in the public interest. Given the recent change in the IRP Statutes, requiring Dominion to file another IRP on October 15, 2024, and the deficiency of critical information present in this IRP, the Commission should not hesitate to provide corrective guidance as identified herein to inform Dominion's development of its 2024 IRP.

III. DOMINION'S ENVIRONMENTAL JUSTICE PLAN IS UNJUSTIFIABLY LIMITED AND SHOULD BE EXPANDED TO INCLUDE ENVIRONMENTAL JUSTICE CONSIDERATION IN THE IRP.

The Commission should refuse to find Dominion's 2023 IRP reasonable and in the public interest because the 2023 IRP fails to comply with the VEJA in several key ways. Essentially, Dominion advocates for a "we won't evaluate environmental justice now; we'll do it later" approach:

[E]nvironmental justice is best evaluated and carried out on a caseby-case basis, informed by the location of the project in question and project-specific characteristics. The Company has established an environmental justice review process for evaluating its *specific* projects....Based on this, the Company presents the results of these project-specific review processes in the relevant proceedings before the SCC, such as in its applications to construct new generating facilities or new transmission lines....²⁰

This approach to environmental justice fails to satisfy the law. Virginia's environmental justice policy requires a focus on *both* environmental justice communities *and* fenceline communities. Dominion acknowledges no such distinction, claiming that "if you are addressing environmental justice communities as defined in VEJA, then it would be inclusive of fenceline line communities." First, Dominion's 2023 IRP does not actually "address" environmental justice in any meaningful way, so Dominion is failing by even its own standard. Second, fenceline communities are a special subset of environmental justice communities because they face "an increased health risk to its residents due to its proximity to a major source of pollution."

As such, this subset of environmental justice communities requires a pollution-specific analysis of health impacts caused by Dominion's proposed plans. The 2023 IRP fails to conduct that health analysis because Dominion admittedly focuses *only* on future projects.

Dominion fails to recognize, however, that the fundamental assumptions it made in constructing its 2023 IRP model implicate whether and how Dominion's *existing* fossil fleet will operate in the future. Preserving (and even increasing) generation and pollution from those existing facilities *does* have location-specific impacts, and those locations *do* have nearby communities.

²⁰ 2023 IRP at 121 (emphasis added).

²¹ Va. Code § 2.2-235.

²² Hearing Transcript at 840:5-8 (Cross Examination of Company Witness MacCormick on Rebuttal).

²³ 2023 IRP at 121 (Four paragraphs of verbiage without analysis that concludes with essentially "we'll do it later" does not "address" environmental justice).

²⁴ Va. Code δ 2.2-234.

Dominion's IRP fails to perform even a cursory analysis of the environmental justice impacts that existing fenceline communities near Dominion's existing fossil units will experience. This is especially critical since Virginia law is clear that Dominion's existing fossil fleet must retire by 2045 absent a unit-specific reliability justification.²⁵ To assume noncompliance with this retirement provision and then ignore the health impacts on fenceline communities attendant to such an assumption is a failure to consider environmental justice. As such, Dominion's IRP fails to satisfy the VEJA.

A. Dominion should conduct an environmental justice analysis in its IRP.

The Commission should not accept Dominion's refusal to substantively address environmental justice in the 2023 IRP simply because Dominion doesn't "see the value" in an in-depth analysis of environmental justice in an IRP.

Here, Dominion's decision to only pursue environmental justice on a case-by-case/project specific manner is misinformed. Despite Company Witness MacCormick's acknowledgement that the IRP is relevant to environmental justice, ²⁷ she goes on to state:

I'm.not saying that the IRP is not relevant to EJ. I'm just questioning the value. And I don't think there's anything in the VEJA that clearly states a requirement to consider EJ in the IRP either. So it kind of is left to us to determine what value would there be.²⁸

Dominion is mistaken. Seeking specific IRP guidance in the VEJA should not be the only source from which Dominion seeks direction on how or whether to consider environmental justice.

²⁵ Va. Code § 56-585.5 B.

²⁶ Hearing Transcript at 829:1-3 (Cross Examination of Company Witness MacCormick on Rebuttal).

²⁷ Id. at 835:22-23.

²⁸ Id. at 835:22- 836:4.

Dominion should also look to the IRP Statues, which require that the contents of the IRP should be consistent with the Commonwealth Clean Energy Policy. The Commonwealth Clean Energy Policy, in turn, states that:

- B. The Commonwealth recognizes the need to promote environmental justice and ensure that it is carried out throughout the Commonwealth, as provided in § 2.2-235, and the need to address and prevent energy inequities in historically economically disadvantaged communities, as defined in § 56-576. To achieve these objectives, it shall be the policy of the Commonwealth to:
- 1. Recognize the disproportionate and inequitable impacts of climate change on historically economically disadvantaged communities and prioritize solutions and investment in these communities to maximize the benefits of clean energy and minimize the burdens of climate change;
- 2. Ensure the fair treatment and meaningful involvement, as those terms are defined in § 2.2-234, of all people regardless of race, color, national origin, faith, disability, or income with respect to the administration of energy laws, regulations, and policies; and
- 3. Increase access to clean energy and the benefits from clean energy to historically economically disadvantaged communities.²⁹

This is not the only instance where Dominion overlooks relevant guidance to inform its approach to environmental justice in an IRP context. When asked to specifically identify where in the EPA guidance support for Dominion's environmental justice review factors can be found, Dominion noted various federal resources, but did not specify where in these resources its approach is supported.³⁰

Q: Just to be clear on this question I was asking regarding the resources listed here, do any of these resources identify that

²⁹ Va. Code § 45.2-1706.1 B.

³⁰ See Ex. 12, Company Response to APV Set 19-1(b).

an IRP should not consider environmental justice in a comprehensive manner?

A: These resources and the VEJA do not speak directly to Integrated Resource Planning.³¹

Here again, Dominion is inappropriately limiting its resource pool to general guidance on environmental justice instead of looking to relevant resources specific to resource planning. For example, Dominion identifies no resource planning specific guidance like the publicly available "Reimaging Resource Planning", which includes extensive detail about how to ensure meaningful involvement through improved transparency in IRP development, which APV Witness Schott identifies in his testimony. Despite Dominion's assertion that its environmental justice approach is "consistent with relevant laws and regulations, as well as previously developed EPA guidance, and currently accepted best practices," the evidence proves otherwise. The evidence shows that Dominion has actually ignored the relevant laws and regulations, like the Commonwealth Clean Energy Policy and the Commission's 2020 IRP Order and has instead supplanted its own value assessment to support its narrow approach to addressing environmental justice. Such an approach is not supported by any of the resources identified in this proceeding and is not in compliance with the relevant laws of the Commonwealth. The Commission should not permit Dominion's continued disregard of the law and should require Dominion to address environmental justice in the IRP in addition to addressing environmental justice in more specific contexts, like CPCNs.

³¹ Hearing Transcript at 838:17-23 (Cross Examination of Company Witness MacCormick on Rebuttal).

³² Ex. 11, Direct Testimony of Justin Schott, 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. 2023-00066 (May 1, 2023) ("Schott Direct") at 5:8.

^{33 2023} IRP at 121.

B. Dominion must promote and ensure environmental justice is carried out by evaluating environmental justice from both a planning perspective and on a project specific basis with a focus on both environmental justice and fenceline communities.

The Commission's guidance correctly reflects the VEJA, which states: "[i]t is the policy of the Commonwealth to promote environmental justice and ensure that it is carried out throughout the Commonwealth, with a *focus on environmental justice communities and fenceline communities*." This focus on environmental justice *and* fenceline communities, which Staff stipulates are indeed two differently defined terms, is simply not present in Dominion's one-page Environmental Justice Plan presented in its IRP. In fact, Staff acknowledges that it did not find the term "fenceline communities" anywhere in the environmental justice section of Dominion's 2023 IRP.

While a focus on fenceline communities is nowhere to be found in Dominion's 2023 IRP, what can be readily found are five Alternative Plans,³⁸ three of which add additional carbon-emitting resources, retain existing carbon emitting generation, and by 2048 project emissions of at least 35 million metric tons per year.³⁹ In fact, over half of the Alternative Plans Dominion presents in its 2023 IRP do not achieve even Dominion's own publicly stated goal of achieving net zero

³⁴ Va. Code § 2.2-235 (emphasis added).

³⁵ Hearing Transcript at 521:5-7 (Cross Examination of Staff Witness Glattfelder on Direct).

³⁶ Id. at 522:25-523:12.

³⁷ Id. at 522:25-523:12; 526:9-11.

³⁸ 2023 IRP at.30 (Regarding projected CO2 emissions from Dominion's fleet for the duration of the Study Period Dominion states: "Due the changes in retirements, as well as higher capacity factors for the Company's existing generators driven by the higher 2023 PJM Load Forecast, carbon emission projections are increasing. Both the build plans and the carbon projections in all five Alternative Plans are similar for the first ten years. While Plans D and E show no Scope 1 emissions by 2045, the level of purchased power required to make the necessary retirements possible would have a Scope 3 emissions impact.").

³⁹ 2023 IRP at 23-31; Hearing Transcript at 118:11-14 (Direct Examination of Company Witness Compton on Direct).

emissions by 2050.⁴⁰ And while Dominion acknowledges it has a whole fleet of generation resources that are considered major sources of pollution,⁴¹ it did not present any evaluation of, reference to, or in any other way indicate that it had considered the potential health impacts of at least Alternative Plans A, B, and C on fenceline communities.

Fenceline communities by definition are "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[,]"⁴² and are communities that according to the VEJA should receive focus when promoting and ensuring environmental justice. Dominion's IRP identifies no such focus. Here, Dominion's complete omission of any analysis of the potential health risks of its proposed Alternative Plans should not be accepted.

C. Staff's environmental justice analysis does not conform to the Commission's order and should not be relied upon in this proceeding.

The Commission found that the IRP is a proper venue to evaluate Dominion's plans to address environmental justice and that Dominion should address environmental justice in both the IRP and in more specific contexts like a CPCN.⁴³

In the Commission's 2020 IRP Order, the Commission explained how Dominion might consider environmental justice in future IRPs by noting that Dominion could "consider the impact

⁴⁰ Hearing Transcript at 119:9-2-120:1 (Direct Examination of Company Witness Compton on Direct).

⁴¹ Hearing Transcript at 841:3-14 (Cross Examination of Company Witness MacCormick on Rebuttal).

⁴² Va. Code §2.2-234.

⁴³ 2020 IRP Order at 14-15 (citing Tr. 637-638 of Case No. PUR-2020-00035, wherein on Direct Examination of Staff Witness White on Direct states at 638:4-12, among other things: "[a]lso, as a matter of clarity, I do not believe that the IRP or any other hearing is an improper venue in which to examine the Company's commitment to environmental justice. I do believe, however, that whether the Company has put its money where its mouth is, so to speak, on its commitment to environmental justice could be better evaluated when the Company takes specific actions.").

of unit retirement decisions on environmental justice communities or fenceline communities."⁴⁴ Dominion conducted no such analysis, and despite not finding any mention of fenceline communities in the IRP, Staff concluded that "generally, ...Dominion's assessment of environmental justice in its 2023 IRP appears appropriate."⁴⁵

Sadly, the Commission should not accept Staff's analysis as sufficient because Staff admitted at the hearing that it was not actually familiar with Virginia's environmental justice policy. While Staff Witness Glattfelder explains that "Staff reviewed the Company's EJ analysis in this case based on our understanding of the EJ statute and guidance provided thus far by the Commission[,]"⁴⁶ the record is clear that Staff's EJ analysis in this case was not informed by knowledge of the foundational environmental justice laws of the Commonwealth. When Staff Witness Glattfelder was asked if he had seen Virgnia's policy on environmental justice, he replied that he "may have glanced at it in the past. However, there's not a whole lot of information here; so I did not -- it wasn't what I spent most of my time looking at."⁴⁷

Staff's review of Dominion's 2023 IRP is not appropriately informed by an awareness of what VEJA requires and is not in alignment with the Commission's environmental justice guidance. Therefore, Staff's environmental justice analysis cannot be relied upon to aid the Commission's evaluation of Dominion's environmental justice plans as contained in Dominion's 2023 IRP. The Commission should find that Dominion's environmental justice plan is unjustifiably narrow and should be expanded to include consideration of environmental justice in

⁴⁴ 2020 IRP Order at 15.

⁴⁵ Hearing Transcript at 524:12-14 (Cross Examination of Staff Witness Glattfelder on Direct).

⁴⁶ Id. at 527:17-20.

⁴⁷ Id. at 518:21-519:4.

integrated resource planning, as well as any other necessary venue to promote and ensure environmental justice is carried out.

IV. DOMINION'S LOAD FORECAST IS NOT SUFFICENTLY ROBUST BECAUSE IT DOES NOT REFLECT THE TRUE UNCERTAINTY OF LOAD GROWTH DRIVEN BY THE NUANCED NEEDS OF A SINGLE CUSTOMER TYPE.

Dominion's 2023 IRP presumes unprecedented load growth, which will cause an unprecedented increase in customer costs. Virtually all of this projected growth has, and will continue to, come from data centers. Appalachian Voices concedes that data centers have expanded rapidly in Virginia and that this pace of growth will likely continue for the short term, but it is also imperative that the Commission have a better understanding of the factors driving the data center industry over the long term given the sheer scale of costs involved with serving the projected demand. Such an understanding simply cannot come from Dominion's exclusive reliance on mathematical formulas that extrapolate historic growth into the future without any forward-looking market analysis.

Historic trends simply do not, and cannot, predict rapid or unanticipated developments in an economy, much less in a single industry. The majority of Dominion's load growth is from expected data center growth. 49 Of that projected data center growth, 80% is from 5 companies. 50 Additionally, 80% of that growth is in Loudoun County and the adjacent counties. 51 If even one

⁴⁸ 2023 IRP at 2.

⁴⁹ Id.

⁵⁰ Ex. 13, Direct Testimony of James F. Wilson, 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. 2023-00066 (May 1, 2023) ("Wilson Direct") at 43:10-11.

^{51 2023} IRP at 55.

of those five companies changes its growth plans, or if one or more counties in northern Virginia takes an aggressively hostile turn against data center expansion, the actual growth in Virginia could be radically different from what Dominion estimates now. Fundamentally, the issue with data centers is not that Dominion's forecast is *wrong*; the issue is that the forecast is too speculative to justify over \$100 billion⁵² in capital expense that customers will bear. The Commission cannot disregard the detrimental impact that could result if the projections about this sector's load growth are inaccurate and are relied upon for any future resource investment Dominion may propose.

Contrary to Dominion's stance, the IRP must be more than a mere paper exercise, and its relevance must extend beyond the bounds of this proceeding. Analysis presented in the IRP also finds its way into procurement-specific proceedings, because the load projections of the IRP inform the need to procure resources. The Commission must therefore grapple with the accuracy of the load forecast generally, and with the data center load forecast specifically.

A. Dominion's long-term data center load forecast is not sufficiently supported and is too uncertain to be relied upon to justify near-term resource investments.

Dominion's data center load forecast methodology relies on formulaic projections of historical trends and does not accurately reflect uncertainties about the pace of economic growth and other drivers of the load forecast. APV Witness Wilson explains the detriment of this backward-looking approach is that "there is no ability to reflect any data or analysis about evolving industry trends or planned future data centers." ⁵³ In fact, not even Dominion seriously disputes the importance of forward-looking data. In fact, when asked if Dominion agrees that forward-looking

⁵² See 2023 IRP at 4, Executive Table Summary (NPV values for all Alternative Plans, where each Plan costs over \$109 billion).

⁵³ Wilson Direct at 34:19-35:2.

information about the data center industry specifically would be valuable to the accuracy of data center forecasting, Company Witness Bradshaw replied "[y]eah, I think I actually recommended that a minute ago." Despite this concurrence regarding the importance of forward-looking analysis in the data center forecast, Dominion did not enlist a third party entity that specializes in data center market analysis to inform its data center load forecast. Instead, Dominion offers that it should do its own data center forecast because it has close contact with data centers and has access to the necessary data. However, having access to the data and accurately analyzing the data are two different things.

Dominion conflates these two, which can be seen in its reliance on contracts with data centers to support its confidence in the forecast presented in the 2023 IRP. In fact, Dominion admits data center companies could possibly walk away from the very contracts it identifies to support its data center load forecast. While Dominion identifies that if data center customers walk away from the various contracts it discusses, financial penalties will be incurred, this does not negate the fact that data center customers can still walk away. Further, Dominion explains in detail how in the past, data center customers who have agreed to the various relevant contract have not walked away from these agreements. Again, this is an example of Dominion's insistence on looking backward to inform its future decision making. The Commission should not rely on analysis and forecasting that is rooted in the past for an industry that even Dominion admits

⁵⁴ Hearing Transcript at 721:6-15 (Cross Examination of Company Witness Bradshaw on Rebuttal).

⁵⁵ Id. at 701:23-24.

⁵⁶ Hearing Transcript at 732:5-8 (Direct Examination of Company Witness Bradshaw on Rebuttal).

⁵⁷ Id. at 688:7-733:17.

facilitates "game changing" technologies.⁵⁸ While Dominion acknowledges that load issues can be very geographically specific,⁵⁹ Dominion's 2023 IRP nonetheless forces 970 MW of gas combustion turbines it is actively pursuing to construct in Chesterfield County,⁶⁰ well outside of Loudoun County where the majority of its data center growth is expected. The coexistence of these two realities (*i.e.*, large, but uncertain load growth and proposed carbon-emitting generation too far away from the location of the projected load to address issues related to the projected rapid growth) necessitates the Commission heed APV Witness Wilson's recommendation to require Dominion's data center forecast to be prepared by professional forecasters, a recommendation with which Staff Witness Johnson agrees: "I actually agree with Mr. Wilson, that having a third party that's an expert in data-center-specific market dynamics would be valuable." ⁶¹

B. A load forecast sensitivity with only a +/-5% variance understates the range of actual uncertainty in the market.

Dominion's +/- 5% load forecast sensitivity too greatly understates the range of uncertainty of Dominion's projected data center load growth. The Commission should not rely on this low range to identify the possible high and low load forecast scenarios. Doing so would yield a false sense of confidence in the planning conclusions Dominion draws from this information. The concentration of location, customer type, and uniquely large load profiles that data centers drive require a larger range of uncertainty to more accurately represent the variability in load growth

⁵⁸ Id. at 701:25 -702:10.

⁵⁹ *Id.* at 686:3-10.

⁶⁰ See Ex. 20, Direct Testimony of Gregory Abbott, 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. 2023-00066 (May 1, 2023) ("Abbott Direct") at 41:11-20; Abbott Direct, Attachment GLA-1, Company Response to APV Set 1-61(c).

⁶¹ Hearing Transcript at 431:18-21 (Cross Examination of Staff Witness Johnson on Direct).

attributed to data centers. The Commission can look to the small number of data center customers driving the data Company's data center load as one example of the volatility that a change of plans by one customer can substantially impact the anticipated load forecasted for data centers.

In this regard, APV Witness Wilson highlights Dominion's assessment that 80 percent of Dominion's data center load is accounted for by five data center companies. ⁶² To explain the nuance of data center load growth and customer accounts associated with that growth, Dominion offers that in some instances, the load that is generated by a data center customer, like a colocation company, is driven by "tenants" who aren't actually Dominion's customers. Company Witness Bradshaw states that colocation companies are two of the top five data center customers and one of the top two data center company types for which Dominion is planning. ⁶⁴ Given this, Dominion could have presented analysis in its' IRP that contemplates: (1) whether, once a collation facility is established, the tenants driving a colocation data center company's load projections will actually become tenants, fully realizing the projected load and (2) whether the colocation facility will ever actually be established in the first place. This is just one example of how the nuance in the data center industry is prone to substantial uncertainty and why a +/-5% is too small a range to accurately reflect the possible variance if even one data center customer's load did not materialize as planned.

Dominion further informs the Commission it has been in contact with a customer that wants to add roughly a half a gigawatt and offers that discussions of adding 1.2 gigawatts have also

⁶² Wilson Direct at 279:4-16.

⁶³ Hearing Transcript at 710:9-711:22 (Direct Examination of Company Witness Bradshaw on Rebuttal).

⁶⁴ Id. at 710:9-19.

recently begun.⁶⁵ The size of these potential loads alone and the uncertainty of whether it will all come to Virginia, and where in Virginia it may be located necessitate a third-party market analysis to ensure the IRP can reliably inform the Commission, legislators and other policymakers, and the public at large. The Commission should require such analysis.

C. Dominion's calculation of its PJM capacity requirement in installed capacity terms does not accurately represent the system reliability value of its proposed resource portfolios.

System reliability is of great to concern to the Commission, Dominion, and to the parties to this proceeding. Appalachian Voices recognizes the critical importance of thorough planning in this regard and understands that the term "reliability" can be used to describe different circumstances. As Company Witness Compton explains, reliability can be thought of in at least two different ways; in terms of either generation meeting capacity and energy needs or in terms of having the necessary transmission. ⁶⁶ These and other distinctions in determining reliability are important to make to ensure the analysis accurately represents the type of reliability being evaluated. Clarity in this regard will help ensure the Commission has a full understanding of Dominion's plans to address a particular type of reliability.

In the 2023 IRP, Dominion's plans contemplate what the appropriate resource mix will be to meet its PJM capacity obligations, reliability of a proposed resource portfolio is informed by Dominion's coincident peak forecast. This is an area where the link between Dominion's load forecast and its resource portfolio development is clear. As APV Witness Wilson identifies, Dominion uses its DOM load serving entity ("LSE") coincident peak forecast to calculate its

⁶⁵ Id. at 695:12-24.

⁶⁶ Hearing Transcript at 594:22-595:6 (Cross Examination of Company Witness Compton on Rebuttal).

Minimum PJM Reliability Requirement. Accurately representing the reliability characteristics of a resource is critical to providing understanding how the PJM capacity obligation can be met with a mixture of generation resources. Clearly PJM sees the benefit of such a full picture, because as APV Witness Wilson explains, "PJM determines capacity obligations on a "unforced" capacity ("UCAP") basis by applying a Forecast Pool Requirement ("FPR") to coincident peak forecasts." The reliability value of a portfolio of resources is equal to its aggregate UCAP and UCAP is now updated to also reflect the capacity value of intermittent resources such as wind and solar. To determine its PJM capacity obligations, Dominion uses Dominion's calculation of the Minimum PJM Reliability Requirement values and includes this information in installed capacity ("ICAP") terms. Herein lies the problem, presenting its capacity obligation in ICAP terms instead of in UCAP terms, like PJM does, inaccurately reflects the reliability value of a proposed resource portfolio to the system. The Commisssion should require Dominion to determine its capacity obligation in UCAP terms.

D. Dominion did not provide the Commission sufficient information to prove that Dominion's data center load forecast was not inflated by both NOVEC and Dominion counting the same possible future loads.

Data center load growth has historically been concentrated in Northern Virginia, specifically in the Dominion Zone in PJM. Dominion, as an LSE does not actually serve all load in the Dominion Zone, however. In reality, that load is met by different electric service providers. APV Witness Wilson raised a concern that about half of the anticipated 5,000 megawatts of new load from future Amazon Web Services data centers may have been counted by both NOVEC and

⁶⁷ Wilson Direct at 22:3-5.

⁶⁸ Id at 22:19-23:1.

Dominion in the data center-specific forecasts each LSE provided to PJM and that were incorporated in the final Dominion Zone forecast. While only one service provider would actually supply this load, it appears that both providers may have accounted for this increase in their respective data center load forecasts thus yielding a "double-counting" of the load in PJM's 2023 load forecast.

This is an entirely difference kind of double-counting than forecasters have dealt with in the past. Econometric forecasts extend historic load growth due to economic factors out into the future. To the extent that data center loads have been part of the historic economic trends, some amount of future growth in the basic econometric forecast will also come from data centers. If, however, a data center-specific load forecast is layered on top of the basic econometric forecast, then the data center growth already embedded in the econometric forecast needs to be adjusted to prevent double-counting. Unfortunately, while Dominion correctly points out that protocols have long been in place to prevent some double-counting, Dominion refuses to acknowledge that a new kind of double counting (i.e., two LSEs in the same zone including the same growth in each LSE's forecast) may also be occurring. In fact, Dominion conflates the meaning with a different form of double-counting as addressed in PJM's Manual 19.69 APV Witness Wilson asserted this conflation at the hearing, stating: "We're using the same term for two completely different phenomena[,]" further explaining that "there has never been any discussion or consideration of different request,

⁶⁹ Hearing Transcript at 235:9-236: 20 (Cross Examination of APV Witness Wilson on Direct).

⁷⁰ Id. at 236:19-20.

different forecasts, Dominion and NOVEC, that might actually overlap and double-count. That has never arisen."⁷¹

Despite this clarification, Dominion appears to rely⁷² on Manual 19's provisions which identify a "double counting" that is not the same double-counting about which APV Witness Wilson raises concern (*i.e.*, the newly discovered issue of double counting imbedded amounts inside Dominion's and NOVEC's econometric forecasts). When on direct examination by its own counsel, Company Witness Rajan addresses Mr. Wilson's double counting concerns, stating that PJM does in fact address the double-counting concern raised by Mr. Wilson. However, the provision to which Witness Rajan points addresses verification of economic and employment impacts claimed by a supplier attempting to bring on a new load.

- A: The third bullet specifically talks about whether that forecast was already somehow reflected in their econometric forecast. And if it was, PJM will ensure that there is no double-counting, that they don't count it in their econometric forecast and data center forecast as well."⁷³
- Q: All right. So then it says: PJM consulted with its economic forecast supplier to verify the claim that the new load would involve very little employment increase or other economic impact and that the forecasts of metropolitan areas within the affected zones were not adjusted to reflect the activity associated with expected construction, ongoing business.⁷⁴

⁷¹ Id. at 237:4-7.

⁷² Hearing Transcript at 641:8-13 (Direct Examination of Company Witness Rajan on Direct).

⁷³ Id. at 645:10-21.

⁷⁴ Id. at 646:2-9.

This misses the point entirely and highlights how Dominion's IRP does not provide the most relevant information to prove that its data center load forecast was not inflated by double-counting certain load commitments from certain data center customers.

Instead of presenting information that is specific to this issue and addresses the core concern, Dominion's discussion of the matter appears to obfuscate instead of directly address the issue.⁷⁵ Dominion provided insufficient evidence to prove APV Witness Wilson's valid concern of possible double-counting is actually addressed by the current processes employed to forecast data center load in PJM.

- V. DOMINION'S ALTERNATIVE PLANS ARE INFORMED BY MODELING ASSUMPTIONS THAT DO NOT REFLECT REALITY AND THAT DO NOT COMPLY WITH THE LAW
 - A. Dominion did not present a single Alternative Plan that complies with the requirements of the VCEA in a least-cost manner.

A central dispute in this case is whether Dominion's 2023 IRP is required to comply with Virginia law – specifically the VCEA. Dominion claims that the Commission did not ever order Dominion to prepare a least-cost VCEA-compliant plan. Moreover, Dominion did not, by its own admission, voluntarily provide a least-cost VCEA-compliant plan:

- Q: There are five plans in this IRP. Is one of those in the Company's position or estimation a least-cost VCEA-compliant plan? And if so, which one?
- A: I think it would be a combination of Plans B and D.⁷⁷

⁷⁵ *Id.* at 638:6-12.

⁷⁶ Hearing Transcript at 584:8-13 (Cross Examination of Company Witness Compton on Rebuttal).

⁷⁷ Id. at 585:10-14.

Neither Mr. Compton nor any other Dominion witness ever actually explained what precise "combination of Plans B and D" would produce this phantom least-cost VCEA-compliant plan.

What is clear however, is that in order for the Commission to evaluate any single Alternative Plan against a single least-cost VCEA-compliant plan, it must first combine two of the Alternative Plans Dominion presented to create a sixth, previously unreleased plan to reach this foundational assessment level. This is unacceptable.

While Dominion does not dispute the VCEA's requirements for retirements, a renewable portfolio standards ("RPS") program, and petitions to procure zero-carbon generating capacity, ⁷⁸ Dominion's 2023 IRP relies on its position that the Commission did not direct Dominion to present a least-cost VCEA compliant plan⁷⁹ to justify its omission of such an Alternative Plan. Here, Dominion again fails to acknowledge that its development of an IRP is meant to comply not only with Commission orders, but also with the IRP Statutes. The IRP Statutes clearly identify that an IRP should be consistent with the Commonwealth's energy policies. How then can the IRP be consistent with the Commonwealth's energy policies if the modeling conducted to develop the Alternative Plans presented in the 2023 IRP is not consistent with such policies, like the VCEA? It cannot.

Surely the General Assembly did not intend for the Commission to approve an IRP that would be rendered unimplementable because it plans for outcomes the law does not permit.

Dominion should not restrain itself from complying with the law on the basis that the Commission

⁷⁸ Hearing Transcript at 106:19 108: -17 (Cross Examination of Company Witness Compton on Direct).

⁷⁹ Hearing Transcript at 584:6-12 (Cross Examination of Company Witness Compton on Rebuttal).

does not specifically direct it to comply; the law demands compliance in its own right, and Dominion should not be permitted to cobble together Alternative Plans after the fact to present a piece-meal compliance attempt. 80 Full compliance is necessary and critical to ensuring the IRP actually contemplates implementing an approved plan, 81 as governed by the IRP Statutes.

B. Dominion's modeling of RGGI is not appropriate.

Dominion's approach to modeling RGGI in its 2023 IRP is flawed. Dominion modeled its participation in RGGI as a sensitivity to its Alternative Plans instead of as the default assumption for all Plans. This approach is inappropriate and turns away from the clear directives of the IRP Statutes and the Commission's directions.

Here again, the IRP Statutes are instructive on this very point. Va. Code § 56-599 B directs that Dominion shall systematically evaluate and may propose: "[t]he effect of current and pending state and federal environmental regulations upon the continued operation of existing electric generation facilities or options for construction of new electric generation facilities;" and "[t]he most cost effective means of complying with current and pending state and federal environmental regulations, including compliance options to minimize effects on customer rates of such regulations;" 83

A: We modeled Virginia in and out of RGGI.

⁸⁰ Of course, in reality, Dominion never actually attempted to cobble together a single least-cost, VCEA-compliant plan.

⁸¹ Va. Code § 56-599 B 6.(In preparing an IRP, the utility shall systematically evaluate and may propose taking such other actions, as the Commission may approve, to diversity its generation supply portfolio and ensure that the electric utility is able to implement an approved plan).

⁸² Va. Code §56-599 B 8.

⁸³ Va. Code § 56-599 B 9.

Q: As a sensitivity. But the base plans for A, B, C, D, and E assumes RGGI does not apply?

A: Correct.84

The IRP Statutes clearly focus on understanding both the effect of environmental regulations on the continued operation of existing generation as well as the most *cost-effective means* of complying with those regulations. Dominion's 2023 IRP identifies carbon regulations, like RGGI as environmental regulations⁸⁵ and this categorization has not been disputed. Thus, Dominion's approach of modeling RGGI as a sensitivity is inapposite given the IRP Statutes' clear requirement for systematic evaluation of environmental regulations. The model is only as reliable as its inputs and assumptions. Assuming that current laws no longer exist as a baseline assumption across all Alternative Plans, as Dominion has done with regard to RGGI, ignores statutory requirements and yields modeling results that provide no helpful information about the actual effect of RGGI on utility resource planning.

C. Dominion's modeling does not appropriately account for VCEA's retirement requirements and neither this nor its selection of 970 MW of gas combustion turbines is supported by any relevant analysis.

Despite the VCEA's requirement that Dominion retire all of its carbon-emitting electric generating units located in the Commonwealth by the end of 2045, over half the Alternative Plans in Dominion's IRP do not model this mandatory retirement and include the procurement of additional carbon emitting generation capacity in the form of gas combustion turbines. Further, the decision to model in this manner was made in the absence of reliability analysis to support this

⁸⁴ Hearing Transcript at 589:7-10 (Cross Examination of Company Witness Compton on Rebuttal)

⁸⁵ See 2023 IRP at 84-85.

approach. And while Company Witness Compton expresses that Dominion has "serious reliability concern given the load forecast growth[,]" Bominion's 2023 IRP lacks any detailed and specific reliability analyses to inform the Commission of the seriousness of Dominion's reliability concerns. Dominion instead admits that it has not done a transmission study, and that it considers the combined economic and reliability modeling completed in its PLEXOS scenario modeling to be its generation reliability study.

The Hearing Examiner:

They haven't been done yet?

The Witness:

The transmission one, I would agree with you, to my knowledge, has not been done. The generation study, I consider that we do in PLEXOS as the

reliability study.88

Further, Dominion Witness Vance's testimony highlights Dominion's approach of choosing its preferred approach first, and then performing analysis on its preferred approach instead of conducting analysis first to inform its modeling decisions.

Q: The Company at some point made a decision for Plans A, B, and C not to mandate mandatory – not to model mandatory retirements. And the Company at some point also conducted a high-level assessment of those plans for reliability on the transmission system. And I just want to know which one came first, the transmission reliability analysis or the decision not to require mandatory retirements for Plans A, B, and C?

A: I believe the transmission analysis came second. 89

⁸⁶ Hearing Transcript at 569:23-24 (Direct Examination of Company Witness Compton on Rebuttal).

⁸⁷ Hearing Transcript at 592:15-16 (Cross Examination of Company Witness Bradshaw on Rebuttal).

⁸⁸ Id. at 595; 7-12.

⁸⁹ Hearing Transcript at 158:18 159:4 (Cross Examination of Company Witness Vance on Direct).

Dominion's 2023 IRP clearly displays Dominion's approach of first pursuing its own preferred outcomes and then presenting these preferred outcomes as "bookends" ⁹⁰ between which it suspects the actual outcome to be. ⁹¹

- Q: Okay. I'd like to talk a little bit about the Plans B and D and the Company's decision to force the model to select combustion turbines in 2028, if I could.
- A: Okay.
- Q: The model assumes normal weather, correct?
- A: Correct.
- Q: Okay. But then in plans B and D, the Company chose to direct the model to select CTs in 2028 due to concerns about extreme weather, correct?
- A: Correct. Well, liability in general.
- Q: But that decision was only for plans B and D, not for A, C, or E?
- A: Correct. 92

This is precisely the case in Dominion's decision to force Alternative Plans B and D to bring on 970 MW of gas combustion turbines that Dominion is already pursuing construction on in Chesterfield County, despite the fact that this IRP is still an ongoing proceeding. This is exactly backwards. The IRP is a planning document, meant to inform the Commission and the general public of the possible resource planning options going forward. Simply put, the only reason this

⁹⁰ Hearing Transcript at 584:18-25 (Cross Examination of Company Witness Compton on Rebuttal) (Stating "So Plan B does not retire all fossil fuel generation for reliability as provided for in the VCEA. Plan D does.")

⁹¹ Hearing Transcript at 570:6-9 (Direct Examination of Company Witness Compton on Rebuttal)

⁹² Hearing Transcript at 120:2-16 (Cross Examination of Company Witness Compton on Direct).

IRP contains the Chesterfield CTs as a resource on the timeline Dominion is pursuing is because Dominion forced the model to choose it on that timeline.

This preference for its own outcomes is clear in Dominion counsel opening statements at the hearing, where for the first time in this proceeding, a preferred plan is identified. 93 Dominion's Short Term Action Plan is Dominion's strategic plan for the next five years. 94 It contains no modeling runs, no bill analysis, no net present value assessments, and does not use constraint-based least-cost planning techniques akin to those use to develop the Alternative Plans. The 2023 IRP, as identified in the IRP statutes, should contain systematic evaluations and recommendations of ways to meet Dominion's forecasted demand. Dominion's Short Term Action Plan is not this, is instead a compilation of decisions Dominion has already made and is moving forward to realize.

D. Dominion's capacity price forecast is unjustifiably high, which affects the values PLEXOS utilizes in its assessment of unit retirements.

The modeling to inform the net present value reports in the 2023 IRP utilizes a capacity price forecast that appears to be biased to the high side. Although Dominion's capacity price forecast is informed by ICF's projections, ICF's projections assume efficient markets, which primarily reflects ICF's hope that supply chain constraints are relieved, and it's hope that FERC queue reform relieves the queue issues. 95 In fact, Dominion Witness Scheller effectively conceded on that stand that the ICF forecasts have little credibility or utility: "I would not say that the forecast I have today is reflective of anything but that. It's reflective of that hope [that long-standing

⁹³ See Hearing Transcript at 69:6-7 (Dominion's Opening Statement, wherein Company counsel identifies Dominion's three-page Short Term Action Plan as its preferred plan).

^{94 2023} IRP at 37.

⁹⁵ Hearing Transcript at 755:8-15 (Cross Examination of Company Witness Scheller on Rebuttal).

interconnection issues will miraculously resolve themselves in the near term]. 96 Ms. Scheller went on to say that "it's advisable to consider situations that are not addressed in that forecast." 97

One such situation not addressed in ICF's forecast is a capacity price forecast that includes a more realistic low capacity price forecast sensitivity to provide a better range when evaluating supply-side generation alternatives. Because the capacity price forecast impacts the values PLEXOS uses in its assessment of unit retirements, it is critical to utilize an unbiased capacity price forecast, like the S&P Global PJM capacity price forecast. Using an independent and reputable company's capacity price forecast would help provide an estimate of the magnitude of the potential inaccuracy and costs resulting from Dominion's capacity price forecast that is biased to the high side.

E. Dominion's modeling of accelerated renewable buyers ("ARBs") and import/export constraints present unrealistic scenarios.

It is undisputed that the load growth forecast contained in Dominion's 2023 IRP is driven by data center load growth. Therefore, the amount of this data center growth that becomes bundled ARBs can have a profound impact on the modeling results and thus should be accurately represented in Dominion's modeling runs. The Commission has previously directed Dominion to address the load forecast, modeling, and planning implications of projecting (and conversely not projecting) a portion of data center load increases coming from ARBs. Appalachian Voices believes direction in the IRP regarding ARBs is similarly merited. While Dominion does not necessarily share the ARB related concerns Appalachian Voices has, Dominion does not state a

⁹⁶ Id. at 10-13.

⁹⁷ Id. at 13-15.

⁹⁸ Abbott Direct at 20:10-14.

position on APV Witness Abbott's recommendation that Dominion be required to conduct a new study to update the modeling constraints related to ARBs and to present the results in Dominion's next IRP. Given this, implementation of this recommendation should be readily undertaken.

Additionally, Dominion is using a modeling constraint of a 5,200 MW import/export limit that appears to be from an internal study performed for a prior IRP many years ago. ⁹⁹ Changes in load growth are ongoing and substantial as evidenced by the emergence of data center load growth concentrated in northern Virginia. Further, Dominion-owned generation units coming online, merchant generation units coming online, generation unit retirements, Ring-Fence facilities coming online, bundled ARBs, transmission line upgrades, etc. could impact the results of such a study. Alternative Plans with this outdated constraint cannot be relied upon. The Commission should require a new study.

VI. DOMINION'S IRP DOES NOT ADEQUATELY EVALUATE NON-WIRES ALTERNATIVES ("NWAS") AND DEMAND-SIDE MANAGEMENT ("DSM")

The IRP Statutes require Dominion to systematically evaluate making investments in demand-side resources, including energy efficiency¹⁰⁰ and DSM services.¹⁰¹ Additionally, the IRP Statutes direct that an IRP Should recommend plans that meet forecasted demand by, among other activities, reducing load growth and peak demand growth through cost-effective demand reduction programs.¹⁰² Domininon's IRP does not adequately evaluate NWAs and DSM in conformity with

⁹⁹ Abbott Direct at 17:14-21.

¹⁰⁰ While Appalachian Voices takes no position on Dominion's energy efficiency assumptions in this proceeding, it does not support Staff's recommendation for an energy efficiency sensitivity where new programs are set at 0.

¹⁰¹ Va. Code §56-599 B 5.

¹⁰² Va. Code § 56-598 1 c.

the IRP Statutes. Conformity with the IRP Statutes should always be a primary consideration in the Commission's evaluation of Dominion's IRPs and doing so is even more critical because of the tremendous load growth Dominion has forecasted in this IRP.

Dominion's 2023 IRP should demonstrate its thorough investigation of how NWA and DSM can help to manage the substantial load it projects. Specifically, Dominion should be working with the companies driving the substantial load growth to develop programs that will help to integrate these loads in a manner that presents the least-costs and minimizes negative grid impacts. In this regard, Dominion offers that it has been in discussions on this very topic with its data center customers and if directed by the Commission would provide a more detailed analysis about the status of its investigations of NWAs to manage some of the data center load growth.

- Q: Would the Company be willing to commit in its next IRP, which will be next year, to updating the Commission and the public in much more detail about the status of investigation of non-wires alternatives to manage some of this data center growth?
- A: We'd be willing to work with customers and continue to have those discussions. Again, we'd not be able to share individual customer names.
- Q: I understand that. So we can we look forward to a more detailed analysis in next year's IRP?
- A: If the Commission so-orders, then we would do that. 103

CONCLUSION

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

¹⁰³ Hearing Transcript at 718:18-719:6 (Cross Examination of Company Witness Bradshaw on Rebuttal).

- Finds Dominion's IRP is not reasonable and in the public interest;
- Affirms that the IRP is an appropriate venue to evaluate Dominion's environmental
 justice plans;
- Finds that it is appropriate for Dominion to incorporate environmental justice analysis for both environmental justice and fenceline communities in this and future IRPs;
- Finds that all Alternative Plans should model current laws as a base assumption;
- Finds that the baseline for all modeling scenarios should be compliance with the retirement requirements set forth in the law;
- Requires Dominion to:
 - Compile, maintain, and make publicly available a list of all environmental justice
 and fenceline communities in its service territory that meet the definitions
 established by the VEJA;
 - Seek inputs from communities that may be impacted by energy development projects and analyze potential distribution of benefits and burdens from its energy planning and investment decisions;
 - Establish metrics to protect environmental justice and fenceline communities from
 disproportionate burdens of the energy system (disproportionate burdens should
 include but need not be limited to health risks related to poor indoor and outdoor
 air quality, and exposure to toxic wastes);
 - Establish metrics to ensure environmental justice and fenceline communities
 receive an equitable share of benefits, including energy savings from DSM
 programs, job and business opportunities in clean energy projects, and wealth-

building opportunities through programs that encourage ownership of distributed generation and storage resources (these metrics should consider historical and cumulative disparities in benefits and invest sufficiently in affected communities to correct their disparities);

- Conduct a series of listening sessions for residents of environmental justice and fenceline communities (sessions should be designed for maximum accessibility and relevance to maximize participation and elicit the input of impacted residents);
- Submit the input from the aforementioned listening sessions, other focus groups, surveys and other information solicited from environmental justice and fenceline communities is submitted with petitions related to Dominion's resource planning and procurement, as well as distribution planning and procurement, and transmission planning and procurement to ensure input becomes a part of the evidentiary record; and
- Define how the voice of environmental justice and fenceline communities can shape the fully cycle of the decision-making process (specifically, how Dominion will engage said communities in the assumptions and considerations used in modeling alternative plans).
- Requires Dominion to engage a third-party load forecasting expert-either through PJM or directly- to perform detailed forward-looking research and analysis that includes a broad range of possible scenarios, and this analysis should be used to inform the load forecast in future IRPs;

- Requires Dominion to include at least one least-cost VCEA-compliant plan that includes (i) the retirement of all carbon emitting resources by 2045; (ii) meets RPS requirements; and (iii) assumes no new carbon emitting resources are brought online;
- Instructs Dominion on what should be included in the anticipated 2024 CPCN application and that this instruction include at a minimum, the following:
 - Dominion shall include a comprehensive reliability analysis that demonstrates the
 reliability need of the project including the timing of this need and the location of
 any projected system reliability violations identified in the DOM Zone. This
 reliability analysis should be coordinated with and verified by PJM;
 - Dominion shall conduct an RFP open to both new and existing peaking generation and storage resources and present the results in the 2024 CPCN application;
 - Dominion shall perform the economic analysis for the proposed CTs under two scenarios: (i) assume that the CTs retire in 2045 as the base assumption consistent with IRP Plan D, and (ii) assume that the CTs operate over the expected useful life as a sensitivity consistent with IRP Plan B; and
 - Dominion shall evaluate the viability of a demand response program tailored specifically to data centers as an NWA peaking resource and to report on its findings in the 2024 CPCN application.
- Requires Dominion to provide a detailed analysis of its investigations of NWAs and
 DSM with its current and potential data center customers in next year's IRP and all
 future IRPs until directed otherwise;

- Requires Dominion to conduct a new study to set a more realistic import/export
 constraint in future IRP filings and to file this study as a part of its next IRP filing and
 require Dominion to update the study on a regular basis;
- Requires Dominion to use a projected ARB-certified name plate capacity that corresponds to its forecast of the energy produced from ARB-certified facilities used to offset Dominion's load for purposes of its mandatory RPS compliance requirements;
- Requires Dominion to determine capacity obligation applying PJM's approach, using the PJM Forecast Pool Requirement so that capacity obligations are identified in UCAP terms; and
- Requires Dominion to perform sensitivity model runs utilizing the most recent S&P
 Global PJM capacity price forecast in Dominion's next IRP filing for any future filings
 for approval of CPCNs for generation or energy storage resources.

In the alternative, if the Commission approves the 2023 IRP as reasonable and in the public interest, Appalachian Voices respectfully requests that the Commission issue an order that:

 Finds that the 2023 IRP shall not be relied upon to inform any future resource acquisition requests and that future IRPs incorporate the requirements identified immediately above. October 24, 2023

Respectfully submitted,

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