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Via E-Portal and E-Mail
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RE: Public Comments on the Draft Prevention of Significant Deterioration Permit for Virginia Electric and Power Company to construct the Chesterfield Energy Reliability Center in Chesterfield County

Dear Ms. Sinclair,

On August 8, 2025, the Virginia Department of Environmental Quality ("DEQ") began the public comment period to solicit comments on the draft Prevention of Significant Deterioration ("PSD") permit ("Draft Permit") for Virginia Electric and Power Company ("Dominion") to construct the Chesterfield Energy Reliability Center ("Project") in Chesterfield County. The Southern Environmental Law Center ("SELC"), on behalf of CASA, INC (Luis Aguilar, Virginia State Director, laguilar@wearecasa.org), the Chesterfield Branch of the NAACP (Nicole Martin, Chapter President, naacppresident7120@gmail.com), and Mothers Out Front (Melissa Thomas, Senior Organizer, melissa.thomas@mothersoutfront.org) (collectively "Concerned Community Groups") along with the Chesapeake Bay Foundation hereby submit the following comments on the Draft Permit and associated processes to develop it.

INTRODUCTION

In the early 1940s, Dominion began operation of the Chesterfield Power Station ("CPS"), a coal-burning power plant located in Chesterfield County's Bermuda District, on the banks of the James River, alongside Henricus Historical Park and the ecologically robust Dutch Gap Conservation Area (the "Site"). Dominion operated the CPS primarily on coal power until 2023 when the last coal units were retired.[1] Here, residents endured the air pollution coal-powered

[1] Dominion has also operated two gas-fired turbines here since 1990.

electricity brought,[2] where pollutants like coal dust, particulates, sulfur dioxide, and mercury, steadily entered the air and their bodies, a result of nearly 80 years of combustion.[3] Today, harmful remnants of that combustion remain in unlined ash ponds, which continue to contaminate ground water even as Dominion undertakes the slow process of excavation. It is also here that Dominion now seeks an air pollution permit to construct and operate a new gas-fired power plant, with four combustion turbines and assorted gas heaters, black start generators, and fuel tanks (all pollution generating parts of the Project), capable of adding 154 tons of fine particulates ("$PM_{2.5}$") to the air every year. This dangerous pollutant is emitted when methane is combusted, has *no safe exposure level*, and causes heart attacks, respiratory illness, and premature death, affecting some populations, like Black Americans more severely than others.

Many people have called the areas near Dutch Gap/Henricus home, owing in part to, as Chesterfield County states, the "nature in splendid abundance"[4] present in this area. But well before the CPS and other nearby industrial operators embarked on what would become of legacy of pollution, and well before the area became a conservation area, Dutch Gap was known as Arrohateck under the Powhatan Chiefdom, an alliance of tribes throughout Eastern Virginia.[5] In 1611, English settlers displaced[6] the inhabitants to establish the second successful English settlement in the New World, doing away with the name Arrohateck and renaming their village the Citie of Henricus.[7] Amidst the abundant natural habitat of Dutch Gap, hard histories of enslavement would unfold over the next centuries. And in 1864, the Union Army, trying to capture

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[2] *See* Chesterfield County, *Moving Forward. . . The Comprehensive Plan for Chesterfield County, Chapter 9: Environment* at EN20, https://perma.cc/U2J6-L4GZ (last visited Oct. 20, 2025) (stating, "[a] 2017 update to the action plan indicates that the air quality improvements are continuing in the region due to increases in ridesharing, investment in renewable energy and a reduction of coal-powered electricity.") (Excerpt Attached).

[3] *See Duane Brankley et al. v. Andrew G. Gillies et al*., Case No. CL 25-384, First Amended Petition for Declaratory Judgment (Feb. 6, 2025) (Attached). In a challenge to the application of an existing CUP of the CPS to the proposed Project, Duane Brankley described the harmful impacts from the CPS, including the ever-present coal dust that covered his mobile home and the home across the street where his mother once resided.

[4] Chesterfield County, *Dutch Gap Conservation Area*, https://perma.cc/TP35-4AYE (last visited Oct. 17, 2025) (Attached).

[5] Nat'l Park Serv., *Stepping Back in Time at Henricus Historical Park* (last updated June 25, 2024), https://perma.cc/428V-QU3L (Attached).

[6] Lakshmi Fjord, PhD, *Final Report – Community Study re: Chesterfield Energy Reliability Center (CERC)* at 44, 69 (July 2025) (hereinafter "Fjord Community Study") (Attached).

[7] Chesterfield County, *Henricus Historical Park*, https://perma.cc/5C7Z-52WL (last visited Oct. 17, 2025) (Attached).

Richmond, forced formerly enslaved Black Union soldiers and Black laborers to dig the Dutch Gap canal under brutal conditions without pay.[8]

While some of these stories have been recognized and shared with visitors to the Henricus Historical Park for years, including with elementary school classes, other stories of importance have taken longer to be honored. Take for instance the historic First Baptist Church in Centralia, just 10 kilometers ("km") away from the Site. This church, which remains active, was founded by Freedmen in 1867 under the name Salem African Baptist Church, a story that was only recently widely recognized in a 2024 Virgina House of Delegates Resolution.[9] More such histories exist in the area, and new stories of more recently settled residents continue to unfold. Today, Chesterfield County remains home to people from various walks of life, including in recent years, the Richmond region's largest Spanish-speaking population and one of the densest in Virginia.[10]

Unfortunately, another story also continues here, one of dangerous pollution plaguing low-income communities and communities of color in the name of "progress." In Chesterfield County, Dominion's Project stands to sacrifice the health and wellbeing of families living nearby, while enriching its shareholders, all in the name of meeting uncertain energy demand growth driven by data centers and some of the richest companies in the world. The story of environmental racism in the name of industrial "advancement" is one that reaches across the U.S., and the Southeast is replete with communities that have endured severe hardships. Chesterfield County has not been spared, as decades after the 1940s and the first coal boilers, Dominion is proposing another major pollution project, on the same site, situated squarely within environmental justice communities.

History need not repeat itself here. Additional pollution and added burdens for a marginalized community are never a *fait accompli*, they are decisions made by industry and regulators. Dominion has decided to place a new gas-fired power plant and all of its harmful emissions in these communities, ignoring cost-effective and emissions-free alternatives like

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[8] University of Maryland, College of Computer, Mathematical, & Natural Sciences, *Evolution, Civil War history meet in fossil with tragic past* (Nov. 26, 2013), https://perma.cc/4UMY-BUVD (Attached).

[9] H.R. 612, 2024 Special Sess. I (Va. 2024) (Attached); *see also* Fjord Community Study at 72.

[10] *See* Letter from Rachel James, Staff Attorney at SELC, to Jerome Brooks, Piedmont Regional Director at DEQ (July 22, 2025) (Attached); Virginia Association of Counties, *Chesterfield County Champions Central Virginia's First-Ever Monolingual Community Meeting for Spanish Speakers* (Oct. 4, 2024), https://perma.cc/9V4T-M66W (Attached).

battery storage, data center flexibility, and transmission upgrades.[11] DEQ must now decide whether to issue an air pollution permit that authorizes the construction of the Project knowing the toll it will inflict once operational. Because of the disproportionate harm the Project will cause and the other issues identified in these comments, we respectfully urge DEQ to deny the permit.

As our comments explain, the Project will:

- *Risk violation of National Ambient Air Quality Standards*. The number and magnitude of deficiencies in Dominion's Application and DEQ's Draft Permit, taken together, make it impossible for DEQ to legitimately conclude that the Project's emissions will not cause or contribute to pollution in excess of the national ambient air quality standards ("NAAQS"). Dominion's emission calculations and modeling assumptions are riddled with technical errors, which DEQ has either overlooked or refused to correct. As a result, Dominion's Application substantially underestimates the Project's potential emissions and the resulting impacts on ambient air and public health. The Draft Permit exacerbates these flaws by unlawfully authorizing unmitigated emissions during "alternative operating scenarios" that Dominion did not analyze or even describe in its Application. These compounding errors make it a near certainty that if the Draft Permit is issued as written, the Project would be permitted to exceed federal health-based standards for deadly air pollutants, including $PM_{2.5}$.
- *Cause disproportionate adverse impacts on environmental justice communities*. DEQ and Dominion have neglected to adequately address environmental justice concerns as required by the Virginia Environmental Justice Act (the "VEJA"), Code Section 10.1-1183 B, and Code Section 10.1-1307 E. For instance, Dominion has overlooked the character of the communities surrounding the Site by failing to solicit and research health risk information about the area and about the residents living nearby. Additionally, Dominion has failed to identify nearby EJ communities because of its incorrect application of the VEJA's definitions, thus misrepresenting what

[11] Testimony of Ryan Deyoe, Virginia State Corporation Commission, Case No. PUR-2025-00037, Dominion Energy's Application for Approval of a Certificate of Public Convenience and Necessity (July 25, 2025) at 47-48 (noting the model was restricted from selecting cost-effective clean options); *id*. at 68-69 (noting that ignoring the long-term growth in capacity benefits attributed to transmission is poor planning practice and fails to account for the resource adequacy benefits of transmission); *id*. at 83-94 (suggesting data center flexibility and critiquing Dominion's NPV analysis) (Excerpts Attached).

communities are actually in the vicinity of the Site. Like many industrial sites, the residents living nearest the CPS are largely persons of color and those whose income sits well below the median incomes in the area.[12] Yet DEQ has not acted to correct Dominion's deficiencies. Instead, the agency obfuscates the fact that no site suitability analysis was conducted for the permit, despite the plain instructions in Code Section 10.1-1307 E. DEQ relies exclusively on Dominion's flawed analysis regarding compliance with NAAQS and ignores the strong admonition from the U.S. Court of Appeals for the Fourth Circuit that this, on its own, is *not* an adequate proxy for the consideration of disproportionate impacts.[13] In fact, evidence before DEQ, based on established science, predicts the Project's emissions will cause 80 premature deaths in Virginia, including in these communities, over 36 years of Project operation. In the face of these serious adverse health risks, DEQ's process has ignored community concerns and erected barriers to engagement instead of inviting informed input. With these defects, DEQ cannot conclude that certain groups of people would not experience disproportionate adverse impacts as a result of the Project.

- *Result in over 2 million tons of greenhouse gas emissions annually*. According to Dominion's Application, even with controls, operation of the Project would generate more than 2 million tons per year of carbon dioxide equivalent ("CO_2e") emissions from carbon dioxide, methane, and nitrous oxide.[14] With the passage of the Virginia Clean Economy Act ("VCEA"), Virginia committed to reduce carbon dioxide emissions from the power sector by 30% by 2030 and to eliminate them entirely by 2050.[15] Authorizing a facility that would be a long-lived new source of emissions would effectively negate a substantial portion of Virginia's planned reductions, and

[12] Finn, John C., *Dominion's CERC Project: An Environmental Justice Review and Analysis* at 20-21 (October 2025) (hereinafter "Finn Report") (Attached).

[13] *See Friends of Buckingham v. State Air Pollution Control Board*, 947 F.3d 68, 91–92 (4th Cir. 2020) ("Even if all pollutants within the county remain below state and national air quality standards, the Board failed to grapple with the likelihood that those living closest to the Compressor Station — an overwhelmingly minority population according to the Friends of Buckingham Survey — will be affected more than those living in other parts of the same county.") (hereinafter "Friends of Buckingham").

[14] *See* Dominion, *Air Permit Application for the Chesterfield Energy Reliability Center, Rev. 3* (Mar. 2025) at Table B-11 (hereinafter "Application").

[15] 2020 Va. Acts, chs. 1193, 1194.

> Dominion's claim that a threat to electric reliability nonetheless justifies this action ignores the availability of clean, cost-effective alternatives. In the face of the significant steps Virginia is taking to reduce greenhouse gas emissions and Dominion's dubious justification, operating a major new source of such emissions is an unreasonable activity.[16]

We implore DEQ to strongly adhere to the protections in the Clean Air Act and in Virginia's laws and policies. DEQ should earnestly pursue input from affected and vulnerable residents and ensure those inputs inform its response to Dominion's Application. Because Dominion's Application lacks key details about potential pollutant impacts to nearby communities and the environment, and relies on unreasonable approaches to evaluating the potential impacts of the harmful pollutants the Project would emit, we are submitting independent analyses of the Application from the following experts to DEQ's administrative record:

- Dr. Loren Hopkins – Air Monitoring Capacity Assessment ("Hopkins Report")[17]
- Dr. Lakshmi Fjord – Community Study ("Fjord Community Study")
- Dr. Christopher Tessum – Disproportionate Air Quality Impact Analysis ("Tessum Report")[18]
- Dr. John C. Finn – Environmental Justice Review and Analysis ("Finn Report")
- Steven Klafka, P.E., BCEE – Evaluation of PM2.5 Air Quality Impacts ("Klafka Report")[19]

These reports are an integral part of our comment submission. Given the numerous fundamental flaws in the permitting process, DEQ cannot lawfully determine that Dominion's Project would not result in a significant deterioration of air quality or burden certain communities with disproportionate adverse impacts. Based on the record before it, DEQ must deny the permit.

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[16] *See* Va. Code § 10.1-1307(E) (requiring DEQ to "consider facts and circumstances relevant to the reasonableness of the activity involved").

[17] Loren Hopkins, PhD, *Assessment of Air Monitoring Capacity Around Dominion's Proposed Chesterfield Energy Reliability Center Site, Chesterfield County, VA* (Aug. 2024) (hereinafter "Hopkins Report") (Attached).

[18] Christopher Tessum, PhD, *Disproportionate Impacts of Proposed Emissions from the Chesterfield Gas Plant* (July 10, 2025) (hereinafter "Tessum Report") (Attached).

[19] *See* Klafka, Steven, Wingra Engineering, *Chesterfield Energy Reliability Center, Chester, Chesterfield County, Virginia, Evaluation of PM2.5 Air Quality Impacts* (July 25, 2025) (hereinafter "Klafka Report") (Attached).

ISSUES

I. DEQ Cannot Issue the Permit As Drafted, Because Dominion Has Failed to Demonstrate That the Project Will Not Cause or Contribute to Air Pollution in Excess of Any Ambient Air Quality Standard.

The plain language of the Clean Air Act prohibits construction of a major modification, such as the Project, unless the permittee adequately demonstrates that its emissions "will not cause, or contribute to, air pollution in excess of any . . . national ambient air quality standard."[20] To justify issuing a PSD permit, DEQ must have a sufficient record upon which to base its determination that Dominion has made this required demonstration. If the proposed modification would cause or contribute to such an exceedance, and the applicant has not fully compensated for or obtained sufficient emission reductions for its adverse ambient impact, DEQ must deny the permit.[21] The burden here is on the applicant, Dominion, to demonstrate that the Project will not cause or contribute to air pollution in excess of any NAAQS. The permitting record reveals Dominion has not met this burden. Moreover, because Dominion has provided insufficient information, DEQ has overstepped its authority in issuing the Draft Permit.

First, the Draft Permit is not informed by ambient air impacts associated with worst-case scenario emissions. This is because DEQ exacerbates the Application's deficiencies by issuing a Draft Permit that unlawfully authorizes alternative operating scenarios not identified in the Application. Here also, Dominion underestimated the Project's potential emissions by not modeling for actual worst-case scenarios, rendering the analyses it provided insufficient to meet its burden. Second, to determine the background concentrations of the various pollutants the Project would emit, Dominion relied on unrepresentative data from existing state air monitors provided by DEQ instead of gathering air quality data in the vicinity of the proposed site and in the surrounding communities by establishing its own pre-construction air monitoring network in the area. Relatedly, DEQ unreasonably limited the number of sources that needed to be included in the analysis to account for nearby sources not captured in the ambient monitored data. Third,

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[20] 42 U.S.C. § 7475(a)(3); *see also* 40 C.F.R. § 51.166(k)(1) (requiring every state's SIP to provide that the permittee "shall demonstrate that allowable emission increases" from the Project "would not cause or contribute to air pollution in violation of: (i) Any national ambient air quality standard in any air quality control region"); 9 VAC 80-1715(A) ("The owner of the proposed source or modification shall demonstrate that allowable emission increases . . . would not cause or contribute to air pollution in violation of: 1. Any ambient air quality standard in any air quality control region.").

[21] 9 VAC 80-1715(B)(1).

the area Dominion considered in its air quality modeling analyses was unjustifiably limited by DEQ to 10 km even though EPA guidance suggests broadening the area of evaluation may be merited. Fourth, Dominion's air quality modeling excluded receptors in the area immediately surrounding the proposed site based on an unsupported assumption that the facility will be fully fenced and the public will not have access to those areas. Any one of these deficiencies alone could yield unreliable results; taken together, these compounding errors render Dominion's analyses—and DEQ's acceptance of them—fatally flawed. Additionally, when an outside expert corrected a few key elements of these flaws in an alternative modeling analysis, he found an exceedance of the annual $PM_{2.5}$ NAAQS.[22] Finally, the Draft Permit contains conditions that render the associated PSD applicability analysis useless.

Given these identified flaws, DEQ's issuance of the Draft Permit is premature. Simply put, Dominion has not provided the necessary data for DEQ to meet its legal obligations. Based on this incomplete record, DEQ cannot approve Dominion's Application. As a result, the permit cannot be issued as drafted.

a. The Draft Permit Cannot be Issued as Drafted Because DEQ Unlawfully Included Alternative Scenarios That Were Not Requested in Dominion's Application, nor Modeled in the Air Quality Impact Analyses.

A PSD air permit determination should be informed by what the applicant has requested and provided adequate documentation and support for. Namely, the permit should be informed by the *worst-case scenario(s)* of operation.[23] That has not occurred here. Additionally, Virginia's regulations provide that "[a]ny owner who constructs or operates a source or modification not in accordance (i) with the application submitted… shall be subject to appropriate enforcement action."[24]

DEQ's Draft Permit includes alternate operating scenarios that were not proposed or even identified in Dominion's Application and that were not accounted for in Dominion's emission calculations or modeled in Dominion's ambient air quality impact analyses. These additional scenarios authorize the Project to operate in modes during which emission controls are not operational or effective and, especially in the case of Condition 9, permit such uncontrolled

[22] *See* Klafka Report.

[23] *See, e.g.*, 40 C.F.R. § 51, App. W at 4.2.1(c), 9.2.3(c).

[24] 9 VAC 5-80-1785(A).

operation without limit. The combination of (1) extended periods of operation to which the annual fuel throughput limits do not apply[25] and (2) turbine operation at loads where emission controls do not work[26] make it a near certainty that pollutant emissions would substantially *increase* above the estimates in Dominion's Application. Issuing the permit as drafted would subject Dominion to enforcement action, because the draft is not in accordance with the Application that Dominion submitted.[27]

Further, a complete application is defined as one that contains all of the information necessary for processing the application.[28] Here, the increases DEQ authorized, but that were not identified in Dominion's Application, would impact the estimations of maximum ambient pollutant concentration contributions from the Project. Dominion's air quality impact modeling did not reflect these estimations, which, if included would likely have increased the overall maximum modeled concentration value (which is one of two main components of how Dominion estimated the Project's contributions to air quality impacts) impacting the overall calculations used to evaluate whether a NAAQS exceedance is projected. As written, DEQ's Draft Permit is unsupported by the Application and related analyses submitted by Dominion and therefore cannot be finalized and issued as written.

The Draft Permit would provide Dominion an exemption from having to comply with applicable emission and operational limits or operate pollution controls during these alternative operating scenarios, and yet neither Dominion nor DEQ took four of the five alternative operating

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[25] Draft Permit at 11 (Condition 24). Condition 24 imposes annual limits on the turbines' heat input rates, but these limits explicitly apply only during "normal operation," which is defined to exclude "alternate operating scenarios as defined in Conditions 8-12."

[26] For example, Condition 9 authorizes unlimited operation in "low load emergency (LLE) mode, when the turbines might operate below MECL." *See* Draft Permit at 6. By definition, "MECL" is the minimum engine load at which a combustion turbine can achieve or maintain compliance with applicable emission limits; operating "below MECL" necessarily means that emissions during such operation will exceed applicable limits. *See also* Draft Engineering Analysis at 21 ("Operation at partial load, or during startup/shutdown results in reduced control efficiency."); *id.* at 31 ("PM2.5 emissions should be . . . highest during low load and/or burning fuel oil.").

[27] 9 VAC 5-80-1785(A) ("Any owner who constructs or operates a source or modification not in accordance (i) with the application submitted… shall be subject to appropriate enforcement action.").

[28] 9 VAC 5-80-1745 ("The owner of a proposed source or modification shall submit all information necessary to perform any analysis or make any determination required under this article."); *see also* 42 U.S.C. § 7475(a) (A major modification cannot be constructed "unless… (2) … the required analysis has been conducted… (3) the owner or operator of such facility demonstrates… that emissions from construction or operation of such facility will not cause, or contribute to, air pollution in excess of any… national ambient air quality standard…"; 42 U.S.C. § 7574(e) ("The review provided for in subsection (a) of this section shall be preceded by an analysis… of the ambient air quality at the proposed site and in areas which may be affected by emissions from such facility…").

scenarios into account in the PSD applicability analysis or the air dispersion modeling.[29] The Draft Permit allows for the following alternative operating scenarios that have not been accounted for in the potential to emit calculations:

- Low Load Emergency Mode: Condition 9 of the Draft Permit provides for an alternative operating scenario referred to as Low Load Emergency ("LLE") mode when the turbines can be operated below the Minimum Emissions Compliance Load ("MECL").[30] By definition, operating at a load below MECL means that emissions will exceed applicable limits. Under Condition 9, the turbines are authorized to operate in LLE mode for an extended period of time during electric grid restoration/black start when the Pennsylvania-New Jersey-Maryland Interconnection, LLC ("PJM") Independent System Operator's ("ISO") has declared an emergency, and also during annual readiness testing. There are no short-term or annual time limits on operation in LLE mode in the Draft Permit.
- Manual Tuning: Condition 10 of the Draft Permit establishes an alternative operating scenario for manual tuning of a turbine, which is defined as "the manipulation of the units and the associated emissions controls to ensure optimized operation and minimized emissions."[31] The Draft Permit requires Dominion to "develop a written operating manual describing the general operating procedures performed for manual tuning alternative operating scenarios," but the Draft Permit does not require Dominion to submit the manual to DEQ for approval or to incorporate the provisions of the manual as enforceable requirements under the permit.[32] Unlike Condition 9, Condition 10 does include certain time limits on manual tuning events: each event can last no more than 18 consecutive hours, and there can be no more than 96 hours of manual tuning for each combustion turbine per 12-month period.[33]

[29] The only alternative operating scenario that was taken into account in calculating potential to emit of the new combustion turbines is the turbine startup and shutdown alternative operating scenario described in Condition 8 of the Draft Permit.

[30] Draft Permit at 6 (Condition 9).

[31] *Id.* at 7.

[32] *Id.* at 6.

[33] *Id.* at 7.

- Fuel Type Transfer: Condition 11 of the Draft Permit establishes an alternative operating scenario for fuel type transfer at a turbine, which is defined as "the switching between different fuels while the combustion turbines are in operation."[34] The Draft Permit requires Dominion to "develop a written operating manual describing the operating procedures performed for fuel type transfer alternative operating scenarios," but like Condition 10, the Draft Permit does not require Dominion to submit the manual to DEQ for approval or to incorporate the provisions of the manual as enforceable requirements under the permit.[35] Although this permit condition defines when the fuel type transfers are considered to begin and end, it does not impose any time limits for conducting a fuel type transfer at a turbine and there are no limits on the frequency of fuel type transfers per turbine per year. The Draft Permit expressly authorizes "excess NOx emissions" for one 4-hour period for any fuel type transfer (or even longer if authorized by DEQ) as long as the emission limits of 40 C.F.R. Part 60, Subpart KKKK are not exceeded.[36] Even worse, the Draft Permit expressly authorizes unlimited "excess emissions" for all other pollutants during fuel type transfers if the procedures of Dominion's own operating manual—procedures that are not subject to DEQ's review or approval—are followed.[37]
- Green Rotor Run-In: Condition 12 of the Draft Permit establishes an alternative operating scenario for "Green Rotor Run-In," which is defined as "the replacement or refurbishment of a turbine rotor, requiring the new rotor to be run at full speed, no load or electrical generation, for several hours to ensure that the unit's vibration levels and other operating conditions are acceptable."[38] The Draft Permit requires Dominion to "develop a written operating manual describing the operating procedures performed for green rotor run-in alternative operating scenarios," but like Conditions 10 and 11, the Draft Permit does not require Dominion to submit the manual to DEQ for approval or to incorporate the provisions of the manual as enforceable requirements under the

[34] *Id*. (Condition 11).

[35] *Id.*

[36] *Id.* at 8.

[37] *Id.*

[38] *Id.*

permit.[39] Unlike Conditions 9 and 11, Condition 12 does include a time limit for green rotor run-ins: each event cannot exceed 12 hours in any 24-hour period.[40] But there is no limit on the frequency of such events per turbine per year. The Draft Permit also does not require compliance with any short-term emission limits of the permit during green rotor run-ins except for the NOx limit of 40 C.F.R. Part 60, Subpart KKKK.[41]

i. The Alternative Operating Scenarios Contained in the Draft Permit Would Be Exempt From the Limits On Emissions and Operations that DEQ Relied on in Calculating the Turbines' Potential Emissions.

Dominion's and DEQ's calculation of potential to emit ("PTE") from the combustion turbines ("CT") was based on the annual heat input limits and the proposed short term emission limits for the turbines proposed in the Application.[42] Yet, in the Draft Permit, DEQ introduced alternative operating scenarios in which the new turbines are exempt from fuel throughput limits, emission limits, and various pollution control requirements. Additionally, for some of the alternative operating scenarios, there is not even any time limit on operations in the alternative operating scenario. The alternative scenarios and the limits/lack thereof is summarized in the table below.

[39] *Id.*

[40] *Id.*

[41] *Id.*

[42] *See* Application at PDF page 145 ("Proposed Permit Limits for Criteria Pollutants").

Table 1. Applicability of Draft Permit Terms and Conditions to Alternative Operating Scenarios in Conditions 9 Through 12 of the Draft Permit

Permit Condition	9 (LLE Mode)	10 (Manual Tuning)	11 (Fuel Type Transfer)	12 (Green Rotor Run-In)
SCR Required to be Used?	No[a]	No[b]	No[b]	No[a]
Water Injection Required to be Used (when firing oil, for NOx control)?	No[a]	No[b]	No[b]	No[a]
Oxidation Catalyst Required to be Used?	No[c]	No[c]	No[c]	No[c]
Short Term Emission Limits (including BACT limits) Apply?	No[d]	No[d]	No[d]	No[d]
Fuel Throughput Limits Apply?	No[e]	No[e]	No[e]	No[e]
Annual "Process Emission Limits" apply?	No[f]	Possibly for CO, unclear for other pollutants, Not Likely for NOx[g]	Unclear, but not likely for NOx[h]	Possibly for CO, unclear for other pollutants, Not Likely for NOx[g]
Time Limits for Alternative Operating Scenario?	None	Manual tuning events limited to 18 consecutive hours, and total events limited to 96 hours per turbine per 12-month period	No limit, but excess NOx emissions are limited to no more than one 4-hour period per fuel transfer event unless authorized by DEQ	Green rotor run-in event shall not exceed 12 hours in any 24-hour period per turbine

Notes

[a] Per Conditions 1 and 2 of Draft Permit, these alternative operating scenarios are specifically excluded from the requirement to operate NOx controls and meet NOx emission limits of the permit. *See also* Condition 37 which states that normal operations do not include operations in alternative operating scenarios described in Conditions 9-12, and the emission limits of Condition 1 only apply during "normal operation."

[b] Although Condition 1 does not list the alternate scenarios described in Conditions 10 or 11 as exempt from operation of SCR or from water injection (during oil-firing), the emission limits of Condition 1 apply only during "normal operation." The requirement to operate the water injection during oil-firing operations in Condition 2.b. also only applies during "normal operations." Per Condition 37, "normal operations" do not include the alternate scenarios described in Conditions 9-12.

[c] Per Conditions 3 and 4 of Draft Permit, the alternative operating scenarios described in Conditions 9-12 are exempt from the requirement to operate the oxidation catalyst.

[d] Per Condition 37, the short-term emission limits only apply during "normal operation," and "normal operations" do not include the alternate scenarios described in Conditions 9-12. Note that the CO2 BACT limits (in units of lb/MMBtu) do apply pursuant to Condition 38.

[e] Per Condition 24 of Draft Permit, the total annual heat input limits apply to normal operations and not to the alternative operating scenarios described in Conditions 8-12.

[f] Per Condition 9 of the Draft Permit, while emissions are to be monitored during LLE Mode "to the extent practicable," the CEMs emissions data is required to be "'flagged' to indicate the beginning and end of the LLE mode and the fuel(s) being combusted during that time."

[g] Conditions 10.f. and 12.g. of the Draft Permit require NOx and CO emissions during manual tuning events and green rotor tie-ins to be recorded and included in the facility-wide total. Thus, it is assumed that the annual NOx and CO process emission limits of Condition 39 apply to the manual tuning and green rotor tie-ins alternative operating scenarios. However, for the other process pollutant limits of Condition 39, it is not clear whether emissions during

periods of manual tuning and green rotor tie-ins are counted in determining compliance because Condition 39 does not clearly indicate how compliance is to be determined, other than to refer to Permit Conditions 1, 3, 4, 6, 7, 24, 25, and 27. Moreover, Condition 50 of the Draft Permit, which defines periods of excess emissions for NOx for the purpose of the permit, does not list as a reportable excess emission for NOx annual emissions that exceed the annual process emission limit for NOx in Condition 39.

[h] For fuel type transfers, Permit Condition 11.d allows unlimited excess emissions of all pollutants except NOx during fuel type transfers as long as Dominion's own operating manual procedures are followed. For NOx emissions, one 4-hour period per fuel type transfer event of excess emissions is allowed (and can be extended in duration by DEQ), as long as the NOx limit in 40 C.F.R. Part 60, Subpart KKKK is met. Condition 11 c.ii also provides that the CEM data will be "flagged" to indicate fuel transfer took place. This seems to indicate that NOx emissions during fuel transfers would not need to be accounted for in assessing compliance with the annual process emission limitations of Condition 39. Moreover, Condition 50 of the Draft Permit, which defines periods of excess emissions for NOx for the purpose of the permit, does not list as a reportable excess emission for NOx annual emissions that exceed the annual process emission limit for NOx in Condition 39.

In determining the PTE calculation, Dominion and DEQ both failed to take into account potential emissions during these alternative operating scenarios when the turbines will not be subject to the operational restrictions and emission limits of the permit as drafted. Thus, the PSD applicability analysis and the air dispersion modeling for the Project are deficient. This deficiency is especially important for the pollutants for which Dominions has proposed netting out of PSD review (NOx, PM, PM10, and H2SO4).[43] Given the lack of required pollution controls and the lack of limits on duration and frequency for some of these events, it is very likely that when the PTE allowed by the alternative operating scenarios in Conditions 9 – 12 is taken into account, the Project would be subject to PSD review for NOx, PM, PM10, and H2SO4.

ii. Even if DEQ Were to Remove the Alternative Operating Scenarios, Dominion's Modeling Inputs Still Do Not Reflect Worst-Case Emission Scenarios.

Throughout the PSD and Art. 6 Modeling Reports, Dominion repeatedly asserts that its modeling inputs rely on emission estimates for the "worst-case" operating scenarios.[44] But a cursory comparison of Dominion's summary tables of modeling inputs with the vendor information and emission calculations on which those inputs are based reveal that is not true.

First, Dominion's PSD Modeling Report states that the inputs used for modeling normal turbine operations were calculated based on the "worst-case emission parameters for the CT over the five operating loads for natural gas and four operating loads for fuel oil."[45] The referenced

[43] Draft Engineering Analysis at 9.

[44] *See* PSD Modeling Report at 2-1 through 2-3, 4-2; DEQ, *Article 6 Air Quality Impact Analyses Report for the Chesterfield Energy Reliability Center, Revision 3* at 2-1 through 2-3, 4-1 (June 2025) (hereinafter "Art. 6 Modeling Report").

[45] PSD Modeling Report at 2-2.

tables indicate that hourly emission rates for carbon monoxide ("CO") are highest at 100% load (11.3 lb/hr for natural gas and 11.7 lb/hr for fuel oil) and lowest at the MECL (5.0 lb/hr for natural gas and 7.4 lb/hr for fuel oil).[46] However, the vendor data attached to the PSD Modeling Report show that hourly CO emissions are drastically higher at low loads than what is listed in those tables: up to 366.0 lb/30-min (732 lb/hr) for natural gas and 1,036 lb/30-min (2,072 lb/hr) for fuel oil.[47] A similar error appears in the Art. 6 Modeling Report, where Dominion's summary tables indicate that hourly emission rates for NO_2 are highest at 100% load (23.3 lb/hr for natural gas and 47.9 lb/hr for fuel oil) and lowest at the MECL (10.3 lb/hr for natural gas and 30.5 lb/hr for fuel oil).[48] Yet the vendor data attached to the Art. 6 Modeling Report again show that hourly NO_2 emissions are drastically higher at low loads than what is listed in those tables: up to 52.0 lb/30-min (104 lb/hr) for natural gas and 143.0 lb/30-min (286 lb/hr) for fuel oil.[49] These errors are particularly relevant because the Draft Permit specifically defines "normal" operations as "operation at a wide range of ambient temperatures and loads (between MECL and 100%)" and does not impose any load-related restrictions applicable during normal operations.[50] Although the Draft Permit includes annual limits on total heat input for the turbines' normal operations, it does not impose annual limits on total *hours* of normal operation. Because the heat input limits were calculated assuming 3,240 hours/year at 100% load, the Draft Permit as written authorizes many more hours of operation at lower loads—when hourly emissions are much higher, according to Dominion's own documentation. Yet the potential emissions for this authorized scenario were not included in the modeling.

Second, Dominion's PSD Modeling Report states that the inputs for modeling turbine startup and shutdown operations were calculated based on a combination of "the more conservative startup case" (for 30 minutes) and "the worst-case load identified in the load analysis runs" ("for

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[46] *See id.* at tbls. 2-1, 2-2.

[47] *See id*. at PDF page 40, App. B (GE – Natural Gas), tbl. 1 (nn. 1–2) (stating that the 366 lb/30-min emission estimate is based on exhaust velocity and exit temperature "for the MECL load"); *id.* at PDF page 43, App. B (GE – Fuel Oil), tbl. 1 (nn. 1–2) (stating that the 1,036 lb/30-min emission estimate is based on exhaust velocity and exit temperature "for the 50% load").

[48] Art. 6 Modeling Report at 2-2, tbls. 2-1, 2-2).

[49] *See id.* at PDF page 33, App. B (GE – Natural Gas), tbl. 1 (nn. 1–2) (stating that the 52 lb/30-min emission estimate is based on exhaust velocity and exit temperature "for the MECL load"); *id.* at PDF page 37, App. B (GE – Fuel Oil), tbl. 1 (nn. 1–2) (stating that the 143 lb/30-min emission estimate is based on exhaust velocity and exit temperature "for the 50% load").

[50] Draft Permit at 15.

the balance of the averaging period when it is not in startup mode").[51] However, the vendor data attached to this report shows that for the "startup case," CO emissions were calculated using parameters associated with "the MECL load" for natural gas and "the 50% load" for fuel oil,[52] rather than for a load below MECL, at which the turbines would be operating for at least some portion of the 30-minute startup period. In addition, despite Dominion's assertion that the period of normal operations modeled to supplement the 30-minute startup was based on "the worst-case load identified," the associated tables and attached vendor information clearly show this modeling relied on CO emission rates associated with 80% load for natural gas and 70% load for fuel oil, both of which are lower than the identified rates for 100% load.[53] Similarly, these tables and the attached calculations show this modeling relied on $PM_{2.5}$ emission rates that are purportedly associated with MECL but are lower than the identified rates for 100% load.[54]

Third, several of the modeled emission rates are lower than the associated emission limits in the Draft Permit. In other words, the Draft Permit authorizes a level of emissions that is more than what Dominion modeled, so the modeling does not reflect the full potential impacts that would be allowed under the permit if issued as written. For example:

- Normal turbine operations with fuel oil were modeled using a $PM_{2.5}$ emission rate of 44.80 lb/hr,[55] but the corresponding emission limit is 45.0 lb/hr.[56]
- Fuel gas heater operations were modeled using a $PM_{2.5}$ emission rate of 0.29 tons/year (tpy),[57] but the corresponding emission limit is 0.6 tpy.[58]

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[51] PSD Modeling Report at 2-3.

[52] *See id.* at PDF page 40, App. B (GE – Natural Gas), tbl. 1 (nn. 1–2) (stating that the 366 lb/30-min emission estimate is based on exhaust velocity and exit temperature "for the MECL load"); *id.* at PDF page 43, App. B (GE – Fuel Oil), tbl. 1 (nn. 1–2) (stating that the 1,036 lb/30-min emission estimate is based on exhaust velocity and exit temperature "for the 50% load").

[53] *Id.* at PDF page 40, App. B (GE – Natural Gas), tbl. 1 (n.3) (stating that the 4.65 lb/30-min emission estimate is based on exhaust velocity and temperature "for the 80% load"); *id.* at PDF page 43, App. B (GE – Fuel Oil), tbl. 1 (nn.1–2) (stating that the 6.94 lb/30-min emission estimate is based on exhaust velocity and temperature "for the 70% load").

[54] *Id*. *Compare* tbls. 2-1 & 2-2 (showing the PM2.5 emission rate at 100% load is 19.70 lb/hr for natural gas and 44.80 lb/hr for fuel oil) *with* App. B (PM2.5-Startup/Shutdown Modeling Calculations) at PDF pgs. 42, 45 (listing the modeled PM2.5 emission rate as 338.40 lb/24-hr (14.1 lb/hr) for natural gas and 1,048.10 lb/24-hr (43.67 lb/hr) for fuel oil).

[55] PSD Modeling Report at 2-2, tbl. 2-2.

[56] Draft Permit at 15.

[57] PSD Modeling Report at 2-5, tbl. 2-5.

[58] Draft Permit at 17.

- Fuel gas heater operations were modeled using a CO emission rate of 1.533 tpy,[59] but the corresponding emission limit is 3.1 tpy.[60]
- Emergency generator operations were modeled using a $PM_{2.5}$ emission rate of 0.45 tpy,[61] but the corresponding emission limit is 0.5 tpy.[62]
- Emergency generation operations were modeled using a CO emission rate of 6.7525 tpy,[63] but the corresponding emission limit is 6.8 tpy.[64]

Notably, the "Air Quality Analysis" memoranda attached to DEQ's Engineering Analysis[65] are both dated July 3, 2025—just two days after Dominion last modified its PSD and Art. 6 Modeling Reports, according to the metadata for those files. It thus appears that DEQ's approval of Dominion's modeling was based on the agency's review of outdated versions of those reports. This timeline may explain the discrepancies between the modeling inputs used (and characterized by Dominion as "worst-case") and the vendor info/emission calculations that Dominion attached. These internal inconsistencies are errors that a careful review by DEQ should have uncovered *prior* to issuing a Draft Permit reliant on this information. Regardless, DEQ has an obligation to thoroughly review and scrutinize the assumptions and calculations contained in the most recent modeling reports before issuing a permit that relies on the results of those analyses. The current Draft Permit is misinformed and cannot be issued as drafted.

b. DEQ and Dominion Have Not Demonstrated That the Air Quality Modeling Represents the Ambient Air Quality at the Site and in the Surrounding Area.

DEQ is responsible for ensuring that there is necessary and adequate modeling to inform its determination of the effect of the Project's emissions on ambient air quality "in any area which

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[59] PSD Modeling Report at 2-5, tbl. 2-5 (listing the CO emission rate as 0.35 lb/hr, which is equivalent to 1.533 tpy if operating 8,760 hr/yr); *id.* at 2-4 ("The fuel gas heater is being permitted to operate up to 8,760 hr/yr.").

[60] Draft Permit at 17.

[61] PSD Modeling Report at 2-5, tbl. 2-5.

[62] Draft Permit at 18.

[63] PSD Modeling Report 2-5, tbl. 2-5 (listing the CO emission rate as 27.01 lb/hr, which is equivalent to 6.7525 tpy if operating 500 hr/yr); *id.* at 2-4 ("The modeled annual emissions rates were based on 500 hyr/yr[.]").

[64] Draft Permit at 18.

[65] Memorandum from Robert Lute, DEQ Office of Air Quality Assessments, *PSD Air Quality Analyses – Chesterfield Energy Reliability Center* (July 3, 2025) (Attached); Memorandum from Robert Lute, DEQ Office of Air Quality Assessments, *Air Quality Analysis – Chesterfield Energy Reliability Center* (July 3, 2025) (Attached).

may be affected by emissions from [the Project]."[66] Air quality impact modeling is informed by air monitor data, which can be collected from varied sources, depending on the circumstances. However, air monitor data must be representative of the areas affected by the proposed project. Without sufficient monitoring to establish representative background concentration values, proposed projects, like the Project here, cannot be constructed.[67]

To inform the implementation of these requirements for monitoring and modeling, the EPA has provided its Guideline on Air Quality Models, and in November 2024, the EPA provided additional guidance[68] focused "on developing a representative background concentration used as part of a cumulative impact analysis for [NAAQS] implementation modeling demonstrations (e.g., [PSD] compliance demonstrations[.]"[69] This more focused guidance recommends a framework ("Framework") to support both applicants and agencies in conducting the necessary air quality evaluations in air permitting programs. The Framework "starts with a determination of the representativeness of the ambient monitoring data and then uses readily available data to inform the determination of those nearby sources to explicitly model to best characterize local air quality." [70] The EPA's Framework to appropriately characterize representative background concentrations contains the following four steps:

1. Define scope of cumulative impact analysis for isolated or multi-source situations;
2. Identify relevant and available emissions, air quality and environmental data;
3. Determine representativeness of ambient monitoring data; and
4. Determine nearby sources to be explicitly modeled.[71]

The EPA states that this Framework is meant to facilitate an air modeling process the results of which best represent the local air quality throughout the geographic scope of the analysis

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[66] *See* 42 U.S.C. § 7475(a)(7) ("No major emitting facility . . . may be constructed in any area to which this part applies unless . . . the person who owns or operates, or proposes to own or operate, a major emitting facility for which a permit is required under this part agrees to conduct such monitoring as may be necessary to determine the effect which emissions from any such facility may have, or is having, on air quality in *any area* which may be affected by emissions from such source[.]" (emphasis added)).

[67] *Id*.

[68] EPA, *Guidance on Developing Background Concentrations for Use in Modeling Demonstrations* (Nov. 2024), https://perma.cc/5ZF6-5ZDW (hereinafter "2024 EPA Modeling Guidance") (Attached).

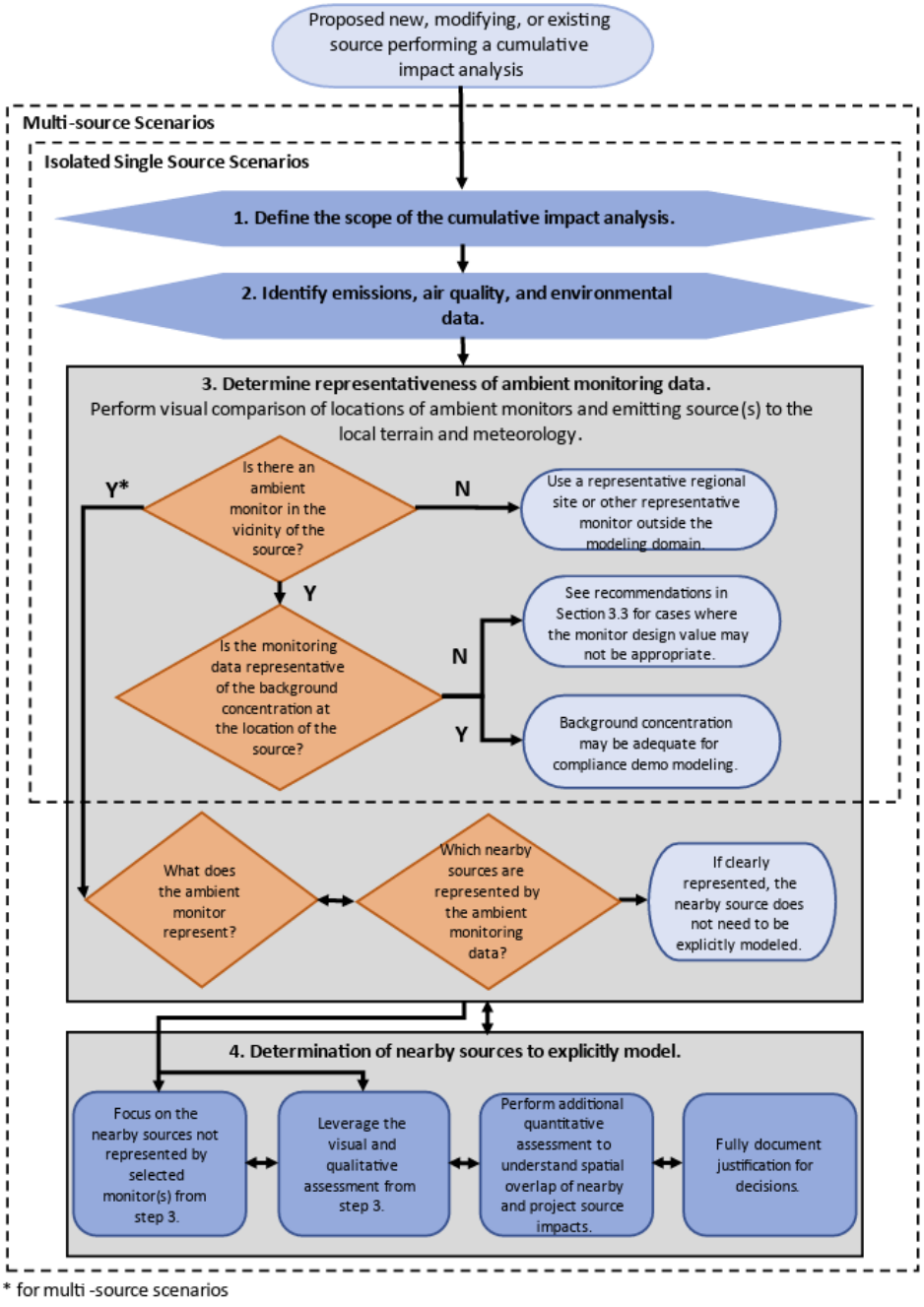
[69] *Id*. at 1.

[70] *Id.* at 4 (noting, the recommended framework based on the underlying recommendations in the 2005 and 2017 versions of the U.S. EPA Guideline on Air Quality Models.)

[71] *Id.* at 8.

and "*in particular near the source(s)* under consideration."[72] The following flowchart provides a brief depiction of the recommended process

Figure 1. EPA Recommended Framework for Characterizing Representative Background Concentrations for Cumulative Impact Assessments in Modeling Demonstrations



[72] *Id.* (emphasis added).

Dominion's Application falls well outside of the Framework and instead relies on a limited modeling exercise that fails to adequately assess potential air quality impacts associated with the operation of the Project. Properly defining the scope and identifying the type of area being evaluated substantively impacts what modeling protocol to implement. For instance, the 2024 EPA Modeling Guidance indicates that the Framework should be applied differently depending on whether the proposed project is in a multi-source area or an isolated source area. Identifying the characteristics of the location thus is an essential first step to decide how to apply the Framework for a particular proposal. Here, neither Dominion in its Application nor DEQ in its Draft Engineering Analysis made any mention of whether the Site is within an isolated area or a multi-source area.

For context, Dominion's air quality impact analyses focused on whether the Project would cause or contribute to an exceedance of the NAAQS. To make this determination, Dominion adds the background concentration of the specified pollutant to the maximum modeled concentration ("MMC"), which includes emissions estimates from (1) the proposed Project (modeled by Dominion), (2) the existing units at the CPS, and (3) certain off-site sources whose emissions are not reflected in monitored background concentrations).[73] Dominion represents that the sum of these numbers reflects an estimate of the resulting pollutant concentration, which Dominion then compares to the associated NAAQS. In this way, Dominion conducts "cumulative modeling" that it then uses to inform DEQ about whether the Project is expected to cause or contribute to pollution in excess of the national standards.[74] However, the first component of this computation—the background concentration—was inadequate from the start; DEQ failed to timely require Dominion to undertake pre-construction monitoring and made unreasonable assumptions in its provision of background concentrations.

The resultant values developed from this flawed baseline yielded unrealistically low and non-representative background concentration values. Additionally, DEQ provided no supportive data to justify its approach in identifying nearby sources to include in the modeling. Because of these shortcomings, neither DEQ nor Dominion have justified that the evaluations upon which the

[73] Draft Engineering Analysis at Appendices C1-1, C1-2.

[74] *See* PSD Modeling Report at 4-2, 4-3.

Draft Permit is based sufficiently captured pollutant dispersion in any area affected by the emissions from the Project.

i. DEQ and Dominion Failed to Identify Relevant and Available Emissions, Air Quality, and Environmental Data in Determining the Background Concentrations Utilized.

In the absence of DEQ or Dominion appropriately characterizing the area where the Project has been provided, we rely here on emissions sources identified in the Fjord Community Study to determine that the site is a multi-source site. Dr. Fjord identified that there are seven air pollution sites within one mile of the Site and 72 within three miles of the Site.[75] For such areas, the EPA provides that:

> [f]or areas with multiple source(s), section 8.3.3(a) of the 2024 Guideline states that "[…] determining the appropriate background concentration involves: (1) Identification and characterization of contributions from nearby sources through explicit modeling, and (2) characterization of contributions from other sources through adequately representative ambient monitoring data."[76]

The EPA Guideline on Air Quality Models states that "[a]ll sources in the vicinity of the source(s) under consideration for emissions limits that are not adequately represented by ambient monitoring data should be explicitly modeled."[77] Further, in the EPA 2024 Modeling Guidance, when defining the scope of a cumulative impact analysis, the EPA provides:

> [I]n situations where a single-source impact analysis is available, the 2024 *Guideline* defines the modeling domain as "the most distant location where air quality modeling predicts a significant ambient impact will occur" but this area is not to exceed 50 km from the proposed new or modifying source.[78]

[75] Fjord Community Study at 99.

[76] 2024 EPA Modeling Guidance at 26.

[77] 40 C.F.R. § Part 51, App. W, Section 8.3.3(b).

[78] 2024 EPA Modeling Guidance at 26.

1. Area for Analysis.

Here, Dominion undertook a cumulative impact analysis and seems to also have also provided a single-source impact analysis for the Project,[79] which suggests that the scenario is one where the EPA 2024 Modeling Guidance would welcome modeling up to but not exceeding a 50 km distance.

As noted above, Dominion's cumulative impact analysis includes the maximum modeled MCC, which it calculated by modeling a combination of potential emissions from the Project, emissions from certain nearby sources, and emissions from the existing units at CPS.[80] DEQ identified the sources it considered "nearby" for purposes of this analysis and then provided that list to Dominion to incorporate into its modeling.[81] DEQ also identified the distance Dominion should use for the modeling domain in the AERMOD modeling. The AERMOD model used for this analysis can provide acceptable modeling results out to 50 km and has been the preferred model for near-field dispersion of emissions for distances up to 50 km since its adoption by the EPA in November of 2005. Dominion employed this model in its analysis but failed to use it to identify "all sources in the vicinity." Instead, Dominion identified sources within 14 km[82] even though Dominion's PSD Modeling Protocol[83] indicated that, "if needed," receptors up to 20 km could have been utilized[84] and EPA guidance allows using 50 km.[85] As is discussed further below, because the modeling done for the Project was not combined with worst case background monitoring data, the background concentrations relied on in the PSD and Article 6 modeling very likely do not represent impacts from all emissions sources in the vicinity of the Project.

2. Limiting Nearby Sources.

EPA's modeling guidelines state that "the question of which nearby sources to include in the cumulative modeling is inextricably linked to the question of what the ambient monitoring data

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[79] *See* PSD Modeling Report at 4-1, tbl.4-1.

[80] *See* E-mail from Robert Lute, Air Quality Modeler at DEQ, to Rachel James, Staff Attorney at SELC (May 16, 2025, at 03:41 PM ET) (Attached).

[81] *See* E-mail from Robert Lute, Air Quality Modeler at DEQ, to Rachel James, Staff Attorney at SELC (Jan. 31, 2025, at 02:00 PM ET) (Attached).

[82] *See* Klafka Report at 3.

[83] *See* Dominion, *Air Quality Impact Analysis Modeling Protocol for Chesterfield Energy Reliability Center* (Dec. 30, 2024) (hereinafter "PSD Modeling Protocol") (Attached).

[84] *Id*. at 3-11.

[85] 2024 EPA Modeling Guidance at 18, 26.

represents within the project area."[86] If DEQ is going to allow Dominion to rely on existing monitoring sites for which it cannot verify the data are representative of background concentration in the vicinity of the Project, then it must evaluate which nearby sources might be captured by the existing monitor and which might not be and would thus merit explicit modeling. EPA 2024 Modeling Guidance for multi-source areas provides:

> In multi-source situations, the visual and qualitative assessment should include maps of the monitor locations, environmental data such as terrain features and wind patterns, and the locations and magnitude of emitting sources within the first 10 to 20 km of the source(s) under consideration (2017 Guideline, section 8.3.3(b)(iii)) and, if available, the area where the source(s) under consideration's impacts are greater than the [significant impact level ("SIL")] based on pre-existing modeling (i.e., the single source impact analysis).[87]

Table 4-1. SIL Results with Maximum SIA

Pollutant	Averaging Period	Maximum Concentration (µg/m³)	Load Case	Fuel Scenario	SIL (µg/m³)	NAAQS SIA (m)
CO	1-hour	1,848.44	SUSD	Natural Gas	2,000	--
	1-hour	1,849.44	SUSD	Fuel Oil	2,000	--
	8-hour	103.03	SUSD	Natural Gas	500	--
	8-hour	103.06	SUSD	Fuel Oil	500	--
$PM_{2.5}$	24-hour	2.27	MECL	Natural Gas	1.2	1,006
	24-hour	2.90	MECL	Fuel Oil	1.2	1,847
	Annual	0.20	Annual	Natural Gas	0.13	499
	Annual	0.21	Annual	Dual Fuel	0.13	684

Source: ECT, 2025.

According to Dominion's PSD Modeling Report, the single-source impact analysis (excerpted from the Application and show in Table 4-1 above) shows that the Project's emissions of $PM_{2.5}$ would result in ambient impacts that are greater than the SILs for annual and 24-hour $PM_{2.5}$.[88] As noted above in subsection(a)(ii), the Project's ambient impacts are likely underestimated based on the errors in emission calculations due to flawed worst case scenario,

[86] 40 C.F.R. § Part 51, App. W, Section 8.3.3(a).

[87] 2024 EPA Modeling Guidance at 28.

[88] PSD Modeling Report at 4-1.

thus the SIL for CO may also actually be exceeded when the calculations are corrected. Dominion's PSD Modeling Report, despite last being updated in June 2025, included no maps of monitor locations, and did not identify the locations and magnitude of emitting sources within 20 km of the Project—even after the April 11, 2025 Letter to DEQ from Concerned Community Groups recommending that DEQ require Dominion to:

> map the modeled concentrations at each of the various receptor points to enable the agency and the public to understand how the pollution is dispersed across the modeled area and demonstrate how pollutant concentrations spatially coincide with residential areas and vulnerable populations, given that pollutants travel and impact the air differently as they combine with other pollutants (i.e., secondary $PM_{2.5}$).[89]

A review of available data suggests that there are many nearby monitors and other nearby sources that Dominion should have considered. The August 2024 Hopkins Report, shared with DEQ in a September 2024 Letter to DEQ from Concerned Community Groups,[90] identifies three monitors within 20 km of the Project (Math-Science at 12 miles, Beach Road at 11.5 miles, and Shirley Plantation at 7.52 miles) and suggests using more than one monitor to estimate background concentrations near the Site.[91] Additionally, the Klafka report states that there are 1,945 emission sources within 50 km of the Project, but over 1,800 of those sources were excluded from Dominion's $PM_{2.5}$ modeling, which only included 121 sources, the furthest one of which was located 14 km from the Project.[92]

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[89] Letter from Rachel James, Staff Attorney at SELC, to Jerome Brooks, Piedmont Regional Director at DEQ, at 4 (Apr. 11, 2025) (Attached).

[90] Letter from Rachel James, Staff Attorney at SELC, to Jerome Brooks, Piedmont Regional Director at DEQ (Sept. 25, 2024) (Attached).

[91] *See* Hopkins Report at 2 (recommending that in the absence of pre-construction monitoring, "[a]t least one monitor should be located in the direction which is predominantly downwind of the proposed site so that it measures concentrations from the site. Ideally, monitors on both the upwind and downwind side of the facility are preferred so that the monitor pair can be used to define the contribution from the site (i.e., by subtracting the concentrations upwind and downwind in the same hour)."

[92] *See* Klafka Report at 3. On July 7, 2025, CBF submitted a Freedom of Information Act request (Attached) for Air Pollution Source Records surrounding the proposed Project to DEQ. That request sought any and all records pertaining to permitted air pollution sources located within 50 km of the boundary of the proposed Project at 500 Coxendale Road in Chester, Virginia. The request further sought (1) stack parameters and hourly emissions for sources of $PM_{2.5}$ to allow use of the AERMOD model to determine compliance with 24-hour and annual average NAAQS for $PM_{2.5}$; (2) allowable $PM_{2.5}$ emissions; and (3) Separate 24-hour and annual average allowable $PM_{2.5}$ emissions rates. DEQ responded to this request on July 15th and provided a list of 8,225 sources in the Commonwealth; this list was then reduced to capture sources within 50 km of the Project, leaving 1,945 identified sources. Beyond limiting the source count for relative distance, the list was not altered. Utilizing these data, Wingra Engineering conducted an independent analysis of potential air quality impacts associated with the Project, expanding Dominion's 10km grid to the 50km

It is not clear how many nearby sources were included in the Article 6 modeling—the report simply states that "DEQ provided the inventory of nearby sources to include in the NAAQS analyses" and that "[t]he facilities included in the cumulative modeling are provided in the electronic modeling files."[93] However, the record is similarly devoid of any maps of monitor locations or the locations and magnitude of emitting sources within 20 km of the Project, thus the "nearby source" selections in the Art. 6 Modeling Report are similarly unsupported and likely should have been expanded.

3. Ambient Monitoring Data is Not Adequately Representative of Emissions in the Area Surrounding the Site.

The 2024 EPA Modeling Guidance is instructive as it specifies that in circumstances where there are not existing monitors in the vicinity of the project site, an accepted approach would be to use "any pre-construction monitoring data that may be available for the source(s) under consideration [. . .] if the data is still representative of the project area."[94] Representativeness here is a key concern. In this regard, monitor selection concerns were raised by Concerned Community Groups well before the Draft Permit was issued, well before Dominion submitted its air monitoring protocol to DEQ, and well within time for DEQ to instruct Dominion to establish a pre-construction monitoring network to collect data on ambient air quality at the Site and in surrounding area. These concerns were raised in a Letter to DEQ on September 25, 2024 which included the Hopkins Report[95] In this report, after assessing the air monitoring capacity around the Site, Dr. Hopkins recommended, among other actions, that "[t]o accurately measure the current ambient pollutant concentrations and monitor concentrations in the future if the Project is constructed, Dominion, at a minimum, must install or identify an air quality monitor or monitors located in the communities near the proposed facility."[96] DEQ and Dominion did not identify any monitors in the communities near the Site, and DEQ did not instruct Dominion to conduct pre-construction monitoring at the Site or in the surrounding area. Instead, DEQ provided Dominion

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allowable range for AERMOD. Separate modeling runs were then conducted for the 24-hour and annual average $PM_{2.5}$ concentrations using the same meteorological data that Dominion used in its analysis. The Wingra Engineering analysis also used the same version of the AERMOD model that Dominion identified in its air quality analyses.

[93] Art. 6 Modeling Report at 3-4.

[94] 2024 EPA Modeling Guidance at 22.

[95] Letter from Rachel James, Staff Attorney at SELC, to Jerome Brooks, Piedmont Regional Director at DEQ (September 25, 2024) (Attached).

[96] Hopkins Report at 2.

with background concentration values informed by existing monitors located well beyond the area surrounding the Site.

For example, for $PM_{2.5}$, DEQ provided a background concentration value of 5.8 $\mu g/m^3$, a value DEQ said it calculated based on data collected from the Shirley Plantation monitor, located roughly seven miles away from the Site. DEQ identified this value by first manually adjusting the monitored data to exclude certain high-concentration values[97] and then averaging the data to yield the background concentration value provided to Dominion. In doing so, DEQ indicated it was following EPA's Guideline on Air Quality Models (40 C.F.R. Part 51, Appendix W). That Guideline does indeed mention such an approach in the section entitled "Recommendations for Isolated Single Sources,"[98] noting that there may be circumstances where modifications to the ambient data record are merited, including "when a monitor is being impacted by activities that are not typical or are not expected to occur again in the future (e.g., construction, roadway repairs, forest fires, or unusual agricultural activities)."[99] However, as initially noted, neither Dominion nor DEQ have taken the critical first step of defining the scope and identifying what source area designation (isolated or multi-source) was used in the modeling exercise. The isolated source area seems to have informed the action here, but ass mentioned earlier, the multi-source area approach seems to be the more appropriate designation. Even if DEQ was assuming (without saying so) that the Site is in an isolated source area, excluding values in the monitoring data based on wildfire smoke impacts is still not reasonable because such events are expected to occur again and, in fact, to increase in frequency and severity as a result of climate change.[100] The purpose of the NAAQS evaluation in PSD permitting is to ensure the permit does not authorize emissions that would result in ambient concentrations that are presumptively unhealthy, regardless of what else is contributing

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[97] *See* Email from Robert Lute, Air Quality Modeler at DEQ to Rachel James, Staff Attorney at SELC (Apr. 9, 2025, 3:22 PM EST) ("DEQ believes that it is appropriate to exclude data that is impacted from smoke events, such as wildfires, from the data set when determining background concentrations for modeling purposes. Consistent with EPA's Guideline on Air Quality Models (40 C.F.R. § Part 51, Appendix W), the PM2.5 background concentrations were recalculated with the removal of smoke impacted data.") (Attached).

[98] 40 C.F.R. § Part 51, App. W 8.3.2.

[99] 40 C.F.R. § Part 51, App. W 8.3.2(c)(ii).

[100] EPA, *Climate Changes Indicators: Wildfires* (last updated Aug. 27, 2025), https://perma.cc/9RY5-LYNM ("The wildfire season has lengthened in many areas due to factors including warmer springs, longer summer dry seasons, and drier soils and vegetation. Similarly, climate change threatens to increase the frequency, extent, and severity of fires through increased temperatures and drought. Earlier spring melting and reduced snowpack result in decreased water availability during hot summer conditions, which in turn contributes to an increased wildfire risk, allowing fires to start more easily and burn hotter.") (Attached).

to those unhealthy concentrations. Given this, DEQ should be erring on the side of including smoke impacts to better reflect the actual air quality in the area being considered for the Project.

Additionally, as discussed in the Klafka Report, the monitoring site used to establish background concentration for $PM_{2.5}$ modeling (i.e., the Shirley Plantation site) was not justified by DEQ as being representative of background concentration for the Site.[101] Dominion claimed in its PSD Modeling Report that the Shirley Plantation monitor was "conservatively representative" of the Site[102] and that its location downwind from Hopewell allows it to capture the heavy industrial impact in that area. However, as the Klafka Report states, the Shirley monitoring site had the lowest $PM_{2.5}$ background concentration of any of all of the $PM_{2.5}$ monitors in Virginia.[103] Importantly, the Windrose for the Shirley Plantation monitor indicates that wind from Hopewell only blows in the direction of the monitor 19% of the year, leaving more than 80% of annual emissions unrepresented.[104] The Shirley Plantation site's role as a proxy for air quality conditions allows that misrepresentative data to be extrapolated throughout the model, vastly underestimating the impacts from this project. Importantly, the Shirley Plantation monitor also serves as the background monitor for SO_2 and NO_x emissions. In order to ensure that $PM_{2.5}$, SO_2, and NO_x emissions from the Project are accurately evaluated, DEQ must require the selection of a monitor that is both conservative and representative.

Summarily, DEQ has not sufficiently supported its background concentration values and they are likely not representative of the air quality in the area surrounding the Project. Since DEQ did not require Dominion to conduct pre-construction monitoring in the area surrounding the Site, it should not have adjusted the air monitoring data it utilized to identify the background concentration in Dominion's air quality modeling. Doing so rendered the results likely unrepresentative of the actual background concentration in the area.

DEQ and Dominion's failure to identify the scope of the modeling analysis, by not designating what type of area the Project is proposed to be sited in (i.e., isolated source or multi-source), riddles the process with ambiguities. Regardless of whether either entity properly identified the scope, the record remains devoid of the critical information necessary to support the

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[101] Klafka Report at 16-17.

[102] *See* PSD Modeling Report, App. C at PDF page 67.

[103] Klafka Report at 16-17.

[104] Klafka Report at 17.

Draft Permit DEQ has issued, because the background concentration values utilized are not inclusive of relevant and available emissions, air quality, and environmental data, rendering the resulting values unrepresentative of the air quality in the area surrounding the Site.

c. If the Public is Not Sufficiently Barred from Accessing Any Part of the Chesterfield Power Station Property, Then It Must Be Considered To Be "Ambient Air" and Included in the Modeling Analyses.

In addition to the deficiencies described above, Dominion's modeling analyses improperly rely on an ambient air boundary that does not satisfy federal standards. The air modeling analyses are required to ensure that the Project will not cause or contribute to a violation of any ambient air quality standard. "Ambient air" is defined as "that portion of the atmosphere, external to buildings, to which the general public has access."[105] Accordingly, Dominion's modeling analyses must include receptors in all publicly accessible areas that may be impacted by the Project's emissions.

In 2019, the EPA revised its policy regarding excluding certain areas from the scope of what is considered "ambient air" for purposes of demonstrating whether a project will cause or contribute to a NAAQS exceedance.[106] This policy reinforces several elements of the EPA's long-standing interpretation of the definition of "ambient air," including that the "general public" must not have either "legal access" or "physical or practical access" to an area in order for it to be properly excluded.[107] The EPA considers the "general public" to be "any person(s) other than those who are permitted access" to the polluting source's property "as employees or business invitees."[108] The EPA's interpretation of the term "general public" specifically includes "trespassers."[109]

Based on this revised policy, to exclude an area from the "ambient air" analysis, Dominion first must demonstrate that the general public does not have "legal access" to any of the excluded areas.[110] Dominion next must demonstrate that the general public does not have "physical or practical access" to any of these areas. Until the EPA revised its policy in 2019, this second element required "a fence or other physical barriers" to be in place around the entire boundary.[111] In 2019,

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[105] 40 C.F.R. § 50.1(e).

[106] EPA, *Revised Policy on Exclusions from "Ambient Air"* (Dec. 2, 2019), https://perma.cc/VG8Z-HHMA (hereinafter "2019 EPA Ambient Air Guidance") (Attached).

[107] *Id.* at 5–6.

[108] *Id.* at 6.

[109] *Id.*

[110] *Id*.

[111] *Id.*

the EPA acknowledged that public access could be effectively precluded by alternative means, "of which more than one may be used in combination," such as "routine security patrols, remote surveillance cameras, [and] drones."[112] But the "effectiveness" of alternative measures to preclude public access "can only be made by the EPA or another air agency on a case-by-case basis after consideration of the relevant administrative record."[113]

The ambient air boundary described in Dominion's Application does not satisfy the criterion of preventing members of the general public from having any "physical or practical access" to areas within the boundary. In its modeling protocol, Dominion asserts that the "entire perimeter of the project site *will be* fenced" and presumes that "the nearest locations of general public access will be at the project fence line."[114] Similarly, the PSD Modeling Report states: "The property boundary *will be* fenced, and no receptors were placed within this boundary."[115] However, DEQ's Draft Permit does not impose any enforceable requirements to ensure Dominion implements its stated plan to install a fence along the entire property boundary.

A review of aerial imagery of CPS indicates there is some fencing around portions of the property but also shows areas where the public could have practical access, including on the northeastern edge of the property along Coxendale Road near the Dutch Gap Boat Ramp and on the northwestern edge of the property along Proctors Creek. In fact, according to the County's parcel map, the Dutch Gap Boat Ramp and its associated parking lot are located *within* Dominion's property boundary. This area is bordered to the west by CPS, to the north by the James River, and to the south and east by forested land. Similarly, the northwestern portion of the property is bordered by Proctors Creek, the James River, and more forested land.

The EPA's policy requires the permitting agency to determine that measures are "adequate to assure that the general public will not have access under reasonably anticipated circumstances that could occur in the area."[116] It is reasonable to expect that members of the general public may use the Dutch Gap Boat Ramp, the James River, Proctors Creek, and/or any of the adjacent forestland for recreational purposes. Therefore, in the absence of a security fence, it is reasonable

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[112] *Id.* at 4, 7.

[113] *Id.* at 2.

[114] PSD Modeling Protocol at 3-10.

[115] PSD Modeling Report at 3-3.

[116] 2019 EPA Ambient Air Guidance at 8.

to expect that members of the public may gain access—inadvertently or otherwise—to areas where modeling receptors were not placed.

In the absence of an existing fence around the entire property boundary, an enforceable requirement to complete its installation prior to construction, or enforceable requirements to implement an adequate combination of alternative means to preclude public access, Dominion cannot exclude receptors within the property boundary from its modeling analysis. Accordingly, DEQ must require Dominion to perform a new air dispersion modeling analysis that includes receptors in every area to which the general public (including trespassers) could have practical access.

d. Alternative Modeling Indicates the Project Would Likely Cause or Contribute to a NAAQS Violation.

In February 2024, the EPA finalized a more stringent standard for the primary annual $PM_{2.5}$ concentration level, revising its prior standard downward from 12 $\mu g/m^3$ to 9 $\mu g/m^3$.[117] The revised standard became effective on May 6, 2024. This lower concentration is the standard that Dominion must show will not be exceeded as a result of the Project's emissions.[118]

Mr. Klafka conducted revised cumulative $PM_{2.5}$ modeling for the Project using a denser receptor grid than Dominion's $PM_{2.5}$ modeling analysis.[119] Mr. Klafka's revised $PM_{2.5}$ modeling[120]

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[117] *See* EPA, *EPA finalizes stronger standards for harmful soot pollution, significantly increasing health and clean air protections for families, workers, and communities* (Feb. 7, 2024), https://perma.cc/ED74-CCRU (Attached).

[118] *See* Reconsideration of the National Ambient Air Quality Standards for Particulate Matter, 89 Fed. Reg. 16,202, 16,370 (Mar. 6, 2024) ("Upon the effective date of the revised primary annual $PM_{2.5}$ NAAQS, the demonstration required under [Clean Air Act] Section 165(a)(3), and the associated regulations, must include the revised primary annual $PM_{2.5}$ NAAQS. In past NAAQS revision rules, . . . EPA included [a] limited provision that exempted certain sources with pending PSD permit applications (those that had reached a particular stage in the permitting process at the time the revised NAAQS was promulgated or became effective) from the requirement to demonstrate that the proposed emissions increases would not cause or contribute to a violation of the revised NAAQS. . . . EPA is not establishing any PSD permitting exemption provision in this action.")

[119] Specifically, Mr. Klafka used a denser receptor grid that was spaced as follows: a 100-meter Cartesian receptor grid centered on Chesterfield Station and extending out 5 km; a 500-meter Cartesian receptor grid centered on Chesterfield Station and extending out to 10 km; and a 1,000 Cartesian receptor grid centered on Chesterfield Station and extending out to 50 km. *See* Klafka Report at 9.

[120] Mr. Klafka also included receptors on the 441-acre Chesterfield property, given that the property would be considered to be "ambient air" if there is no requirement to fence or otherwise effectively preclude public access. Mr. Klafka also placed denser receptors, spaced at 100-meter intervals in a 10 by 10 Cartesian grid pattern, around three off-site sources that were labeled in the Dominion modeling as VA101, VA901, and VA1901. Elevations for all of the new receptors were obtained using the latest version of the AERMAP program, v. 24142. Mr. Klafka's revised $PM_{2.5}$ modeling showed that "the maximum concentration of the updated analysis was greater than the CERC analysis and resulted in a predicted exceedance of the 2024 $PM_{2.5}$ annual average NAAQS of 9 ug/m3." *See* Klafka Report at 9, 12.

yielded results that were 14% higher than Dominion's $PM_{2.5}$ modeling results. A denser receptor grid coupled with an expanded area of consideration is appropriate here to ensure that the Project does not cause or contribute to any NAAQS exceedances.

The results of this revised modeling are shown in the table below, which is a reprint of Table 1 from the Klafka Report.

Klafka Report, Table 1 – Comparison of Annual Modeling Results.[121]

Source of Analysis	**Maximum ($\mu g/m^3$)**	**Secondary ($\mu g/m^3$)**	**Background ($\mu g/m^3$)**	**Total Annual $PM_{2.5}$ ($\mu g/m^3$)**	**$PM_{2.5}$ Annual NAAQS ($\mu g/m^3$)**	**Complies with $PM_{2.5}$ NAAQS?**
Dominion	2.35	0.001	5.8	8.15	9	Yes
Wingra Engineering	3.51	0.001	5.8	9.31	9	No

Mr. Klafka's revised modeling shows that the Project, if permitted as requested, would cause or contribute to an exceedance of the annual $PM_{2.5}$ NAAQS. When a source causes or contributes to air pollution in excess of the NAAQS, as Mr. Klafka's analysis indicates the Project would, state law provides that the source *will be considered* to have caused or contributed to that concentration when its modeled impact exceeds the associated significance level.[122] Dominion's PSD Air Quality Impact Analysis claims that the Project's maximum modeled impact for $PM_{2.5}$ is 0.21 mg/m^3, which exceeds the significance level that EPA adopted in 2024 after revising the associated NAAQS.[123] Moreover, Dominion's estimate is not inclusive of the alternative scenarios DEQ included in the Draft Permit and thus almost certainly underestimates the Project's ambient impacts throughout the area, including at the location where Mr. Klafka's analysis shows a modeled NAAQS exceedance. As a result, that value cannot be relied upon to determine whether the Project would cause or contribute to a NAAQS exceedance.

For all of these reasons, DEQ cannot issue the air permit for the Project as drafted.

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[121] Klafka Report at 12–13, tbl. 1.

[122] *See* 9 VAC 5-80-1715(B).

[123] Although the state rule provides that the significant impact level for annual PM2.5 is 0.3 mg/m^3, *see id.*, EPA revised this value downward to 0.13 $\mu g/m^3$ after revising the primary annual NAAQS for $PM_{2.5}$. *See* Memorandum from Richard Wayland, U.S. Envtl. Protection Agency, Air Quality Assessment Div. Dir., *Supplement to the Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program*, Attachment at 6 (tbl.1), 7 (Apr. 30, 2024), https://perma.cc/6NCA-X87M (Attached).

e. Emissions From the Project Are Not Properly Accounted For in the Calculation of the Combustion Turbines' PTE.

To be federally enforceable, a PSD construction permit must be informed by the project's maximum potential emissions. The maximum potential emissions must be inclusive of all operating scenarios authorized by the permit, including alternative operating scenarios. This is required to ensure that the emissions resultant of the actual worst-case scenario for the combustion turbines' operation are considered in evaluating whether to issue a construction permit for the Project.

The first step of the PSD applicability analysis is concerned with whether a significant emissions increase will occur given the estimated emissions of the units included in the proposed modification.[124] For "new" emissions units that are proposed, those units' "potential to emit" ("PTE") must be calculated to inform this determination.[125] Virginia's PSD rules define PTE as follows:

> "Potential to emit" means the *maximum capacity* of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design *if the limitation or the effect it would have on emissions is federally and state enforceable*.[126]

Based on this definition, each unit's maximum capacity to emit cannot be reduced based on the anticipated use of pollution controls or operational limits unless a federally enforceable permit imposes practically enforceable requirements to install and operate those controls and to abide by those operational limits.[127] The Draft Permit, in a number of instances, lacks these limits because the operating scenarios were only introduced in the Draft Permit and not in the Application upon which the Draft Permit was meant to be based. Therefore, the PTE utilized in the Application is inaccurate, because the PTE, as informed by the scenarios authorized in the Draft Permit, has not been properly accounted for.

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[124] *See* 9 VAC 5-80-1605(G)(2).

[125] *See id.* § 5-80-1605(G)(4).

[126] *Id.* § 5-80-1615(C) (defining "potential to emit") (emphasis added).

[127] *See id.* § 5-80-1615(C) (defining "state enforceable" to mean "all limitations and conditions that are enforceable as a practical matter").

i. DEQ Cannot Rely on the Annual Process Emission Limits of Condition 39 of the Draft Permit To Determine PSD Applicability to the Project.

Calculation of the turbines' potential emissions must be based on "the maximum capacity" of the turbines to emit each pollutant.[128] Limitations on the turbines' maximum emissions capacity can only be taken into account in this calculation "if the limitation or the effect it would have on emissions is federally and state enforceable."[129] To be federally enforceable, the limitation must be enforceable by EPA and through citizen suits under the Clean Air Act.[130] To be state enforceable, the limitation must be "enforceable as a practical matter"[131]—meaning it must be a "legal obligation" that is "permanent," "technically accurate and quantifiable," based on "averaging times or other provisions that allow at least monthly . . . checks on compliance," and is subject to "a level of recordkeeping, reporting and monitoring sufficient to demonstrate compliance."[132]

To the extent that DEQ is relying on the annual "process emission limits" set forth in Condition 39 of the Draft Permit to limit emissions during the alternative operating scenarios authorized in Conditions 9-12, this reliance is misplaced because the enforceability of those process emission limits is questionable for several reasons.

First, Condition 39 states that combined emissions from the operation of the four simple-cycle turbine generators shall not exceed the following emission limits:[133]

PM	78.9 tpy
PM_{10}	150.2 tpy
$PM_{2.5}$	150.2 tpy
Carbon Monoxide (CO)	775.0 tpy
NO_2	292.0 tpy
Sulfur Dioxide (SO_2)	27.7 tpy
Volatile Organic Compounds (VOCs)	134.5 tpy
H_2SO_4	18.7 tpy
Carbon Dioxide Equivalent (CO_2e)	2,194,773 tpy

However, Condition 39 does not specifically define how compliance with these emission limits is to be determined. Instead, Condition 39 states: "Compliance with these emission limits *may be*

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[128] 9 VAC 5-80-1615(C) (defining "potential to emit").

[129] *Id.*

[130] *Id.* (defining "federally enforceable").

[131] *Id.* (defining "state enforceable").

[132] *Id.* (defining "enforceable as a practical matter").

[133] Draft Permit at 16-17.

determined as stated in Conditions 1, 3, 4, 6, 7, 24, 25, and 27."[134] First, use of the word "may" rather than "shall" in this sentence indicates that there may be other ways of showing compliance with these limits other than the methods in the permit conditions cited; it also indicates that if any of these methods show noncompliance, they may not be considered determinative or may even be disregarded altogether. More importantly, the cited permit conditions do not include emission limits or monitoring requirements that apply to all levels of operation, including the alternative operating scenarios authorized in Draft Permit Conditions 9 through 12. This is shown in the table below.

Table 2. Draft Permit Conditions Listed in Condition 39 Describing How Compliance with Annual Process Emission Limits "May" Be Determined, Along with Explanation of Why Compliance with Annual Process Emission Limits Is Not Assured

Permit Condition	Description	Issues with Ensuring Compliance with Annual Process Emission Limits
1	NO_x limits (ppmvd), 4-hour average, to be measured with CEMs	1. Applies to "normal operations," which do not include Alternative Operating Scenarios 2. Does not explain how emissions in ppmvd are to be converted to tons per year
3	CO limits (ppmvd), 4-hour average, to be measured with CEMs	1. Condition explicitly states oxidation catalyst does not need to be in operation for Alternative Operating Scenarios in Conditions 8 through 12. 2. Does not explain how emissions in ppmvd are to be converted to tons per year
4	VOC limits (ppmvd), 3-hour average	1. Condition explicitly states oxidation catalyst does not need to be in operation for Alternative Operating Scenarios in Conditions 8 through 12. 2. Does not explain how emissions in ppmvd are to be converted to tons per year 3. Does not specify how compliance with ppmvd limit to be determined
6	States $PM/PM_{10}/PM_{2.5}$, SO_2, and H_2SO_4 to be controlled by sulfur content limits in natural gas (12-month rolling average) and of #2 fuel oil. Compliance based on Conditions 27 and 25, respectively.	Condition does not explain how fuel sulfur contents are to be used to calculate $PM/PM_{10}/PM_{2.5}$, SO_2, and H_2SO_4 emissions in tons per year
7	Describes work practices to control greenhouse gas emissions: use of low carbon fuels (natural gas with or without hydrogen and #2 fuel oil) and efficient turbine operation.	1. Condition does not establish a CO_2e emissions limit 2. Condition does not explain how CO_2e emissions are to be calculated

[134] *Id*. at 17.

24	Establishes total annual heat input limits for each turbine and total annual heat input limits for firing #2 fuel oil for each turbine	1. Applies to "normal operations," which do not include Alternative Operating Scenarios 8 through 12 2. Does not explain how this fuel throughput data will be used to calculate emissions in tons per year
25	Limits the total number of turbine startups and shutdowns per all four turbines per year, requiring recordkeeping of the total number of startups and shutdowns per 12-month period	Does not explain how the number of startups and shutdowns that actually occur are to be converted to tons per year of emissions.
27	Provisions for monitoring the sulfur content of natural gas to ensure sulfur content is less than 1.0 gr total sulfur per 100 scf or 0.4 gr per 100 scf, 12-month rolling average based on purchase contracts, tariff sheets, or actual measurements.	Although this provision states the sulfur content testing is to demonstrate that PM, PM_{10}, $PM_{2.5}$, SO_2, and H_2SO_4 are less than emission limits in Conditions 37.a. and 39, this provision fails to explain how sulfur content of fuel is to be converted to tons per year of PM, PM_{10}, $PM_{2.5}$, SO_2, and H_2SO_4.

As the above table demonstrates, the Draft Permit fails to include adequate terms and conditions to ensure that the process emission limits of Condition 39 of the Draft Permit are enforceable as a practical matter. As a result, these limits cannot be relied upon in calculating the turbines' potential emissions. Moreover, Condition 50 of the Draft Permit clearly states that excess emissions of NOx only include emissions that exceed the short-term emission limits set forth in Condition 37.a., limits which explicitly do not apply to certain alterative operating scenarios. Specifically, Condition 50.a. of the Draft Permit states "An excess emission is any unit normal operating period (does not apply to startup, shutdown, malfunction, or LLE operating scenarios) in which the 4-hour rolling average NOx emission rate exceeds the applicable emission limit in Condition 37.a."[135]

Because the draft permit specifically excludes violations of the annual process emission limits from being considered "excess emissions" under Condition 50.a., the annual process emission limits for NOx emissions are not legally enforceable.

In addition, Condition 37.a. of the Draft Permit reiterates the short-term NO_x emission limits in units of ppmvd (4-hour average) from Condition 1 of the Draft Permit (among other limits). Yet, Condition 37.a. specifically states that its limits apply to "normal operation" and that

[135] Draft Permit at 20.

normal operation does not include "LLE mode as defined in Condition 9, and any operating scenarios defined in Conditions 10-12, or maintenance."[136]

In sum, the Draft Permit specifically excludes emissions during the alternative operating scenarios in Conditions 9-12 from having to be counted in evaluating compliance with short term limits, and the annual process emission limits of Condition 39 are not practically or legally enforceable under the terms of the Draft Permit. As a result, the annual process emission limits of Condition 39 cannot be relied on for calculating the turbines' potential to emit and thus cannot be relied on by DEQ in determining PSD applicability from the Project.

ii. Given the Lack of Restrictions on Alternative Operating Scenarios in Conditions 9–12 of the Draft Permit, DEQ Is Not Justified in Claiming that the Project Is Exempt from PSD for NO_x, PM, PM_{10}, or H_2SO_4.

DEQ's analysis of the combustion turbines' potential to emit is flawed due to DEQ's failure to account for emissions that the draft permit would allow to occur during the alternative operating scenarios listed in Conditions 9 through 12. This undermines DEQ's acceptance of Dominion's proposal to avoid PSD review on the basis that that the Project's net emissions increases of NO_x, PM, PM_{10}, and H_2SO_4 are less than the PSD major modification significance levels. It is imperative that DEQ correct this error and account for the increased emissions from the alternative operating scenarios in determining PSD applicability for these pollutants for the Project.

Indeed, DEQ's inclusion of the LLE mode alternative operating scenario in Condition 9 of the Draft Permit, which is not subject to any operational restrictions per year nor subject to any NO_x controls or emission limits, should mean that the Project cannot net out of PSD review for NO_x at all. Dominion's emissions calculations show a net emission decrease for NO_x (assuming the credit for the shutdown of Boilers #5 and 6 are valid and enforceable, which questionable as discussed later) of 93.0 tpy.[137] Given that the major modification significance threshold for NO_x is 40 tpy, an increase of 133 tpy or more in potential emissions would trigger PSD for NO_x, even without adjusting the coal units' baseline (which is necessary, as described in Section III).[138] Using a NOx emission factor for oil firing of 0.1643 lb/MMBtu (equivalent to 42 ppm, which does not likely reflect how high NO_x emissions could be during LLE operation when NO_x controls

[136] *Id.* at 15.

[137] Draft Engineering Analysis at 9, tbl. 2.

[138] *See* 9 VAC 5-80-1615 C (defining "significant').

including water injection are not required to be utilized) and assuming an hourly heat input of 1,460 lb/MMBtu (which is just under the MECL) at 59 degrees Fahrenheit),[139] the LLE alternative operating scenario with oil firing would allow for a net increase in NO_x emissions that exceeds the PSD significance threshold if each turbine were operated in LLE mode for approximately 280 hours per year.[140]

While the LLE alternative operating scenario may be intended to apply only during a PJM Independent System Operator's declared emergency (as well as during annual readiness testing), it is not reasonable for DEQ to presume that such emergency declarations will be made infrequently and only when appropriate.[141] For example, the U.S. Department of Energy has issued ten emergency orders under the Federal Power Act so far in 2025[142] (at least four of which have been challenged on grounds that the purported emergency does not exist[143]), and PJM has expressed "growing resource adequacy concern" regarding increasing grid reliability risks.[144]

Grid reliability concerns expressed by PJM may be why DEQ has decided to preemptively authorize the LLE operating scenario in the Draft Permit to allow the Project turbines to violate emission limits during such emergencies. DEQ cannot authorize an alternative operating scenario with no required pollution controls and no limitations on emissions or hours of operation without

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[139] *See* Application at App. B tbl.B-3, Case 15.

[140] This was calculated as follows: 0.1643 lb NOx/MMBtu x 1,460 MMBtu/hr x 280 hrs/yr x 4 turbines x (1 ton/2,000 lb) = 134.33 tons NOx/yr.

[141] The language of Condition 9 suggests but does not clearly require that operation in LLE Mode will be limited to periods of a PJM Independent System Operator-declared emergency. Rather than expressly limiting such operation to true emergencies that meet specified criteria, the draft condition vaguely states that the "turbines *would* only be called upon to operate in LLE mode" during such an emergency. Draft Permit at 6 (emphasis added). This presumes that PJM grid operators will make emergency declarations only when appropriate, and that Dominion will not otherwise be "called upon" to operate the turbines in LLE mode during a non-emergency.

[142] *See* U.S. Dep't of Energy, *2025 DOE 202(c) Orders* (last visited Oct. 22, 2025), https://perma.cc/GJ2W-Z9P5 (Attached).

[143] *See In Re Federal Power Act Section 202(c) Emergency Order: Midcontinent Independent System Operator (MISO), Order No. 202-25-3,* Motion to Intervene and Request for Rehearing and Stay (June 18, 2025), https://perma.cc/Q6ZL-YWYG (Attached); *In Re Federal Power Act Section 202(c) Emergency Order: PJM Interconnection and Constellation Energy, Order No. 202-25-4*, Motion to Intervene and Request for Rehearing (July 3, 2025), https://perma.cc/VW8Y-VULP (Attached); *In Re Federal Power Act Section 202(c) Emergency Order: Midcontinent Independent System Operator (MISO), Order No. 202-25-7*, Motion to Intervene and Request for Rehearing and Stay (Sept. 8, 2025), https://perma.cc/7KMN-Y9CF (Attached); *In Re Federal Power Act Section 202(c) Emergency Order: PJM Interconnection and Constellation Energy, Order No. 202-25-8*, Motion to Intervene and Request for Rehearing (Sept. 26, 2025), https://perma.cc/SCA2-QHSM (Attached).

[144] *See* POWER Magazine, *DOE's Fifth Emergency Order—for PJM—Caps Summer of Escalating Grid Risk* (Jul. 31, 2025), https://perma.cc/VW3A-CT47 (Attached).

also accounting for how that lack of limitations would increase the turbines' potential emissions, an increase that must be accurately reflected in the PSD applicability and modeling analyses. Because there are no limits on the frequency or length of time a combustion turbine could operate in LLE mode under Permit Condition 9, DEQ cannot justify exempting the Project from PSD for NO_x or for PM, PM_{10}, or H_2SO_4.

Not only did DEQ fail to account for emissions during the LLE alternative operating scenario authorized by Permit Condition 9, but the calculation of the turbines' potential to emit NO_x, PM, PM_{10}, or H_2SO_4 also failed to account for the other alternative operating scenarios allowed in Draft Permit Conditions 10 through 12. Specifically, Dominion's Application clearly shows that the assumed potential to emit for the combustion turbines was based on the maximum hourly emissions of the combustion turbines at "normal operations" based on (for all four turbines combined) 12,960 hours of normal operation per year (with a maximum of 3,000 hours on fuel oil) plus 2,000 startups and shutdowns (with a maximum of 480 startups and shutdowns on fuel oil).[145] These hours of normal operation were calculated based on the 7,927,050 MMBtu/year total heat input per turbine and the 1,839,000 MMBtu/yr oil-fired annual fuel throughput per turbine limits that appear in Condition 24 of the Draft Permit and the maximum hourly heat input capacity of the turbines when operating on natural gas and when operating on fuel oil.[146] The alternative operating scenarios of Conditions 9-12 are not subject to the annual fuel throughput limits, as previously discussed. Thus, DEQ cannot claim the other alternative operating scenarios were accounted for in determining the Project's potential to emit.

Inherent to the determination of a project's potential to emit is that any limitation on potential emissions can only be considered if the limits are practically and legally enforceable.[147] As demonstrated in Table 2 above, the annual process emission limits of Condition 39 are not practically enforceable limits and thus cannot be relied upon to reduce the new turbines' potential to emit. Further, the annual process NO_x emission limits of Condition 39 are not legally enforceable pursuant to Condition 50 of the Draft Permit, which excludes the annual emission limits of Condition 39 in defining excess emissions of NO_x for the purpose of the permit.

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[145] *See* Application, at PDF page 145 ("Proposed Permit Limits for Criteria Pollutants").

[146] *Id.* at PDF page 137.

[147] *See* 9 VAC 5-80-1615(C) (defining "federally enforceable," "state enforceable," and "enforceable as a practical matter").

Thus, the PSD applicability analysis for the Project is flawed because DEQ failed to take into account potential emissions that are expressly allowed by its proposed alternative operating scenarios in Conditions 9 through 12. Given the lack of enforceable restrictions on the alternative operating scenarios, including the LLE operating scenario which has absolutely no time limits, DEQ is not justified in claiming that the Project is not subject to PSD permitting as a major modification with respect to NO_x, PM, PM_{10}, or H_2SO_4.

II. DEQ Has Not Ensured the Fair Treatment and Meaningful Involvement of Environmental Justice and Fenceline Communities as Required By the Virginia Environmental Justice Act, Va. Code § 10.1-1183, And Va. Code § 10.1-307 E.

Under Virginia law, in considering whether to approve a permit for the construction of the Project, DEQ must: (1) identify low-income communities, communities of color, and fenceline communities in the vicinity of the Project; (2) facilitate the input of these communities in its evaluation of the Project, allowing community input to shape its decisions; and (3) determine whether the Project's emissions will have disproportionate negative impacts on any group of people, taking into consideration the community's existing health status. The Code provides three statutory foundations for these requirements—the Virginia Environmental Justice Act ("VEJA"), Code Section 10.1-1183, and Code Section 10.1-1307 E. These statutes align with the purpose of the PSD permitting program itself, which is "to 'protect public health and welfare from any actual or potential adverse effect which in [EPA's] judgment may reasonably be anticipate[d] to occur from air pollution . . . *notwithstanding attainment and maintenance of all [NAAQS]*.'"[148]

First, the VEJA makes it the policy of the Commonwealth to *promote and ensure* "fair treatment and meaningful involvement" when environmental laws, regulations, and policies are in play, with a focus on EJ and fenceline communities.[149] Fair treatment means that "no group of people bears a disproportionate share of any negative environmental consequence resulting from an industrial, governmental, or commercial operation, program, or policy."[150] In addition, the VEJA also demands that community members be meaningfully involved, such that "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";

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[148] *Friends of Buckingham*, 947 F.3d at 73 (emphasis added) (quoting 42 U.S.C. § 7470(1)).

[149] Va. Code §§ 2.2-234 & 235.

[150] Va. Code § 2.2-234.

and that in this process, "decision makers will seek out and consider" the participation of these residents such that their "views and perspectives . . . shape and influence the decision."[151] Finally, these pillars of the VEJA, fair treatment and meaningful involvement, require a keen focus on communities of color, low-income communities, and residents in these communities who face increased health risk due to their proximity to a major source of pollution.[152]

Second, the language of DEQ's enabling statute mirrors the requirements of the VEJA. Under Code Section 10.1-1183 B, DEQ's purposes include "further[ing] environmental justice and enhanc[ing] public participation in the regulatory and permitting processes" and "ensur[ing] the fair treatment and meaningful involvement of all people regardless of race, color, national origin, faith, disability, or income with respect to the administration of environmental laws, regulations, and policies."[153]

And third, Code Section 10.1-1307 E requires that DEQ consider "consider facts and circumstances relevant to the reasonableness of the activity involved . . . including:

1. The character and degree of injury to, or interference with, safety, health, or the reasonable use of property which is caused or threatened to be caused;
2. The social and economic value of the activity involved;
3. The suitability of the activity to the area in which it is located, except that consideration of this factor shall be satisfied if the local governing body of a locality in which a facility or activity is proposed has resolved that the location and operation of the proposed facility or activity is suitable to the area in which it is located; and
4. The scientific and economic practicality of reducing or eliminating the discharge resulting from such activity."

In the *Friends of Buckingham* litigation, DEQ asserted that these factors, in part, "require[ ] the Board to consider the potential for disproportionate impacts to minority and low income communities,"[154] and the Fourth Circuit agreed.[155]

DEQ's draft permit has not met the requirements of these statutes.

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[151] *Id.*

[152] Va. Code §§ 2.2-234 & 235.

[153] Va. Code § 10.1-1183 B 4 & 13.

[154] *Friends of Buckingham*, 947 F.3d at 87 (quoting DEQ brief).

[155] *Id.*

a. DEQ Failed to Adequately Identify Low-Income Communities, Communities of Color, and Fenceline Communities.

The Fourth Circuit, in *Friends of Buckingham*, found that "under Virginia law, the Board is *required* to consider 'character and degree of injury to . . . health,' and 'suitability of the activity to the area.'"[156] Further, the Fourth Circuit emphasized that DEQ and the Board could not meet their statutory duty to consider environmental justice in weighing a proposed permit where they "failed to make any findings regarding the character of the local population."[157] The Fourth Circuit vacated the air permit DEQ issued to the Buckingham Compressor Station due, in part, to DEQ and the Board's "fail[ure] to make any findings regarding the demographics of Union Hill that would have allowed for a meaningful assessment of the likelihood of disproportionate harm."[158] The VEJA embodies this requirement for an assessment of the likelihood of disproportionate harm in its definition of fair treatment, which directs DEQ and all Commonwealth agencies to ensure no group of people bears disproportionate negative impacts as a result of, in this case, the Project's operation.

i. DEQ and Dominion Did Not Correctly Identify EJ Communities.

While the Company's depiction of an EJ analysis lacks key components, like appropriately identifying a study area, Dominion does at least acknowledge that community characteristics should be considered. Even so, the Company has failed to follow its own depiction of an EJ analysis, let alone established technical guidance (i.e., characterizing affected populations) and legal guidance on the matter. DEQ has not corrected this grave error.

The first step Dominion identifies in its depiction of an EJ analysis is to "identify whether an EJ community is present."[159] Here, it has failed to properly identify whether EJ communities are present, and DEQ has not undertaken additional analysis to correct this informational deficit.

Dr. Finn finds in his 2025 report that Dominion incorrectly applied the VEJA's definition of "low-income community," which resulted in Dominion undercounting the number of census block groups ("CBGs") in the Study Area that meet the VEJA definition of an EJ community.[160]

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[156] *Id.* at 87 (emphasis in original) (quoting Va. Code § 10.1-1307(E)). .

[157] *Id.* at 86.

[158] *Id. a*t 87.

[159] Application, App. H, CERC Environmental Justice Analysis, at 3 (hereinafter "EJ Analysis").

[160] *Id.* at 4 (stating that "[b]ased on the criteria described in Section III.A of this Report, 22 of the 24 CBGs intersecting a 3-mile radius meet one or more of the race/ethnicity or low income criteria and are considered EJ communities. Additional study of the Project area also shows a significant buffer of industrial, commercial, and forested area

When Dr. Finn corrects Dominion's error, he finds that all 24 CBGs intersecting with the Study Area are definitionally EJ communities.[161]

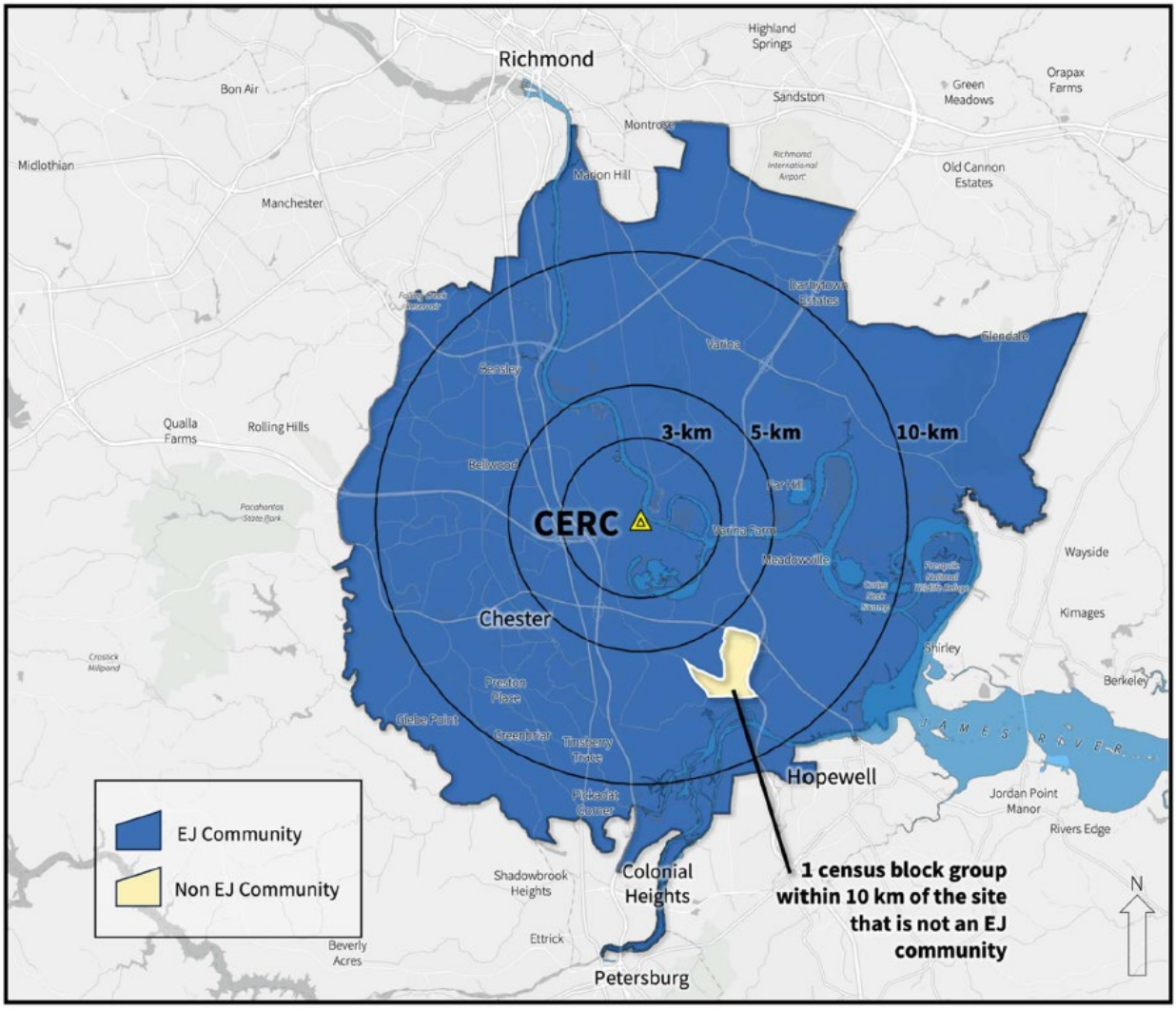

***Figure 4**. All 24 CBGs within a 5-km radius of the project site, and 80 of 81 block groups within a 10-km radius, classify as EJ Communities.*

1. Communities Near the Proposed Site Appear to Have Been Overlooked.

The VEJA specifies that affected and vulnerable residents are meant to be included in the full cycle of DEQ's decision making. While screening data can identify where such individuals reside in relation to the projected reach of harms from pollution, understanding whether screening

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between the CERC and the nearest residences in EJ areas. Review of aerial imagery and land cover maps show there are no substantial residential populations within a mile of the project site." (citations omitted)).

[161] Finn Report at 19–27.

results have adequately captured the actual population requires additional verification or "ground-truthing." [162] While Dominion envisions ground-truthing as a verification of whether a neighborhood "identif[ies] as an EJ community,"[163] the language in the VEJA plainly identifies what constitutes an EJ community for the purposes of ensuring environmental justice is carried out across the Commonwealth. And it is within these communities and fenceline communities that the VEJA directs particular focus.

Here, the Fjord Community Study reported that the majority of participants were completely unaware of Dominion's plans to build the Project, let alone informed about the related processes to which their input must be sought.[164] To the extent DEQ and Dominion's outreach relied on Chesterfield County's residential address listings, residents in mobile home parks may not have received mailers, as Chesterfield County lists the addresses for mobile home parks as business addresses only, not by individual trailer owners.[165] Because these residents' addresses were not reflected as residential, it appears that, despite Dominion's and DEQ's assertions of extensive outreach, residents living in mobile home communities were likely unrecognized in Dominion's EJ Analysis, which may explain why the majority of respondents to the Community Study were unaware of Dominion's Project proposal. The Community Study researchers were able to identify these residents through on-the-ground verification of the screening data.[166]

2. DEQ and Dominion Did Not Identify Fenceline Communities.

The VEJA defines "fenceline community" 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."[167]

In Dominion's EJ Analysis, its estimation of potentially affected residents starts and ends at identifying EJ communities; despite having operated the CPS for nearly 80 years, Dominion fails to identify the areas surrounding the CPS site or any other areas as fenceline communities. In

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[162] *See* Application, App. H1, Environmental Justice Demographics and Outreach Report (Feb. 25, 2025) at 9.

[163] *See id.* (stating that "ground-truthing is necessary to verify any desktop analysis, as neighborhoods may be called out [ ] whose residents do not identify as an EJ community and neighborhoods may be missed in desktop screening that would identify as an EJ community")

[164] Fjord Community Study at 64–67.

[165] Fjord Community Study at 31–32.

[166] Fjord Community Study at 25–29.

[167] Va. Code § 2.2-234.

doing so, Dominion circumvents the plain language of the VEJA, which separately defines EJ communities and fenceline communities. Instead of identifying these communities based on VEJA's distinct definitions, Dominion conflates the two, stating that "despite the difficulty in identifying specific fenceline communities caused by that term's lack of definition, any screening for EJ communities under the VEJA's definitions must logically include any subset of those EJ communities that may also be considered potential fenceline communities."[168] The statute, however, does not equivocate; rather than speaking in terms of "potential fenceline communities," it expressly defines fenceline communities as those where due to proximity to a major pollution source, residents are presented with increased health risks. Simply put, the law recognizes that not all residents in a CBG that is defined as an EJ community live near enough to a major pollution source that they face increased health risks. But, some residents living in EJ communities, and even those not living within said communities,[169] may live close enough to a major source of pollution that they face increased risk of adverse impacts to their health. So, Dominion's approach of merely identifying where an EJ community is without also identifying whether people living within that area are presented with increased health risks—or even identifying whether there are existing or recently retired major pollution sources within the Study Area—fails to operationalize the plain language of the VEJA and completely overlooks the health risks associated with living near major pollution sources, a core concern of the VEJA. Dominion cannot independently decide which aspects of the VEJA's definitions are relevant, and DEQ is responsible for correcting such overreach.

When evaluating whether an area presents health risk to its residents due to its proximity to a major pollution source, Dominion could have taken any number of approaches. For instance, Dr. Finn approached the definition of "fenceline community" using geographic proximity factors to identify to what extent certain communities may be disproportionately exposed to the environmental hazards introduced by polluting industries.[170] In doing so, Dr. Finn critiques Dominion's approach noting that "Dominion's 'subset' framing narrows the concept of fenceline communities to something already captured by mapping EJ communities, and thus implies that

[168] Application, Appendix H, CERC Environmental Justice Analysis, at 4.

[169] *See* Va. Code § 2.2-234 (defining "fenceline community" in part as "all or part of" an EJ community.

[170] Finn Report at 26–27.

there are no additional obligations to identify or analyze proximity-based risks."[171] Here, Dr. Finn finds when undertaking this proximity-focused analysis of the Project, that "the project would create substantial disproportionate environmental burden (as a function of increased exposure) on minority and high poverty communities in closest proximity to the proposed site."[172] Given this and the fact that the Project is proposed to be located on the same site as the CPS station, which currently operates under a Title V major pollution permit, it seems likely that there areas where residents face increased health risk due to their proximity to the Site.

Dr. Tessum offers another approach to identifying fenceline communities that Dominion could have considered: using pollutant concentration data mapped over EJ communities to identify areas where residents are exposed to high concentrations of the pollutant. Here, Dr. Tessum used the pollutant PM2.5, the concentrations of which "are the largest cause of increased health risk from air pollution in the US."[173] When Dr. Tessum identified fenceline communities in the areas surrounding the Site, he found that the risk of mortality from exposure to the Project's PM2.5 emissions is 75% higher for residents in these communities.[174] This finding reflects the fact that PM2.5 causes adverse health impacts at all concentration levels and harkens back to the VEJA's proximity definition, because "the main cause of exposure to high concentrations of PM2.5 is proximity to major sources of pollution emissions."[175]

And Dr. Fjord offers yet another approach to identifying fenceline communities. She identified that Dominion could have looked within its EJ evaluation radius of three miles to identify major sources of pollution, then estimated an impact distance around those sources to denote the proximity within which health risks would be high. In this way, Dr. Fjord notes that Dominion could have taken this modest effort "to understand where health risks might be greater in certain areas of EJ communities," and in doing so established an "informative starting place to begin an evaluation of how [Project] pollution emissions might impact certain groups of people differently."[176]

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[171] Finn Report at 9.

[172] Finn Report at 19.

[173] Tessum Report at 9.

[174] Tessum Report at 15.

[175] Tessum Report at 9.

[176] Fjord Community Study at 10.

In each of these instances, despite the "difficulty" in the definition Dominion points to in seeking to justify its failure to separately evaluate whether fenceline communities exist, three separate individuals managed to estimate potential fenceline communities. Importantly, the onus is on Dominion to present a complete picture of the potential community impacts and on DEQ to ensure that picture is accurate. Dominion should not be excused from undertaking the effort to, at the very least, estimate where fenceline communities might exist. As an obvious starting point, Dominion could begin with the current CPS station, which is currently permitted as a major source of air pollution. Dominion and DEQ did not undertake any of these three options and failed to answer whether certain areas within EJ communities present increased health risk to the residents therein because of their distance from a major pollution source.

Consistent with the VEJA, DEQ should require Dominion to identify fenceline communities in the vicinity of the Project.

ii. DEQ Did Not Adequately Facilitate the Input of Affected and Vulnerable Communities in the Full Cycle of the Decision-Making Process – Particularly with Respect to Spanish-Speaking Communities Living Near the Plant.

The VEJA defines meaningful involvement as "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, allowing the views and perspectives of community residents *to shape and influence* the decision."[177] In DEQ's Draft Engineering Analysis, it concludes that "DEQ and Dominion's outreach, both required by law and voluntary, meet the process-based requirement of meaningful involvement under the EJ Act."[178] As DEQ provides no explanation of what it considers voluntary versus required by law, and we are primarily concerned with DEQ and Dominion meeting their legal requirements, our comments will only address the legal requirements of meaningful involvement as prescribed by the VEJA.

Earlier in this Section, we described how DEQ and Dominion have not adequately identified affected and vulnerable communities, as they have blindly relied on NAAQS-based analysis to evaluate potential impacts from the Project's emissions. Here again, Dominion and DEQ have missed the mark on complying with the plain language of the VEJA. Ensuring

[177] Va. Code § 2.2-234 (emphasis added).

[178] Draft Engineering Analysis at 4.

meaningful participation of those most directly affected by DEQ's permitting decisions requires both that affected and vulnerable residents are identified as such, and that they receive environmental and health impact information in a time and manner that equips them to be informed participants in the full cycle of DEQ's consideration of Dominion's Application. To date, Dominion's outreach efforts have fallen short of ensuring that affected communities are identified and sought out and that relevant information reaches affected communities. Further, DEQ's outreach efforts have been woefully inadequate especially with regard to ensuring Spanish-speaking residents living near the Project site have information and can understand the information provided and that their inputs can similarly be understood by the Department.

1. Dominion's Outreach Efforts Were Inadequate and DEQ was Not Justified in Relying on These Efforts to Fulfill Its Duties Under Virginia Law.

Dominion's outreach efforts are separate and apart from the requirements VEJA and § 10.1-1183 require of DEQ. Ideally, Dominion's outreach would be informed by DEQ as the Department whose purpose includes the furtherance of environmental justice and enhancement of public participation in the regulatory and permitting processes.[179] In the absence of specific direction from DEQ, Dominion should rely on the plain language of the VEJA to promote meaningful involvement.

Both Dominion, as the entity making Project-specific decisions, and DEQ, as the entity making permit approval decisions, have critical roles to play in ensuring meaningful involvement is carried out. Here, DEQ relied on Dominion's outreach efforts and made little to no actions toward meaningful involvement with regard to the decision-making cycle *it governs*, thereby neglecting its duties under VEJA. Dr. Finn used Hunhold and Young's five principles for procedural justice (inclusivity, consultation over time, equal resources and access to information, shared decision-making authority, and authoritative decision-making) to evaluate both DEQ and Dominion's efforts to pursue meaningful involvement and found that "Dominion's efforts seem to have been designed to demonstrate one-directional outreach as opposed to collaborative involvement, reducing VEJA's participatory mandate to a box-checking exercise"[180] and that "DEQ has summarily failed to ensure full participation of affected residents."[181] Dr. Fjord's

[179] Va. Code § 10.1-1183 B.

[180] Finn Report at 15.

[181] Finn Report at 19.

research points to Dominion's neglect in failing "to provide information about potential negative impacts to safety, health, or property uses for residents in Chesterfield and Henrico Counties" and "details regarding the potential disproportionate impact of the Project activities on the individuals living in the nearest vicinity of the Site."[182] In fact, even ERM's Environmental Justice Demographics and Outreach Report commissioned for Dominion indicates that community concerns about air quality centered on health,[183] yet DEQ and Dominion did not extend their analysis beyond the NAAQS-based conclusions offered in the Application.[184] Dominion and DEQ simply failed to solicit information, and were thus subsequently unable to provide adequate information to affected and vulnerable community members about the very thing a Dominion-commissioned report indicates is of concern—community health.

These shortcomings, paired with the lack of any sustained and collaborative coordination initiated by DEQ and Dominion with the affected communities surrounding the Site, render the outreach both entities conducted insufficient to support a finding that either met the meaningful involvement definition of the VEJA. DEQ should establish a stakeholder group, in coordination with Dominion and inclusive of affected and vulnerable community members, and should consult with this group to inform how it corrects its outreach failures. This effort should focus on ensuring that all groups of people are provided with comprehensive information, technical support, and the resources necessary to participate on equal footing.

2. DEQ Provided Spanish-Speaking Residents Less Access to the Permit Process Than It Did for English-Speaking Residents Despite the Substantial EJ Communities That are Linguistically Isolated.

EPA guidance regarding public participation in federally funded programs cautions that "failure to ensure that LEP [limited-English proficient] persons can effectively participate in or benefit from Federally assisted programs and activities may violate the prohibition under Title VI of the Civil Rights Act of 1964 and Title VI regulations against national origin discrimination."[185] Further, the VEJA's definition of meaningful involvement articulates an inherent two-way

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[182] Fjord Community Study at 10.

[183] Application, Appendix H1, Environmental Justice Demographics and Outreach Report (Feb. 25, 2025) at 14.

[184] *See, e.g.*, Application, Appendix H, CERC Environmental Justice Analysis at 4 (hereinafter "EJ Analysis").

[185] *Guidance to Environmental Protection Agency Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons*, 69 Fed. Reg. 35602, 35604 (June 25, 2004), https://perma.cc/LWW3-HG6U (citation omitted).

communication dynamic where affected and vulnerable residents receive information and are provided opportunities to participate in the full cycle of decision-making, and DEQ receives information from these residents to "shape and influence" the Department's decision.[186]

Here, DEQ's facilitation of public participation lacks the fundamental two-way information foundation necessary to ensure meaningful involvement of affected and vulnerable residents. With respect to ensuring that information reached affected residents, Dominion and DEQ have not adequately provided for the Spanish-speaking residents living in the areas surrounding the Site. First, after being made aware of the linguistically isolated communities living near the Project in September 2024,[187] DEQ made no effort to ensure that those communities are informed in a language they understand about the processes related to DEQ's evaluation of the air permit and the potential environmental and health impacts associated with the Project.[188] DEQ did not undertake any Spanish-language communications until July 2025, after it already issued its notice for Public Briefing. And this action was only taken following requests from CASA, NAACP, and Mothers Out Front to provide adequate access to these community members to the full cycle of the decision-making process. In fact, at the only Q&A forum DEQ provided, the Public Briefing, DEQ had no Spanish translators present, so it could neither provide comments in Spanish nor understand questions were they to have been posed in Spanish. Despite advertising in its flyer that the information from the briefing would be available in Spanish on the website that same day, DEQ did not actually provide this information as advertised.[189]

As the permit process progressed, DEQ did provide some information in Spanish, but it neglected to provide in Spanish the very information it directs commenters to use, the Draft

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[186] *See* Va. Code § 2.2-234.

[187] See Dominion's September 2024 application supplement, which included updates on EJ information in the form of the "September 2024 EJ Screening Report" at 8, stating: "Throughout the EJ study area there are significant pockets of linguistic isolation, with 8 of the 24 CBGs meeting VEJA's threshold for a potential EJ community based on linguistic isolation. In all these CBGs, Spanish is the most commonly spoken language after English and the most common language of linguistically isolated households."

[188] *See generally* Finn Report; *see also* Letter from Rachel James and Emma Clancy, SELC to Michael Rolband, Director of DEQ (Aug. 25, 2025) (Attached).

[189] *See* Email from Jerome Brooks, Piedmont Office Director at DEQ, to Rachel James, Staff Attorney at SELC (Aug.20, 2025, 11:29 AM EST) (response from Mr. Brooks following August 8, 2025, email from Rachel James noting that meeting materials in Spanish from the August 7, 2025 Public Briefing were not available on the DEQ website) (Attached); *see also* DEQ, Public Info Meeting: Chesterfield Energy Reliability Center (CERC) Prevention of Significant Deterioration Air Permit (July 25, 2025) ("Meeting materials in English and Spanish will be available at the meeting and online on the day of the event.") (Attached).

Permit[190] (and associated documents).[191] Further, with regard to receiving information, upon providing interpretive services at its public hearing on September 8,[192] it appears DEQ did not make this service available to the court reporter they hired to transcribe the hearing, leaving the agency devoid of any record of the substance of what Spanish-speaking commenters shared.[193] SELC hired a court reporter and interpreter and has attached the transcript, complete with translated comments of those Spanish-speaking commenters, to this submission.[194]

Even after requesting that DEQ pause its process, gather resources so it could reach Spanish-speaking residents, and restart the process once these provisions are in place, DEQ declined to adjust, moving forward with its known inadequate access.

b. Dominion's Disproportionate Impact Analysis is Inadequate.

The Fourth Circuit found that the Air Pollution Control Board, in issuing the Buckingham Compressor Station permit, had "failed to make any findings regarding the demographics of Union Hill that would have allowed for a meaningful assessment of the likelihood of disproportionate harm."[195] Not only are the Fourth Circuit's findings instructive here, but Virginia's EJ Act also puts forth guidance in this regard. The VEJA requires that DEQ ensure fair treatment with a focus on EJ and fenceline communities. This policy requires DEQ to ensure that no group of people bears "disproportionate" negative impacts as a result of the Project's operation.[196] The Cambridge English dictionary defines "disproportionate" as "too large or too small in comparison to something else."[197] The relevant component of that definition here is "in comparison to." The

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[190] *See* DEQ, *Make Public Comments Count,* https://perma.cc/PR8C-8RYH (last visited Oct. 22, 2025) (providing guidance on "drafting public comments" and, in response to the question "What should my comment include?" giving the following direction: "Describe the nature and extent of your interest, or that of people you represent. Explain how and to what extent such interest would be directly or adversely affected by the proposed action you are commenting on. *Where possible, include specific references, to terms and conditions of the permit or action with suggested revisions*." (emphasis added))

[191] *See* DEQ, *Dominion Chesterfield Energy Reliability Center Project*, https://perma.cc/M22W-8P5E (last visited Oct. 22, 2025) (listed documents do not include Spanish versions of CERC Permit Application, CERC Application Appendices, CERC Draft Permit, and CERC Draft Engineering Analysis); *see also* Finn Report at 18.

[192] *See* Transcript at 8:5–9 from DEQ's Sept. 8, 2025 hearing.

[193] *See* Transcript 83:18-10, 120:14-8, 194:7-9, 207:16-8 from DEQ Sept. 8, 2025 hearing where all Spanish speaking commenters have something akin to the following recorded: "(Whereupon, the commenter offered her comments in Spanish which were not translated.)"

[194] Planet Depos, *Transcript of Public Hearing Meeting, Sept. 8, 2025* (Sept. 19, 2025) (Attached).

[195] *Friends of Buckingham*, 947 F.3d at 87, 92.

[196] Va. Code § 2.2-234.

[197] *Disproportionate*, Cambridge Dictionary Online, https://perma.cc/374M-KAYB (last visited Oct. 22, 2025).

pursuit of fair treatment, then, must necessarily include an analysis that incorporates comparisons of groups of people, to understand if any group is experiencing too large a negative impact in comparison to other groups of people. That is to say, fair treatment must go beyond mere identification of different groups of people; it must understand relevant qualities existent in those different groups of people to determine whether the Project's impacts to the environment and residents' health would have a *comparatively* worse effect on some groups of people as opposed to others.

Similarly, Section 10.1-1307(E)'s directive to consider "the character and degree of injury to, or interference with, safety [and] health" requires more than a paper exercise. As the *Friends of Buckingham* court noted in its analysis of that section, where an EJ community is identified, the Board cannot "merely fall[] back on NAAQS and state air quality standards not tailored to this specific EJ community."[198] Upon raising that concern, the court went on to note that the record was "replete with such reliance, up to and including the very last Board meeting."[199]

DEQ would see those errors repeated in this record, as it again relies on Dominion's NAAQS-based EJ Analysis. The Application for this process began in 2023, and since then Dominion has completed multiple revisions and submitted a number of supporting documents, including its EJ Analysis which Dominion says it conducted using DEQ's Draft EJ Guidance.[200]

This approach is insufficient in two key ways. First, the Draft Guidance is a primarily NAAQS-based analysis, which fails to account for the real adverse impacts experienced when pollutant concentrations are well below the standard—a pivotal consideration the Fourth Circuit focused on in *Friends of Buckingham*, as noted above. Second, while DEQ issued its first Draft Guidance for EJ in Permitting in 2023 and has yet to finalize it, the EPA has been issuing Technical Guidance for Assessing Environmental Justice in Regulatory Analysis since at least 2016 and on through 2024.[201] It would have been more reasonable for DEQ and Dominion to lean more heavily on this longstanding guidance throughout the Project development and permitting process. Dominion's reliance solely on DEQ's Draft Guidance is insufficient here. Importantly, the EPA

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[198] *Friends of Buckingham*, 947 F.3d at 90.

[199] *Id.*

[200] *See generally* EJ Analysis.

[201] EPA, *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis* (2d ed. Dec. 2024), https://perma.cc/V7N9-QB2J (hereinafter "2024 EPA EJ Process Guidance") (Attached).

identifies five main steps of an in-depth EJ analysis, which are: "(1) identify the sources being regulated; (2) describe the environmental stressor; (3) characterize affected populations: (4) compare the affected and comparison groups; and (5) conduct sensitivity analysis."[202] In Dominion's EJ Analysis, Dominion does not defer to this EPA guidance, but instead notes what it believes generally constitutes an EJ analysis, stating: "[g]enerally, there are three steps to an EJ analysis: (1) identify whether an EJ community is present; and if so, (2) provide enhanced public participation to ensure EJ communities have a meaningful voice (process-based); and (3) ensure no negative disproportionate impacts on any EJ community, taking into account mitigation and enhancement measures (substantive analysis)."[203] Dominion's approach lacks the necessary elements of describing the environmental stressor and characterizing the affected populations.

Dominion's omissions yield its subsequent disproportionate impact analysis hollow. As presented by Dominion and accepted by DEQ, the EJ Analysis falls far short of EPA's preferred analysis and cannot be relied upon to support its conclusion that no EJ community would experience disproportionate negative impacts, let alone any group of people.

Despite this lengthy application process, Dominion has at no point moved to engage in anything that resembles an analysis of local air quality impacts, and in the absence of DEQ correcting this oversight, the record is devoid of legally required EJ analysis. DEQ should require Dominion to identify the environmental stressors associated with the Project's proposed operation, and to then identify a study area informed by the distance at which these stressors are likely to affect surrounding populations. Thereafter DEQ should require Dominion to conduct a community health impact study that takes into account pre-existing health conditions in the communities surrounding the Site to inform its characterization of the affected population. Based on this underlying data, DEQ should require Dominion to conduct an evaluation of whether certain groups of people are more likely to experience worse outcomes from exposure to identified pollutants based on their demographic makeup and proximity to major sources of pollution.

Unless and until Dominion remedies these deficiencies, the noted omissions warrant DEQ's denial of a permit for this project.

i. NAAQS Are Not a Replacement For a Granular Health Impact Analysis.

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[202] *Id.* at 52.

[203] EJ Analysis at 3.

As a starting point, describing the environmental stressor would help identify the appropriate distance to evaluate potential impacts. Technical guidance promulgated by EPA provides that when mapping the location of polluting sources, "[a]nalysts must . . . decide what distance from the facility *most accurately* reflects the community's exposure to a stressor; *no single distance is appropriate for all analyses."*[204]

Dominion's air quality impact analysis, upon which its EJ Analysis is based, used a 10 km distance to evaluate pollution dispersion impacts to the ambient air within that range, but did not identify whether this distance accurately reflects the community's exposure to the Project's emissions. Instead, Dominion simply identifies that DEQ requested this distance,[205] and DEQ provided no justification for this distance in its Draft Engineering Analysis. Further, although NAAQS are intended to provide "public health protection,"[206] the EPA's Integrated Science Assessment for Particulate Matter concluded that no level of PM2.5 exposure is entirely without health risk.[207] This assessment has been verified by an array of medical research evaluating correlation between air pollution and human health outcomes. The 2015 Global Burden of Disease Study determined that exposure to outdoor $PM_{2.5}$ was the fifth leading risk factor for death worldwide, resulting in approximately 4.2 million premature deaths.[208] $PM_{2.5}$ is also associated with cardiovascular disease (the leading cause of $PM_{2.5}$ mortality),[209] respiratory diseases (finding that $PM_{2.5}$ exposure contributes to the development of irreversible airway disease),[210] and neurological effects (increased risk of first hospital admission for Parkinson's disease, Alzheimer's disease, and related dementias as a result of long-term exposure).[211]

The Fourth Circuit has also recognized the importance of localized health assessments. In *Buckingham* the court held that "blindly relying on ambient air quality standards is not a

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[204] 2024 EPA EJ Process Guidance at 61 (emphasis added).

[205] PSD Modeling Report at 4-2 ("Per DEQ request, the NAAQS analyses were performed using a 10-km receptor grid as described in Section 3.4. The 10-km receptor grid extends well beyond the Project's SIAs.").

[206] EPA, *NAAQS Table,* https://perma.cc/W8YC-2QDT (last visited Oct. 22, 2025) (Attached).

[207] Testimony of Dr. Chris Lim, Virginia State Corporation Commission, Case No. PUR-2025-00037, Dominion Energy's Application for Approval of a Certificate of Public Convenience and Necessity at PDF page 5 (July 25, 2025) (hereinafter "Lim Report") (Attached).

[208] *Id.*

[209] *Id.* at PDF page 6 (citing Landrigan et. al. 2018, Kaufman et. al. 2016, Hayes et. al. 2020).

[210] *Id.* (citing Lan et al. 2024).

[211] *Id.* at PDF page 6–7 (citing Shi et al. 2020, Huang et al. 2025).

sufficiently searching analysis of air quality standards for an EJ community."[212] Otherwise, the court noted, "§10.1-1307(E) is rendered meaningless."[213] DEQ should require Dominion to conduct an EJ analysis that is not reliant on NAAQS.

ii. DEQ and Dominion's Conclusions About Disproportionate Adverse Health Impacts Were Reached Without Considering Community Health.

As stated above, the VEJA defines fair treatment as "the equitable consideration of all people whereby no group of people bears a disproportionate share of any negative environmental consequence."[214] EPA guidance, as noted above, also supports a characterizing the affected community as a preliminary step in an in-depth EJ analysis— the type of analysis that should be conducted here.

Had Dominion and DEQ conducted any community-based research, they might have learned about the existing health conditions of concern in the communities surrounding the Project, which would be important to consider when evaluating the potential impact of the Project's emissions. DEQ need not proceed without this information, however, because included in Dr. Fjord's Community Study is an introduction to community health concerns as informed by publicly available data and actual community member input.[215] Dr. Fjord Community Study shows that the majority of study participants have concerns about how the Project would affect their health.[216] In fact, this sentiment is echoed in the ERM Report commissioned for Dominion, which states: "Community members expressed concerns about NOx and SOx emissions and health concerns of adjacent communities[.]"[217] The Community Study further captured health-based characteristics that community members self-reported, indicating that residents in the area are currently dealing with health conditions that increased air pollution would tend to exacerbate.[218] In fact, in 2023, the Chesterfield County and Colonial Heights Health Assessment reported areas within three miles of the Project site as having high social vulnerability index values, meaning

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[212] *Id.*

[213] *Id.*

[214] Va. Code § 2.2-234.

[215] *See generally* Fjord Community Study.

[216] Fjord Community Study at 2, 82–86.

[217] Application, Appendix H1, Environmental Justice Demographics and Outreach Report (Feb. 25, 2025) at 14.

[218] Fjord Community Study at 59–60 (noting incidents of asthma, heart disease and lung issues).

residents in the area are at higher risk of poor health outcomes.[219] Dominion's Application included no reference to the Chesterfield Health Assessment, nor to any other available community health resource depicting health conditions present in the communities surrounding the Project site.

The omission of this information mischaracterizes the communities DEQ and Dominion are meant to most focus on and results in a misinformed EJ analysis. A more appropriate and legally compliant practice for identifying each of the groups outlined in the VEJA involves a more granular assessment. Accordingly, in order to comply with the VEJA, Dominion must be required to complete a localized public health study as a component of its work to characterize the communities affected by the Project.

c. There are Disproportionate Adverse Impacts at Emission Levels Identified in Dominion's Application.

The VEJA is clear: DEQ (as an entity of the Commonwealth) is instructed to promote *and ensure* that fair treatment and meaningful involvement of every person is carried out throughout the Commonwealth.[220] Permitting a new polluting project that emits a significant amount of a deadly pollutant like $PM_{2.5}$ would certainly not ensure that disproportionate adverse impacts are not visited upon any group of people.

Dominion's Application and DEQ's Draft Engineering Analysis do not include analysis of potential air quality impacts, as informed by the existing air quality conditions at the Site and in the surrounding communities *and* by health and demographic information about residents in the area. For instance, Dominion's EJ Screening Report and EJ Analysis use one-mile and three-mile distances but do not justify why these most accurately reflect the boundary within which a community's potential exposure to increased air pollution from the Project's construction and operation ends. In other words, any adverse impacts from the Project's emissions in communities living beyond three miles are not captured in Dominion's EJ screening. Likewise, the air quality impact modeling that Dominion relies on to support its EJ findings ends at 10 km, so communities outside that range are not accounted for in Dominion's EJ Analysis. These distances are overly restrictive and leave out a large portion of potentially affected areas and the residents living within

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[219] *See* Va. Dep't of Health, *Chesterfield & City of Colonial Heights Community Health Assessment* 4 (2023), https://perma.cc/3B53-ENS2. The social vulnerability index uses 16 different variables (e.g., language spoken at home, poverty, and household composition) to identify communities that are at higher risk of poor health outcomes. *Id.*

[220] Va. Code §§ 2.2-234 & 235.

them, essentially eliminating any analysis of whether affected and vulnerable people living therein are likely to experience disproportionate adverse impacts from the Project's operation.

Dr. Tessum, who specializes in modeling air pollution dispersion and evaluating the associated health impacts, found that the modeled net increases in $PM_{2.5}$ emissions alone have the potential to impact people living 105 km (65.2 miles) away from the Site.[221] Dominion's PSD Modeling Report indicated that it used a 10 km (6.2 miles) distance ("receptor grid") to model $PM_{2.5}$ and CO concentrations, at the behest of DEQ.[222] All of these distances—one mile, three miles, and 6.2 miles—do not adequately capture the distance at which impacts from the Project's operation could be experienced. Unlike the 105 km that Dr. Tessum identifies as the area within which 90% of the deaths attributable the Project would occur, the distances Dominion used and DEQ directed are not informed by an analysis of where people live, who lives there, and how they might be impacted by projected Project emissions.

To support his findings, Dr. Tessum states that "[b]ecause $PM_{2.5}$ causes adverse health impacts at all known concentration levels—not only at concentrations above the NAAQS—and because emissions of $PM_{2.5}$ and its precursors can cause health impacts in locations far from the emissions source—not just within a half-km radius—any scientifically sound analysis of potentially disproportionate health impacts from a power plant in Virginia would need to consider health impacts at concentrations below the NAAQS and in locations throughout the Commonwealth."[223]

When taking these considerations into account, the Project's $PM_{2.5}$ emissions alone would cause 80 deaths in the Commonwealth.[224] This stark and undoubtedly adverse impact of the Project would fall disproportionately on Black people and members of environmental justice and fenceline communities, who would have far greater increases in mortality rates from the Project's $PM_{2.5}$ emissions than other communities.[225] Because these disproportionate impacts are incompatible

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[221] Tessum Report at 18.

[222] PSD Modeling Report at 4-2 ("Per DEQ request, the NAAQS analyses were performed using a 10-km receptor grid as described in Section 3.4. The 10-km receptor grid extends well beyond the Project's SIAs.")

[223] Tessum Report at 2.

[224] Tessum Report at 15.

[225] Tessum Report at 15 (stating that, "[o]n average throughout the Commonwealth of Virginia, the net increase in PM2.5 related emissions from the proposed project would increase the risk of mortality by 0.009 deaths per 100,000 people per year" and that this risk "is 150% higher for Black or African American people (at 0.022 deaths per 100,000

with the VEJA's mandate that DEQ ensure fair treatment, DEQ must deny Dominion's Application.

d. DEQ and Dominion Should Have Included a Comprehensive Evaluation of the Social and Economic Value of The Project *to the Community.*

Virginia Code Section 10.1-1307 E 2 requires DEQ to consider the social and economic value of the Project's operation to understand reasonableness of the proposed activity in the context of the regulations that control it. With the passage of the VCEA, Virginia has committed to reduce carbon dioxide emissions from the power sector by 30% by 2030 and to eliminate carbon emissions from the power sector by 2050.[226] Authorizing a major new source of GHG emissions from a facility with an estimated 36 year life would effectively nullify the planned reductions the General Assembly mandated the Commonwealth to achieve. This goes directly to the "reasonableness of the activity involved" under Section 10.1-1307 E 2. Operating a new and unnecessary major source of GHG emissions would be an unreasonable activity, and one that would only become more unreasonable when taking into account the social and economic *costs* such an activity would bring to those subject to the full burden of the collective emissions from the activity.

Here, not only are the projected GHG emissions from the Project significant, but there are three other PSD pollutants identified in Dominion's Application that the Project is also projected to significantly increase ($PM_{2.5}$, VOC, and CO).[227] In fact, DEQ merely accepted Dominion's representation of the economic and social value of the Project, despite the fact that Dominion's analysis did not reflect net economic impact (i.e., the value after considering both economic benefit and detriment).[228] And this Project is likely to have substantial social and economic detriment. Expert testimony submitted to the State Corporation Commission ("SCC") in the case associated

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people per year) and around 75% higher for residents of EJ communities and fenceline communities (at 0.0154 and 0.0157 deaths per 100,000 people per year, respectively").

[226] 2020 Va. Acts, chs. 1193, 1194.

[227] Application at tbl. B-11.

[228] *See* Engineering Analysis at 8 (stating: "DEQ finds that the project would provide economic value to the county in the form of job creation and tax revenue. When called upon, this plant will stabilize the grid by rapidly supplementing electric generation from renewable sources in times of high demand (very hot days or very cold nights) or decreased electric generation (due to darkness, calm winds, low temperatures), preventing grid stress (which might trigger a region-wide power outage). By shutting down and demolishing the coal units at this facility and installing cleaner technologies on the same site, this project reduces land disturbance and construction of additional infrastructure and reduces pollution.").

with the Project provides an analysis of costs associated with the public health impacts from the Project. In this testimony, Dr. Chris Lim, a public health expert, conducted a Comprehensive Health Impact Assessment and Economic Valuation of $PM_{2.5}$ emissions from the Project, the results of which are contained in the Lim Report. Dr. Lim utilizes EPA's Benefits Mapping and Analysis Program Community Edition ("BenMap-CE"), which implements epidemiologically-derived concentration-response functions within a spatially-resolved population exposure assessment framework.[229] In order to assess public health impacts from the proposed projects, Dr. Lim relied on the 25,140 discrete calculation points in Mr. Klafka's atmospheric dispersion model, discussed above.[230] Those data points were then combined with population specific data (2020 Decennial Census data) and baseline health incidence rates.[231] This analysis determined that the the Project's operation could result in significant health impacts, including 6.71 deaths, 38.59 asthma onsets, and 3,600 lost work days annually.[232] BenMap-CE estimates the cumulative cost of all health endpoints to be $88.5 million per year.[233] These totals represent an assessment of all communities within the 50km range established in the Klafka modeling.

Additionally, Dr. Tessum's analysis suggests that Dominion's economic analysis fails to reflect the costs that $PM_{2.5}$ mortality would drive, estimating that the 80 deaths caused by the Project's $PM_{2.5}$ emissions would be the equivalent of $965 million in economic *damages.*[234] The fact that the pollutant emissions from the Project can be estimated to cost millions of dollars per year in climate and health related damages should be highly relevant to DEQ's evaluation of the "social and economic value of the activity involved." A net analysis of the economic value of the plant is a necessary component of an adequate social and economic valuation of the Project.

In light of the very real economic detriment associated with the Project's emissions, DEQ should instruct Dominion to complete an analysis that incorporates the costs the Project would drive such that a net evaluation of economic value is provided for the Department's consideration.

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[229] Lim Report at PDF page 8.

[230] *Id.* at 9.

[231] *Id.*

[232] *Id.* at 12.

[233] *Id.* at 11-13

[234] Tessum Report at 18 ("Using the standard EPA Value of Statistical Life of $7.4 million year-2006 USD per death, inflation-adjusted to $12.1 million year-2025 USD, this 80 deaths is equivalent to $965 million in economic damages, which is 4.5 times larger than the economic benefits of $213 million claimed by Dominion.") (citations omitted).

e. DEQ Failed to Conduct a Site Suitability Analysis.

Under Va. Code § 10.1-1307(E), before approving an air permit such as the proposed permit for the Project, DEQ:

> shall consider facts and circumstances relevant to the reasonableness of the activity involved … including: … (3) The suitability of the activity to the area in which it is located, except that consideration of this factor shall be satisfied if the local governing body of a locality in which a facility or activity is proposed has resolved that the location and operation of the proposed facility or activity is suitable to the area in which it is located[.][235]

The Fourth Circuit understood this requirement to indicate that the "true nature" of the area surrounding the site in question is a necessary component of a site suitability analysis.[236] Further, the Fourth Circuit found that neither compliance with zoning ordinances nor the existence of a conditional use permit, can substitute the permit granting entity's duty to conduct an *independent* evaluation of site suitability.[237] Following the 2022 change to § 10.1-1307(E)(3), which codified the opportunity for localities to directly inform DEQ's evaluation of whether a proposed activity would be suitable to the site of its planned location, DEQ developed a form, the Suitability and Value Form.[238] In its August 30, 2023 Initial Letter of Determination, DEQ advised Dominion of the absence of this form in its Application,[239] and the completed form remains absent from the record. Instead, DEQ's Draft Engineering Analysis states the following:

> Regarding the third bullet item, the DEQ Site Suitability Form is usually reviewed by a local government entity, and they indicate whether the site is suitable for the proposed activity or not. In lieu of a signed Site Suitability

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[235] Va. Code § 10.1-1307(E).

[236] *Friends of Buckingham*, 947 F.3d at 92–93 ("[T]he single-page October 2017 site evaluation was woefully inadequate to represent the true nature of the area surrounding the Compressor Station").

[237] *Id.* at 93 ("[I]t is improper to rely upon a SUP as a substitute for an independent determination of site suitability under section 10.1–1307(E)."); *see also* 9 Va. Code § 5-80-1230 ("[C]ompliance [with zoning ordinances] does not relieve the board of its duty under . . . § 10.1-1307(E) . . . to independently consider relevant facts and circumstances.") .

[238] DEQ, Air Pollution Activity Suitability and Value Form (Attached).

[239] Letter from Alison M. Sinclair, Air Permit Writer, Sr. II, DEQ to Robert Sauer, VP System Operations, Dominion (Aug. 30, 2023) ("In screening your permit application, the following deficiencies were identified: Applications for major modifications must include a signed Local Governing Body Certification Form and Suitability and Value Form. DEQ has yet to receive these documents.") (Attached).

> Form, Chesterfield County indicated in a letter dated June 24, 2024 that the location of the CERC at 500 Coxendale Rd, adjacent to the current power station, and operated similarly to the existing power turbines, would not necessitate any additional approval by the county. DEQ considers this a determination by Chesterfield that the Coxendale Road site (existing Chesterfield Power Station site) is suitable for this project. DEQ agrees with Chesterfield County's position that the site is suitable for the [Project] based on the results of air quality analysis.[240]

At best, DEQ's statement is a mischaracterization, at worst it is an intentionally factually inaccurate statement. Chesterfield County has not in fact resolved that the site is suitable as evidenced by the County's lack of action to complete the Suitability and Value Form. There is no indication that the County failed to receive the form; rather, the County appears to have never completed and submitted the form to DEQ. Instead the County reached out to DEQ in writing, identifying its willingness to help facilitate public participation regarding the required permit hearings and that it defers to DEQ's authority in the context of air permitting related decisions.[241] This writing cannot be considered an action of the local governing body that resolves that matter of site suitability, as the County Board of Supervisors conducted no resolution forming process to make such a decision, despite frequent community requests to hold a hearing or decision making process to resolve the issue of whether the site is suitable.[242] The "agreement" with the County's position that DEQ references is nonexistent because Chesterfield County has not resolved that the

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[240] Draft Engineering Analysis at 2.

[241] *See* Letter from Joseph P. Casey, Chesterfield Cnty. Adm'r, to Comm'r Jehmal T. Hudson, State Corp. Comm'n, and Dir. Mike Rolband, Va. Dep't of Envtl. Quality Dir. (June 24, 2024) (Attached); Letter from Joseph P. Casey, Chesterfield Cnty. Adm'r, to Michael Dowd, Va. Dep't of Envtl. Quality (July 3, 2024) (Attached).

[242] The Chesterfield County Board of Supervisors never held the requested hearing on the issue of whether the Site is suitable for the Project. In light of this inaction, on October 29, 2024, community groups held their own hearing, the "People's Hearing," to capture their concerns on the issue. *See* Planet Depos, *Transcript of Hearing: Chesterfield People's Hearing, October 29, 2024* (Nov. 8, 2024) (Attached); Planet Depos, *Transcript of Recorded Conservation with Frances Broaddus-Crutchfield* (Dec. 20, 2024) (Attached); Planet Depos, *Transcript of Recorded Conservation with Chris Weigard* (Dec. 20, 2024) (Attached); Planet Depos, *Transcript of Recorded Conservation with Gail Christie* (Dec. 20, 2024) (Attached); Planet Depos, *Transcript of Recorded Conservation with Karol Fisher* (Dec. 20, 2024) (Attached); Planet Depos, *Transcript of Recorded Conservation with Gray Montrose* (Dec. 20, 2024) (Attached); Planet Depos, *Transcript of Recorded Conservation with Marni Pilafian* (Dec. 20, 2024) (Attached); Planet Depos, *Transcript of Recorded Conservation with Johnathon Williams* (Dec. 20, 2024) (Attached); Planet Depos, *Transcript of Recorded Conservation with Eliezer Ferrell* (Dec. 20, 2024) (Attached); Written Comments Gathered at the People's Hearing (Attached).

site is suitable. Given this, DEQ retains the statutory duty to conduct an independent evaluation of site suitability to determine whether the operation and location of the Project is suitable to the area.

DEQ's issuance of the Draft Permit clearly circumvents the law. DEQ cannot issue a final permit without completing the required evaluation of site suitability. We believe upon doing so, DEQ would find that the site is not indeed suitable for the Project.[243]

f. DEQ Did Not Identify Whether There are any Localities Particularly Affected by the Project.

When issuing permits, DEQ has several important duties it must undertake. The duty to consider facts and circumstances associated with the reasonableness of the proposed activity and related laws has been addressed above. In Virginia Code § 10.1-1307.01, the General Assembly provided another collection of duties for DEQ to undertake upon making a finding of a "locality particularly affected" which are required to be executed *before* a permit is issued. The statute provides, "the Department, before . . . issuing a permit for the construction of a new major source or for a major modification to an existing source, *if it is found* that there is a locality particularly affected by the regulation, variance, or permit, shall" do particular things.[244] A "locality particularly affected" ("LPA") is defined as "any locality that bears any identified disproportionate material air quality impact that would not be experienced by other localities."[245] This finding is of consequence because when there is a finding of an LPA, DEQ must conduct an enhanced public participation process, which includes, among other requirements, an opportunity to submit comments after any public hearing on the associated permit.[246]

Here, DEQ has made not such finding, neither asserting there are localities particularly affected, nor finding that no such localities are present. However, DEQ has, in some respects, acted in conformity with the provisions of the statute dedicated to what DEQ should undertake when in

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[243] *See, e.g.*, Letter from Rachel James, Staff Attorney at SELC, to Jerome Brooks, Piedmont Regional Director at DEQ (June 14, 2024) (Attached) ("The Deputy County Administrator signed Dominion's Certification Form for Chesterfield County and transmitted it to Dominion, but it is not clear that Mr. Smith's action was informed by a decision made by the local governing body, as the statute requires."); Letter from Rachel James, Staff Attorney at SELC, to Jerome Brooks, Piedmont Regional Director at DEQ (Jan. 28, 2025) (Attached) (notifying DEQ of "a recently filed lawsuit challenging Chesterfield County's assertions regarding the proposed gas plant meeting current zoning requirements").

[244] Va. Code § 10.1-1307.01(A).

[245] Va. Code § 10.1-1307.01(C).

[246] 9 VAC 5-80-1775(K)(3).

the instance an affirmative finding of LPA has been made.[247] DEQ is not incapable of providing clarity by specifically identifying LPA localities, as it made such a finding in suggesting a variance for data centers in early 2023, finding that the Counties of Loudoun, Fairfax, and Prince William were localities particularly affected. [248] Still, despite community request to make a finding in this regard and despite the fact that the Application is for a major modification—a designation that, by definition, indicates emission increases will exceed significance thresholds—DEQ has neglected to make an LPA finding here.[249]

DEQ's stated reliance on LPA-associated regulatory authority indicates that there are localities that are particularly affected. Furthermore, recent reporting conducted for the purpose of evaluating potential disproportionate impacts associated with the Project found that, indeed, certain localities would experience disproportionate material air quality impacts in the form of premature deaths due to increased exposure of $PM_{2.5}$, and thus would be LPAs. Dr. Tessum's report evaluating potential disproportionate impacts of the $PM_{2.5}$ emissions identifies Chesterfield County, Charles City County, Hopewell, Petersburg, Richmond, and Virginia Beach/Norfolk as localities that would experience the highest death tolls (as a result of the Project's $PM_{2.5}$ emissions over the 36-year projected life of the Project), values exceeding those of other localities in the Commonwealth.[250] Dominion's own analysis identifies an area near Hopewell as location with the highest maximum $PM_{2.5}$ modeled concentration—8.15 mg/m^3 or 90.5% of the $PM_{2.5}$ annual NAAQS.[251] DEQ cannot simply circumvent its statutory duties, nor execute them partially at its convenience. Instead, DEQ must consistently adhere to the fullness of the laws of the Commonwealth. Here, DEQ needs to evaluate and make a finding as to whether there are localities particularly affected and undertake *all* of the associated duties pursuant to said finding.

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[247] *See* Email from Mike Rolband, Director of DEQ to Stefanie K. Taillon, Va. Governor's Office (Sept. 24, 2025, 3:36 PM EDT) (citing 9 VAC 5-80-1775(K)(3) as authority to shorten the 30 day public comment period following any public hearing with regard to the revised public comment period ending date for the Draft Permit), https://perma.cc/F5G6-6Z2D (last visited Oct. 22, 2025) (Attached); Letter from Rachel James, Staff Attorney at SELC, to Michael G. Dowd, Director of DEQ Air & Renewable Energy Division (June 10, 2025) (Attached).

[248] *See, e.g.*, General Notice, Revised proposal and extended comment period starting March 7, 2023 – Notice of Public Comment – order and local variance for data centers located in the Counties of Fairfax, Loudoun, and Prince William, Va. Dep't of Envt' Quality (Jan. 25, 2023), https://perma.cc/4QLG-TJLV (last visited Oct. 22, 2025) (Attached).

[249] Letter from Rachel James and Emma Clancy, SELC to Michael Rolband, Director of DEQ (Aug. 25, 2025) (Attached).

[250] Tessum Report at 16.

[251] *See* EJ Analysis at 9-10 & Figure 1.

III. The Project Must Be Permitted as a Major Modification for VOCs, CO, $PM_{2.5}$, GHGs *And* PM, PM_{10}, NOx, And Sulfuric Acid Mist.

Under Virginia's SIP, evaluating PSD applicability for a proposed project at an existing major source entails a two-step analysis to determine whether the Project is a "major modification."[252] The first step is to determine whether the Project will cause a "significant emissions increase" based on a comparison of the new units' potential emissions to regulatory thresholds.[253] If the Project will cause a significant increase in emissions, the second step considers "whether a significant *net* emissions increase will occur at the major stationary source."[254]

At the second step, the Project's emissions increase is combined with "[a]ny other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable."[255] For a decrease in emissions to be "contemporaneous," it must occur within the five-year period immediately preceding construction of the Project.[256] In addition, an emissions decrease is only "creditable" to the extent that the decrease is "enforceable as a practical matter at and after the time that actual construction on the particular change begins,"[257] here the change being the construction of the Project. To be "enforceable as a practical matter," the permit must contain "emission limitations that are enforceable by the board or the department and meet the following criteria:

a. *Are permanent*;
b. Contain a *legal obligation* for the owner to adhere to the terms and conditions;
c. Do not allow a relaxation of a requirement of the implementation plan;
d. Are technically accurate and quantifiable;
e. Include averaging times or other provisions that allow at least monthly… checks on compliance…; and

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[252] *See* 9 VAC 5-80-1625(B) (providing that PSD review applies "to the construction of any new major stationary source or the major modification of any existing major stationary source"); *id.* § 5-80-1605(G)(1)–(2) (describing the two-step PSD applicability analysis).

[253] *Id.* § 5-80-1605(G)(2), (4); *see also id.* at 5-80-1615(C) (defining "significant" and "significant emissions increase").

[254] *Id.* § 5-80-1605(G)(2) (emphasis added).

[255] *Id.* § 5-80-1615(C) (defining "net emissions increase").

[256] *Id.*

[257] *Id.*

f. Require a level of recordkeeping, reporting and monitoring sufficient to demonstrate compliance."[258]

This analysis is then relied upon to determine which pollutants are subject to PSD review and thereafter what permit terms must be included. Taken together, these criteria for determining PSD applicability must be properly implemented to adhere to the legal framework that allows for a source to "net out" of PSD review for certain pollutants.

a. The Draft Permit Lacks the Necessary Provisions to Allow Dominion to Net Out of PSD Review for PM, PM10, Nox, and Sulfuric Acid Mist.

The first step of Dominion's PSD applicability analysis shows that the proposed project (the new Project) would result in significant emissions increases for eight of the ten pollutants considered (NO_X, CO, VOC, PM, PM_{10}, $PM_{2.5}$, H_2SO_4, and GHG).[259] However, at the second step, Dominion proposes to avoid PSD review for NO_X, PM, PM_{10}, and H_2SO_4 by subtracting emission decreases associated with the retirement of the last two coal-fired boilers at CPS, which ceased operation in May 2023.[260] To determine the amount of emissions decreases to subtract at the second step, Dominion proposes calculating "baseline actual emissions" using a 24-month annual average of the historical emissions from CPS coal Units 5 and 6 from July 2020 through June 2022.[261]

As informed by this calculation, Dominion proposed (and DEQ accepted) that of the eight criteria pollutants the Project will emit in significant amounts, only four would experience a significant *net* emissions increase: CO, $PM_{2.5}$, VOC, and GHG.[262] As a result, Dominion and DEQ only conducted PSD review for these four pollutants. However, these coal generation units remain on site at the CPS and their operation continues to be permitted under Dominion's existing Title V permit.[263] In addition, DEQ's Draft Permit does not impose a "legal obligation" for Dominion

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[258] *Id.* § 5-80-1615(C) (defining "enforceable as a practical matter").

[259] *See* Application at 3-13 tbl.3-7 (showing that the "project emissions" exceed the "PSD [Significant Emission Rate]" for NO_X, CO, VOC, PM, PM_{10}, $PM_{2.5}$, H_2SO_4, and CO_2e). The two pollutants for which the Project would not result in a significant increase are SO_2 and lead. *See id.*

[260] *See id.* at 3-13, 3-14 tbl.3-8.

[261] *See id.* at App. B, tbl.B-11 n.2.

[262] *See id.* at 3-13; Draft Engineering Analysis at 9.

[263] *See* DEQ, *Federal Operating Permit No. PRO50396* at 2 (June 15, 2023), https://perma.cc/69S6-JPW3 ("Equipment to be operated consists of: . . . ES-5 (Unit 5) . . . [and] ES-6 (Unit 6)[.]") (hereinafter "CPS Title V Permit") (Attached); *see also* Chesterfield Cnty. Dep't of Bldg. Inspection, *Commercial Demolition Permit No. 20250127*-066 (Feb. 13, 2025) (showing that Dominion's approved demolition permit does not include demolition of

to keep the coal units shut down *permanently*, which is necessary in order to justify accepting Dominion's proposal to utilize contemporaneous decreases from the shutdown of Units 5 and 6 to avoid PSD review for several pollutants. The decreases associated with retirement of the coal units cannot be subtracted from the Project's emission increases without an enforceable provision in the permit to ensure the coal-fired boilers remain shut down permanently.

b. DEQ Must Ensure that Baseline Actual Emissions for Boilers 5 and 6 Do Not Include Noncompliant Emissions.

For purposes of subtracting emission decreases at the second step of the PSD applicability analysis, Dominion proposes calculating the coal units' "baseline actual emissions" using historical data from July 2020 through June 2022.[264] The definition of "baseline actual emissions" requires that "[t]he average rate shall be adjusted downward to exclude any noncompliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period."[265] Dominion's Application did not provide any information to demonstrate that it did not include noncompliant emissions in the calculation of baseline emissions for Boilers 5 and 6. Similarly, the draft engineering analysis does not disclose whether DEQ scrutinized Dominion's calculations to verify they did not incorporate excess emissions during the baseline period. These coal-fired units are subject to several emission limits (including for NO_x, SO_2, and PM) under the terms of the existing Title V permit. DEQ must document that, during the months relied on for baseline actual emissions, the boilers were not exceeding any legally enforceable emission limitation.

i. DEQ Must Ensure That the Baseline Emissions For Boilers 5 and 6 Were Not Based on Any Period for Which There is Not Adequate Information for Determining Emissions.

The definition of "baseline actual emissions" also requires that "[t]he average rate [of emissions] shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions."[266] Dominion's Application does not provide any details as to how it determined the historical actual emissions of pollutants for which there are no

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the coal-fired boilers) (Attached); Dominion Response to Interrogatory, Case No. PUR-2025-00037 (Sept. 4, 2025) ("There are no plans to demolish additional structures, equipment, or the units themselves.") (Attached).

[264] *See* Application at App. B, tbl. B-11 n.2.

[265] 9 VAC 5-80-1615(C) (defining "baseline actual emissions").

[266] *Id.*

Continuous Emissions Monitoring Systems ("CEMS") at Boilers 5 and 6, including PM_{10}, $PM_{2.5}$, VOCs, or H_2SO_4.[267] DEQ must require that Dominion provide sufficient documentation as to how the monthly baseline emissions were calculated for pollutants for which Dominion did not rely on CEMs data. This is necessary so that DEQ and the public can ensure that the baseline emissions calculations were based on sufficiently reliable emissions data. Given that DEQ has proposed allowing Dominion to avoid PSD review for NO_X, PM, PM_{10}, and H_2SO_4 based on taking credit for emission reductions from the shutdown of Boilers 5 and 6, it is imperative that the public be assured that baseline actual emissions for these pollutants reflect documentable actual emissions for the boilers and thus that the project will not actually result in a significant net emissions increase for these pollutants.

ii. The Baseline Period for Boilers 5 and 6 Needs to Be Adjusted to Be Based on the Five Year Period Immediately Preceding When Construction Begins on the Project.

In addition to the fact that the permit does not require Boilers 5 and 6 to permanently cease operation, which is necessary to create netting credits from these boilers, the time period of baseline actual emissions relied on by Dominion and DEQ does not comply with Virginia PSD regulations. Specifically, Virginia's PSD permitting rules state that baseline actual emissions are to be based on the 24-month annual average of emissions within the five years "immediately preceding when the owner begins actual construction of the project."[268] "Begin actual construction" is defined in Virginia's PSD permitting regulations as "initiation of physical on-site construction activities on an emissions unit that are of a permanent nature."[269]

Dominion has not yet begun actual construction of the Project and, indeed, *cannot* begin actual construction on the Project until a PSD permit is issued.[270] Yet, Dominion's baseline actual

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[267] *See generally* Application, App. B. Although the current Title V permit for CPS includes the default requirement to "install, certify, operate, and maintain a PM CEMS" to demonstrate compliance with 40 C.F.R. § 63 Subpart UUUUU, it also allows Dominion to conduct periodic stack testing as an alternate compliance method. *See* CPS Title V Permit at 19–20. In September 2021, Dominion notified DEQ that it had elected to "change to quarterly stack testing" and that "PM CEMS will no longer be used to demonstrate compliance" for Units 5 and 6. *See* Letter from Thomas N. Effinger, Dominion Energy Servs., Inc., to David Robinett, Va. Dep't of Envtl. Quality (Sept. 22, 2021) (providing notification for Unit 6) (Attached); Letter from Thomas N. Effinger, Dominion Energy Servs., Inc., to David Robinett, Va. Dep't of Envtl. Quality (Sept. 30, 2021) (providing notification for Unit 5) (Attached).

[268] 9 VAC 5-80-1615(C) (defining "baseline actual emissions").

[269] *Id.* § 5-80-1615(C) (defining "begin actual construction").

[270] *See* 42 U.S.C. § 7475(a) ("No major emitting facility . . . may be constructed in any area to which this part applies unless—(1) a permit has been issued for such proposed facility in accordance with this part[.]"); 9 VAC 5-80-1625(A)

emissions for Boilers #5 and #6 used the 24 month period from July 2020 through June 2022 for all pollutants.[271]. To use this baseline period, Dominion would have needed to begin actual construction by July 2025—before DEQ even initiated the public comment period on the Draft Permit. DEQ's Permitting Enhancement and Evaluation Platform indicates that the "target" date for permit issuance is currently December 20, 2025.[272] Accordingly, actual construction cannot begin until the end of December 2025 *at the earliest*. Moreover, these comments identify multiple deficiencies in Dominion's Application and DEQ's Draft Permit that necessitate additional analyses and a new comment period on a revised draft permit, making it impossible for DEQ to lawfully issue a permit by its target date of December 2025. And Dominion's own timeline for the project has changed: according to a recent filing in the SCC proceeding associated with the Project, Dominion now expects to begin construction in November 2026.[273] Given this, the beginning date of the five year period from which two years of data can be used for determining baseline actual emissions must not start earlier than November 2021.

The Draft Permit is foundationally unsound and cannot be issued as written because it relies on a flawed PSD applicability analysis that underestimates the Project's potential emissions and likely overestimates the coal units' baseline emissions. In the absence of an enforceable permit condition requiring the coal units to remain shut down permanently and revised calculations of the coal units' baseline emissions, the Draft Permit as written does not comply with federal and state requirements. DEQ must require Dominion to submit the necessary air quality analyses, including air dispersion modeling, to inform a PSD review of PM, PM_{10}, NO_x, and H_2SO_4.

IV. Several Provisions in the Draft Permit Lack Enforceability.

To be practically enforceable, such conditions must establish "legal obligation[s]" that are "permanent" and that "[r]equire a level of recordkeeping, reporting and monitoring sufficient to demonstrate compliance."[274]

("No owner or other person shall begin actual construction of any new major stationary source or major modification without first obtaining from the department a permit to construct and operate such source.").

[271] *See* Application at App. B, tbl. B-11 n.2.

[272] *See* DEQ, *DEQ Permitting Enhancement and Evaluation Platform*, *Dominion Energy – Chesterfield Power Station, Request No. 50396-52* (last updated Oct. 21, 2025) (Attached).

[273] Testimony of Jeffrey G. Miscikowski, Virginia State Corporation Commission, Case No. PUR-2025-00037, Dominion Energy's Application for Approval of a Certificate of Public Convenience and Necessity (March 3, 2025) at PDF pages. 565-9 (Excerpt Attached)

[274] 9 VAC § 5-80-1615(C) (defining "enforceable as a practical matter").

There are several issues with emission limits and operational limits in the Draft Permit that lack the necessary clarity and/or monitoring, recordkeeping, and reporting to ensure that the limits are enforceable as a practical matter. These are discussed in detail below.

a. The Annual Process Emission Limits for the Combustion Turbines in Condition 39 of the Draft Permit Are Not Practically Enforceable.

As discussed in Section I.e.i. above and as demonstrated in Table 2, the Draft Permit lacks clarity and/or adequate monitoring, recordkeeping, and reporting to ensure compliance with the "Annual Process Emission Limits" set forth in Condition 39 of the Draft Permit. These process emission limits apply on a rolling 12-month total for the following pollutants: PM, PM_{10}, $PM_{2.5}$, CO, NO_X, SO_2, VOC, H_2SO_4, and CO_2e.[275] DEQ must make several changes to this Draft Permit condition to ensure that these limits are practically enforceable.

With respect to the ton per 12-month emission limits, Condition 39 states: "Compliance with these emission limits *may be* determined as stated in Conditions 1, 3, 4, 6, 7, 24, 25, and 27."[276] This language is impermissibly vague, as the use of the word "may" instead of the word "shall" implies that the Permittee could select other methods of showing compliance that are not spelled out in the permit. It also indicates that if any of the cited methods show noncompliance, they may not be considered determinative or may even be disregarded altogether. In addition, simply referring to Conditions 1, 3, 4, 6, 7, 24, 25, and 27 of the permit does not provide sufficient clarity as to *how* compliance with the annual process emission limits is to be determined, as shown in Table 2 above. For example, the recordkeeping requirements in Condition 64.c. of the Draft Permit allow Dominion to establish certain calculation methods and obtain approval from the Piedmont Regional Office,[277] rather than specifying the approved methods in the permit as needed to ensure the replicability of the compliance method with the annual emission limits. DEQ must revise Condition 39 to more specifically define how compliance with the annual process emission limits must be determined; without such clarifying revisions, the annual process emission limits cannot be considered as practically enforceable.

First, to ensure the annual process limits are enforceable, DEQ must replace the last sentence of Condition 39 (which reads "Compliance with these emission limits may be determined

[275] Draft Permit at 16–17.

[276] *Id*. at 17.

[277] *See id.* at 25.

as stated in Conditions 1, 3, 4, 6, 7, 24, 25, and 27") with more detailed requirements as to how compliance "must" be shown. For example, for NOx and CO, DEQ should specifically require that compliance be demonstrated based on emissions measured by the required CEM and also state that emissions be summed (and reported) for each month and each rolling 12-month period.

For those pollutants for which the permit requires testing to show compliance with lb/MMBtu limits, Condition 39 should require compliance with the annual limits to be demonstrated using the most recent test results and the actual heat input to the turbines, which is required to be measured and recorded per Condition 64.a of the Draft Permit.[278] The Permit must also include an equation showing exactly how the emissions from oil-firing and the emissions from gas-firing are to be calculated each month and also state that emissions be summed (and reported) for each month and each rolling 12-month period.

If DEQ intends for fuel sulfur content, the determination of which is required by Condition 27 of the Draft Permit,[279] to be used to show compliance with the annual SO_2 emission limit, the Permit must explain *how* the data collected per Condition 27 of the Draft Permit is to be used to ensure compliance with the annual SO_2 limit set forth in Condition 39.

For VOC emissions, the Permit must explain how test results in ppmvd will be converted to tons per month, and the permit must also require that emissions be summed (and reported) for each month and each rolling 12-month period.

For the annual CO2e emissions limit, DEQ should require use of CEMs to monitor CO_2 emissions (which is required under the acid rain requirements of 40 C.F.R. Part 75), and DEQ should require use of reliable emission factors and monthly heat input from fuels data to demonstrate compliance with respect to the other GHG pollutants.

Condition 39 also must explain how emissions during startups and shutdowns of the turbines are to be calculated and included in the rolling 12-month total emissions. For NO_x and CO, the CEMs data should be required to be used for this purpose. But for the other pollutants ($PM/PM_{10}/PM_{2.5}$, SO_2, VOC, and H_2SO_4), the Permit must establish the emission factors that are to be used for startups and for shutdowns and require that emissions be based on the number of

[278] *See id.*

[279] *See id.* at 12.

reported startups and shutdowns each month pursuant to Condition 25 and the specified emission factors.

Condition 39 must also make clear that emissions during each of the alternative operating scenarios authorized by Conditions 9 through 12 must be included in assessing compliance with the ton per 12-month emission limits.

Last, Condition 64.c must be revised to require Dominion to use emission calculation methods established in the permit and to require the inclusion of startup and shutdown emissions in the monthly and annual emission totals, and the Permit must clearly require the reporting of 12-month rolling emissions totals to DEQ to demonstrate compliance with the annual process emission limits of Condition 39. As drafted, these conditions render the permit unenforceable.

b. DEQ Failed to Require CEMS For CO2 Emissions Under Acid Rain Regulations.

Condition 46 of the Draft Permit includes CEM requirements for CO and NOx and requires either CEMs or an alternative method "as allowed by 40 C.F.R. 75" for SO_2 emissions.[280] This permit condition fails to require CEMs for measuring CO_2 emissions, yet such CO_2 CEMs are required pursuant to acid rain regulations.[281] Use of CEMs to monitor CO_2 emissions will also help ensure the practical enforceability of the CO_2 BACT limit and the annual CO_2 limit in Condition 39 of the Draft Permit.

c. The Draft Permit Inaccurately Defines CEMs Excess Emissions.

Condition 49 of the Draft Permit is titled "CEMs: Excess Emissions,"[282] and it appears to define limited circumstances when excess NOx emissions measured by CEMs will constitute a permit violation. There are several deficiencies in this provision. First, it only addresses NOx and fails to address CO excess emissions measured with CEMs, suggesting that any excess CO emissions measured by CEMs could never be considered to constitute a permit violation. This provision must be modified to include provisions for CO CEM data to be used for demonstrating compliance with the CO emission limits of the permit.

Second, Conditions 49 and 50.a of the Draft Permit indicate that only compliance with the short term average NOx BACT limits (of 2.5 ppmvd when firing natural gas and 5.0 ppmvd when

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[280] *Id.* at 18–19.

[281] *See* 40 C.F.R. § Part 75.

[282] Draft Permit at 19.

firing oil) are to be demonstrated with CEMs.[283] As discussed above, the CEMs must also be used to demonstrate compliance with the annual process emission limits in Condition 39 of the Draft Permit. Based on how these conditions of the Draft Permit are currently written, it does not appear that DEQ would treat annual emissions that exceed the annual process emission limits of Condition 39 as a permit violation. Thus, this condition must be revised to explain how the hourly ppmvd data is to be converted to pounds or tons of NOx emissions to assess compliance with the tons per rolling 12-month period NOx limit that applies pursuant to Condition 39 of the Draft Permit.[284] Similarly, these conditions must explain how the hourly ppmvd CO emissions data is to be converted to pounds/tons of CO emissions to assess compliance with the tons per rolling 12-month CO limit.

Further, Condition 49.c states: "Only quality assured data from the CEMS shall be used to identify excess emissions. Periods where the missing data substitution procedures in 40 C.F.R. § 75, Subpart D are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under 40 C.F.R. § 60.7(c)."[285] This permit provision improperly provides an automatic discounting of substituted CEM data from being considered as evidence of a potential violation of NO_x BACT limits. DEQ should not exclude such data from BACT compliance demonstrations without requiring sufficient evidence from Dominion that it was otherwise operating the NO_x BACT controls during such periods of CEM downtime. Condition 50.b. also needs to be revised to not allow monitor downtime to automatically be excluded from excess emissions determinations without submittal of other documentation from Dominion to verify compliance with emission limits of the permit.[286]

d. The Draft Permit Fails to Specify Initial Compliance Requirements for PM or H2SO4.

Condition 52 of the Draft Permit includes initial performance test requirements for PM_{10}, $PM_{2.5}$, and VOC from each combustion turbine,[287] but this provision does not require testing for PM emissions. Given that DEQ has imposed BACT limits for PM that are more stringent than the

[283] *See id.* at 19–20.

[284] *See id.* at 16.

[285] *Id.* at 19.

[286] *See id.* at 20.

[287] *See id.* at 20–21.

PM_{10} and $PM_{2.5}$ limits,[288] the Draft Permit must require initial performance testing to demonstrate compliance with the PM limits of the Draft Permit.

In addition, Condition 54 of the Draft permit includes initial performance testing requirements for SO_2 to assess compliance with the limits in Permit Condition 37.a., but this permit condition does not require initial testing for H2SO4.[289] Yet, DEQ has imposed a H_2SO_4 BACT limit for the turbines in Condition 37.a. of the Draft Permit.[290] Thus, DEQ must also require an initial performance test for H2SO4 emissions from the turbines.

e. The Draft Permit Fails To Require The Submittal Of Monthly And Annual Records Kept On The Heat Input To Each Turbine, Monthly And Annual Startups And Shutdowns Of Each Turbine, And Monthly And Annual Emissions Data.

Condition 64 of the Draft Permit requires Dominion to "maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit," [291] but it does not require that the company submit this data to DEQ. The data that Condition 64 requires records to be kept of include (among other things):

- Monthly and annual heat input of each turbine;
- Monthly and annual number of startups and shutdowns for each turbine, including the time spent in startup or shutdown;
- Monthly and annual emissions calculations for PM_{10}, $PM_{2.5}$, VOC, SO_2, and CO_2e from the turbines, and CEMs emissions data for CO and NOx including excess emissions;
- Fuel quality records, including fuel sulfur content;
- Instances of alternative operating scenarios and records regarding those permit conditions; and
- The occurrence of any malfunction of the affected facility, any malfunction of air pollution control equipment, or any periods when the CEMs in not operating.[292]

This information is extremely important to ensure compliance with the terms and conditions of the permit, the BACT limits, the integrity of the modeling, and with DEQ's findings

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[288] *See id.* at 14–17.

[289] *See id.* at 21.

[290] *See id.* at 15.

[291] *Id.* at 24.

[292] *See id.* at 24–25.

of whether PSD permitting applied to the Project. As such, DEQ must require this information, or at least summaries of this information, to be submitted by Dominion in periodic reports to DEQ such as quarterly reports.

With respect to emissions information, DEQ should not limit the length of time that a facility must keep emissions information to five years.[293] Such emissions information is important for, among other things, analysis of baseline actual emissions which is necessary to determine whether a future project triggers PSD permitting. Thus, the monthly and annual emissions data should be both reported to DEQ and retained for the life of the Project.

f. DEQ Failed to Document How the Fuel Sulfur Content Can Demonstrate That the PM, PM_{10}, $PM_{2.5}$, SO_2, and H_2SO_4 Emissions Won't Exceed the Short Term and Annual Emission Limits of the Draft Permit.

In Condition 27 of the Draft Permit, DEQ requires the permittee to determine the total sulfur content of the natural gas being combusted at the Project "to verify that the sulfur content of the natural gas is less than a maximum of 1.0 grains of total sulfur per 100 scf, or 0.4 grains per 100 scf on a 12-month rolling average in order to demonstrate that potential PM, PM10, PM2.5, SO_2, and H_2SO_4 emissions shall not exceed the limits specified in Conditions 37.a. and 39 for the combustion turbine generators."[294] This provision fails to explain how sulfur content of fuel is to be converted to tons per year of PM, PM_{10}, $PM_{2.5}$, SO_2, and H_2SO_4. Further, DEQ has not documented in its Engineering Analysis how monitoring of the fuel sulfur content can be used to ensure that the turbines will not exceed the emission limits on PM, PM_{10}, $PM_{2.5}$, SO_2, and H_2SO_4 in the Draft Permit. DEQ must explain how the fuel sulfur content is to be used to determine actual emissions of PM, PM_{10}, $PM_{2.5}$, SO_2, and H_2SO_4.

V. DEQ's Determination of BACT for the New Combustion Turbines is Deficient.

The combustion turbines of the Project are subject to best available control technology (BACT) requirements for $PM_{2.5}$, CO, VOC, and CO_2e under Virginia's PSD permitting regulations.[295] In addition, the turbines are subject to BACT under Virginia's Article 6 permitting requirements for NO_X, SO_2, PM and PM_{10}.[296]

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[293] *See id.* at 26.

[294] *Id.* at 12.

[295] *See* Draft Engineering Analysis at 13.

[296] *See id.* at 36.

The definition of BACT under Virginia's PSD permitting regulations is as follows:

> "Best available control technology" or "BACT" means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant that would be emitted from any proposed major stationary source or major modification that the department, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under 40 C.F.R. Parts 60, 61, and 63. If the department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means that achieve equivalent results.[297]

Virginia's federally enforceable SIP also requires DEQ to impose BACT limits for pollutants that are not subject to PSD but for which a project would result in emission increases above specified thresholds. In particular, Virginia's SIP states that a "project shall apply best available control technology for each regulated pollutant for which there would be an increase in the uncontrolled emission rate equal to or greater than the levels in 9VAC5-80-1105 D."[298] In

[297] 9 VAC 5-80-1615(C) (defining "best available control technology").

[298] *Id.* § 5-50-260(C).

other words, for any pollutant that is subject to Article 6 permitting, the permittee must perform a BACT analysis and DEQ must impose BACT requirements in the permit.[299]

The applicable definition for this requirement reads as follows:

> "Best available control technology" or "BACT" means, as used in 9VAC5-50-260, an emissions limitation (including a visible emission standard) based on the maximum degree of emission reduction for any pollutant which would be emitted from a new stationary source or project which the board, on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for the new stationary source or project through the application of production processes or available methods, systems and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard in Article 5 (9VAC5-50-400 et seq.) of this part or Article 1 (9VAC5-60-60 et seq.) or Article 2 (9VAC5-60-90 et seq.) of Part II of 9VAC5-60 (Hazardous Air Pollutant Sources). If the board determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emission standard infeasible, a design, equipment, work practice, operational standard, or combination of them, may be prescribed instead of requiring the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by

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[299] *See, e.g.*, Memorandum from Michael G. Dowd, Va. Dep't of Envtl. Quality, Air Div. Dir. *APG-354; Permitting and BACT Applicability under Chapter 80 Article 6*, at 9 (June 12, 2015), https://perma.cc/HL5K-2YUV (Attached) ("If [Article 6] permitting applicability is triggered for a pollutant, then BACT applicability is triggered for that same pollutant and would apply to each affected emissions unit that emits the pollutant."); Memorandum from Michael G. Dowd, Va. Dep't of Envtl. Quality, Air & Renewable Energy Div. Dir., *Air Permitting Guidance Memo No. APG-350-Ch8 – Air Permit Guidance for Control Technology Standards*, at 1 (Aug. 31, 2020), https://perma.cc/43FX-HZZJ (hereinafter "Art. 6 BACT Analysis Guidance") (Attached) ("BACT is required when a . . . project is required to get a new Article 6 permit approval.").

> means which achieve equivalent results. In determining best available control technology for stationary sources subject to Article 6 (9VAC5-80-1100 et seq.) of Part II of 9VAC5-80 (Permits for Stationary Sources), consideration shall be given to the nature and amount of the emissions, emission control efficiencies achieved in the industry for the source type, total cost effectiveness, and where appropriate, the cost effectiveness of the incremental emissions reduction achieved between control alternatives.[300]

DEQ states in its Engineering Analysis for the Draft Permit that "Article 6 BACT does not require a top-down BACT analysis as was done for the PSD BACT pollutants."[301] While DEQ's internal guidance for Article 6 BACT determinations does not require a full, top-down BACT analysis in all cases, this guidance does not preclude DEQ from conducting (or requiring the applicant to conduct) such an analysis when appropriate. Indeed, DEQ's guidance indicates that relying on a "presumptive BACT" determination is only appropriate in circumstances where the permit writer has sufficient "experience with an emissions unit type in a particular industry."[302] When this is not the case, "a formal BACT analysis becomes necessary."[303] Here, DEQ's Engineering Analysis does not document whether the permit writer has sufficient experience with low- or intermediate-load simple-cycle combustion turbines or the ancillary equipment that Dominion proposes to install and operate. In the absence of such documentation, it is not apparent that a full, top-down BACT analysis is not warranted for NO_X, SO_2, PM, and PM_{10}. Regardless, there are several flaws with both DEQ's PSD BACT determinations and its Article 6 Permit BACT determinations, as discussed below.

a. DEQ Must Evaluate the Options of Either Not Prohibiting the Firing of #2 Fuel Oil or Significantly Limiting the Firing of #2 Fuel Oil as Part of Its BACT Analyses.

DEQ failed to consider as part of its BACT analysis either prohibiting the firing of #2 fuel oil or more significantly limiting the amount of #2 fuel oil that can be used in the combustion turbines of the Project. Yet, emissions of most criteria pollutants when firing fuel oil are much

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[300] 9 VAC 5-50-250(C) (defining "best available control technology").

[301] Draft Engineering Analysis at 36.

[302] Art. 6 BACT Analysis Guidance at 4–5.

[303] *Id.* at 6.

higher than pollutant emissions when firing natural gas. The table below shows these significant differences by comparing DEQ's proposed emission limits for natural gas versus oil for the combustion turbines.

Table 3. *DEQ's Proposed Short Term Emission Limits for Use of Fuel Oil in the Combustion Turbines and for the Use of Natural Gas in the Combustion Turbines*[304]

Pollutant	**Fuel Oil Firing**	**Natural Gas Firing**
NO_x	5.0 ppmvd	2.5 ppmvd
VOC	2.0 ppmvd	1.0 ppmvd
PM_{10}	0.04 lb/MMBtu and 45.0 lb/hr	0.014 lb/MMBtu and 19.7 lb/hr
$PM_{2.5}$		
PM	0.0165 lb/MMBtu and 24 lb/hr	0.0072 lb/MMBtu and 11.9 lb/hr
CO_2e	160 lb/MMBtu	120 lb/MMBtu
NO_x During Startup and Shutdown	143 lb/turbine – startup 62 lb/turbine - shutdown	52 lb/turbine – startup 20 lb/turbine – shutdown
CO During Startup and Shutdown	1,036 lb/turbine – startup 246 lb/turbine - shutdown	366 lb/turbine – startup 152 lb/turbine – shutdown

Clearly, the proposed emission limits applicable to fuel oil firing for the pollutants listed above are much higher than the proposed emission limits for firing natural gas in the combustion turbines. Yet, DEQ is proposing to allow more than 23% of the allowed annual heat input to each turbine to be from firing fuel oil each year.[305] Dominion stated in its Application that the turbines would be fueled "primarily [by] pipeline quality natural gas" and that the turbines would have the "capability to fire No. 2 fuel oil with a maximum sulfur content of 15 ppm."[306] The Application states that having "fuel oil as [a] secondary source" is necessary to ensure the turbines will "be available throughout the entire [electricity] delivery year," suggesting that fuel oil need only be fired when natural gas is unavailable.[307] Given the company's proposal that the turbines would *primarily* fire natural gas and the complete lack of information regarding potential interruptions in natural gas supply, DEQ is not justified in allowing for more than 23% of the annual heat input at each turbine to be based on firing oil.

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[304] *See* Draft Permit at 14-16 (showing emission limits proposed under Conditions 37 and 38).

[305] *See id.* at 11.

[306] Application at 1-1.

[307] *Id.* at 2-2.

For purposes of BACT, DEQ must evaluate not allowing the use of any fuel oil, or at the very least impose more stringent requirements that would limit the use of fuel oil to no more than is absolutely necessary. For example, DEQ could only allow the firing of fuel oil in the case of an unavoidable loss in the supply of natural gas to the Project, a nationwide natural gas shortage, or other similar events that would truly necessitate the use of fuel oil at the Project's turbines, with appropriate documentation and reporting requirements.

It is important to note that it is rare that new simple cycle combustion turbine power plants built today are allowed to burn fuel oil at all. As demonstrated in Dominion's analysis of emission limits from EPA's RACT/BACT/LAER Clearinghouse ("RBCL"),[308] there are only a few permits for simple-cycle combustion turbines listed in the RBLC that are authorized to burn fuel oil. Thus, it would be consistent with numerous other BACT determinations for simple-cycle combustion turbine power plants to only allow the firing of natural gas (with and without hydrogen).

The statutory definition of BACT specifically includes "clean fuels" as a potential control option to be evaluated.[309] In addition, both the PSD and the Virginia Article 6 definitions of BACT allow the Commonwealth to consider "production processes or available methods, systems, and techniques" in determining BACT.[310] Thus, it is wholly within DEQ's authority to adopt BACT requirements that do not allow the use of fuel oil or that only allow the use of fuel oil if certain requirements are met. Indeed, DEQ's summary of BACT determinations for the Project lists the exclusive use of "clean fuel," "low sulfur/carbon fuel," and "natural gas fuel" as required BACT controls for the fuel gas heater.[311] Accordingly, DEQ must evaluate such control options to ensure that the emissions of NO_X, VOC, CO_2e, PM, $PM_{10}/PM_{.25}$, and CO from the new turbines are minimized to the maximum degree achievable.

b. DEQ's Proposed NO_X Limits Fail to Reflect BACT for the New Combustion Turbines.

As shown in Table 3 above, DEQ has proposed NO_X BACT limits for the proposed new combustion turbines of 2.5 ppmvd for natural gas firing and of 5.0 ppmvd for fuel oil firing, with

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[308] *See id.* at App. C.

[309] 42 U.S.C. § 7479(3).

[310] 9 VAC 5-80-1615(C) (defining "best available control technology" for purposes of PSD permitting), 9 VAC 5-50-250(C) (defining "best available control technology" for purposes of Article 6 permitting).

[311] Draft Engineering Analysis at 39–40 tbl.10.

compliance based on a 4-hour rolling average basis using continuous emission monitoring systems (CEMs).[312] These limits are based on the use of dry low NOx combustors and selective catalytic reduction (SCR) for natural gas firing and the use of water injection with SCR for oil firing.[313] These BACT limits fail to reflect the maximum degree of NOx emission reductions that other similar sources have achieved.

c. DEQ Must Evaluate a 2.0 ppm NOx BACT Limit for Natural Gas Firing for the Combustion Turbines.

There are several comparable simple-cycle combustion turbines which have been permitted with NOx limits of 2.0 ppm, including one in Virginia, as shown in the table below.

Table X: Simple-Cycle Combustion Turbines Subject to a BACT Limit of 2.0 ppm

Facility	Location	Permit Issued
CTC Property LLC [314]	Memphis, Tennessee	July 2, 2025
Vantage Data Center[315]	Sterling, Virginia	September 15, 2023
Alaska Gasline Liquefaction Plant[316]	Nikiski, Alaska	July 7, 2022
Freeport LNG Pretreatment Facility[317]	Freeport, Texas	July 16, 2014

Dominion has indicated that the turbines to be installed at the Project are General Electric (GE) 7FA.05 turbines and will be equipped with dry low NOx combustors for natural gas firing.[318] According to the manufacturer, the GE 7FA.05 turbines can achieve at least 9.0 ppm NOx with

[312] *See* Draft Permit at 3.

[313] *See id.*

[314] *See* Shelby Cnty. Health Dep't, *Construction Permit No. 01156-01PC*, at 3 tbl.4 (July 2, 2025) (Excerpt Attached).

[315] *See* DEQ, *Stationary Source Permit to Construct and Operate, Source Registration No. 74242*, at 13 (Sept. 15, 2023) (Excerpt Attached).

[316] *See* Alaska Dep't of Envtl. Conservation, *Construction Permit No. AQ1539CPT01*, at 13 tbl.3 (July 7. 2022), (Excerpt Attached).

[317] *See* EPA, CLEAN AIR TECHNOLOGY CENTER – RACT/BACT/LAER CLEARINGHOUSE, *RBLC ID No. TX-0678* (Attached).

[318] *See* Application at 2-3.

GE's Dry Low NOx 2.6 system alone (i.e., without add-on controls like SCR).[319] But it appears that Dominion assumed a much higher NOx emission rate from the turbines with dry low NOx combustors (prior to the SCR) of 25 ppm, per Dominion's Application.[320] Dominion's assumed NOx emission rate of 25.0 ppm with gas firing and dry low NOx combustors is not supported in the permit record and, based on GE's information for its Dry Low NOx 2.0 system available for its 7FA.05 turbines, a much lower controlled NOx rate of less than 9.0 ppm should have been assumed with dry low NOx combustors. Moreover, a NOx BACT emission limit of 2.0 ppmvd reflects 78% NOx reduction attributable to the SCR pollution control when assuming a NOx emission rate of 9.0 ppmvd from the dry low NOx combustors. Yet SCR systems are routinely designed to achieve at least 90% NOx reduction.[321] Thus, a NOx BACT limit for natural gas firing during normal source operation of 2.0 ppm should be readily achievable by the Project combustion turbines, with a sufficient margin of safety.

It does not appear that Dominion addressed the other simple-cycle turbines that have met or will meet an emission limit of 2.0 ppm in its BACT review. Thus, DEQ must evaluate a NOx BACT limit of 2.0 ppm for natural gas firing in making its BACT determination. Given that DEQ has proposed to exempt the turbines from the NOx BACT limits set forth in Condition 37.a. during startup and shutdown, LLE mode, manual tuning, fuel transfers, and maintenance,[322] there is no apparent reason to expect that a NOx rate of 2.0 ppm cannot be met during normal operations.

d. DEQ Must Tighten the NOx BACT Limit Averaging Period.

As previously stated, DEQ has proposed NOx BACT limits based on a rolling 4-hour averaging period.[323] There is significant support for a 1-hour averaging time for NOx BACT instead of a 4-hour averaging time for natural gas fired turbines. These examples are not necessarily found in EPA's RACT/BACT/LAER Clearinghouse because simple cycle turbines are often permitted as minor sources or minor modifications and are thus not subject to major source permitting.

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[319] *See* GE VERNOVA, *Dry Low NOx combustor upgrades*, https://perma.cc/CEP4-47GF (last visited Oct. 22, 2025) (Attached).

[320] *See* Application at App. B, tbl.B-1.

[321] *See* EPA, CONTROL COST MANUAL, Section 4, Chapter 2 at § 2.1 (June 2019), https://perma.cc/6B4F-MU2R (Excerpt Attached).

[322] *See* Draft Permit at 14-15.

[323] *See id.* at 15.

One good example of an evaluation of the NOx emission limits achievable at simple cycle gas turbines with dry low NOx combustors and SCR is an analysis done by the Bay Area Air Quality Management District (BAAQMD) in 2010—more than 15 years ago—for the Mariposa Energy Project, which is a 200 MW power plant consisting of four simple cycle gas turbines with a nominal rating of 48.5 MW each.[324] This facility was not subject to PSD permitting requirements but was subject to BACT under local rules.[325] In documentation for its air permit, BAAQMD provided numerous examples of simple-cycle gas turbines permitted in the District with 1-hour average NOx limits of 2.5 ppmvd.[326] These examples of NOx limits for simple-cycle turbines with SCR are summarized in Table 4, below.

Table 4*1: Simple-Cycle Gas-Fired Turbines in California with NOx Limits of 2.5 ppmvd@15%O2, 1-Hour Average (August 2010)*[327]

Facility	**Turbine Size**
Panoche Energy Center	100 MW each
Walnut Creek Energy Park	100 MW each
Sun Valley Energy Project	100 MW each
CPV Sentinel Energy Project	100 MW each
Lambie Energy Center	48.5 MW each
Riverview Energy Center	48.5 MW each
Wolfskill Energy Center	48.5 MW each
Goosehaven Energy Center	48.5 MW each

Accordingly, BAAQMD required the simple-cycle gas turbines at the Mariposa Energy Project to meet a NOx BACT limit of 2.5 ppmvd on a 1-hour average basis.[328]

In addition to those simple cycle turbines listed above, there are several other simple cycle turbines that are subject to NOx emission limits of 2.5 ppmvd on a 1-hour average, as shown in the following table.

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[324] *See* Bay Area Air Quality Mgmt. Dist., *Preliminary Determination of Compliance, Mariposa Energy Project*, at 3, 15 (Aug. 18, 2010) (Excerpt Attached).

[325] *See id.* at 30.

[326] *See id.* at 38 tbl.19.

[327] *Id.*

[328] *Id.* at 39.

Table 5*2: Other Simple Cycle Gas-Fired Turbines with NOx Limits of 2.5 ppmvd@15% O2, 1-Hour Average*

Facility	**Turbine Size**
Dominion Cove Point LNG[329]	21.7 MW each
El Cajon Energy LLC[330]	49.95 MW
Escondido Energy Center LLC[331]	49.95 MW
Orange Grove Project[332]	49.80 MW
Pio Pico Energy Center[333]	100 MW each

Thus, at minimum, the NOx BACT limit for the new combustion turbines when firing natural gas should be no less stringent than 2.5 ppm, applicable on a 1-hour averaging time. But clearly, as demonstrated above, a lower NOx BACT limit of 2.0 ppm should be readily achievable for the new combustion turbines, especially with each turbine not being subject to the NOx BACT limits during periods of startup, shutdown, LLE mode, tuning, fuel type transfers, and maintenance.

e. DEQ Failed to Adequately Evaluate BACT for Greenhouse Gas Emissions for the New Simple Cycle Turbines.

The Project is subject to PSD permitting for greenhouse gas ("GHG") emissions, and thus DEQ must conduct a BACT analysis for GHG emissions and use this analysis to inform the BACT limits it proposes in the Draft Permit. The BACT limits must be at least as stringent as the applicable New Source Performance Standard ("NSPS"),[334] and the form of these limits should reflect the controls that DEQ determined reflect BACT for the emission type.

In developing the Draft Permit, DEQ relied on Dominion's GHG BACT analysis for the combustion turbines presented in Section 5.1 of the Application.[335] In this section, Dominion's evaluation of low carbon fuels is deficient, and the resulting GHG BACT limit DEQ included in the Draft Permit is not as stringent as the applicable NSPS limit, which is the minimum level of control that the BACT determination must reflect. Further, the form of the GHG BACT limits and

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[329] *See* EPA, CLEAN AIR TECHNOLOGY CENTER – RACT/BACT/LAER CLEARINGHOUSE, *RBLC ID No. MD-0035* (Attached).

[330] *See id.*, *RBLC ID No. CA-1174* (Attached).

[331] *See id.*, *RBLC ID No. CA-1175* (Attached).

[332] *See id.*, *RBLC ID No. CA-1176* (Attached).

[333] *See id.*, *RBLC ID No. CA-1223* (Attached).

[334] *See* 9 VAC § 5-80-1615(C) ("In no event shall application of best available control technology result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under 40 C.F.R. § Parts 60, 61, and 63.").

[335] *See* Application at 5-20 through 5-34.

permit provisions do not reflect the controls that DEQ determined reflect BACT for GHG emissions (efficient turbine design and operation, documented good combustion practices, and use of low carbon fuels).[336] These issues are discussed in detail below.

f. DEQ's Evaluation of Low Carbon Fuels and its Resulting GHG BACT Requirements Fail to Reflect BACT.

DEQ states in its Engineering Analysis that its GHG BACT determination for the combustion turbines is based in part on use of low carbon fuel, and that "low carbon fuel (natural gas with or without a blend of hydrogen, and restrictions on the annual amount of fuel oil that can be combusted) will be required."[337] Yet, the Draft Permit terms does not require the use of the lowest carbon fuel.

First, although Dominion states that the proposed GE 7FA.05 combustion turbines will be capable of operating on a fuel blend of natural gas and 10% hydrogen,[338] the Draft Permit does not require any blending of natural gas with hydrogen. Instead, the permit merely allows up to a 10% hydrogen blend with natural gas.[339] To the extent that emission reductions achievable through use of a blended fuel containing hydrogen is part of DEQ's BACT determination, the Draft Permit must require the use of this blended fuel. If DEQ has determined that hydrogen fuel is not yet commercially available but will be during the expected useful life of the proposed turbines, the Draft Permit should define commercial availability and require the use of blended fuel as soon as that definition is met. Further, DEQ failed to evaluate whether the proposed turbines could use an even higher blend of hydrogen with natural gas. According to the manufacturer, GE's 7F gas turbines have up to 30% hydrogen capability.[340]

Second, the Draft Permit does not sufficiently limit the use of fuel oil. The Draft Permit allows more than 23% of the total allowed annual heat input to be from use of fuel oil each year at each turbine, and those fuel throughput limits do not apply to the LLE alternative operating scenario authorized by Condition 9 or the other alternative operating scenarios in Conditions 10-

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[336] *See* Draft Engineering Analysis at 17.

[337] *Id.*

[338] *See* Application at 1-1.

[339] *See* Draft Permit at 11.

[340] *See* GE VERNOVA, *GE VERNOVA 7F GAS TURBINE*, https://perma.cc/J5A6-WS9F (last visited Oct. 22, 2025) (Attached).

12 of the Draft Permit.[341] As previously discussed, most BACT determinations for new simple cycle turbines require the use of natural gas as fuel, and it is rare that the use of fuel oil is even proposed. As shown in Table 3 above, GHG emissions with fuel oil-firing are significantly higher than GHG emissions with natural gas firing. Thus, to meet its claimed GHG BACT finding, DEQ must at the very least impose requirements that would greatly minimize the use of fuel oil at the Project. For example, DEQ could only allow the firing of fuel oil in the case of an unavoidable loss in the supply of natural gas to Project, a nationwide natural gas shortage, or other similar events that would truly necessitate the use of fuel oil at the Project turbines, with appropriate recordkeeping and reporting requirements.

DEQ must also evaluate not allowing the use of fuel oil in the combustion turbines at all as part of the GHG BACT analysis. As the data presented in Dominion's Application clearly demonstrates, most combustion turbines in the EPA's RBLC are only authorized to burn natural gas as part of the BACT determination. DEQ must evaluate such a GHG BACT option for the Project CTs.

In any event, allowing more than 23% of the turbines' total annual heat input to be from fuel oil, and unlimited use of fuel oil during alternative operating scenarios authorized in Conditions 9-12 of the Draft Permit, cannot be considered as reflective of a GHG BACT determination based on low carbon fuels.

g. DEQ's GHG BACT Emission Limits Have Not Been Demonstrated to Be At Least As Stringent as the Applicable New Source Performance Standard in 40 C.F.R. Part 60 Subpart TTTTa, Which is the GHG "BACT Floor."

DEQ has proposed GHG BACT limits of 120 lb/MMBtu when firing natural gas and 160 lb/MMBtu when firing fuel oil.[342] The definition of BACT in Virginia's PSD regulations states: "In no event shall application of best available control technology result in emissions of any pollutant that would exceed the emissions allowed by any applicable standard under 40 C.F.R. Parts 60, 61, and 63."[343] DEQ has not provided any analysis to show whether its proposed GHG BACT emission limits would be at least as stringent as the applicable limits of the NSPS.

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[341] *See* Draft Permit at 11.

[342] *See id.* at 16.

[343] 9 VAC 5-80-1615(C).

The applicable NSPS for GHG emissions from combustion turbines is in 40 C.F.R. 60, Subpart TTTTa, which applies to (among other things) stationary combustion turbines that commenced construction after May 23, 2023.[344] The Project CTs would be considered to be "intermediate load" turbines under the terms of the Draft Permit that would allow the Project turbines to operate up to 37% capacity at full load. This was determined based on the allowable annual heat input limits of 7,927,050 MMBtu/yr in total per combustion turbine, with no more than 1,839,000 MMBtu/yr allowed from fuel oil,[345] and the hourly heat input capacities of the turbines of 2,445 MMBtu/hr (natural gas) and 2,452 MMBtu/hr (fuel oil).[346] As such, the CO_2 limit of Subpart TTTTa applicable under the NSPS for intermediate load turbines is to be determined based on 40 C.F.R. § 60.5525a(a)(3)(ii), Equation 3.[347]

Importantly, the form of the NSPS emission limit is in units of mass of CO_2 per unit of power produced (*i.e.*, lb/MW-hr or kg/MW-hr).[348] Yet, DEQ's proposed GHG BACT limits are based on mass of GHG per unit of heat input (*i.e.*, lb/MMBtu).[349] CO_2 emission limits in units of lb/MW-hr reflect the efficiency of the turbine, and imposing a GHG BACT emission limit in those units helps to ensure efficient operation and maintenance of the combustion turbine in order to maintain continuous compliance with the emission limit. In contrast, CO_2 emission limits in units of lb/MMBtu heat input most likely reflect worst case expected GHG emissions from natural gas or from fuel oil (rather than efficient operation of the turbine).

Further, compliance with DEQ's proposed GHG BACT limits is based on a stack test that is only definitively required once in the life of the facility (within 180 days of startup) pursuant to Condition 55 of the Draft Permit,[350] whereas compliance with the NSPS CO_2 limit is based on a rolling 12-month average.[351] Thus, the NSPS limit, being a 12-month rolling average, is more

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[344] *See* 40 C.F.R. § 60.5509a.

[345] *See* Draft Permit at 11.

[346] *See* Application at App. A, Form 7 p.14.

[347] *See* 40 C.F.R. § 60.5525a(a)(3)(ii).

[348] *See id.*

[349] *See* Draft Permit at 16.

[350] *Id.* at 22. Although Condition 63 of the Draft Permit does allow DEQ to request additional testing, *see id.* at 24, no additional testing is definitively required for CO_2e emissions from the combustion turbines.

[351] *See* 40 C.F.R. § 60.5525a.

likely to ensure proper operation and maintenance of the combustion turbine to ensure continuous compliance with the CO_2 NSPS limit.

While DEQ has established an annual process GHG limit for the combined GHG emissions from the turbines of 2,194,773 tons per year CO_2e on a 12-month rolling total,[352] this limit cannot be considered to be as stringent as the applicable NSPS limit of Subpart TTTTa. That is because this annual ton per year limit of the permit is based on the maximum amount of oil-firing allowed per year in the Draft Permit (which emits GHG at a much higher rate than natural gas), and it includes GHG emissions from the maximum allowed numbers of startups and shutdowns.[353] In comparison, the CO_2 limit determined by Equation 3 of 40 C.F.R. § 60.5525a(a)(3)(ii) is based in part on an emission factor in lb CO_2/MMBtu that is, in turn, based on the *actual heat inputs of fuels* burned in the turbine – not the allowable heat inputs of fuels burned. In addition, DEQ's annual process CO_2e limit applies to all four combustion turbines in total, whereas the NSPS limit applies to each combustion turbine individually. Thus, DEQ's annual process GHG emission limit for the Project turbines cannot be considered to be as stringent as the applicable NSPS limit under Subpart TTTTa.

In summary, DEQ has not demonstrated that its proposed GHG BACT limits for the combustion turbines are at least as stringent as the BACT floor emission limitations from 40 C.F.R. 60, Subpart TTTTa. Indeed, given the differences in the form of DEQ's GHG BACT limits compared to the form of the NSPS standard (*i.e.*, lb/MMBtu versus lb/MW-hr), as well as the fact that the NSPS limit applies on a 12-month rolling basis whereas compliance with the GHG BACT limits in DEQ's permit is only required via one stack test, it is very unlikely that DEQ could demonstrate that its proposed GHG BACT limits are at least as stringent as the NSPS limit. DEQ must at the very least revise its GHG BACT limits to be based on the same formula of Equation 3 in 40 C.F.R. § 60.5525a(a)(3)(ii).

h. Assuming the Alternative Operating Scenarios in Conditions 9-12 of the Permit Can Be Justified, DEQ Failed to Adequately Evaluate and Establish BACT Limits for the Alternative Operating Scenarios.

Neither Dominion nor DEQ has evaluated BACT for the alternative operating scenarios authorized in Conditions 9 through 12. Yet, BACT must apply to all periods of source operation.

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[352] *See* Draft Permit at 17.

[353] *See* Application at App. A, Form 7 p.31.

Notably, DEQ did evaluate BACT during periods of startup and shutdown of the turbines,[354] but DEQ ignored BACT requirements for the other four alternative operating scenarios described in Conditions 9-12 of the Draft Permit. Assuming DEQ can justify retaining any of these alternative operating scenarios, DEQ must conduct a BACT analysis for each alternative operating scenario and impose appropriate BACT limits.

It is noted that, for the alternative operating scenarios for manual tuning, fuel type transfers, and green rotor run-ins, the Draft Permit requires a written operating procedure or manual to be developed by Dominion for those alternative operating scenarios.[355] However, the permit does not require those procedures to be submitted to DEQ for approval or to be incorporated as part of the permit. To the extent that DEQ intends to rely on those operating procedures to satisfy BACT, the operating procedures must be incorporated into the permit, and the permit must include sufficient recordkeeping and reporting requirements to demonstrate that the requirements were followed. Further, if the state intends to rely on those operating procedures or manuals to satisfy BACT requirements in whole or in part, the public must be given an opportunity to review and comment on those operating procedures.

DEQ cannot allow emissions during any of the alternative operating scenarios to exceed applicable NSPS limits, which represent the BACT floor. This includes the NOx limits of 40 C.F.R. Part 60, Subpart KKKK. While Permit Conditions 11 and 12 state this clearly, Permit Conditions 9 (LLE operating) and 10 (manual tuning) fail to include a similar limitation. At the very minimum, DEQ must require the applicable NSPS NOx limits be met during all alternative operating scenarios.

CONCLUSION

To approve the proposed PSD permit on this record would be to repeat the missteps that led the Fourth Circuit to vacate the Buckingham Compression station permit in 2020, the year the VCEA and the VEJA went into effect. As set forth in this letter, DEQ and Dominion have neglected to adequately address environmental justice, in the face of VEJA's mandate to not only consider EJ concerns, but to act in such a manner so as to ensure its aims are achieved. DEQ has also completely neglected performing a site suitability evaluation, and Dominion failed to

[354] *See* Draft Engineering Analysis at 35, 39–40 tbl.10.

[355] *See* Draft Permit at 6–8.

demonstrate compliance with applicable air permitting requirements for the Project. These fundamental flaws in the permitting process require that the proposed permit be denied. Accordingly, we ask that DEQ cease efforts to proceed with the Draft Permit until all deficiencies have been addressed, or in the absence of remedying the errors identified, deny the permit.

Respectfully submitted,

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Attachments:

1. Chesterfield Comprehensive Plan (Excerpt)
2. *Brankley v. Gillies*, Petition for Declaratory Judgment
3. Website – Dutch Gap Conservation Area
4. Article – Stepping Back in Time at Henricus Historical Park
5. Fjord Community Study
6. Website – Henricus Historical Park
7. Article – Evolution, Civil War history meet in fossil with tragic past
8. Va. H.R. 612 (2024)
9. Letter from SELC to DEQ (July 22, 2025)
10. Article – Chesterfield County Champions Central Virginia's First-Ever Monolingual Community Meeting for Spanish Speakers
11. Testimony of Ryan Deyoe (Excerpts)
12. Finn Report
13. Hopkins Report
14. Tessum Report

15. Klafka Report
16. PSD Modeling Analysis Memo
17. Art. 6 Modeling Analysis Memo
18. 2024 EPA Modeling Guidance
19. Email from DEQ to SELC (May 16, 2025)
20. Email from DEQ to SELC (Jan. 31, 2025)
21. PSD Modeling Protocol
22. Letter from SELC to DEQ (Apr. 11, 2025)
23. Letter from SELC to DEQ (Sept. 25, 2024)
24. Freedom of Information Act Request No. 25-2136'
25. Email from DEQ to SELC (Apr. 9, 2025)
26. Website – Climate Change Indicators: Wildfires
27. 2019 EPA Ambient Air Guidance
28. Press Release – EPA finalizes stronger standards for harmful soot pollution
29. 2024 EPA SIL Guidance
30. Website – 2025 DOE 202(c) Orders
31. Challenge to DOE Order No. 202-25-3
32. Challenge to DOE Order No. 202-25-4
33. Challenge to DOE Order No. 202-25-7
34. Challenge to DOE Order No. 202-25-8
35. Article – DOE's Fifth Emergency Order for PJM
36. Letter from SELC to DEQ (Aug. 25, 2025)
37. Email from DEQ to SELC (Aug. 20, 2025)
38. Public Information Meeting Flyer
39. SELC Transcript of September 8 Public Hearing
40. 2024 EPA EJ Process Guidance
41. National Ambient Air Quality Standard Table
42. Lim Report
43. Air Pollution Activity Suitability and Value Form
44. Letter from DEQ to Dominion (Aug. 30, 2023)
45. Letter from County to DEQ and SCC (June 24, 2024)
46. Letter from County to DEQ (July 3, 2024)
47. Full Transcript of the People's Hearing
48. Transcript of Recorded Conversation with Frances Broaddus-Crutchfield
49. Transcript of Recorded Conversation with Chris Weigard
50. Transcript of Recorded Conversation with Gail Christie
51. Transcript of Recorded Conversation with Karol Fisher
52. Transcript of Recorded Conversation with Gray Montrose
53. Transcript of Recorded Conversation with Marni Pilafian
54. Transcript of Recorded Conversation with Johnathon Williams
55. Transcript of Recorded Conversation with Eliezer Ferrell
56. Written Comments Gathered at the People's Hearing
57. Letter from SELC to DEQ (June 14, 2024)
58. Letter from SELC to DEQ (Jan. 28, 2025)
59. Email from DEQ to Governor's Office (Sept. 24, 2025)
60. Letter from SELC to DEQ (June 10, 2025)

61. Notice of Extended Comment Period on Data Center Variance
62. CPS Title V Permit
63. Demolition Permit
64. Dominion Response to Interrogatory
65. PM CEMS Notification for Unit 6
66. PM CEMS Notification for Unit 5
67. Website – DEQ Permitting Enhancement and Evaluation Platform
68. Testimony of Jeffrey G. Miscikowski
69. Art. 6 BACT Applicability Guidance
70. Art. 6 BACT Analysis Guidance
71. CTC Property Permit (Excerpt)
72. Vantage Data Center Permit (Excerpt)
73. Alaksa Gasline Liquefaction Permit (Excerpt)
74. RBLC – Freeport LNG
75. Website – GE Dry Low NOx Combustor Upgrades
76. EPA Control Cost Manual (Excerpt)
77. Mariposa Energy Project Preliminary Determination (Excerpt)
78. RBLC – Dominion Cove Point
79. RBLC – El Cajon Energy
80. RBLC – Escondido Energy Center
81. RBLC – Orange Grove Project
82. RBLC – Pio Pico Energy Center
83. Website – GE Vernova 7F Gas Turbine