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VIA ELECTRONIC FILING

November 8, 2024

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

RE: Application of Virginia Electric and Power Company, For approval to amend certificates of public convenience and necessity for the Brunswick and Greensville County Power Stations to construct and operate an LNG Storage Facility pursuant to § 56-580 D of the Code of Virginia

CASE NO. PUR-2024-00096

Dear Mr. Logan:

Pursuant to Paragraph 13 of the July 9, 2024 Order for Notice and Hearing in the above-captioned proceeding,[1] PJM Interconnection, L.L.C. ("PJM") hereby submits the following public comments.

Please do not hesitate to contact the undersigned with any questions regarding this submission.

Regards,

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[1] *Application of Virginia Electric and Power Company, For approval to amend certificates of public convenience and necessity for the Brunswick and Greensville County Power Stations to construct and operate an LNG Storage Facility pursuant to § 56-580 D of the Code of Virginia,* Case No. PUR-2024-00096, Order For Notice and Hearing at P 13 (Jul. 9, 2024) ("On or before November 12,2024, any interested person may file comments on the Application by following the instructions found on the Commission's website . . . All comments shall refer to Case No. PUR-2024-00096.").

Public Comments of PJM Interconnection, L.L.C.

Benefits of an LNG Supply Option to Support the Brunswick and Greensville Gas-Fired Generating Stations

Introduction

Virginia Electric and Power Company's Brunswick and Greensville generating stations are two large combined cycle generation plants that supply reliable electricity to thousands of homes and businesses both locally and regionally. PJM is offering these comments in support of the proposed establishment of a Liquefied Natural Gas (LNG) facility intended to improve grid reliability during stressed system conditions that can lead to natural gas delivery disruption. These disruptions can range from interstate pipeline operating constraints, pipeline maintenance, or upstream gas supply scarcity when natural gas wellhead freezing occurs. The availability of an on-site back up fuel option during these conditions provides increased fuel assurance and overall greater availability of generation from the Brunswick and Greensville generating stations for the PJM grid.

Supporting PJM

PJM is responsible for ensuring the reliability of the electric grid and managing the wholesale electricity market in its region. The establishment of the proposed LNG facility would directly contribute to Virginia Electric and Power Company's ability to support PJM in several ways:

1. **Enhanced Grid Reliability**: By providing a secure supply of back-up natural gas via LNG to the Brunswick and Greensville generating stations, the LNG facility could be utilized to offset potential hourly gas flow and/or pressure fluctuations originating from the Transco mainline pipeline, which is the primary gas transportation supply for these stations. This is important for PJM, as these stations help PJM meet the demand for electricity, especially during peak periods and emergencies.
2. **Emergency Preparedness**: In the event of a natural disaster or other emergencies that disrupt the primary natural gas supply and delivery to these generation stations, the LNG facility would serve as a critical backup source of fuel. This would enable Virginia Electric and Power Company to continue delivering electricity from the Brunswick and Greensville generating stations without interruption, thereby enhancing the resilience of the entire PJM grid.
3. **Environmental Benefits**: Gas-fired generating resources that have the ability to operate on a backup fuel when natural gas becomes unavailable from either supply scarcity or when pipeline transportation issues arise, puts PJM in a much greater grid reliability position. Typically the alternative fuel source is predominately oil. Having LNG as the alternative fuel source lessens the emissions level and environmental permitting limitations that exist with an oil backup fuel option.

Enhancing Reliable Operations: Challenges with Weekend Gas Procurement

One of the primary challenges faced by all natural gas units, including the Brunswick and Greensville generating stations, is the procurement of natural gas during weekends, particularly during cold winter periods. An LNG facility could provide a buffer against potential supply scarcity by storing surplus gas and making it available as needed over the weekend. This would ensure a steady supply of natural gas, thereby enhancing the reliability of the generating stations.

Enhancing Reliable Operations: Fuel Assurance

Fuel assurance is a critical concern for any power generation facility. The current reliance on pipeline-delivered natural gas exposes the Brunswick and Greensville stations to potential supply disruptions. These disruptions can be caused by pipeline maintenance, accidents, physical/cyber-attack or weather-related issues such as freezing, storms, etc. An LNG facility would mitigate these risks by providing an alternative source of natural gas that is not dependent on pipeline infrastructure. The stored LNG could be re-gasified and supplied to the generating stations during periods of pipeline disruption, ensuring continuous operation and reducing the risk of power outages.

Enhancing Reliable Operations: Concerns with Loss of Gas Supply Due to Well-Head Freezing

Natural gas well-head freezing is a significant risk during cold weather conditions, particularly in regions with harsh winters. When temperatures drop, the moisture in natural gas can freeze at the well-head, blocking the flow of gas and leading to supply interruptions. The proposed LNG facility could help to mitigate this problem by creating an inventory of LNG supply prior to an impending cold weather event and then utilizing this stored LNG supply to offset any supply limitations that develop as a result of the colder weather conditions.

Capacity Market Impacts

As noted previously, LNG can potentially provide multiple reliability benefits for the Brunswick and Greensville generation stations. These reliability benefits increase the likelihood that the units will be available when the electric grid is experiencing stressed or emergency conditions coincident with the constraints on the natural gas grid. Under the PJM Capacity Market construct, units that demonstrate higher reliability during stressed conditions receive a higher accreditation in the capacity market, which can potentially translate to lower capacity costs for consumers. The zone for Brunswick and Greensville cleared at a higher price than the rest of the RTO for the 25/26 capacity auction. As Virginia Electric and Power Company has explained, this higher price will flow to consumers only if Virginia Electric and Power Company has to procure from the market. Ensuring the viability of Brunswick and Greensville could conceivably lessen the need for Virginia Electric and Power Company to procure needed supply from the market.

Conclusion

In conclusion, the establishment of a new LNG facility would provide beneficial support to the reliable operation of the Brunswick and Greensville generating stations and, by extension, the PJM Interconnection.

Respectfully submitted,

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