Idylwood Substation Rearrangement Project

Case No. PUR-2017-00002

Quarterly Update Report

September 15, 2025

Background

On September 8, 2021, the Virginia State Corporation Commission ("SCC") issued an Order on Motion authorizing Virginia Electric and Power Company d/b/a/ Dominion Energy Virginia ("the Company") to extend the project construction to the new December 31, 2026 in-service date for the Idylwood Substation Rearrangement Project ("Rebuild Project" or "Project").[1]

The Company, in part, requested the in-service date extension because:

> The unanticipated delay in obtaining the necessary local approvals has disrupted the Company's prior scheduling, sequencing, and planning for the construction of the Rebuild Project requiring the Company to release any prior outage requests it had made to support the prior schedule. In addition, the ability to obtain and coordinate both distribution- and transmission-side outages in northern Virginia, generally, and in the area of the Project, specifically, has become increasingly difficult due to customer and system loading. For example, because obtaining outages in the peak loading seasons of winter and summer generally is not possible, it essentially is mandatory that the work must be performed during the fall and spring. Moreover, the limited fall and spring outage windows must accommodate increased outage needs in the Northern Virginia area for ongoing projects and system needs. The Company also must coordinate its outages to ensure reliability contingencies in the area and must coordinate outages with certain customers, such as the Washington Metropolitan Area Transit Authority. Outages must be submitted months in advance. Adding to those scheduling difficulties, as part of compliance with its local approvals, construction is limited to certain times and must be performed in a manner that reduces noise to ensure the Company minimizes impacts to the nearby community. Recent work on another GIS project at a different substation has further informed the Company's view on the added complexity of the installation of new GIS systems. Finally, compounding these variables, to the greatest extent possible, the Company must keep the Idylwood Substation energized during project construction to meet the growing load needs of the surrounding areas. These current circumstances have led to more complex, on-the-ground logistics and construction sequencing than initially anticipated for this Project during the proceeding before the Commission.[2]

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[1] *Application of Virginia Electric and Power Company For approval and certification of electric transmission facilities under Va. Code § 56-46.1 and the Utility Facilities Act, Va. Code § 56-265.1 et seq.,* PUR-2017-00002, Order on Motion at 4 (Sept. 8, 2021).

[2] *Application of Virginia Electric and Power Company For approval and certification of electric transmission facilities: Idylwood Substation Rebuild and Rearrangement of 230 kV Transmission Lines #202, #207, #251, #266, #2035, and #2097*, PUR-2017-00002, Motion of Virginia Electric and Power Company for Relief from May 31, 2020 In-Service Date at 4-5 (Apr. 27, 2020).

As required by the Order on Motion, the Company shall:

- Submit quarterly construction status updates regarding the Rebuild Project to the Director of the Commission's Division of Public Utility Regulation until the Rebuild Project is completed or until further order of the Commission.
- Post each quarterly construction status update on the Company's website: www.DominionEnergy.com/shreve.
- Post its Construction Timeline on the website and update the Construction Timeline, as needed, to maintain accuracy.

Project Overview

The Idylwood Substation Rebuild Project rebuilds the existing Idylwood Substation on Shreve Road, originally built in the late 1950s, to support growing capacity and projected reliability concerns in the region. These enhancements will allow Dominion Energy to continue providing safe and reliable electric service to the community.

Due to the limited space at the site, Dominion Energy is investing in Gas Insulated Substation ("GIS") technology. The existing substation currently uses Air-Insulated Technology. By utilizing GIS technology, Dominion Energy will be able to largely utilize the substation's existing footprint while modernizing the facility to meet area demand and minimizing impact to surrounding neighbors. GIS is the best available technology and offers several benefits:

- GIS equipment takes up less space, allowing Dominion Energy to accommodate growth in the area, while operating within the existing property;
- GIS is more reliable than traditional air-insulated substations, meaning fewer outages for customers; and
- GIS requires less maintenance than traditional substations.

Idylwood Substation is a necessary and important component of the electrical system and is critical in maintaining reliability for the area. As such, it is necessary that most of the substation equipment remain energized while crews perform their work. This increases the complexity of the Project and has also impacted our timeline. To perform operations safely, crews must work in a limited space and temporarily relocate some of the equipment to install new equipment. Additionally, we must limit the number of crews working inside the substation at the same time.

Status Update

Each quarter, the Company will provide a construction update on the following information:

- Permitting
- Achievements
- Challenges
- Upcoming Construction
- Public Outreach and Communications

- Budget
- Noteworthy Changes

Permitting

The Company does not anticipate the need for any additional permits for this Project.

Achievements

Since the June 2025 Quarterly Update, the Company has accomplished the following milestones for the Project, including:

- HICO installed the Gas Insulated Bus ("GIB") on the east and west side of the 230 kV GIS building, with the exception of the 2175-line terminal and foundation, which is scheduled to be completed in October 2025. Transformer #1, Transformer #2 and Transformer #3 terminal bushings will not be installed until May and June of 2026 during outages.
- Work on the external 230 kV bus has been completed as much as possible. Dominion Energy Virginia is waiting on HICO to install the 2175 terminal foundations so that the bus can be completed.
- The Company completed installation of the new streetlights on Holly Manor Rd in late June 2025.
- On June 13, 2025, the 2035 / 4 monopole located north of Idylwood Substation was installed and the 2035-Line conductor transferred to monopole.
- The Company also installed the Transmission CCVT couplers and the wave traps.

Key Challenges

HICO provides a Local Control Cabinet ("LCC") for each 230 kV GIB unit, serving as the interface between the Company and the HICO breakers. HICO is responsible for developing the LCC drawings, which the Company reviews and approves before assembly.

During the review process, the Company approved the LCC drawings. Based upon the approved design, HICO assembled and wired the new LCCs. The LCC cabinets were shipped late 2024 and subsequently installed in the HICO 230 kV GIB system.

In early January 2025, the Company and HICO had a site meeting to address issues with the newly installed LCC cabinets. During this meeting, the Company determined that the terminal wiring blocks were too small to accommodate the external wires from the Company's 230 kV control enclosure. To minimize both schedule and cost impacts, the Company and HICO developed a plan to replace only the terminal blocks that interface with the external wires. This modification requires HICO to make design adjustments to fit and rewire the affected terminal blocks.

HICO estimated that this rework would take approximately five months to complete. As a result, the Company will not be able to begin pulling external wires to the LCCs until this work is

finished. This work is expected to be completed by September 15, 2025. This delay will impact the timing of outages required to energize the new HICO 230 kV gas-insulated equipment. The terminal block sizing issue should have been identified during the Company's review of the LCC drawings. There are two major cost impacts to the Project: (i) HICO's change order to rework the LCC cabinets and (ii) the delay in the schedule. These delays are expected to affect the overall Project completion date by approximately 7 months.

Please see below for an updated timeline for the planned outages, the anticipated in-service date, and updated Project costs:

- **Construction**: The HICO LCC were delivered with terminal blocks that were too small to accommodate the external wires. HICO plans to complete the LCC rework by September 15, 2025.
- **Outages**: The original planned energize cut-in date for the 230 kV system was September 8, 2025. This date has now been rescheduled to March 23, 2026, when outages to connect the new HICO 230 kV Gas-Insulated equipment will begin. The outage sequence is expected to take approximately eight months to complete. The System Operation Center, Regional Operation Center, and Distribution Planning Group will not permit distribution transformer outages during the heavy winter load season. This restriction is why outages will commence in March 2026.
- **In-Service Date:** The in-service date will be pushed back from June 30, 2027 to April 30, 2028. The Project will continue beyond the completion of the HICO 230 kV GIS, including the demolition of old equipment and control enclosures, installation of security walls on the east, west, and south sides, deployment of security systems, and seasonal landscaping.
- **Project Costs**: The seven-month schedule delay will increase AFUDC charges incurred monthly, as well as contractor costs during this period. Additionally, HICO's change orders for the LCC rework will further increase project costs. The projected total cost increase is approximately $10 million, bringing the estimated total spend for the Project to $230 million.

Upcoming Construction

1. The Company will continue to wire the equipment in the 230 kV GIS building. This work is expected to continue at least until March 2026.
2. The Company has a project to replace the newly installed streetlight pole on Holly Manor Rd with a taller pole. The plan is to have the streetlight corrected within the next three weeks.
3. The 230 kV GIB to the 2175 terminal will be completed in November 2025 following completion of the2175 terminal foundation in October 2025. The 230 kV GIB bushing for Transformers #1, #2 and #3 installation will be completed when the outages occur on the associated equipment in May and June of 2026.

*Public Outreach and Communications [***Deon, please provide any updates on public outreach or communications since our last report in June;** *Wiley provided the one below]*

Following completion of the streetlight work described above, Ms. Jeffrey sent the Company an email about one of the new streetlights indicating that it was not working and that it was different from the other streetlights on Holly Manor Rd. The Company replied to Ms. Jeffrey to let her know that the Company requested the engineer to investigate the issue. It was discovered that the incorrect pole was ordered for the project. Ms. Jeffrey was notified via email that the Company has a project in the system to replace the pole with the correct size and connect it so that the streetlight will work properly. The project is in the approval process and will be released to construction next week.

There is no other recent public outreach or communication to report. [**Deon, please confirm or provide updates**]

Budget

As presented in the June 2024 Quarterly Update, the budget for the Project increased from $159 million to $220 million. For the reasons stated above, the budget for the Project has increased from $220 million to $230 million.

$189.2 million of $230 million spent.

Noteworthy Changes

No additional noteworthy changes.