

**PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120**

Public Meeting held September 21, 2023

Commissioners Present:

Stephen M. DeFrank, Chairman
Kimberly Barrow, Vice Chair
Ralph V. Yanora
Kathryn L. Zerfuss
John F. Coleman, Jr.

Letter of Notification of PPL Electric Utilities Corporation for approval to reconstruct sections of the Siegfried – Frackville 230 kV Transmission Line, Eldred – Frackville 230 kV Transmission Line, and Columbia – Frackville 230 kV Transmission Line located in Butler Township, Schuylkill County, Pennsylvania

Docket Number:
A-2023-3040694

ORDER

BY THE COMMISSION:

On May 15, 2023, PPL Electric Utilities Corporation (PPL Electric), Utility Code 110500, filed a Letter of Notification pursuant to 52 Pa. Code § 57.72(d)(1)(vi) of the Pennsylvania Public Utility Commission’s (Commission) transmission line siting regulation. For the reasons expressed in this Order, the Letter of Notification is approved.

Copies of the Letter of Notification were served in accordance with Section 57.72(d)(3) and 57.74(b) & (c), 52 Pa. Code §§ 57.72(d)(3), 57.74(b) & (c), on the PA Department of Transportation, PA Department of Environmental Protection, PA Historical and Museum Commission, Schuylkill County Commissioners, Butler Township, *et al.* No protests were filed. No hearings were held.

PPL Electric requests approval to reconstruct sections of the Siegfried – Frackville 230 kV Transmission Line, Eldred – Frackville 230 kV Transmission Line, and Columbia – Frackville 230 kV Transmission Line located in Butler Township, Schuylkill County, Pennsylvania. The project proposes to rebuild approximately 0.3 miles of each of the above transmission lines for a total of 0.9 miles. The sections of transmission line to be rebuilt are located directly adjacent to PPL Electric’s existing Frackville 230/69 kV Substation. Application Attachment 3, Section 1.0.

PPL Electric states that rebuilding the sections of transmission line is necessary to accommodate reconstruction of the existing Frackville Substation. PPL Electric also states that the majority of the assets at the Frackville Substation have reached their end-of-life and are operating at well beyond the average age of the equipment in the PPL Electric fleet. PPL Electric further states that the three existing 230/69 kV transformers at the Frackville Substation average 50 years in age and that twelve of the 230 kV circuit breakers are over 30 years old and three of Frackville Substation’s oil filled circuit breakers are over 45 years old. Finally, PPL Electric states that per the manufacturer’s recommendations it has treated circuit breakers as an asset with a 30-year lifespan and the 230/69 kV power transformers as an asset with a 50-year lifespan. Application ¶¶18-19.

PPL Electric submits that the three existing 230/69 kV transformers at the Frackville Substation also show considerable material concern. Transformer 2 has had fifteen emergent trouble orders in the past five years and Transformer 3 has had nine emergent

trouble orders in the previous five years. PPL Electric also submits that the oil filled circuit breakers and certain other breakers using sulfur hexafluoride gas have experienced known leaks and maintenance issues and must be replaced for reliability and environmental concerns. PPL Electric further submits that the majority of the Frackville Substation yard equipment, including disconnects and relays, are of a similar age and condition. Finally, PPL Electric submits that replacing these breakers is among the highest priorities for the Frackville Substation Project. Application ¶¶18-20 and Attachment 1, pgs. 1-9.

PPL Electric states that in addition to the existing substation equipment exceeding its useful life, good planning practices also support replacing the existing substation with a new substation. PPL Electric states that in accordance with PJM Interconnection, LLC minimum planning and design standards, the use of three terminal lines and radial bus substation configurations, as is found at the Frackville Substation, are discouraged in new bulk electric system substation construction because of the potential for detrimental effects on transmission system reliability. PPL Electric also states that acceptable standards for substations are noted as ring bus configurations or breaker-and-a-half arrangements. Finally, PPL Electric states that since the existing Frackville Substation 230 kV and 69 kV yards were originally constructed before the PJM minimum planning and standards were implemented, the existing layout does not adhere to these standards and needs to be redesigned to comply with this Good Utility Practice. Application ¶12.

PPL Electric states that in order to resolve the identified asset health conditions and substation configuration issue, it proposes to construct the rebuilt Frackville Substation in a breaker-and-a-half configuration adjacent to the existing Frackville Substation. To facilitate this, PPL Electric also states that it will relocate the three existing 230 kV transmission lines to accommodate moving bay positions at the rebuilt Frackville Substation. The new 230 kV yard will be located several hundred yards to the west of the current position. Finally, PPL Electric states that it presented its plan to address the Frackville Substation needs on its

230 kV system at PJM's May 2022, Transmission Expansion Advisory Committee and was subsequently assigned supplemental project number s2753. Application ¶¶ 27, 29, 36 and PPL Electric Data Request Response No. 1.

PPL Electric states that in addition to rebuilding the Frackville Substation, it considered one alternative solution, replacing the equipment in place plus mitigation work. PPL Electric states that the estimated total cost of replacing the aging assets is approximately \$45 million plus an additional \$32 million to facilitate the replacement. Accordingly, PPL Electric submits that the alternative was rejected for a solution which addresses the aging infrastructure and non-standard substation configuration in a cost-effective manner. Application Attachment 1, pg. 13.

PPL Electric states that to facilitate rebuilding the Frackville Substation it will remove the existing conductors and six existing transmission structures on the sections of line to be rebuilt and install new conductors supported on seven new steel monopole structures. The existing structures range from approximately 85 feet-in-height to 160 feet-in-height and the new transmission structures will range from approximately 60 feet-in-height to 170 feet-in-height. In its filing, PPL Electric states that the Frackville Substation Rebuild Project has been designed and will be built within existing right-of-way or on the property of the Frackville Substation. PPL Electric also states that the right-of-way is approximately 175 feet-in-width where it runs east to west and approximately 600 feet-in-width where it runs north to south. Application ¶¶36-37, 39 and PPL Electric Data Request Response No. 6.

PPL Electric asserts that the Frackville Substation Rebuild Project will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable PPL Electric and National Electrical Safety Code minimum standards and all applicable legal requirements. Application ¶33.

PPL Electric states that the total estimated cost for the Frackville Substation Rebuild Project is approximately \$5.1 million and that the cost of the substation work is approximately \$55.7 million. All costs will be paid for by PPL Electric. Finally, PPL Electric states that construction of the project is anticipated to commence in July 2023 with a proposed in-service date of November 2025. Application Attachment 1, pgs. 1-2 and PPL Electric Data Request Response No. 5.

Section 57.72 authorizes the abbreviated Letter of Notification siting application process in lieu of an application for the following:

- (i) An HV line which is proposed to be located entirely on an existing transmission line right-of-way, so long as the size, character, design, or configuration of the proposed HV line does not substantially alter the right-of-way.
- (ii) An HV line which is proposed to be located entirely within a public road.
- (iii) An HV line which is proposed to be located entirely within applicant's existing transmission line right-of-way and the property of the sole customer to be served by the line, so long as the size, character, design, or configuration of the proposed HV line does not substantially alter the right-of-way.
- (iv) A line for which the voltage is proposed to be increased above its present levels so long as the size, character, design, or configuration of the proposed HV line does not substantially alter the right-of-way.

- (v) An HV line which is to be reconducted or reconstructed so long as the size, character, design or configuration of the proposed HV line does not substantially alter the right-of-way.

- (vi) An HV line having a proposed route of 2 miles or less.

52 Pa. Code § 57.72(d).

We agree with PPL Electric that the formal PPL Electric Letter of Notification and manner in which it was filed conforms to the requirements of 52 Pa. Code § 57.72(d)(1)(vi) because the Frackville Substation Rebuild Project reconstructs sections of existing 230 kV transmission lines which total less than two miles in length. Moreover, the Commission has reviewed the filing and does not find it to be inconsistent with the applicable law or Commission policy regarding transmission line siting and, therefore, to be in the public interest.

We also note that our approval of the Letter of Notification does not address the issues of accounting treatment, and cost recovery; **THEREFORE,**

IT IS ORDERED:

1. That the Letter of Notification filed by PPL Electric Utilities Corporation for approval to reconstruct sections of the Siegfried – Frackville 230 kV Transmission Line, Eldred – Frackville 230 kV Transmission Line, and Columbia – Frackville 230 kV Transmission Line located in Butler Township, Schuylkill County, Pennsylvania, is hereby approved.

2. That upon completion of the subject project, PPL Electric Utilities Corporation shall file the final project cost with the Commission.

3. That upon completion of Ordering Paragraph 2, this proceeding at Docket No. A-2023-3040694 be closed.

BY THE COMMISSION,

A handwritten signature in black ink, appearing to read "Rosemary Chiavetta". The signature is fluid and cursive, with the first letter of each word being capitalized and prominent.

Rosemary Chiavetta
Secretary

ORDER ADOPTED: September 21, 2023

ORDER ENTERED: September 21, 2023