

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

Public Meeting held March 27, 2025

Commissioners Present:

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

Letter of Notification of PPL Electric Utilities Corporation for approval to reconstruct the Mountain – Jenkins – Stanton 230 kV Transmission Line located in Exeter, Jenkins, Kingston, Plains, and Plymouth Townships and the Boroughs of Courtdale, Exeter, Larksville, Swoyersville, West Wyoming, and Wyoming, Luzerne County, Pennsylvania

Docket Number:
A-2024-3052129

ORDER

BY THE COMMISSION:

On November 13, 2024, PPL Electric Utilities Corporation (PPL Electric), Utility Code 110500, filed a Letter of Notification pursuant to 52 Pa. Code § 57.72(d)(1)(i) 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). No protests were filed. No hearings were held.

PPL Electric requests approval to reconstruct the Mountain – Jenkins – Stanton 230 kV Transmission Line located in Exeter, Jenkins, Kingston, Plains, and Plymouth Townships and the Boroughs of Courtdale, Exeter, Larksville, Swoyersville, West Wyoming, and Wyoming, Luzerne County, Pennsylvania. The lines to be rebuilt connect the Mountain 230-69 kV Substation owned by UGI Utilities, Inc., Utility Code 111100, and the PPL Electric owned Jenkins 230-69 kV Substation and Stanton 230-69 kV Substation. Application page 1. PPL Electric states that the rebuild will include the replacement of lattice structures, conductors and associated hardware.

PPL Electric states that the reconstruction of the Mountain – Jenkins - Stanton line is necessary to resolve significant asset health condition concerns across the transmission lines associated with the presence of pack-out rust in the existing COR-TEN steel lattice towers. PPL Electric also states that the Mountain – Jenkins – Stanton transmission line was constructed in the early 1970s and includes 99 weathering-steel COR-TEN steel lattice structures spanning approximately 18.3 miles. PPL Electric further states that COR-TEN lattice towers were commonly installed by the industry during this time because it was believed that the corrosion-resistant properties of weathering-steel would reduce future maintenance needs and costs. Lastly, PPL Electric states that these towers had an expected service life of approximately 75 years at the time they were installed. Application ¶¶9 & 22 and PPL Electric Data Request Response No. 3.

PPL Electric submits that independent field investigations and assessments were conducted in 2013 and 2019 on PPL Electric’s 230 kV system and in 2013 and 2023 on the Mountain – Jenkins – Stanton transmission line. PPL Electric submits that the

investigations and assessments were conducted by separate third party entities and revealed that the aging COR-TEN structures on the 230 kV system including the Mountain – Jenkins – Stanton transmission lines’ facilities are showing signs of accelerated deterioration. PPL Electric also submits that based on the results of these assessments, the issue with the COR-TEN lattice towers has accelerated the deterioration of these structures and has brought the assets to the end of their service life much sooner than would have been anticipated. PPL Electric further submits that at roughly 50 years of age, the COR-TEN lattice towers that comprise the Mountain – Jenkins – Stanton line have exceeded their useful life and can no longer be relied upon to safely operate as designed. Application ¶¶23, 25, 26, 29, & 31.

PPL Electric states that the asset health concerns discovered by the 2013 Assessment were heightened by the discovery of pack-out rust in the section joints of the subject COR-TEN lattice towers. PPL Electric also states that when the presence of pack-out rust becomes too severe, it can deform steel members and connecting hardware, it can also shear off bolts, cause loss of structural integrity, cause members to disconnect from the tower, and even result in tower failure. PPL Electric further states that this now well-known inherent problem with COR-TEN steel is also being seen in other infrastructure where two pieces of COR-TEN steel overlap at joints, such as those present on lattice towers. Application ¶24.

PPL Electric submits that the accelerated deterioration of the asset health of the COR-TEN lattice towers has been further corroborated by a recent study prepared by RTR Energy Solutions, Inc. (RTR), in 2023. PPL Electric submits that RTR was contracted to perform a condition assessment on the Mountain – Jenkins – Stanton transmission line. PPL Electric also submits that the sample set for the assessment consisted of all 99 of the COR-TEN structures on these lines. PPL Electric submits that of the structures evaluated on the Mountain – Jenkins – Stanton line, approximately 94% were determined to have a condition rating of severe, which indicates that greater than 50% of the existing structure’s

joints contain pack-out rust. PPL Electric further submits that the majority of pack rust observed on each structure was found in the lower sections of the post leg where horizontal and diagonal members are bolted to the post leg. Application Attachment 1, pp. 13-14.

PPL Electric states that it will remove the 99 existing COR-TEN structures and 10 non-COR-TEN structures and install 108 new steel pole structures, new conductors, and new optical ground wires. PPL Electric also states that the existing structures range from approximately 101 feet-in-height to 172 feet-in-height and the new steel structures will range from approximately 105 feet-in-height to 170 feet-in-height. PPL Electric states that the proposed new conductors will consist of six 1590 kcmil, 54/19 stranding, “Falcon” High Strength aluminum conductor steel supported (ACSS) conductors. Finally, PPL Electric states that the new transmission structures are anticipated to have a service life of approximately 75 years. Application Attachment 2, pp. 5-6 and Attachment 1, p. 10.

PPL Electric states that it presented its plan to address COR-TEN needs on its 230 kV system at PJM’s October 2020, Transmission Expansion Advisory Committee. PPL Electric further states that the presentation included the reconstruction of the Mountain – Jenkins – Stanton line and was subsequently assigned supplemental project number s2371 and s2372. Application ¶¶37-38.

PPL Electric submits that, in addition to rebuilding the Mountain – Jenkins – Stanton transmission line, it considered two alternative solutions, structure replacement, and structure restoration. PPL Electric also submits that the estimated total cost of ownership over a 45-year period for the two alternative solutions is approximately \$252.3 million and \$226.2 million, respectively. Accordingly, PPL Electric submits that the two alternatives were rejected for a solution which addresses the aging infrastructure in a cost-effective manner. Finally, PPL Electric submits that the 45-year cost of the chosen solution is approximately \$219.4 million and that the initial cost of constructing the project is

approximately \$72.9 million. Application ¶37 and Attachment 1, Section 5.0.

In its filing, PPL Electric submits that the reconstruction project has been designed and will be built within the existing right-of-way of the Mountain – Jenkins – Stanton line. PPL Electric also submits that the right-of-way width generally varies from approximately 150 to 325 feet wide. PPL Electric submits that the new structures will be located near the existing structures and that in instances where the structures will be relocated, the proposed locations will be discussed with the property owners. Finally, PPL Electric submits that the existing number of structures on each parcel will not increase, and no new structures will be added to properties that do not currently have a structure. Application ¶¶44-45.

PPL Electric asserts that the reconstruction 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 ¶42.

PPL Electric states that the total estimated cost for the Mountain – Jenkins – Stanton reconstruction project is approximately \$72.9 million and will be paid for by PPL Electric. Lastly, PPL Electric states that construction of the project is anticipated to commence in May 2025 with a proposed in-service date of November 2028. Application Attachment 1, p. 2.

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 recondotored 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)(i) because the project reconstructs the Mountain – Jenkins – Stanton 230 kV Transmission Line in such a manner that it does not substantially alter the existing right-of-way. 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 the Mountain – Jenkins – Stanton 230 kV Transmission Line located in Exeter, Jenkins, Kingston, Plains, and Plymouth Townships and the Boroughs of Courtdale, Exeter, Larksville, Swoyersville, West Wyoming, and Wyoming, Luzerne 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-2024-3052129 be closed.

BY THE COMMISSION,



Rosemary Chiavetta
Secretary

ORDER ADOPTED: March 27, 2025

ORDER ENTERED: March 27, 2025