

**PENNSYLVANIA PUBLIC UTILITY COMMISSION
HARRISBURG, PENNSYLVANIA 17105**

Joint Petition for Waiver of Certain Provisions of the Commission's Regulations for Commission Review of Siting and Construction of Electric Transmission Lines set forth at 52 Pa. Code § 57.71 et seq. and Letter of Notification of PPL Electric Utilities Corporation, for Approval to Rebuild Approximately 22.5 Miles of Existing 138/69 kV Transmission Lines in Washington Township, Lehigh County and the Boroughs of Nesquehoning, Palmerton, and Summit Hills and East Penn, Lower Towamensing, and Mahoning Townships, Carbon County, Pennsylvania

**Public Meeting: September 19, 2019
3009112-TUS
Docket No. A-2019-3009112**

STATEMENT OF COMMISSIONER ANDREW G. PLACE

Before the Pennsylvania Public Utility Commission (Commission) is the a Joint Petition, seeking a waiver in order to file a Letter of Notification (LON) under 52 Pa. Code § 57.72(d) in lieu of an application under 52 Pa. Code §§ 57.71 and 57.72(a)-(c), together with an LON pursuant to 52 Pa. Code § 57.72(d) of the Commission's transmission line siting regulation. PPL Electric requests Commission approval to rebuild approximately 22.5 miles of existing 138/69 kV transmission lines in Washington Township, Lehigh County and the Boroughs of Nesquehoning, Palmerton, and Summit Hills and East Penn, Lower Towamensing, and Mahoning Townships, Carbon County, Pennsylvania. More specifically, PPL Electric seeks to reconstruct a section of the Hauto-Siegfried #1 & #4 138/69 kV Transmission Line (Hauto-Siegfried) and Siegfried-East Palmerton #1 and #2 138/69 kV Transmission Line (Siegfried-East Palmerton). Estimated cost of the LON is \$55.5 million.

Siegfried-East Palmerton was constructed in 1948, currently consisting of 21 newer steel monopoles, 25 steel lattice towers, and 187 wood pole structures. The average ages of these structures are 17, 68, and 51 years, respectively, and the expected service lives are 80 years for the lattice structures and 40 to 50 years for the wood structures. New monopoles are expected to have a service life of 70 years. PPL Electric further states that the wood structures are the greatest concern on this line.

The Hauto-Siegfried was constructed in 1914 and 1923, currently consisting of 23 newer steel monopoles, 260 steel lattice towers, and 5 wood pole structures. The average ages of these structures are 20, 98, and 43 years, respectively, and the expected service lives are 80 years for the lattice structures and 40 to 50 years for the wood structures. PPL Electric further states that the lattice towers and wood structures are the greatest concern on the Hauto-Siegfried line.

PPL Electric states that the 2018 Assessment of both lines evaluated 158 structures, and that the sample size provides a 90% confidence level that the results were reflective of the entire population. The sample structures were chosen at random by a third-party evaluator. The report identified 35% of the steel lattice structures and 78% of the wood structures inspected as “reject” structures requiring immediate restoration or replacement.

Yet despite these “reject” assessments, PPL has adequately maintained the reliability of this transmission segment. Further data requests revealed that only 4 sustained outages occurred on the Hauto-Siegfried line over the last 13 years, and no sustained outages occurred on the Siegfried-East Palmerton line. While the lines serve a total of 27,500 customers, the average number of affected customers per event was 6,244, with an average outage time of 7.6 hours for the 4 events. Given these parameters, the resulting per unit System Average Interruption Duration Index (SAIDI) cost is approximately \$89 Million/SAIDI improvement. This far exceeds the SAIDI improvement costs in PPL’s Long-Term Infrastructure Investment Plan of roughly \$3 Million/SAIDI improvement.

As to the 4 sustained outage events, only one outage was related to the failing structures – one outage was caused by falling vegetation, while the causes of the two remaining outages were unknown. While this rebuild project may prevent structural outages, the vegetation outages may not be resolved, and there remains uncertainty as to the impacts on the other two outages. However, the analysis herein assumes the most positive outcome for PPL’s project – assuming the resolution of all 4 outages when calculating benefits to this total rebuild project.

PPL also provided cost of service data for 3 different scenarios, which the Company has marked as Highly Confidential. Upon my review, I believe that the data merits serious consideration of the maintenance scenario, rather than approval of the total rebuild scenario proposed in this Joint Petition. This consideration should include a discussion not only of the costs savings, but of the reliability benefits. While a total rebuild would likely eliminate most outage events, it does so at an inordinate cost.

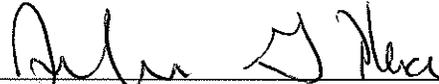
An examination of the nominal cost of service (COS) study results in a projected breakeven, on a COS basis, unviably many years down the road. At that point, the COS of the new facility is roughly equivalent to the COS of the maintenance scenario.

As to consideration of reliability benefits, I would reiterate the significant challenges of this project to efficiently enhance reliability at reasonable costs in terms of the SAIDI analysis. The history provided by PPL does not establish any trend of increased outages. In fact, PPL's latest outage in 2016 was only 12 minutes – the shortest of all reported outages. PPL was asked to provide evidence of future outage projections. Their response simply acknowledges that “Projected outages were not modeled for any of the alternative solutions described in the LON.” Thus, a critical element of need was not provided to adequately and accurately evaluate this Joint Petition.

In summary, PPL did not provide sufficient justification at this time to merit approval of this LON project. I might be convinced otherwise with sound, well documented evidence of impending and escalating outage projections, assuming that PPL continued its effective maintenance practices. However, PPL did not provide this information, and I am thus unable to vote in favor of this petition.

Also, I want to be clear that I am not proposing that this line should never be rebuilt. Rather, the cost of service and reliability data on the record indicates that it may be more efficient and cost-effective to do so at a later date.

DATE: September 19, 2019



Andrew G. Place, Commissioner