

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Letter of Notification of PPL Electric :
Utilities Corporation, Filed Pursuant to :
52 Pa. Code Chapter 57 Subchapter G, : Docket No. A-2016-_____
for Approval to Rebuild Approximately :
24.4 Miles of the Existing :
Susquehanna-Jenkins 230 kV :
Transmission Line Located in Luzerne :
County, Pennsylvania :

LETTER OF NOTIFICATION

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PPL Electric Utilities Corporation (“PPL Electric”) hereby files, pursuant to 52 Pa. Code § 57.72(d), this Letter of Notification to request approval from the Pennsylvania Public Utility Commission (“Commission”) to rebuild approximately 24.4 miles of the existing single-circuit Susquehanna-Jenkins 230 kV Transmission Line as a double-circuit 230 kV transmission line (the “Project”). The proposed Project is located in Luzerne County and will traverse the following municipalities: Conyngham Township, Slocum Township, Nuangola Borough, Rice Township, Hanover Township, Bear Creek Township, Laurel Run Borough, and Plains Township. As explained below, the proposed Project is required to resolve a thermal violation identified by PJM Interconnection, L.L.C (“PJM”) in the 2013 Regional Transmission Expansion Plan (“RTEP”) analysis.

Subject to the Commission’s approval, construction is scheduled to begin in September 2016 to support an in-service date of June 2018. In support thereof, PPL Electric states as follows:

I. INTRODUCTION

1. This Letter of Notification is filed by PPL Electric, a public utility that provides electric distribution, transmission, and provider of last resort services in Pennsylvania subject to the regulatory jurisdiction of the Commission.

2. PPL Electric’s address is PPL Electric Utilities Corporation, Two North Ninth Street, Allentown, Pennsylvania 18101.

3. PPL Electric’s attorneys are:

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PPL Electric’s attorneys are authorized to receive all notices and communications regarding this Letter of Notification.

4. PPL Electric furnishes electric service to approximately 1.4 million customers throughout its certificated service territory, which includes all or portions of twenty-nine counties and encompasses approximately 10,000 square miles in eastern and central Pennsylvania. PPL Electric is a “public utility” and an “electric distribution company” as defined in Sections 102 and 2803 of the Pennsylvania Public Utility Code, 66 Pa.C.S. §§ 102, 2803.

5. PPL Electric owns approximately 5,000 miles of transmission lines operating at 69 kV (kilovolts) or higher, approximately 375 substations with a capacity of 10 MVA (megavolt amperes) or more, and approximately 43,000 miles of distribution lines operating at less than 69 kV.

6. This Letter of Notification includes the following accompanying attachments:

- Attachment 1 Necessity Statement.
- Attachment 2 Engineering Description.
- Attachment 3 Description of the Right-of-Way.
- Attachment 4 PPL Electric Design Criteria and Safety Practices.

7. This Letter of Notification and accompanying Attachments, which are incorporated herein by reference, contain all the information required by 52 Pa. Code § 57.72(d)(4).

II. THE PROJECT

A. NEED FOR THE PROJECT

8. The existing Susquehanna-Jenkins 230 kV Transmission Line is a single-circuit 230 kV transmission line that extends approximately 26.5 miles between the Susquehanna 230-69 kV Substation in Conyngham Township to the Jenkins 230-69 kV Substation in Plains Township. The Susquehanna-Jenkins 230 kV Transmission Line is one of the three major 230 kV lines that connect generation in the west to load in the east in PPL Electric's Central and Northeast regions. A description and one-line diagram of the existing system is provided in the Necessity Statement included as Attachment 1 to this Letter of Notification.

9. Studies conducted for PPL Electric's transmission system, in conjunction with the PJM RTEP process, identified a violation of the mandatory North American Electric Reliability Corporation ("NERC") Reliability Standards on the existing Susquehanna-Jenkins 230 kV Transmission Line. Detailed descriptions of the NERC Reliability Standards, PJM RTEP process, and PPL Electric's system planning process are provided in Attachment 1 to this Letter of Notification.

10. PPL Electric's studies and the 2013 PJM RTEP identified that the Susquehanna-Jenkins 230 kV Transmission Line will exceed 100% of its summer emergency rating under peak conditions for the following N-1-1 contingency: the loss of the Susquehanna-Lackawanna 500 kV Transmission Line, followed by the loss of the Mountain-Susquehanna T10 230 kV Transmission Line. As explained in Attachment 1, this thermal overload identified in the 2013 RTEP is a violation of the mandatory NERC Reliability Standards.

11. A detailed description of this reliability issue is provided in Attachment 1 to this Letter of Notification.

B. THE PROPOSED PROJECT

12. To resolve the NERC reliability violation identified in the 2013 PJM RTEP and to improve the 230 kV system serving PPL Electric's customers, PPL Electric proposes to rebuild the existing single-circuit Susquehanna-Jenkins 230 kV Transmission Line.

13. Specifically, PPL Electric seeks Commission approval to rebuild approximately 24.4 miles of existing 26.5-mile single-circuit Susquehanna-Jenkins 230 kV Transmission Line between the Susquehanna 230-69 kV Substation in Conyngham Township to a new tap point near the Jenkins 230-69 kV Substation in Plains Township to a double-circuit configuration. The new double-circuit system will tap into the existing Jenkins-Acahela 230 kV Transmission Line located approximately 2.1 miles south of the Jenkins 230-69 kV Substation.

14. At the tap point, one of the two circuits will tap into and continue north on the existing Jenkins-Acahela 230 kV Transmission Line and will terminate at the Jenkins 230-69 kV Substation. This circuit will continue to be referred to as the Susquehanna-Jenkins 230 kV Transmission Line. The other circuit will tap into and continue south on the existing Jenkins-Acahela 230 kV Transmission Line and will terminate at the Acahela 230-69 kV Substation. This circuit will be referred to as the Susquehanna-Acahela 230 kV Transmission Line.

15. A description and one-line diagram of the proposed Project is provided in the Necessity Statement included as Attachment 1 to this Letter of Notification. An aerial exhibit showing the location of the proposed facilities is provided in Attachment 3.

16. The rebuilt transmission line will be located within the existing right-of-way for the Susquehanna-Jenkins 230 kV Transmission Line, which is 150-feet wide for the majority of the line with several locations increasing to 250-feet or more. The rebuilt double-circuit line will be constructed on the existing centerline with each new structure located adjacent to the existing structures. No new additional right-of-way is necessary for this Project.

17. The existing single-circuit Susquehanna-Jenkins 230 kV Transmission Line consists of nine steel poles and 132 lattice tower structures, with an average height of 100 feet. The existing lattice towers will be replaced by self-weathering tubular steel structures with an average height of 150 feet. All new poles will be self-supported on concrete caisson foundations. The average spans between the structures will be approximately 1,100 feet.

18. The first four tower structures (Structure 1 to Structure 4) from the Susquehanna 230-69 kV Substation currently are double-circuit structures, with one side occupied by the existing single-circuit Susquehanna-Jenkins 230 kV Transmission Line and the other side occupied by the existing Susquehanna-Mountain 230 kV Transmission Line. The proposal to rebuild the Susquehanna-Jenkins 230 kV Transmission Line for double-circuit operation will require that the Susquehanna-Mountain 230 kV Transmission Line be removed from Structures 1 to Structure 4 and relocated onto five new steel monopoles. These new monopoles will be located entirely on PPL Electric-owned property for the existing Susquehanna 230-69 kV Substation.

19. Each of the new 230 kV transmission lines to be constructed as part of this Project will utilize three power conductors and two fiber optic ground wires for lightning protection and for communications between the transmission system facilities. The minimum conductor-to-ground clearance will be 32 feet, which occurs at a maximum conductor temperature of 125° C.

20. An engineering description of the Project is provided in Attachment 2 to this Letter of Notification.

21. The proposed Project will resolve the reliability violation identified in the 2013 RTEP. The proposed Project will provide the region with the required electric power supply reinforcement and will meet all NERC, PJM, and PPL Electric reliability criteria. The Project also will provide additional capacity for future electric system load growth in the area.

22. PPL Electric submitted the proposed Project to PJM in early 2013 for review and inclusion in the RTEP. The Project was presented before stakeholders at the TEAC meeting on April 11, 2013, and was approved by the PJM Board. The proposed Project was included in the 2013 RTEP Report as baseline project b2269.

23. The total estimated cost of the Project is approximately \$64.3 million.¹

24. Upon Commission approval, the Project has a scheduled construction start date September 2016 to support an in-service date of June 2018.

III. HEALTH AND SAFETY

25. The proposed Project will not create any unreasonable risk of danger to the public health or safety.

¹ The estimated cost for the proposed Project is an order-of-magnitude estimate developed using averages of recent costs for similar projects and without an in-depth analysis or field investigation. The estimated cost is subject to change as the constructability of the Project, sequence of construction, and other factors that may affect the cost are identified and analyzed as the Project progresses.

26. The Project will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable National Electrical Safety Code (“NESC”) minimum standards and all applicable legal requirements. Descriptions PPL Electric’s design criteria and safety practices are provided in Attachment 4 to this Letter of Notification.

27. Consistent with its Magnetic Field Management Program, PPL Electric will construct the Project for ground clearances that are a minimum of five feet higher than the required NESC minimum ground clearance for 230 kV lines in order to reduce the magnetic field exposure. Further, the rebuilt double-circuit 230 kV line will be reverse-phased to minimize the potential for exposure to magnetic fields. A description of PPL Electric’s Magnetic Field Management Program is provided in Attachment 2 to this Letter of Notification.

IV. DESCRIPTION OF RIGHT-OF-WAY

28. As explained above, the rebuilt transmission line will be located within the existing right-of-way for the Susquehanna-Jenkins 230 kV Transmission Line. The existing Susquehanna-Jenkins 230 kV Transmission Line right-of-way extends approximately 26.5 miles and traverses the following municipalities: Conyngham Township, Slocum Township, Nuangola Borough, Rice Township, Hanover Township, Bear Creek Township, Laurel Run Borough, and Plains Township. A detailed description and aerial map of the existing right-of-way are provided in Attachment 3 to this Letter of Notification.

29. The existing right-of-way for the Susquehanna-Jenkins 230 kV Transmission Line is 150-feet wide for the majority of the line with several locations increasing to 250-feet or more. As explained in Attachment 2, PPL Electric has designed the rebuilt line to fit within the existing right-of-way and meet the NESC standards. PPL Electric does not require any additional right-

of-way to rebuild the existing single-circuit Susquehanna-Jenkins 230 kV Transmission Line for double-circuit operation.

30. Although the rebuilt and new structures will slightly increase in height (from an average of 100 feet to an average of 150 feet), impacts will be minimal because the Project will be built entirely on PPL Electric owned property or right-of-way and in close proximity to the existing structures. The new tower structures will be located adjacent to the existing tower structures. Further, no new poles will be placed on any property that currently does not have an existing pole.

31. Land use impacts are anticipated to be minimal due to the fact that the Project will be constructed entirely within the existing right-of-way and on the substation site owned in fee by PPL Electric. Where practical, PPL Electric will use and update previously established access roads for construction to further reduce interference with existing land uses.

32. The existing right-of-way for the single-circuit Susquehanna-Jenkins 230 kV Transmission Line previously has been cleared of vegetation. As a result, limited vegetation management will be required for this project. In areas where vegetation management is required to complete the project, PPL Electric will apply its "*Specifications for Transmission Vegetation Management LA-79828*" to mitigate any impacts.

33. No communication towers, pipelines, or other utilities will be affected by the proposed Project.

34. PPL Electric does not anticipate any interference with airport operations because of the distance from the Project area, the presence of existing electrical facilities in the Project area, and the similar height of the new facilities and the existing facilities. PPL Electric will file

any required documentation with both the Federal Aviation Administration and the Pennsylvania Department of Transportation, Bureau of Aviation.

35. As explained in Attachment 3, the existing right-of-way currently traverses five state and conserved lands. Impacts to these state and conserved lands are anticipated to be minimal because the proposed Project will be constructed within the existing right-of-way for the Susquehanna-Jenkins 230 kV Transmission Line. PPL Electric will coordinate with the owners of these state and conserved lands regarding the construction of the Project, use of existing access roads, as well as any new temporary access roads needed to access specific tower locations. No other state lands, national parks, state parks, or local parks will be impacted by the proposed Project.

36. The Project will not affect any recreational areas, natural landmarks, or unique geological areas.

37. The existing right-of-way for the Susquehanna-Jenkins 230 kV Transmission line currently traverses eight areas identified by the Pennsylvania Natural Heritage Program as natural areas. These areas will be surveyed and protective measures will be implemented during construction to avoid impacts to any protected species identified within these natural areas.

38. PPL Electric conducted a review of the online Pennsylvania Historical and Museum Commission (“PHMC”) Bureau for Historic Preservation Cultural Resources Geographic Information System database to determine if National Register of Historic Places listed any eligible historic properties located in the Project vicinity. PPL Electric has submitted its results and requested that the PHMC review the Project area for impacts to cultural and archaeological resources. PPL Electric will coordinate with the PHMC and comply with any terms and conditions required by the PHMC.

39. Although 16 waterways and several wetlands were identified within the existing right-of-way for the Susquehanna-Jenkins 230 kV Transmission, PPL Electric will avoid impacts to streams and wetlands located in the Project area to the maximum extent practical. PPL Electric will obtain all necessary permits from the Pennsylvania Department of Environmental Protection and the United States Army Corps of Engineers and will comply with all of the terms and conditions placed on those permits.

40. PPL Electric will acquire any required soil erosion and sedimentation control permits and will comply with any conditions placed on those permits.

41. PPL Electric has consulted with state and federal agencies to obtain information regarding endangered and threatened species in close proximity to the Project. PPL Electric has reviewed the Pennsylvania Natural Diversity Inventory records under the jurisdiction of the Pennsylvania Department of Conservation and Natural Resources, the Pennsylvania Fish and Boat Commission, and the Pennsylvania Game Commission, and the United States Fish and Wildlife Service.

42. The Pennsylvania Fish and Boat Commission search indicated that the Project is located within the range of suitable habitat for the for the Northern Cricket Frog (*Acris crepitans*), an endangered species in Pennsylvania, and the timber rattlesnake (*Crotalus horridus*), a candidate species of concern in Pennsylvania. However, the Pennsylvania Fish and Boat Commission concluded that the proposed Project would not have any direct impacts on these species.

43. The Pennsylvania Game Commission noted that portions of the Project may include potential day roost habitat for the eastern small-footed bat (*Myotis leibii*), a threatened species in Pennsylvania. The Pennsylvania Game Commission requested that all potential

eastern small-footed bat day roost habitat be assessed and delineated by a qualified biologist. PPL Electric will conduct the required habitat survey and coordinate with the Pennsylvania Game Commission to avoid or minimize any impacts to the threatened species.

44. The Pennsylvania Natural Diversity Inventory records further indicated the potential presence of six plant species of concern identified by the Pennsylvania Department of Conservation and Natural Resources. The Pennsylvania Department of Conservation and Natural Resources requires that a qualified botanist conduct a botanical survey of the Project area for each plant species. PPL Electric will conduct the required botanical survey and coordinate with the Pennsylvania Department of Conservation and Natural Resources to implement measures to avoid impacts to any plant species of concern identified.

45. The United States Fish and Wildlife Service noted that the proposed Project is located within habitat areas for both the federally endangered Indiana bat (*Myotis sodalist*) and the federally threatened long-eared bat (*Myotis septentrionalis*). However, the United States Fish and Wildlife Service concluded that, as no new forest clearing is anticipated, the effects of the Project are not likely to affect these bat species.

46. PPL Electric will continue to consult with the jurisdictional agencies regarding potential impacts to protected species. PPL Electric will obtain all approvals and permits necessary for the construction of the Project, and will comply with any conditions placed on those permits.

V. NOTICE

47. PPL Electric has provided information regarding the Project to representatives of Luzerne County and Conyngham Township, Slocum Township, Nuangola Borough, Rice

Township, Hanover Township, Bear Creek Township, Laurel Run Borough, and Plains Township. These entities have not objected to the proposed Project.

48. Copies of this Letter of Notification will be served on the governmental agencies, municipalities, and other public entities agencies in accordance with 52 Pa. Code § 57.72(d)(3).

49. Copies of this Letter of Notification will be served on the owners of land subject to the right-of-way and easement in accordance with 52 Pa. Code § 57.72(d)(3).

VI. LETTER OF NOTIFICATION

50. PPL Electric is proceeding by means of a Letter of Notification, instead of a full Application, pursuant to the Commission's regulations at 52 Pa. Code § 57.72(d)(1)(v).

51. The proposed Project qualifies for use of a Letter of Notification because the proposed Project will be located entirely within PPL Electric's existing right-of-way for the Susquehanna-Jenkins 230 kV Transmission Line and on PPL Electric's property for the Susquehanna 230-69 kV Substation. As explained above, the proposal to rebuild the existing single-circuit line for double-circuit operation will not substantially alter the existing right-of-way. As explained above, the new poles for the Project will be placed in close proximity to the existing poles, and no new poles will be placed on any property that currently does not have an existing pole. In addition, the replacement of the existing lattice tower structures with new steel monopoles will result in smaller footprints within the right-of-way.


52. This Letter of Notification is filed on the date set forth below. As provided in 52 Pa. Code § 57.72(d)(5), the Commission will review and, by order, approve or disapprove this Letter of Notification. If the Commission approves this Letter of Notification, the proposed Project will be constructed as proposed herein without the formal application process set forth at 52 Pa. Code §§ 57.71, *et seq.*

VII. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission approve the rebuild of approximately 24.4 miles of the existing Susquehanna-Jenkins 230 kV Transmission Line for double-circuit operation in Luzerne County, Pennsylvania, as explained above and in the Attachments hereto.

Respectfully submitted,

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Date: January 29, 2016

Attorneys for PPL Electric Utilities Corporation

VERIFICATION

I, Stephanie Raymond being the Vice President-Transmission and Substations at PPL Electric Utilities Corporation, hereby state that the facts above set forth are true and correct to the best of my knowledge, information and belief and that I expect PPL Electric Utilities Corporation to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Date: 1/19/16

Stephanie Raymond