

**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-2017- _____
for Approval to Rebuild Approximately :
8.5 miles of 138/69 kV Transmission :
Line in Franconia and Hatfield :
Townships, Montgomery County, and :
West Rockhill Township, Bucks :
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 the approximately 7.8-mile Buxmont-Elroy #1 and #2 69 kilovolt (“kV”) transmission lines, the approximately 0.25-mile Elroy-Hatfield #1 and #2 138/69 kV transmission lines, the approximately 0.35-mile Elroy #1 and #2 138/69 kV transmission taps, and the approximately 354-foot Hatfield #1 and #2 69 kV transmission taps (the Project). These transmission lines are located in Franconia and Hatfield Townships, Montgomery County, and West Rockhill Township, Bucks County, Pennsylvania. As explained below, these transmission lines have reached the end of their useful life and must be replaced in order to ensure continued safe and reliable electric service to approximately 17,060 customers. The entire Project is located within the existing right-of-way or on property owned in fee by PPL Electric.

Subject to the Commission's approval, construction is scheduled to begin in September 2017 to support the 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 kilovolts (“kV) or higher, approximately 417 substations with a capacity of 10 megavolt amperes (“MVA”) 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’s 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. EXISTING SYSTEM

8. The existing Buxmont-Elroy #1 and #2 69 kV transmission lines extend approximately 7.8 miles between the Buxmont Substation located in West Rockhill Township, Bucks County, and the tap point with the Elroy Substation located in Hatfield Township, Montgomery County. The double-circuit Buxmont-Elroy #1 and #2 69 kV transmission lines were constructed in the 1950s and are approximately 67 years old.

9. The Elroy #1 and #2 138/69 kV transmission taps interconnect the Buxmont-Elroy #1 and #2 138/69 kV lines with the Elroy Substation. These taps lines extend approximately 0.35 miles from the transmission line right-of-way to the Elroy Substation. The tap lines were constructed in the late 1960s and are approximately 50 years old.

10. The existing Elroy-Hatfield #1 and #2 138/69 kV transmission lines extend approximately 0.25 miles from the tap point with Elroy Substation to the Hatfield Substation located in Hatfield Township, Montgomery County. The double-circuit Elroy-Hatfield #1 and #2 138/69 kV transmission lines were constructed in the late 1960s and are approximately 50 years old.

11. The existing Hatfield #1 and #2 69 kV transmission taps interconnect the Elroy-Hatfield #1 and #2 138/69 kV transmission lines and Hatfield Substation and are located in Hatfield Township and Franconia Township, Montgomery County. These taps lines extend approximately 354 feet from the transmission line right-of-way to the Hatfield Substation. The tap lines were constructed in the late 1960s and are approximately 50 years old.

12. Collectively, the Buxmont-Elroy #1 and #2 69 kV transmission lines, Elroy-Hatfield #1 and #2 138/69 kV transmission lines, Elroy #1 and #2 138/69 kV transmission taps, and Hatfield #1 and #2 69 kV transmission taps serve approximately 17,060 customers as well as five transmission customers in Bucks and Montgomery Counties.

13. A description of the existing system is provided in Attachment 1 to this Letter of Notification. A map and one-line diagram of the existing system are provided in Attachment 1 to this Letter of Notification.

B. NEED FOR THE PROJECT

14. The existing Buxmont-Elroy #1 and #2 69 kV transmission lines, Elroy-Hatfield #1 and #2 138/69 kV transmission lines, Elroy #1 and #2 138/69 kV transmission taps, and Hatfield #1 and #2 69 kV transmission taps have been in service for over 50 years. The existing conductors and structures do not meet current design or height standards.

15. PPL Electric has analyzed the Buxmont-Elroy #1 and #2 69 kV transmission lines, Elroy-Hatfield #1 and #2 138/69 kV transmission lines, Elroy #1 and #2 138/69 kV

transmission taps, and Hatfield #1 and #2 69 kV transmission taps. Based on this analysis, PPL Electric concluded that the conductors, hardware, splices, and tower structures along these transmission lines have reached the end of their useful lives and should be rehabilitated or replaced in order to continue to provide safe and reliable service to approximately 17,060 customers as well as five transmission customers in Bucks and Montgomery Counties.

16. The need for this Project is further explained in Attachment 1 to this Letter of Notification.

C. THE PROPOSED PROJECT

17. PPL Electric evaluated the cost to rehabilitate the Buxmont-Elroy #1 and #2 69 kV transmission lines, the Elroy-Hatfield #1 and #2 138/69 kV lines, Elroy #1 and #2 138/69 kV transmission taps, and Hatfield #1 and #2 69 kV transmission taps and concluded that the total cost to rehabilitate these lines would be greater than the cost to completely rebuild them within the same right-of-way. Therefore, the rebuild of these aging and deteriorated transmission lines is the most prudent and cost-effective option.

18. PPL Electric proposes to rebuild the existing Buxmont-Elroy #1 and #2 69 kV transmission lines for approximately 7.8 miles from the Buxmont Substation to the tap point with the Elroy Substation. The existing transmission line consists primarily of 170 wood pole structures that range in height from 60 to 105 feet. The existing structures will be removed and replaced with 143 new self-weathering steel structures, the majority of which are monopole structures.

19. PPL Electric also proposes to rebuild the existing Elroy-Hatfield #1 and #2 138/69 kV transmission lines for approximately 0.25 miles from the tap point with the Elroy Substation and the Hatfield Substation. The existing transmission line consists primarily of 30

wood pole structures that range in height from 60 to 105 feet. The existing structures will be removed and replaced with 25 new three new steel monopole structures.

20. PPL Electric also proposes to rebuild the Elroy #1 and #2 138/69 kV transmission taps for approximately 0.35 miles between the Buxmont-Elroy #1 and #2 69 kV transmission line right-of-way and the Elroy Substation. The existing transmission line consists primarily of 6 wood pole structures that range in height from 60 to 105 feet. The existing structures will be removed and replaced with 3 new steel monopole structures.

21. Finally, PPL Electric proposes to rebuild the Hatfield #1 and #2 69 kV transmission taps for approximately 354 feet between Elroy-Hatfield #1 and #2 138/69 kV line and Hatfield Substation. The existing transmission taps consist of 2 wood poles and 1 steel pole. These existing structures will be removed and replaced with 3 new steel monopoles structures

22. A map and one-line diagram of the proposed system are provided in Figures 1-2 and 1-4 of Attachment 1.

23. The existing wood pole structures and hardware will be removed and replaced primarily with modern steel monopole structures. Overall, the total number of tower structures will decrease from 209 to 174, and will range from 5 to 30 feet taller than existing wood structures. All new poles will be self-supported, either direct embedded or on concrete caisson foundations. A total of 19 structures will be guyed.

24. Depictions of the type of monopoles used for this Project are provided in Attachment 2 to this Letter of Notification.

25. The rebuilt transmission lines will each be constructed for future double-circuit 138 kV operation, but will initially be operated as double-circuit 69 kV lines. The existing

conductors will be removed and replaced with modern conductors. The rebuilt 138/69 kV design will utilize three power conductors and one overhead ground wire.

26. A detailed engineering description of the rebuilt line is provided in Attachment 2 to this Letter of Notification.

27. The Project will bring the Buxmont-Elroy #1 and #2 69 kV transmission lines, the Elroy-Hatfield #1 and #2 138/69 kV lines, Elroy #1 and #2 138/69 kV transmission taps, and Hatfield #1 and #2 69 kV transmission taps into compliance with current design standards, including increased vertical ground clearance, increased phase spacing for galloping loop consideration, and installation of steel monopole structures for optimal structure longevity and integrity. The Project will also increase the lightning protection of the transmission line to reduce the frequency of momentary outages experienced by customers

28. The total estimated cost of the proposed Project is \$13.3.¹

29. Upon Commission approval, the Project has a scheduled construction start date of September 2017 to support the in-service date of June 2018.

III. HEALTH AND SAFETY

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

31. The Project will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable PPL Electric and National Electrical Safety Code (“NESC”) minimum standards and all applicable legal requirements. Descriptions of PPL

¹The 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 of field investigation. The estimated cost is subject to change as the constructability of the Project, sequence of construction, and other factors that may affect cost are identified and analyzed as the Project progresses. The entire cost for this transmission line Project will be paid by PPL Electric. The costs and cost recovery of this transmission line Project is subject to the regulatory jurisdiction of the Federal Energy Regulatory Commission.

Electric's design criteria and safety practices are provided in Attachment 4 to this Letter of Notification.

32. The closest airport is located 3.7 miles east of the Project area. 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 other existing facilities in the Project area. However, PPL Electric will file all required documentation with the Federal Aviation Administration and the Pennsylvania Department of Transportation, Bureau of Aviation.

33. As explained in Attachment 2 to this Letter of Notification, PPL Electric's Magnetic Field Management Program has been developed to reduce magnetic fields on new and rebuilt transmission lines when it can be done at low or no cost and consistent with functional requirements. To reduce the potential for exposure to magnetic fields, the rebuilt transmissions will be constructed using clearances that are higher than the NESC standards, and the new double-circuit conductors will be reverse-phased.

IV. DESCRIPTION OF RIGHT-OF-WAY

34. The entire Project will be rebuilt within the existing rights-of-way for the Buxmont-Elroy #1 and #2 69 kV transmission lines, the Elroy-Hatfield #1 and #2 138/69 kV lines, Elroy #1 and #2 138/69 kV transmission taps, and Hatfield #1 and #2 69 kV transmission taps, and on property owned in fee by PPL Electric.

35. As explained in Attachment 3, the existing rights-of-way vary in width from 40 to 100 feet. In areas where the right-of-way is less than 100 feet, PPL Electric will design the line to be constructed within the existing right-of-way while maintaining all necessary clearances as explained in Attachment 2. No new or additional right-of-way is necessary for the construction, operation, or maintenance of the rebuilt transmission lines.

36. The new tower structures generally will be placed in close proximity to the location of the existing tower structures. Certain structures locations may be shifted slightly to accommodate construction, environmental, and landowner concerns. However, no new structures will be placed on property that currently does not have an existing structure.

37. An aerial plot plan is provided in Figure 1-4 of Attachment 1 to this Letter of Notification.

38. 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 property owned in fee by PPL Electric. Where practical, PPL Electric will use previously established access roads for construction to further reduce interference with existing land uses.

39. The Project area 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-79827*" to mitigate any impacts.

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

41. The Project area contains no national parks, state parks, state-owned land, or local parks.

42. Four existing structures are located on preserved a farmland. These structures will be replaced with three steel monopoles, which will reduce the impact to the preserved farmland.

43. The Project will not traverse or affect any unique geological, scenic, or natural areas.

44. The Project will not affect any recreational areas or natural landmarks.

45. Due to the limited impact of the proposed Project, no coordination with the Pennsylvania Historical and Museum Commission is required.

46. The proposed Project will span four creeks. The rebuilt transmission lines will span these creeks, which will minimize any impacts.

47. The Project will span several wetland sites. It is anticipated the Project will have no impacts on streams or wetlands because the entire Project will be built within the existing right-of-way, and because the new tower structures will be located to avoid impacts to wetland and streams. PPL Electric will obtain all necessary permits, and will comply with all of the terms and conditions placed on any permits required.

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

49. PPL Electric completed a Pennsylvania Natural Diversity Inventory records review. PPL Electric also conducted field habitat assessment surveys for state-listed plant and wildlife species and a federally-listed wildlife species. PPL Electric submitted the results of these surveys to the applicable jurisdictional agencies. Based on these reviews, the jurisdictional agencies have advised that no further coordination or field surveys are required as explained in Attachment 3.

50. PPL Electric will obtain all permits necessary from applicable state and federal agencies, and will comply with all of the terms and conditions placed on any permits required.

V. NOTICE

51. PPL Electric has provided information regarding the Project to representatives of Lower Milford Township and Lehigh County. These entities have not objected to the proposed Project.

52. 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).

53. 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

54. 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)(i).

55. As explained above, PPL Electric herein seeks Commission approval to rebuild approximately 8.5 miles of existing transmission line: the approximately 7.8-mile Buxmont-Elroy #1 and #2 69 kV transmission lines, the approximately 0.25-mile Elroy-Hatfield #1 and #2 138/69 kV transmission lines, the approximately 0.35-mile Elroy #1 and #2 138/69 kV transmission taps, and the approximately 354-foot Hatfield #1 and #2 69 kV transmission taps.

56. The entire Project will be located entirely within the existing rights-of-way and on property owned in fee by PPL Electric. No new or additional right-of-way is necessary for the construction, operation, or maintenance of the rebuilt transmission lines. The new tower structures generally will be placed in close proximity to the location of the existing tower structures. No new structures will be placed on property that currently does not have an existing structure.

57. Based on the foregoing, PPL Electric submits that this proposed rebuild Project qualifies for use of a Letter of Notification because it will not result in a substantial alteration of the existing right-of-way.

58. 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 the approximately 7.8-mile Buxmont-Elroy #1 and #2 69 kV transmission lines, the approximately 0.25-mile Elroy-Hatfield #1 and #2 138/69 kV transmission lines, the approximately 0.35-mile Elroy #1 and #2 138/69 kV transmission taps, and the approximately 354-foot Hatfield #1 and #2 69 kV transmission taps in Franconia and Hatfield Townships, Montgomery County, and West Rockhill Townships, Bucks County, Pennsylvania, as explained above and in the Attachments hereto.

Respectfully submitted,

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Date: July 7, 2017

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: 6/20/17

Stephanie Raymond