

**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 Replace and Re- :  
terminate Approximately 200 feet of the :  
Existing Breinigsville-Alburtis 500 kV :  
Transmission Line in Lower Macungie :  
Township, Lehigh 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 replace and re-terminate approximately 200 feet of the existing single circuit Breinigsville-Alburtis 500 kV Transmission Line in Lower Macungie Township, Lehigh County, Pennsylvania (the “Project”). As explained below, the proposed Project is required to comply with the requirements of North American Electric Reliability Corporation (“NERC”) Critical Infrastructure Protection Standard “CIP-014-1 - Physical Security.” Subject to the Commission’s approval, construction is scheduled to begin in September 2017 to support the in-service date of October 2017. 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:

Kimberly A. Klock (ID #89716)  
Amy E. Hirakis (ID #310094)  
PPL Services Corporation  
Two North Ninth Street  
Allentown, PA 18101  
Voice: 610-774-5696  
Fax: 610-774-6726  
E-mail: [kklock@pplweb.com](mailto:kklock@pplweb.com)  
E-mail: [aehirakis@pplweb.com](mailto:aehirakis@pplweb.com)

David B. MacGregor (ID # 28804)  
Christopher T. Wright (ID # 203412)  
Post & Schell, P.C.  
17 North Second Street  
12th Floor  
Harrisburg, PA 17101-1601  
Voice: 717-731-1970  
Fax: 717-731-1985  
E-mail: [dmacgregor@postschell.com](mailto:dmacgregor@postschell.com)  
E-mail: [cwright@postschell.com](mailto:cwright@postschell.com)

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      Design & Engineering Description.
- Attachment 3      Description of 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 single-circuit Breinigsville-Alburtis 500 kV Transmission Line extends approximately 6 miles from the Breinigsville 500-138-69 kV Substation located in Upper Macungie Township, Lehigh County, to the existing Alburtis 500-230 kV Substation in Lower Macungie Township, Lehigh County.

9. PPL Electric and a FirstEnergy Corporation (“FirstEnergy”) subsidiary jointly share the Alburtis 500-230 kV Substation. The PPL Electric-owned Breinigsville-Alburtis 500 kV Transmission Line currently terminates into Bay 1 of a PPL Electric owned switchyard at the Alburtis 500-230 kV Substation. PPL Electric is currently sharing a control cubicle in the Alburtis 500-230 kV Substation with FirstEnergy. A description, aerial map, and one-line diagram of the existing system are provided in the Necessity Statement included as Attachment 1 to this Letter of Notification.

10. On January 26, 2015, the Federal Energy Regulatory Commission approved the NERC Critical Infrastructure Protection Standard “CIP-014-1 - Physical Security.” The NERC CIP-014-1 mandates that each Transmission Owners, such as PPL Electric, establish a physical security perimeter around non-exempt transmission substation and the related primary control centers.

11. There is no secure separation between the FirstEnergy controls and the PPL Electric controls inside the control cubicle. In order to comply with the requirements of NERC CIP-014-1, PPL Electric needs to establish a physical security perimeter around its relay and control equipment.

12. In order to comply with the requirements of NERC CIP-014-1, PPL Electric proposes to realign the Breinigsville-Alburtis 500 kV Transmission Line from the existing Bay 1 position into a new Bay 2 position at the Alburtis 500-230 kV Substation. The use of the new bay allows PPL Electric to separate its relay and control equipment at the Alburtis 500-230 kV Substation from the control cubicle currently shared with FirstEnergy.

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

## **B. THE PROPOSED PROJECT**

14. The Project will involve the realignment of one span of new 500 kV conductors that will extend approximately 200 feet from the dead end structure to the new Bay 2 position at the Alburtis 500-230 kV Substation. Due to a difference in the positions of Bay 1 and Bay 2, the existing conductors will be replaced with new, slightly longer conductors.

15. No additional poles or tower structures are required for this Project. The Project will be constructed entirely within PPL Electric-owned property. No new additional right-of-way will be required.

16. The approximately 200-foot segment of new 500 kV conductors will utilize three power conductors and one overhead ground wire. The power conductors will be 3 phases of double bundle 2493 kcmil,<sup>1</sup> 54/37 stranding aluminum conductor alloy reinforced (“ACAR”)

---

<sup>1</sup> A kcmil is a thousand circular mils. A circular mil is the cross-sectional area of a wire 1 mil in diameter, where 1 kcmil = 0.5067 square millimeters.

conductors. The overhead ground wire will be a 19#9 Alumoweld wire with a diameter of 0.572 inches.

17. Upon completion of the Project, the line will be renamed the Breinigsville-Alburtis #2 500 kV Transmission Line.

18. The total estimated cost of the Project is \$430,500 which includes substation work and the transmission line re-termination.<sup>2</sup>

19. Subject to the Commission's approval, construction is scheduled to begin in September 2017 to support the Project's scheduled in-service date of October 2017.

### **III. HEALTH AND SAFETY**

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

21. 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.

22. Consistent with its Magnetic Field Management Program, the proposed Project will utilize structures that have a ground clearance that is a minimum of five feet higher than NESC standards. A description of PPL Electric's Magnetic Field Management Program is provided in Attachment 2 to this Letter of Notification.

---

<sup>2</sup> 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 of filed 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.

#### **IV. DESCRIPTION OF THE RIGHT-OF-WAY**

23. The entire Project will be constructed entirely within PPL Electric's property for the Alburdis 500-230 kV Substations. No additional rights-of-way or easements are necessary for the proposed Project.

24. As explained in Attachment 3 to this Letter of Notification, land use and environmental impacts are anticipated to be minimal due to the fact that the Project will be constructed entirely on PPL Electric's substation property.

25. 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.

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

27. PPL Electric does not anticipate any interference with airport operations because of the distance from the Project area, and the presence of existing electrical facilities in the Project area.

28. The Project area contains no state lands, national parks, state parks, or local parks.

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

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

31. No cultural and archaeological resources are located within the Project area.

32. No wetlands, 100-year floodplains, or waterways are located within the Project area.

33. No state or federal environmental permits are required for this project. However, to the extent necessary, PPL Electric will obtain all approvals and permits needed for the construction of the Project, and will comply with any conditions placed on those permits.

**V. NOTICE**

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

35. 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).

36. 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**

37. 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)(vi).

38. The proposed Project replacement and re-termination of approximately 200 feet of the existing single circuit Breinigsville-Alburtis 500 kV Transmission Line entirely within the PPL Electric-owned property for the Alburtis 500-230 kV Substation.

39. Based on the foregoing, PPL Electric submits that the proposed Project qualifies as a Letter of Notification.

40. 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 Pennsylvania Public Utility Commission approval to replace and re-terminate approximately 200 feet of the existing single circuit Breinigsville-Alburtis 500 kV Transmission Line in Lower Macungie Township, Lehigh County, Pennsylvania, as explained above and in the Attachments hereto.

Respectfully submitted,

Kimberly A. Klock (ID #89716)  
Amy E. Hirakis (ID #310094)  
PPL Services Corporation  
Two North Ninth Street  
Allentown, PA 18101  
Voice: 610-774-5696  
Fax: 610-774-6726  
E-mail: [kklock@pplweb.com](mailto:kklock@pplweb.com)  
E-mail: [aehirakis@pplweb.com](mailto:aehirakis@pplweb.com)

  
David B. MacGregor (ID # 28804)  
Christopher T. Wright (ID # 203412)  
Post & Schell, P.C.  
17 North Second Street  
12th Floor  
Harrisburg, PA 17101-1601  
Voice: 717-731-1970  
Fax: 717-731-1985  
E-mail: [dmacgregor@postschell.com](mailto:dmacgregor@postschell.com)  
E-mail: [cwright@postschell.com](mailto:cwright@postschell.com)

Date: May 17, 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: 5/16/17

Stephanie Raymond