

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Letter Of Notification of PPL Electric :
Utilities Corporation, Filed Pursuant to 52 :
Pa. Code Chapter 57 Subchapter G, for :
Approval of the Replacement of the Hauto : Docket No. A-2013-_____
– Siegfried #1 & #4 69 kV Line & the :
Siegfried – East Palmerton #1 & #2 69 kV :
Line with the Siegfried – Hauto #1 & #2 :
138/69 KV Transmission Line and the :
Treichlers 138/69 kV Taps :

LETTER OF NOTIFICATION

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PPL Electric Utilities Corporation (“PPL Electric” or the “Company”) hereby files, pursuant to 52 Pa. Code §57.72(d), this Letter of Notification to request that the Pennsylvania Public Utility Commission (“Commission”) approve the replacement of approximately 8.5 miles of two existing parallel double-circuit 69 kilovolt (“kV”) transmission lines, the Hauto – Siegfried #1 & Siegfried – East Palmerton #2 Line and the Hauto – Siegfried #4 and Siegfried – East Palmerton #1 Line, with one high capacity double-circuit 138/69 kV transmission line. The new double-circuit line will be referred to as the “Siegfried – Hauto #1 & #2 138/69 kV Transmission Line” (“Siegfried – Hauto Line”). In addition, PPL Electric seeks Commission approval for the reconstruction of approximately 800 feet of the Treichlers #1 138/69 kV Transmission Tap and the siting and construction of the new Treichlers #2 138/69 kV Transmission Tap. The first approximately 470 feet of Treichlers Tap #1 & #2 lines will be

constructed on separate structures. The two circuits are then supported by a common switching structure and deadend double-circuit structure for approximately 330 feet to provide a double-circuit tap-singe feed (DT/SF) configuration. The Siegfried – Hauto Line will be located in portions of Allen Township in Northampton County and of North Whitehall and Washington townships in Lehigh County. The Treichlers Tap Line will be located in Allen and Lehigh townships in Northampton County.

PPL Electric proposes to replace the Hauto – Siegfried #1 & Siegfried – East Palmerton #2 Line and the Hauto – Siegfried #4 and Siegfried – East Palmerton #1 Line because their ages have exceeded their expected useful lives and because they are in a deteriorated condition. The Hauto – Siegfried #1 & Siegfried – East Palmerton #2 circuits were constructed in 1914 and 1923, respectively. The Hauto – Siegfried #4 and Siegfried – East Palmerton #1 circuits were constructed in the 1950s. Although the new Siegfried – Hauto Line will be designed for 138 kV operation, it will be operated at 69 kV until future load growth makes it appropriate to increase the operating voltage of the transmission system in the area.

Presently, the Treichlers 69-12 kV distribution substation is supplied by the Treichlers #1 69 kV Tap Line, a single tap line from the Hauto – Siegfried #1 69 kV transmission line. In planning the Siegfried – Hauto Line to replace the older lines, it was observed that the reliability of service from the Treichlers Substation could be improved by modifying the Treichlers Tap Line so that the Treichlers Substation could be supplied from either circuit of the proposed Siegfried – Hauto Line. In that manner, service from the Treichlers Substation will be able to be restored quickly in the event of an outage of either circuit. The existing Treichlers Tap Line is approximately 1.1 miles long. The modification of the Treichlers Tap Line will affect approximately 800 feet of the Tap Line which will involve rebuilding the existing tap line and

adding a second tap line, the Treichlers #2 Tap Line and installation of switches and other equipment. The remainder of the existing Treichlers Tap Line will not be modified.

The Project will cost approximately \$11.8 million. Subject to the Commission's approval, construction is scheduled to commence in February 2014 to support an in service date of September 2014. PPL Electric reviewed the proposed Project representatives of Lehigh and Northampton counties and Allen, North Whitehall, Washington, and Lehigh townships, and neither the townships nor the counties had any objection to it.

In support of this Letter of Notification, PPL Electric states the following.

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:

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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 those terms are defined in Sections 102 and 2803 of the Pennsylvania Public Utility Code, 66 Pa.C.S. §§ 102, 2803, respectively.

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

6. Accompanying this Letter of Notification is a separately bound volume containing Attachments 1-7, which provide additional information about the proposed Project:

- Attachment 1 Necessity Statement
- Attachment 2 Engineering Description
- Attachment 3 Environmental Assessment
- Attachment 4 PPL Electric Design Criteria and Safety Practices

- Attachment 5 PPL Electric Magnetic Field Management Program
- Attachment 6 List of Owners of Property within the Right-of-Way
- Attachment 7 List of Involved Governmental Agencies, Municipalities, and Other Public Entities

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. NECESSITY

8. The Necessity Statement for the proposed Project is provided as Attachment 1 to this Letter of Notification.

9. PPL Electric is requesting Commission approval to replace approximately 8.5 miles of two existing aging double-circuit 69 kV lines with one new high capacity double-circuit 138/69 kV transmission line. The 8.5-mile-long corridor presently hosts two double-circuit lattice tower lines. The first tower line supports the Hauto – Siegfried #1 and Siegfried – East Palmerton #2 69 kV circuits, and the second tower line supports the Hauto – Siegfried #4 and Siegfried – East Palmerton #1 69 kV circuits. These lines serve 11,000 customers in Lehigh County with a 2012 summer peak loading of 40 MW. The new line will be referred to as the Siegfried – Hauto #1 and #2 138/69 kV Transmission Line (“Siegfried – Hauto Line”). It will be designed for 138 kV standards for higher capacity operation and will provide better reliability of service to the area it supplies.

10. The Siegfried – Hauto Line Project is the first phase of a three-phase plan to replace aging transmission lines between the Siegfried Substation and the East Palmerton and Hauto substations. PPL Electric has divided the overall plan into three separate phases, each

with a separate need, to reduce the complexity of project execution. Each phase of the plan will be the subject of a separate filing. This Letter of Notification seeks the Commission's approval of the first phase, the section between the Siegfried Substation and the point in Washington Township where the double-circuit structures diverge. PPL Electric is seeking Commission approval of the first phase in order to achieve optimal project execution and sequencing.

11. Presently, all four 69 kV circuits described above exit the PPL Electric Siegfried Substation located in Allen Township, Northampton County, Pennsylvania, on two sets of double-circuit transmission structures and continue northwest for approximately 8.5 miles. The routes diverge near the intersection of Mountain Road and Brown Road in Washington Township, Lehigh County (the "Split"). From this point, the Hauto – Siegfried #1 and Hauto – Siegfried #4 69 kV lines continue northwest for approximately 15.2 miles to the Hauto Substation in Nesquehoning Borough, Carbon County, Pennsylvania on separate transmission structures. From the Split, the Siegfried – East Palmerton #1 and Siegfried – East Palmerton #2 69 kV lines traverse northeast for approximately 6.9 miles to the East Palmerton Substation in Lower Towamensing Township, Carbon County, Pennsylvania on separate transmission structures.

12. In addition, PPL Electric seeks Commission approval for the reconstruction of approximately 800 feet of the Treichlers #1 138/69 kV Transmission Tap, the siting and construction of the new Treichlers #2 138/69 kV Transmission Tap. Presently, the Treichlers Substation is served via the single-circuit Treichlers Tap #1 off the existing Hauto – Siegfried #1 138/69 kV Transmission Line. The Treichlers Tap #2 will be constructed to create a double-circuit tap-single feed configuration, which will provide a second source of electricity to the

Treichlers Substation. The new tap line will be constructed within PPL Electric's right-of-way, which was recently expanded in this area from 70 to 100 feet in width.

13. The existing Treichlers Tap #1 is approximately 1.1 miles in length. After the first 800 feet, switches and other equipment will be installed so that the remaining portion of the Treichlers Tap #1 can be supplied from either of the proposed Hauto – Siegfried circuits. The remainder of the Treichlers Tap #1 will continue into and supply the Treichlers Substation. It will not be modified.

14. All of the transmission lines in this Project are being constructed for 138/69 kV operation. The operating voltage will be increased to 138 kV in the future as part of a regional upgrade of the transmission system in this area when future customer load increases make it appropriate to do so.

15. This filing also seeks Commission review of the future increase in the operating voltage for the portion of the Treichlers Tap #1 138/69 kV Line that will not be modified from 69 to 138 kV. The existing Treichlers #1 Tap is can safely be operated at 138 kV without modification.

16. PPL Electric is seeking review of the future increase in the operating voltage of the remaining portion of the Treichlers #1 Tap to 138 kV because PPL Electric is uncertain whether Commission approval is required for the increase in the operating voltage of the portion of the Treichlers Tap #1 that will not be modified. The Treichlers Tap #1 was constructed in 1976, before the Commission's regulations requiring prior approval of siting and construction of transmission lines with an operating voltage greater than greater than 100,000 volts were adopted. Therefore, its siting and construction were "grandfathered." 52 Pa. Code § 57.77. The Treichlers #1 Tap was initially designed to be capable of operating at 138 kV. PPL Electric,

however, is not certain whether the grandfather provisions of the regulation apply to the future increase in operating voltage of the Treichlers Tap #1 contemplated in this Letter of Notification. 52 Pa. Code § 57.72(d)(iv). If the Commission determines that approval for the increase in the operating voltage is required, then PPL Electric requests such approval. If the Commission determines that no approval is required, PPL Electric asks that the order so indicate.

17. The need for the Project was identified through System Planning. System Planning is the process which assures that the transmission system can supply electricity to all customer loads in a manner that is reliable and economic. This System Planning process assures that both the Bulk Electric System (BES) and non-Bulk Electric System (non-BES)¹ are planned and constructed so that they are able to provide reliable service in an economic manner.

18. The process of planning the transmission system requires PPL Electric to look into the future to develop a reinforcement plan far enough in advance to be able to complete a project when it is needed. Ideally, transmission facility upgrades are planned such that the in-service date corresponds with the time frame that the facility is required to meet the planning criteria established by PPL Electric's Reliability Principles and Practices (RP&P). Significant lead times are needed to design and install new line and substation facilities where new sites and/or rights-of-way and regulatory approvals must be acquired.

19. The reliable and economical operation of PPL Electric's transmission system requires planning standards for system expansion and reinforcement. The principles upon which these planning practices are based recognize that: (1) system expansion should be coordinated to achieve the most economical balance of construction and operating expenditures; (2) the system should maintain a proper balance between the degree of risk, amount and type of load

¹ The BES includes transmission facilities operating at or above 100 kV. The non-BES includes transmission facilities operating at lower voltages.

interrupted, and the cost of providing the needed expansion; and (3) system reliability should be maintained to prevent large scale, long term, or frequent service interruptions to avoid adverse effects and hazards to the public.

20. In order to achieve these objectives, PPL Electric undertakes an independent analysis of both its BES and non-BES transmission facilities. The PPL Electric planning practices are outlined in the RP&P, which was developed to ensure adequate and appropriate levels of electric service to its customers consistent with good utility practice. The fundamental purpose of the RP&P is to provide PPL Electric planning engineers with a comprehensive set of planning practices and criteria that enable them to plan for a reliable transmission and distribution system for PPL Electric's customers. The RP&P is reviewed periodically by PPL Electric engineers and planners. The document is updated to reflect current standards and practices. Updates to the document are approved by PPL Electric's senior management. PPL Electric's RP&P is consistent with good utility practices and with the reliability criteria and standards used by similar utilities.

21. In accordance with these practices and PPL Electric's RP&P, the PPL Electric transmission system is planned so that it can be operated at all projected load levels and during normal scheduled outages and withstand specific unscheduled contingencies without exceeding the equipment capability, causing system instability or cascade tripping, or exceeding voltage tolerances. The transmission system is required to have adequate capability so that it can be operated normally and can withstand the certain unscheduled contingencies and other system conditions.

22. As explained more fully below, the proposed rebuild of the existing Hauto – Siegfried #1 & Siegfried – East Palmerton #2 and Hauto – Siegfried #4 & Siegfried – East

Palmerton #1 69 kV double-circuit lines to one new Hauto – Siegfried #1 & #2 138/69 kV double-circuit line will replace the existing aging, deteriorated transmission infrastructure. Replacement of aging infrastructure necessary to maintain electric system reliability is a practice set forth in PPL Electric’s RP&P, its local planning criteria on the non-BES 69 kV transmission system.

23. For non-BES system reliability violations, the local transmission operator, in this case PPL Electric is responsible for identifying the reliability violations and correcting any violations to meet its own local transmission planning criteria. PPL Electric’s local transmission planning criteria for ensuring the reliability of the non-BES transmission system are based on the principles of the NERC and PJM reliability criteria for the BES. PJM relies on the local transmission owners to ensure the reliability of their non-BES system by meeting their own local transmission planning criteria. Projects that are necessary to resolve NERC criteria, PJM reliability criteria, or the transmission owners’ own local transmission planning criteria are included as baseline projects in PJM’s RTEP.

24. Transmission owners submit their lower voltage reliability projects to PJM so that they can be presented before the PJM stakeholders at the Sub-Regional RTEP Committee meetings.

25. The PJM Sub-Regional RTEP Committee review includes, but is not limited to, the review of the transmission owner criteria, assumptions and models used to identify reliability criteria violations and proposed solutions prior to finalizing the Local Plan. The Committee members are provided an opportunity to review and provide written comments to the transmission owners on the criteria, assumptions, and models used in local planning activities prior to finalizing the Local Plan. Once the Local Plan is finalized, the Committee is provided an

opportunity to review and provide written comments to the transmission owners on the Local Plans as integrated into the RTEP. The final version of the RTEP, which includes the transmission owners' Local Plans that were reviewed and recommended by the Committee, is then sent to the PJM Board for approval. Once the PJM Board approves the RTEP that includes the transmission owners' Local Plans, the transmission owners then move forward to implement the RTEP BES transmission and the non-BES facility upgrades as they are obligated to do under the PJM Tariff and Operating Agreements. Particular projects, such as rebuilds of existing aging infrastructure that are categorized as PJM "supplemental" projects, do not need to be presented before the PJM Board for approval.

26. The purpose of the proposed Project is to replace aging transmission infrastructure on the non-BES (69 kV) system serving a portions of the Lehigh and Central Regions of PPL Electric's service territory. PPL Electric submitted the proposed Project to PJM for review and inclusion in the RTEP as a supplemental project. The Project was presented before stakeholders at the Mid-Atlantic Sub-Regional RTEP meeting on February 28, 2013 and was assigned supplemental project number s0524.

27. In addition to the above planning approach, PPL Electric has also developed an Asset Optimization Strategy (AOS) that has been incorporated into the planning process. A significant portion of PPL Electric's system infrastructure is either approaching the end of or has exceeded its expected or useful life. The AOS program was developed to systematically identify and modernize these deteriorated facilities. The criteria used to identify and prioritize the equipment and lines that qualify for this work include, but are not limited to: age, condition, operational issues, maintainability of the equipment, criticality of the equipment or line, line

loading, and circuit performance. Once equipment has been identified and assessed under the above criteria, it will be put into the Capital Budget for modernization under the AOS program.

28. The Hauto – Siegfried #1 and #4 circuits have been in service since 1914 and 1923, respectively. The Siegfried – East Palmerton #1 & #2 circuits have been in service since the 1950s. The Hauto – Siegfried line operates with the original 4/0 copper conductor, and the Siegfried – East Palmerton line carries the original 250 MCM copper conductor. The conductors of both lines have exceeded their useful lives.

29. Based upon the age of the circuits and lines, a more detailed examination of the facilities was needed. PPL Electric hired an outside engineering consultant, DiGioia Gray and Associates (DGA) to perform an independent field investigation and assessment of the line components. DGA completed its study in September 2011. Based on an inspection of 10 percent of the structures with known problems on the line, DGA concluded that the Phase 1 Hauto – Siegfried and Siegfried – East Palmerton lines have reached the end of their useful lives. This assessment found significant deterioration of the structural components, foundations, insulators, line hardware, shield wire, grounding, signage, paint and galvanizing as well as an outdated structure design. Given the age of the structures, foundation conditions, conductor age, and right-of-way constraints, DGA recommended that PPL Electric rebuild the existing lines with a more reliable and robust circuit constructed on steel monopoles. Rebuilding the existing double-circuit lines as one double-circuit line allows PPL Electric to construct the new line on the center line of the existing right-of-way to increase safety and reliability by increasing the distance between the conductors and the edge of the right-of-way.

30. PPL Electric requested that DGA also compare the relative costs of rehabilitating and replacing the aging lines. Based on DGA’s assessment, rehabilitating the existing lines

would not be economical. Replacing the existing lines will allow PPL Electric to upgrade the lines to current standards, as well as to install 138 kV circuits and improved conductors to allow for future load growth.

31. PPL Electric performed an independent cost analysis to evaluate the cost difference between rebuilding and rehabilitating the lines. Typically, if the cost to rehabilitate the line is 50% or greater of the cost to rebuild the entire line, the option to rebuild should be considered. Based on PPL Electric's cost analysis, the total cost to rehabilitate the line would be greater than the cost to rebuild. Therefore, replacing the two existing aging double-circuit lines with one new high capacity double-circuit 138/69 kV transmission line was identified as the more prudent option.

32. PPL Electric also seeks Commission approval for the rebuild of an 800-foot section of the approximately 1.1-mile-long Treichlers Tap into a double-circuit tap, single feed configuration so that the Treichlers Substation can be supplied from either circuit of the proposed Siegfried – Hauto Line. As explained above, the Treichlers Tap will be designed for a double tap/single feed arrangement to provide more reliable service.

33. The proposed future configuration will use higher ampacity conductors, use improved sectionalizing devices and meet new lightning protection standards of PJM. After completion of this Project, the customers served from these lines will experience improved service reliability. The improved line design and increased line sectionalizing capability will allow quicker load restoration after a system interruption and will contribute to the higher level of reliability for the customers served from these lines.

34. For all of the foregoing reasons, this Project is necessary to enable PPL Electric to continue to provide reliable service now and into the future and therefore requests approval of the Commission to complete this Project.

B. ENGINEERING DESCRIPTION

35. The proposed Siegfried – Hauto #1 and #2 transmission line will be supported by approximately 74 steel monopoles with an average height of approximately 110 feet and an average span of 670 feet. The proposed steel monopoles will be installed on concrete foundations.

36. The proposed Siegfried – Hauto transmission #1 and #2 line will consist of six power conductors and two overhead optical ground wires. The power conductors will be 795 kcmil,² 30/19 strand Aluminum Conductor Steel Reinforced (“ACSR”) and two 0.752” optical ground wires (“OPGW”). The overhead optical ground wire will provide lightning protection for the proposed tap line as well as communications between substations. Additionally, two self-supporting high-low tap poles will be placed at the Split. These two tap poles will be constructed on concrete foundations. The tap poles will be used to tie the new line into the future East Palmerton – Slatedale #1 & #2 transmission line. The heights of these two poles are two different in order to allow clearance for one circuit to pass over the other at this “T” point where these lines meet. Six new load sectionalizing air brakes (“LSABs”) and associated poles will be installed on the new double circuit line in the vicinity of the “split” to facilitate sectionalizing the lines. Four special single circuit transposition poles will be installed to carry each circuit under the existing Susquehanna – Wescosville 500 kV transmission line.

² A kcmil is a thousand circular mils. A circular mil is the cross-sectional area of a wire one mil in diameter, where 1 kcmil = 0.5067 mm².

37. The proposed Treichlers Tap #1 & #2 138/69 kV line will be supported by approximately 5 single-circuit steel monopoles with an average height of approximately 100 feet and an average span of 240 feet. The two circuits will join together on a common two-pole switching structure and one deadend steel monopole. The steel monopoles will be installed on concrete foundations. In this area, the first 800 feet of right-of-way adjacent to the existing Treichlers Tap #1 was widened by 30 feet to accommodate the installation of the Treichlers Tap #2 line.

38. The proposed Treichlers Tap #1 & #2 line Tap will consist of six power conductors and two overhead ground wires. The power conductors will be 795 kcmil, 30/19 strand ACSR and 0.375" steel ground wires. The overhead ground wires will provide lightning protection for the proposed tap line. Additionally, two guyed tap poles will be installed to tap the mainline circuits. Two new LSABs and associated poles will be installed on the new double-circuit line. After the LSABs, a dead end structure will be installed to terminate the double-circuit line. Horizontal phase ties will be installed in the span before the dead end. The phase ties in conjunction with the two LSABs will allow the remainder of Treichlers Tap to be a double-circuit tap and single feed source to Treichlers Substation. Two special single-circuit transposition poles (Figure 8) will be installed to carry each circuit under the Siegfried – Frackville 230 kV Transmission Line.³

39. The estimated cost to design and construct the Project is \$11.8 million. Subject to the Commission's approval, construction is scheduled to begin in February 2014, to accommodate an in service date of September 2014.

³ The design of the Line has not yet been finalized, and the final design may be somewhat different from the design explained here and in Attachment 2 hereto.

III. HEALTH AND SAFETY

40. The Project will not create any unreasonable danger to the public health or safety.

41. The new double-circuit 138/69 kV transmission lines will be designed according to, and will generally surpass, National Electrical Safety Code (“NESC”) minimum standards. Additional design criteria and safety practices of PPL Electric are explained in Attachment

42. The minimum conductor-to-ground clearance will be 30 feet for the new 138/69 kV lines, except for where the Treichlers Tap #1 & #2 line crosses under the Siegfried – Frackville circuit. The clearance at this crossing will be a minimum of 26 feet. These minimum clearances occur at a maximum thermal conductor temperature of 125°C. The design minimum conductor clearances and conductor thermal rating are provided in Table 1 and Table 2 respectively.

43. PPL Electric does not believe that the current scientific evidence demonstrates that magnetic fields cause any adverse health effects or pose a health or safety danger to the public. Nevertheless, PPL Electric has determined, as a matter of policy, to design its new and rebuilt transmission lines to reduce magnetic fields when that can be done at low or no cost and does not interfere with functional requirements.

44. PPL Electric’s Magnetic Field Management Program is summarized in Attachment “5” and is applied to all rebuild and new line projects. In order to lower magnetic field exposures, the program generally prescribes a line design that provides for ground clearances that are at least five feet higher than those required under the NESC, and reverse phasing of new double-circuit lines where it is feasible to do so at low or no cost. The implementation of additional modifications will be considered, provided that those modifications can be made at low or no cost and will not interfere with the operation of the line.

45. For this project, increased structure height and reverse phasing will be incorporated into the design of the new transmission lines to reduce magnetic field exposures.

IV. ENVIRONMENTAL EVALUATION

46. The proposed Project is located in Allen and Lehigh townships in Northampton and in North Whitehall and Washington townships in Lehigh County.

47. The Project was reviewed with representatives of the townships and the counties, and neither the counties nor the townships had any objection to the Project.

A. LAND USE

48. The proposed Project will result in little environmental or social impacts as the new line section will be constructed entirely on an existing, cleared right-of-way or property owned in fee by PPL Electric. Further, the principal portion of the Project involves replacing two double circuit transmission lines with one double circuit transmission line. Each of the present transmission lines is supported by a separate set of structures. The structures for the existing two transmission lines will be removed and replaced with one set of structures. The number of structures in the right-of-way for the Siegfried - Hauto Line will be reduced from approximately 148 to approximately 67.

49. Further, each of the existing structures is a steel lattice tower constructed on four separate foundations. In contrast, the proposed transmission line will be primarily steel monopoles with one foundation for each structure.

50. The Project begins in Allen Township in Northampton County at the existing Siegfried Substation located adjacent to West 27th Street and east of the Lehigh River. The proposed route exits the Siegfried Substation to the west and crosses the Lehigh River. After crossing the river, the route continues northwest for approximately 3.6 miles through a mix of

forested and agricultural areas within North Whitehall Township, Lehigh County. From there, the route continues northwest through agricultural, forested and rural residential areas in Washington Township for approximately 4.7 miles, crossing Interstate 476 (I-476, the Northeast Extension of the Pennsylvania Turnpike) and terminating at the proposed switchyard station located on a vacant parcel near the intersection of Mountain Road and Brown Street in Washington Township.

51. The Treichlers Tap #1 138/69 kV Line right-of-way varies between 70 and 100 feet in width. PPL Electric acquired 30 feet of additional right-of-way to the east of the existing right-of-way in order to accommodate both tap lines, which are approximately 800 feet in length. The existing right-of-way is located within an agricultural field and is presently cleared of trees. The additional 30 feet of right-of-way acquired by PPL Electric is also within an agricultural field. Therefore, limited or no vegetation clearing is anticipated as part of the Treichlers Tap rebuild. No work will be conducted on the remaining portion of the Treichlers Tap #1 69 kV Line. The portion between the rebuild and the Treichlers Substation is included in this filing in order to assure that PPL Electric is authorized to operate this portion of the line at 138 kV in the future.

52. Four cemeteries and one church are located within 1,000 feet of the Project. The existing right-of-way crosses the southwest corner of Union Cemetery in Washington Township. The remaining cemeteries and churches are not crossed but are located within 1,000 feet of the right-of-way. They include the Freidens Church and Cemetery located just south of Union Cemetery and south of the right-of-way; the Welsh Baptist Congregation Cemetery located west of Union; and the Slatedale Cemetery located south of the "Split." No schools are crossed by or are located within 1,000 feet of the right-of-way.

53. No communication towers, pipelines, or other utilities will be affected by the proposed Project. The closest airport is a privately owned heliport located approximately 800 feet north of the Project off Ranch Road in North Whitehall Township. In addition, a privately owned airport, identified as HI-VU, is located approximately 1 mile south of the Project in North Whitehall Township, and the Slatington airport is located approximately 1.8 miles north of the Project in Slatington Borough. The proposed transmission line rebuild is not expected to impact airport operations or flight patterns. Nevertheless, PPL Electric will file the appropriate documentation with both the Federal Aviation Administration and the PennDOT Bureau of Aviation to ensure that the proposed construction will not be a hazard to flight operations.

B. CULTURAL RESOURCES

54. PPL Electric reviewed the Pennsylvania Historical and Museum Commission's (PHMC's) Bureau for Historic Preservation (BHP) Cultural Resources Geographic Information System (CRGIS) to identify previously recorded historic resources located in the vicinity of the Project. Based on this review, the Project does not cross any known historic architectural or archeological resources. The CRGIS search identified two bridges and one unidentified structure within 0.5 mile of the Project. Two are considered ineligible for inclusion on the National Register of Historic Places (NRHP), and the eligibility of one is undetermined. Impacts of the Project on these resources are expected to be minimal because the principal portion of the Project is replacing two double circuit transmission lines with one double circuit transmission line in an existing and cleared right-of-way.

55. Eight Historic Linear Resources (six railroads, the Pennsylvania Turnpike and one canal) are crossed by the existing line. Three of the railroads are listed as “aggregates”⁴ and two are considered eligible for listing on the NRHP. The CRGIS indicates that the Pennsylvania Turnpike Northeast Extension is considered ineligible whereas the Walnutport to Allentown and the Lehigh Gap to Walnutport Sections of the Lehigh Canal are listed on the NRHP. Impacts on these listed resources are expected to be minimal because the principal portion of the Project is replacing two double circuit transmission lines with one double circuit transmission line in an existing and cleared right-of-way.

56. Five archaeological sites, that have “insufficient data available to make a decision,” are located within 0.5 mile of the existing line. There are also five historic districts within 0.5 mile of the existing line, three of which are considered ineligible and two of which (Slatington Historic District and Vigilant Fire Company’s Firemen’s Monument) are listed on the NRHP. Impacts on the resources are expected to be minimal because the principal portion of the Project is replacing two double-circuit transmission lines with one double-circuit transmission line in an existing and cleared right-of-way.

57. PPL Electric submitted a letter to the PHMC on April 24, 2013 to request information on any additional archaeological or historic architectural resources located in the Project vicinity. No response has been received to date.

58. A separate letter was sent to the PHMC on June 6, 2013 regarding the Treichlers Tap rebuild. A PHMC response dated June 12, 2013 indicated that no historic properties are

⁴ Aggregate files refer to a display of previously surveyed components (associated resources) of a particular railroad line. The aggregate file illustrates the historic path of the railroad line based on research, but is not considered to be definitive. Aggregate files do not represent a historic district survey and will not have a determination of eligibility.

located within this portion of the Project Area. PPL Electric will continue to consult with the PHMC to minimize the potential for any adverse impacts on cultural resources.

C. NATURAL FEATURES

59. The Project will not affect any recreational areas or natural landmarks. No recreational areas are traversed by the Project.

60. The rights-of-way for both the proposed Siegfried – Hauto line and the Treichlers Tap line cross the Mantz Conservation Easement located adjacent to the Lehigh River. The Project involves rebuilding transmission infrastructure within the existing, cleared rights-of-way through the conservation easement area. In fact, the Project is anticipated to reduce impacts through this area by reducing the number of transmission circuits from four to two and reducing the number of structures. The portion of the Treichlers Tap line that will be rebuilt as part of this Project does not cross the Mantz Conservation Easement.

61. A few local recreational areas are located within 1 mile of the Project. The closest recreational area is the Minnich Tract located approximately 0.2 mile north of the right-of-way. The Project crosses a portion of the Delaware and Lehigh (D&L) Trail, a rails to trails project, which is a 165-mile trail network constructed in an inactive Conrail right-of-way adjacent to the Lehigh River. The Project also crosses the Slate Heritage Trail, which is another rails-to-trails project that connects to the D&L Trail in Washington Township. The existing transmission right-of-way presently crosses these recreational areas. The Project is not anticipated to impact either site, as it will be located in an existing, cleared right-of-way and will reduce the number of structures.

62. The Project is located approximately 0.7 mile from the Appalachian Trail. State Game Land 217A is located along the Appalachian Trail in this area. Based on this distance, the

change in elevation, and heavy tree cover, the proposed transmission line will not be visually noticeable from the Appalachian Trail, and no impacts to these areas are anticipated.

63. The Project will traverse approximately 0.3 miles of two natural area sites identified in the natural area inventory (NAI) for Lehigh and Northampton counties, the Clearview Road Riverbank Site located in the eastern portion of the Project Area in North Whitehall Township and the Rextown Ponds Site located in the western portion of the Project Area in Washington Township. The Clearview Road Riverbank Site consists of a forested strip of riverbank along the shore of the Lehigh River. This stretch of riverbank is influenced by scouring from flooding and ice and includes varying segments of rock outcrops, stunted trees and shrubs and mixed herbs growing on alluvial sediments. According to The Nature Conservancy, the site supports populations of two plant species of special concern, the Virginia rose and the Baltic rush. Extensive suitable habitat for both of these species occurs along the river. Approximately 1 acre of this natural area is crossed by the Project. Impacts to this area are expected to be minimal because the proposed transmission line will span this natural area on an existing transmission right-of-way.

64. The Project traverses approximately 0.4 acres of the Rextown Ponds natural area. This NAI site consists of several small, seasonally wet, shallow depressions or ponds in an otherwise well-drained, upland forest along the Lehigh River and supports a plant species of concern, the Northeastern Bulrush. A rare plant survey was conducted within the right-of-way as part of the Project. None of the plant species of concern that may be located within these NAI areas were identified during the survey. Based on this information and the facts that the Project will be rebuilt within PPL Electric's existing, cleared right-of-way and will span this natural area

on an existing transmission right-of-way, no impacts to this NAI area are expected. The Project will not traverse any other unique geological, scenic or natural areas.

65. In addition, although the following natural areas are not crossed by the Project, they are located within 1 mile of the right-of-way:

a. Rextown Quarry Site (Washington Township, Lehigh County) is located approximately 0.2 miles north of the right-of-way adjacent to I-476. This NAI area consists of an abandoned slate quarry that provides suitable habitat for a plant species of concern, Torrey's rush. This plant species has been observed at the base of a large slag pile on muddy soil enriched by the limy slate. In this case, human disturbance has created a unique habitat utilized by the species of concern.

b. Walnutport Canal (Washington and North Whitehall townships, Lehigh County) is located approximately 0.2 miles north of the right-of-way. This NAI area consists of a canal and adjacent banks and a strip of woods between towpath and river. It contains a plant species of concern, Virginia rose. A second species of concern, autumn willow, was reported but could not be confirmed.

c. Rockdale Cliffs (North Whitehall Township, Lehigh County) is located directly south of the Lehigh River in North Whitehall Township approximately 0.2 mile north of the right-of-way. This NAI area includes several small, seasonally wet, shallow depressions in otherwise well-drained, upland forest. A plant species of concern, ebony sedge, is found at one of the ponds.

Because these sites are distant from the Project and because the Project is a rebuild on existing cleared right-of-way, no impacts to these NAI areas are anticipated.

66. PPL Electric conducted a wetland delineation of the line in March 2012. Field survey efforts identified 40 wetlands and other Waters of the United States (“WOUS”).

67. Regarding these wetlands, PPL Electric will obtain any required soil erosion and sedimentation control approvals and associated National Pollutant Discharge Elimination System (“NPDES”) construction permits from the applicable County Conservation Districts and/or the Pennsylvania Department of Environmental Protection and will comply with any conditions placed on those permits. PPL Electric will employ its “Specification for Soil Erosion and Sedimentation Control on Transmission Line Rights-of-Way” as appropriate.

68. In order to reduce impacts on wetlands, although some minimal tree clearing may be required, PPL Electric will apply its “Specification for Initial Clearing and Control of Vegetation On or Adjacent to Electric Line Right-of-Way Through Use of Herbicides, Mechanical and Hand Clearing Techniques” to mitigate any impacts.

D. THREATENED AND ENDANGERED SPECIES

69. PPL Electric has coordinated with the relevant state and federal agencies to obtain information regarding endangered and threatened species that have been known to occur in the vicinity of the proposed Project. The Pennsylvania Game Commission (“PGC”), and Pennsylvania Fish and Boat Commission (“PFBC”) report that, except for occasional transient species of wildlife, no threatened or endangered plant or animal life is known to exist in the Project vicinity. However, PGC identified the following voluntary conservation measure for the Northern Myotis: “To the best extent practicable, removal of all trees and dead limbs greater than 5-inch diameter at breast height should be cut between November 1 and March 31.” PPL Electric will comply with this recommendation.

70. The Pennsylvania Department of Conservation and Natural Resources (“DCNR”) indicated that the Project is located within the vicinity of 10 plant species of concern listed in Table 3 of Attachment 3 hereto.

71. DCNR requested surveys for the species identified in Table 3 and the Virginia rose, which is currently unlisted in Pennsylvania. PPL Electric retained a qualified botanist to conduct plant surveys within the ROW in May and June 2012. Based on these surveys, none of the species identified by DCNR were identified within the right-of-way. However, one species of concern that was not identified by DCNR, Clinton’s woodfern, was identified within the Project right-of-way during these surveys. PPL Electric is currently finalizing the rare plant report for submission to DCNR.

72. The U.S. Fish and Wildlife Service (“USFWS”) indicated that the federally threatened bog turtle is known to exist within Lehigh County and requested Phase I bog turtle surveys. PPL Electric retained a qualified bog turtle surveyor to conduct Phase I bog turtle surveys along the right-of-way. No potential bog turtle habitat was identified during the Phase I surveys. PPL Electric is currently in the process of finalizing the Phase I report for submission to the USFWS.

An online PNDI review was conducted for the Treichlers Tap rebuild area. No impacts were identified by PGC, PFBC or USFWS. DCNR recommends the following conservation measure for the Ebony sedge: “Please avoid the introduction of invasive species in order to protect the integrity of nearby plant species of special concern. Voluntary cleaning of equipment/vehicles, using clean fill and mulch, and avoiding planting invasive species will help to conserve sensitive plant habitats.” PPL Electric will comply with this recommendation.

73. PPL Electric will continue consultation with USFWS, DCNR and PGC to avoid impacts to species of concern and will obtain all required approvals, clearances, and permits prior to construction.

V. RIGHTS-OF-WAY STATUS

74. Work for this Project will be completed entirely within an existing utility corridor. This corridor includes property owned in fee by PPL Electric and right-of-way owned by PPL Electric. No additional right-of-way is required, although an 800' section of the Treichlers Tap #1 right-of-way was widened by 30 feet to obtain the needed clearances for the proposed Treichlers Tap #2 Line.

VI. NOTICE

75. The proposed Project was reviewed with representatives of Allen and Lehigh townships in Northampton County and North Whitehall and Washington townships in Lehigh County, as well as representatives of the counties. Neither the townships nor the counties had any objection to the Project.

76. Attachment 6 to this Letter of Notification contains a list of owners of property that are subject to the right-of-way for the Project. Copies of this Letter of Notification are being served upon these property owners in accordance with 52 Pa. Code § 57.72(d)(3).

77. Attachment 7 accompanying this Letter of Notification contains a list of the involved governmental agencies, municipalities, and other public entities. Copies of this Letter of Notification are being served on the agencies listed in Attachment 7 in accordance with 52 Pa. Code § 57.72(d)(3).

VII. LETTER OF NOTIFICATION

78. PPL Electric is proceeding by means of a Letter of Notification, instead of a full siting Application, pursuant to the Commission's regulation at 52 Pa. Code § 57.72(d). The proposed Siegfried – Hauto Line qualifies for use of a Letter of Notification because it will be entirely within the existing right-of-way for the Hauto – Siegfried #1 and Siegfried – East Palmerton #2 Line and the Hauto – Siegfried #4 and Siegfried – East Palmerton #1 Line, which will be removed as part of the Project and because the construction of the new transmission line will not substantially alter the tracts of land. 52 Pa. Code § 57.72 (d)(1)(i). The Hauto – Siegfried Line will not substantially alter the right-of-way in which it will be constructed for the following reasons.

- a. Two separate double-circuit transmission lines will be replaced by one double-circuit transmission line.
- b. The number of structures within the right-of-way will be reduced from approximately 148 to 67.
- c. The footprint of each new structure will be less than the footprint of the existing structures. The present structures are lattice towers. Each structure requires four foundations. The new structures, in contrast, will be steel monopoles which require only a single foundation.
- d. The new transmission line will have less visual impact than the existing lines. The existing structures are lattice towers with multiple crossbars and braces. The new structures, in contrast, will be simpler monopole structures with one are for each conductor and overhead ground wire. There will be six conductors instead of twelve

conductors. In addition, as explained above, there will be a substantial reduction in the number of structures.

e. When the Siegfried – Hauto Line is complete, no tract of land subject to the easement for it will have more structures on it than are on it presently.

79. The Treichlers Tap should also be considered with this Letter of Notification because it is a very small project, requiring merely the rebuild of 800 feet of the Treichlers #1 Tap into a double-tap single-feed configuration so that Treichlers Substation will have two sources of supply, which will enhance service reliability. It is merely incidental to the larger project, the replacement of two double-circuit transmission lines with one double-circuit transmission line.

80. This Letter of Notification is being filed on the date set forth below.

81. 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 replacement of approximately 8.5 miles of the Hauto – Siegfried #1 & Siegfried – East Palmerton #2 Line and the Hauto – Siegfried #4 and Siegfried – East Palmerton #1 Line with the Siegfried – Hauto #1 & #2 138/69 kV Transmission Line as well as the reconstruction of approximately 800 feet of the Treichlers #1 138/69 kV Transmission Tap and the siting and construction of the new Treichlers #2 Tap will be completed as proposed herein without the formal application process set forth at 52 Pa. Code §§ 57.71, *et seq.* As further provided in 52 Pa. Code § 57.72(d)(5), if the Commission does not approve this Letter of Notification, PPL Electric will comply with the application process set forth in 52 Pa. Code Chapter 57, Subchapter G.

II. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission approve the replacement of approximately 8.5 miles of the Hauto – Siegfried #1 & Siegfried – East Palmerton #2 Line and the Hauto – Siegfried #4 and Siegfried – East Palmerton #1 Line with the Siegfried – Hauto #1 & #2 138/69 kV Transmission Line as well as the reconstruction of approximately 800 feet of the Treichlers #1 138/69 kV Transmission Tap and the siting and construction of the new Treichlers Tap #2 that are explained above and in the Attachments hereto. In addition, PPL Electric Utilities Corporation requests that the Pennsylvania Public Utility Commission either determine that no approval is needed for the future increase in the operating voltage of the remaining portion of the Treichlers #1 138/69 kV Transmission Tap from 69 to 138 kV or approve the increase in the operating voltage.


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Date: July 3, 2013

Respectfully submitted,



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VERIFICATION

I, Stephanie Raymond, being the Transmission – Substation Vice President of 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 that 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: 7/1/2013

Stephanie Raymond