

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Joint Petition of PPL Electric Utilities :
Corporation for Waiver of Certain :
Provisions of the Pennsylvania Public : Docket No. _____
Utility Commission’s Regulations at 52 Pa. :
Code § 57.71 *et seq.*, and Letter of :
Notification of PPL Electric Utilities :
Corporation, Filed Pursuant to 52 Pa. Code :
Chapter 57 Subchapter G, for Approval of :
the Siting and Construction the Siegfried – :
East Palmerton #1 & #2 183/69 kV :
Transmission Lines and Associated Tap :
Lines located in Lehigh and Carbon :
Counties, Pennsylvania :
:
:
:

**JOINT PETITION FOR WAIVER AND
LETTER OF NOTIFICATION**

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PPL Electric Utilities Corporation (“PPL Electric”) hereby files this Petition for Waiver, pursuant to 52 Pa Code §§ 5.43 and 57.72(e), for a waiver of certain of the Pennsylvania Public Utility Commission’s (“Commission”) regulations governing the review and approval of the siting and construction of high voltage electric transmission lines set forth at 52 Pa. Code §§ 57.71 *et seq.*, together with this Letter of Notification to request that the Commission approve the siting and construction of the proposed Siegfried – East Palmerton #1 & #2 183/69 kV Transmission Lines and Associated Tap Lines (“Siegfried – East Palmerton Transmission Line” or the “Project”) pursuant to 52 Pa. Code § 57.72(d).¹ This Project is the second phase of three

¹PPL Electric recognizes that the Waiver Petition is a separate request from the Letter of Notification. The request for Waiver and approval of the LON are being submitted as a Joint Petition due to the timing of the construction date for this Project and the fact that additional right-of-way is being acquired at an impacted landowner’s request.

separate but related transmission line projects to replace the aging transmission lines between the Siegfried Substation and the East Palmerton and Hauto Substations in Lehigh and Carbon Counties, Pennsylvania.

The existing transmission line is 6.8 miles long and consists of two parallel single-circuit transmission lines for 3.4 miles and a combination of double-circuit and single-circuit lines for the remaining 3.4 miles. The proposed Siegfried – East Palmerton Transmission Line will be rebuilt as one high capacity double-circuit 138/69 kV transmission line for the entire 6.8 miles. The rebuilt line will operate entirely within the existing or recently-acquired right-of-way. As part of the rebuild of the Siegfried – East Palmerton Transmission Line, PPL Electric also proposes to reconstruct approximately 0.1 mile of the existing Palmerton 138/69 kV Transmission Tap and approximately 300 feet of the Palmerton Zinc 138/69 kV Transmission Tap for 138/69 kV operation. Collectively, these line segments make up the proposed Siegfried – East Palmerton Transmission Line to be constructed in Washington Township in Lehigh County, and the Borough of Palmerton and Lower Towamensing and East Penn Townships, Carbon County, Pennsylvania. PPL Electric has provided information regarding this Project to these political subdivisions, and none of them have objected to the Project. Subject to the Commission’s approval, construction of this Project is scheduled to begin in August 2018, to support an in-service date of March 2019. In support thereof, PPL Electric states as follows:

I. INTRODUCTION

1. This Joint Petition for Waiver and 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 as follows:

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PPL Electric's attorneys are authorized to receive all notices and communications regarding this Joint Petition for Waiver and 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. PPL Electric proposes to undertake three separate transmission projects as part of its plan to replace the aging transmission lines between the Siegfried Substation and the East Palmerton and Hauto Substations. These lines have reached the end of their useful lives and must be replaced in order to continue to provide safe and reliable service. Each of the three transmission projects will be the subject of a separate filing. The first phase was approved by the Commission on July 5, 2013 at Docket No. A-2013-237211.² This Joint Waiver Petition and Letter of Notification seeks Commission approval of the second phase, which encompasses the section between a point where the existing Siegfried – East Palmerton #1 and #2 138/69 kV

² Phase I of the project includes rebuilding the existing Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Line and the existing Siegfried – Hauto #1 and #4 138/69 kV between the existing Siegfried Substation property in Allen Township, Northampton County, traversing generally west/northwest for 8.5 miles and ending at a point where the two lines diverge in Washington Township, Lehigh County (the "Split"). PPL previously filed a LON for this project in 2013 (see Docket # A-2013-2372112). However, construction of the line was deferred to strategically align this Phase of the project with other work in the region to more effectively use resources and manage planned outages. PPL will submit a new LON for Phase I prior to initiation of the construction since the project has substantially changed since the original LON was submitted.

Transmission Line and the existing Siegfried – Hauto #1 and #4 138/69 kV Transmission Line diverge in Washington Township (“the Split”) and the East Palmerton 230-69 kV Substation. In the final phase, PPL Electric plans to rebuild 15.2 miles of the Hauto – Siegfried #1 and #2 69 kV double-circuit line. PPL Electric will seek approval for the final phase after preliminary engineering is complete.

7. This Joint Petition for Waiver and Letter of Notification includes the following accompanying attachments:

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

8. This Joint Petition for Waiver and 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. LETTER OF NOTIFICATION

A. THE PROJECT

1. Overview

9. PPL Electric proposes to reconstruct approximately 6.8 miles of the existing Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines as one high capacity double-circuit 138/69 kV transmission line. PPL Electric also proposes to reconstruct approximately 0.1 mile of the existing Palmerton 138/69 kV Transmission Tap and approximately 300 feet of the Palmerton Zinc 138/69 kV Transmission Tap. Collectively, these

line segments will make up the proposed double-circuit Siegfried – East Palmerton Transmission Line.

10. The proposed Siegfried – East Palmerton Transmission Line, together with the other two separate but related transmission line projects, is part of PPL Electric’s Asset Optimization Strategy. The rebuilt lines will meet all current design and lightning protection standards. Modernization of the lines will help ensure reliable and continuous service to customers in Lehigh and Carbon Counties.

2. Need for the Project

11. Through a regional transmission system planning process and PPL Electric’s planning guidelines, PPL Electric identifies facilities that require reinforcement to enable it to continue to provide adequate and reliable service to the public and plan appropriate measures to assure reasonably continuous supply to the entire regional load, even during adverse conditions. PPL Electric has also developed an Asset Optimization Strategy which is designed to identify and modernize aging facilities that are either approaching or have exceeded their expected or useful lives. A further description of PPL Electric’s system planning process and Asset Optimization Strategy is provided in Attachment 1 to this Letter of Notification.

12. The Necessity Statement for the proposed Project is provided as Attachment 1 accompanying this Letter of Notification. As explained in greater detail therein, the purpose of the Project is to modernize the lines to meet all current design and lightning protection standards and help ensure reliable and continuous service to customers in Lehigh and Carbon Counties.

a. Existing System

13. The current Hauto – Siegfried #1 and Siegfried – East Palmerton #2 double-circuit 138/69 kV Transmission Lines extend from the Siegfried 230-69 kV Substation for approximately 8.5 miles on two, parallel single-circuit structures, west to the “Split.” Similarly,

the Hauto – Siegfried #4 and Siegfried – East Palmerton #1 double-circuit 69 kV Transmission Lines extend from the Siegfried 230-69 kV Substation for approximately 8.5 miles west to the “Split.”

14. From the “Split” the lines continue in two different directions. The Siegfried – Hauto #1 and #4 138/69 kV circuits continue as a double-circuit line west towards the Hauto 69-12 kV Substation. The Siegfried – East Palmerton #1 and #2 138/69 kV circuits continue as a combination of single-circuit and double-circuit line northeast toward the East Palmerton 230-69 kV Substation. This line begins as two parallel single-circuit transmission lines for approximately 3.4 miles and then continues as double-circuit for another 2.1 miles. From here, the line transitions to single-circuit for 0.6 mile northeast of the Palmerton Zinc 138/69 kV Transmission Tap and then back to double-circuit for another 0.5 mile. For the remaining 0.2 mile, the line continues as single-circuit within PPL Electric-owned property upon entering the East Palmerton 230-69 kV Substation. Two short tap lines extend from the Siegfried – East Palmerton #1 and #2 138/69 kV circuits to the Palmerton and Palmerton Zinc Substations.

15. The Palmerton 138/69 kV Transmission Tap Line consists of two parallel single-circuit lines for approximately 300 feet to the Palmerton 69-12 kV Substation. The Palmerton Zinc 138/69 kV Transmission Tap Line consists of two parallel single-circuit lines for approximately 0.1 mile to the Palmerton Zinc 69-12 kV Substation. This filing specifically includes the 6.8-mile portion of the Siegfried – East Palmerton Line from the “Split” to the East Palmerton 230-69 kV Substation, the 300-foot Palmerton 138/69 kV Transmission Tap Line and the 0.1-mile Palmerton Zinc 138/69 kV Tap Line.

16. The Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines serve the existing Palmerton 69-12 kV Substation, Palmerton Zinc 69-12 kV Substation and South

Slatington 69-12 kV Substation, which are distribution substations serving customers located in Carbon, Lehigh and Northampton Counties, as well as a transmission customer.

b. Definition of the Problem

17. The Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines have been in service since the 1950s and carry the original 250 MCM copper conductor. The Palmerton 138/69 kV and Palmerton Zinc 138/69 kV taps are of similar age and are in a similarly deteriorated condition as the Siegfried – East Palmerton #1 and #2 Transmission Lines. As explained above, PPL Electric has adopted an Asset Optimization Strategy to address and modernize deteriorated existing facilities across PPL Electric’s transmission system such as the East Palmerton #1 and #2 138/69 kV Transmission Lines and the Palmerton 138/69 kV and Palmerton Zinc 138/69 kV taps. In addition, these taps need to be rebuilt to operate at 138 kV standards.

18. Considering the age of the circuits and lines, PPL Electric determined that a detailed examination of the facilities should be performed. PPL Electric hired an outside engineering consultant, DiGioia Gray and Associates (DGA), to perform an independent field investigation and assessment of the line components. This assessment revealed that the aging facilities were showing signs of deterioration. Based on its inspection of the facilities, DGA concluded that the Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines have reached the end of their reliable service life.

19. Based on the age and condition of the facilities, DGA recommended that PPL Electric rebuild the existing lines with a more reliable and robust circuit constructed on steel monopoles. Rebuilding the existing single-circuit portion of the lines as one double-circuit line allows PPL Electric to construct the new line on the center of the existing right of way, in most

areas, to increase safety and reliability by increasing the distance between the conductors and the edge of the right of way.

3. The Proposed Project

20. Consistent with PPL Electric's Asset Optimization Strategy, PPL Electric determined that the best solution is to replace the existing single-circuit and double-circuit sections of the Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines with one new double-circuit line. The double-circuit line will be designed to new 138 kV standards but will initially operate at 69 kV. PPL Electric also proposes to rebuild approximately 0.1 mile of the existing Palmerton 138/69 kV Transmission Tap and approximately 300 feet of the Palmerton Zinc 138/69 kV Transmission Tap as 138/69 kV transmission lines, which is necessary to accommodate reconstruction of the Siegfried – East Palmerton 138/69 kV Transmission Line.

21. The Project originates at the location where the existing Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines diverge from the existing Siegfried – Hauto #1 and #4 69 kV Transmission Lines (the "Split"). The Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines head in a generally northeast direction to the East Palmerton Substation. Two short tap lines extend from the Siegfried – East Palmerton #1 and #2 138/69 kV lines to the Palmerton and Palmerton Zinc Substations. For the first approximately 3.4 miles, the existing Siegfried – East Palmerton #1 and #2 138/69 kV lines are supported on two, parallel single-circuit H-frame structures, spaced approximately 50 feet apart. In this section, each of the proposed double-circuit monopole structures will be placed along the center of the existing right-of-way, in most areas, replacing two existing H-frame structures.

22. After the first 3.4 miles, the existing line continues on double-circuit lattice structures for 2.1 miles until reaching the Palmerton Zinc 138/69 kV Tap Line. The proposed

line will be rebuilt on a shifted centerline entirely within existing/recently acquired ROW for approximately 0.4 mile. At the request of a landowner, PPL Electric recently acquired approximately 0.4 mile of new 100-foot-wide right-of-way, adjacent to the Delaware and Lehigh (“D&L”) Trail, before rejoining the existing right-of-way and crossing the Lehigh River. In this section, new structures along the existing line will be placed in close proximity to existing structure locations. Additionally, one new structure will be installed to maintain required 138 kV clearances along the north side of Red Hill Drive. The proposed structure is located on a property that contains an existing pole.

23. From the Palmerton Zinc 138/69 kV Tap, the existing Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines are supported on single-circuit monopole structures for 0.6 mile, which will be replaced with new double-circuit monopole structures. From this point, approximately 0.5 mile of the existing line is supported by double-circuit lattice structures, which will be replaced with new double-circuit monopole structures on the existing centerline. The last three spans are located entirely within property owned by PPL Electric. These three spans into the East Palmerton 230-138-69 kV Substation will be rebuilt on parallel single-circuit alignments to match the existing configuration.

24. The Palmerton and Palmerton Zinc 138/69 kV Taps are both two parallel single-circuit taps off the Siegfried – East Palmerton #1 and #2 Transmission Lines. The Palmerton 138/69 kV Tap consists of three spans into the Palmerton 69-12 kV Substation which are supported by single-circuit H-frame structures. The Palmerton 138/69 kV Zinc Tap consists of two spans into the Palmerton Zinc 69-12 kV Substation which are supported by single-circuit monopole structures. Both taps will be replaced structure for structure on steel single-circuit monopole structures.

25. Currently, there are a total of 124 existing structures along the Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines. A majority of the existing Siegfried – East Palmerton #1 and #2 138/69 kV lines are carried on separate single-circuit structures, while a few short portions of the lines are carried on double-circuit structures. The existing structures consist of a mix of single-circuit wooden H-frame, single-circuit wooden single-pole, double-circuit wooden single-pole, and double-circuit steel lattice structures.

26. The entire Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Line will be rebuilt as a double-circuit line. The new line will be constructed with 74 double-circuit tubular steel monopoles with glass 138 kV insulator assemblies. This reduces the total number of existing transmission structures in the right-of-way by 50.

27. The existing Palmerton Zinc Tap consists of two single-circuit wooden single-pole structures and the existing Palmerton Tap consists of four single-circuit wooden H-frame structures, and one wooden single-pole structure. The new Palmerton Zinc 138/69 kV Tap will consist of two single-circuit steel MOLBAB (motor-operated load break air break) switch structures and two single-circuit steel monopoles, and the new Palmerton 138/69 kV Tap will consist of five single-circuit steel monopoles.

28. The existing Siegfried – East Palmerton #1 and #2 138/69 kV Lines structures range in height from approximately 35 to 110 feet with an average height of 65 feet. The new steel monopoles are expected to range between 65 and 145 feet in height, with an average height of approximately 95 feet. The existing tap structures range in height from approximately 45 to 90 feet with an average height of 55 feet. The new tap steel monopoles are expected to range between 65 and 75 feet in height, with an average height of 70 feet. All new poles will be self-

supported, either direct embedded or on concrete caisson foundations. No guyed poles will be used as part of this Project.

29. The Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines will utilize six power conductors and two overhead ground wires, while each branch of the taps will utilize three power conductors and a single overhead ground wire. The power conductors will be 556.5 kcmil,³ 24/7 stranding, aluminum conductor steel reinforced (ACSR) conductors. The overhead ground wires will be 0.791-inch-diameter optical ground wire (OPGW).

30. The proposed rebuild of the Siegfried – East Palmerton 138/69 kV Transmission Lines and associated Tap Lines will bring the Lines 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. The Project will also increase the lightning protection of the Transmission Line to reduce the frequency of momentary outages experienced by customers. Additionally, as a part of the Project, PPL Electric will be installing MOLAB switches that will allow for remote sectionalizing of the transmission system to restore service to customers in instances of sustained outages or during maintenance scenarios.

31. After completion of this Project, the customers served from the Palmerton 69-12 kV, Ashfield 69-12 kV, South Slatington 69-12 kV, Hauto 69-12 kV and Treichlers 69-12 kV Substations, as well as Palmerton Zinc Substation, will experience improved service reliability.

32. The total estimated cost for the proposed Line is approximately \$23.6 million.⁴

³ Wire sizes are expressed in thousands of circular mils (kcmil). A circular mil is the cross-sectional area of a wire one mil in diameter, where 1 kcmil = 0.5067 mm².

⁴ PPL Electric requested that DGA evaluate the cost to rehabilitate the Siegfried – East Palmerton #1 and #2 138/69 kV Transmission Lines and concluded that the total cost to rehabilitate the lines would be greater than the cost to rebuild the lines in place.

33. Subject to the Commission's approval, construction of this Project is scheduled to begin on August 2, 2018, to support a required in-service date of March 2019. This proposed timeline is designed to help avoid potential service interruptions that could be caused by damage to existing facilities.

34. The Engineering Description of the proposed Siegfried – East Palmerton Transmission Line is provided in Attachment 2 accompanying this Letter of Notification.

B. HEALTH AND SAFETY

35. The proposed Lines will not create any unreasonable risk of danger to the public health or safety. The proposed Lines 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 of the NESC standards, PPL Electric's design criteria, and PPL Electric's safety practices are provided in Attachment 4 to this Letter of Notification.

36. Attachment 2 accompanying this Letter of Notification explains PPL Electric's standards for Magnetic Field Management. Pursuant thereto, ground clearances for the proposed Lines will be increased five feet higher than those required by the NESC standard in order to reduce the magnetic field exposure. The proposed Siegfried – East Palmerton Transmission Line will be constructed for double circuit operation, which will allow for reverse phasing. A reduction in magnetic field exposure is anticipated due to the higher ground clearances and reverse phasing.

C. DESCRIPTION OF THE RIGHT-OF-WAY

37. The proposed rebuild of the Siegfried – East Palmerton Transmission Line will be entirely within the existing rights-of-way with one exception. PPL Electric did not seek additional rights-of-way for the Siegfried – East Palmerton Transmission Line because the

existing rights-of-way are sufficient to accommodate the reconstructed transmission lines without the need for additional right-of-way. Although PPL Electric can rebuild the Project entirely within the existing rights-of-way, PPL Electric acquired a new right-of-way adjacent to the D&L Trail and Lehigh River at the request of Lehigh Gap Nature Center. This entity requested that the reconstructed line be located within the new rights-of-way to minimize impacts on its property. PPL Electric agreed to accommodate the landowner's request. By shifting the centerline in this area, rights-of-way on two additional properties also had to be shifted. All three affected property owners, the Lehigh Gap Nature Center, Lehigh County and East Penn Township, agreed to the shifts and voluntarily granted PPL Electric the newly-acquired rights-of way.

38. All new structures will be located in close proximity to the existing double-circuit structures. There are 36 proposed structures which will be relocated more than 10 feet from the existing single-circuit structure locations in order to avoid wetlands and other areas of concern. In these areas, PPL Electric has discussed the proposed structure locations with the respective property owners, none of which had any objection to the new pole locations. No new structures will be located on any property that currently does not have an existing structure. Further, except for the PPL Electric property, the number of poles on any single property will not increase as a result of this Project.

39. As explained in Attachment 2, the average height of the new structures will be approximately 30 feet taller than the average height of the existing structures. Although the new structures will increase in height as compared to the existing outdated structures, the rebuilt Transmission Line will reduce overall impacts to land use within the right-of-way by consolidating the 4.2-mile-long section of parallel single-circuit lines into one double-circuit

line. Rebuilding the entire line for double circuit reduces the total number of existing transmission structures in the right-of-way by 50. Further, the proposed structures will have a smaller overall footprint than the wooden H-frame structures and existing steel lattice structures.

40. An aerial plot plan is provided at the end of Attachment 3 to this Letter of Notification. The plot plan depicts the location of the existing transmission facilities for this Project.

D. LAND USE AND ENVIRONMENTAL EVALUATION

41. As explained above, construction of the proposed Line will take place almost entirely within existing rights-of-way. Therefore, it is anticipated that the proposed Siegfried – East Palmerton Transmission Line will have minimal incremental impacts on land use in the area. PPL Electric will use and update previously established access roads for construction to the extent practical to further reduce interference with existing uses and minimize land use impacts.

42. The rebuilt 0.1-mile Palmerton 138/69 kV Transmission Tap traverses within the existing right-of-way, spanning the Aquashicola Creek through a forested area before terminating at the Palmerton Substation. The 300-foot rebuilt Palmerton Zinc 138/69 kV Transmission Tap traverses within the existing right-of-way through an industrialized area before terminating at the Palmerton Zinc Substation. The industrial area is classified by the U.S. Environmental Protection Agency as a superfund site. PPL Electric is currently working with the property owner regarding this issue and any associated environmental and regulatory compliance concerns, and will comply with all environmental and health and safety requirements when working in this area.

43. PPL Electric conducted a review of the online Pennsylvania State Historic Preservation Office (“SHPO”) Bureau for Historic Preservation (“BHP”) Cultural Resources Geographic Information System (“CRGIS”) database to determine if National Register of

Historic Places (“NRHP”)-listed or eligible historic properties are located in the Project vicinity. PPL Electric submitted a letter to the SHPO on December 11, 2017. The SHPO responded in a letter dated January 10, 2018 that archaeological and above ground resources could potentially be affected. In addition, PPL Electric has been consulting with the National Park Service through regular meetings and telephone conferences regarding the proposed Line and its potential impacts on the Appalachian Trail and adjacent federal lands, as well as cooperatively developing design and construction methods that could minimize those impacts. On March 23, 2018, PPL Electric submitted an *Application for Transportation and Utility Systems and Facilities on Federal Lands* (Standard Form 299) and supporting information to the National Park Service for the crossing of the Appalachian Trail and adjacent federal lands. This application addressed potential impacts on the natural and built environment, including impacts on cultural resources and the Appalachian Trail itself. The application is currently being processed by the National Park Service. PPL Electric will continue to coordinate closely with both the SHPO and the National Park Service regarding any cultural resource concerns related to crossing of the Appalachian Trail and work on federal lands. Any additional design and mitigation measures, if required, will be coordinated with the National Park Service and the SHPO as necessary.

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

45. The closest airport is a privately owned airport located approximately 1 mile south of the Project. No additional airports are located within 2 miles of the Project. PPL Electric does not anticipate any interference with airport operations because the Project is located a substantial distance from the airport and new facilities will be generally similar in height to the

existing facilities that PPL Electric is replacing. However, PPL Electric will file any required documentation with the Federal Aviation Administration and the Pennsylvania Department of Transportation, Bureau of Aviation.

46. Two federal recreation areas are crossed by the Project. The Project crosses approximately 230 feet of the Appalachian Trail just west of the intersection of Route 873 and Mountain Road in Washington Township, Lehigh County. The Project reduces the total number of structures from two to one through the federal property. The existing structures on federal lands consist of two 55-foot-tall wooden H-frame structures that will be replaced with one 105-foot-tall steel monopole. The existing transmission line right-of-way crossing the Appalachian Trail predates the acquisition of the land by the National Park Service. The proposed structure will be placed in close proximity to the existing eastern H-frame structure. Existing access roads are located through the federal property. Because the number of structures will be reduced and construction work will be temporary in nature, PPL Electric believes the Project will not significantly impact the Appalachian Trail or associated federal lands by rebuilding the proposed structure in-place. PPL Electric is currently consulting with, and will obtain all necessary permits from, the National Park Service and will comply with all of the terms and conditions placed on those permits.

47. The Project crosses approximately 1 mile of Pennsylvania State Game Land 217 in Washington Township, Lehigh County. The existing transmission line traverses along the southern boundary of the Game Land. State Game Land 168 is located approximately 0.4 mile southeast of the Project. Based on this distance, the change in elevation, and heavy tree cover, the existing transmission line is not visually noticeable from State Game Land 168 and no

significant impacts to these areas are anticipated. No other recreational areas or natural landmarks are located within 1 mile of the Project.

48. The Project will traverse approximately 6.7 miles of one Important Bird Area (IBA). The Hawk Mountain and Kittatinny Ridge IBA is located within Washington Township, Lehigh County and Palmerton Borough and East Penn and Lower Towamensing Townships in Carbon County. The IBA encompasses the National Park Service property, the Appalachian Trail, the D&L Trail and State Game Land 217 crossed by the Project. Impacts to birds within this IBA would be minimized by constructing the Project within an existing right-of-way. Although the Project would not introduce a new collision risk, it could potentially increase the existing collision risk because the proposed structures would be taller than existing structures. Further, the Project will reduce the path of exposure to the IBA by consolidating two parallel single-circuits into one double-circuit alignment.

49. A Natural Area Inventory (“NAI”) has been prepared by The Nature Conservancy in association with the Pennsylvania Natural Heritage Program (“PNHP”) for Lehigh and Carbon Counties (2005). The Project crosses one NAI area. The West Lehigh River Kittatinny Slope is located in the southwestern portion of the Project area in Washington Township, Lehigh County and in East Penn Township, Carbon County. This NAI consists of the south-facing forested slopes and the ridgeline of Blue Mountain, which provide habitat for several species of concern. The Project is not expected to impact the West Lehigh River Kittatinny Slope because the Project will be rebuilt within the existing, cleared right-of-way. The Project will not traverse or affect any other unique geological, scenic or natural areas.

50. PPL Electric retained an environmental consultant to identify and delineate all wetlands and watercourses within the Project Area. The Project will span 46 wetlands and 25

streams. However, it is anticipated the Project will have no additional impacts on streams or wetlands because the entire Project will be built within the existing, cleared right-of-way, and because the new monopole structures will be located to avoid impacts to wetland and streams. 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. PPL Electric will also prepare any required soil erosion and sedimentation control plans and obtain National Pollutant Discharge Elimination System (NPDES) permits and will comply with any conditions placed on those permits.

51. PPL Electric conducted an online PNDI database review on October 19, 2017. Based on this review, the Pennsylvania Fish and Boat Commission (“PFBC”) reported that the Project will not impact any threatened and endangered species, or special concern species and resources located within the Project area. Although the PFBC results indicated no further review is required, they indicated that the Project is located within the range of the timber rattlesnake (*Crotalus horridus*), and identified several recommended conservation measures. PPL Electric will comply with all conservation measures required by PFBC.

52. The Pennsylvania Department of Conservation and Natural Resources (“DCNR”) indicated that the Project is located within the vicinity of Long’s sedge (*Carex longii*), a special concern species. A botanical survey was conducted by Mellon Biological Services, LLC in July 2012. During surveys, Long’s sedge was found within some delineated wetlands. However, no impacts to Long’s sedge are anticipated within specific wetlands because these wetlands will be avoided during construction. PPL Electric submitted a follow-up letter with DCNR on January 31, 2018. The DCNR response letter on February 9, 2018 indicated no impacts are anticipated.

53. The U.S. Fish and Wildlife Service (“USFWS”) indicated that the Project is located in the vicinity of an unidentified special concern species or resource and an unidentified sensitive species. Because the federally threatened bog turtle (*Glyptemys muhlenbergii*) is known to exist within Lehigh County, a Phase I bog turtle survey was conducted to determine if any known species habitat was located within the vicinity of the Project. PPL Electric retained a qualified bog turtle surveyor to conduct Phase I bog turtle surveys along the right-of-way in March 2012 and concluded in November 2012 and again between November and December 2017. Potential bog turtle habitat was identified within three delineated wetlands during the 2017 Phase I surveys. PPL Electric submitted a follow-up letter with USFWS on January 31, 2017 regarding the unidentified sensitive species and bog turtles. A qualified bog turtle surveyor will conduct Phase II presence/absence surveys in Spring 2018 and results will be forwarded to the USFWS.

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

E. NOTICE

55. PPL Electric has provided information regarding the Project to representatives of Washington Township in Lehigh County, and the Borough of Palmerton and Lower Towamensing and East Penn Townships, Carbon County, Pennsylvania. These entities have not objected to the proposed Line.

56. Copies of the Letter of Notification and Joint Petition for Waiver will be served on the owners of land subject to the rights-of way and easement in accordance with 52 Pa. Code § 57.72(d)(1)(vi).

III. PETITION FOR WAIVER

A. OVERVIEW

57. The purpose of the Petition for Waiver, as explained more fully below, is to obtain from the Commission such waivers as are necessary or appropriate to permit PPL Electric to proceed by means of this Letter of Notification for the siting and construction of the proposed Siegfried-East Palmerton Transmission Line. Use of a Letter of Notification will permit PPL Electric to complete the filings required for approval in a much shorter period of time than the time that would be required to prepare a complete siting Application for the proposed Siegfried-East Palmerton Transmission Line. Regulatory review in a shorter period of time will enable PPL Electric to complete construction of the proposed Siegfried – East Palmerton Transmission Line and maintain the construction and in-service dates for all three of the separate but related transmission line Projects that are required to modernize existing facilities and ensure continued safe and reliable service to customers.

58. As described in the Letter of Notification, the total Project length is approximately 6.8 miles and could be completed entirely within existing rights-of-way. However, PPL Electric has recently acquired new voluntary rights-of-way from three property owners to accommodate a landowner's request to shift the line in order to minimize impacts on its property. None of the affected property owners objected to shifting the location of the line into the new rights-of-way.

59. Because approximately 6.5 miles of the Project will be constructed entirely within existing right-of-way with an existing transmission line and only approximately 0.3 mile of the Project will be constructed within right-of-way or land recently acquired by PPL Electric for this Project, the most practical and efficient method to obtain Commission review and approval for the siting of the proposed Siegfried – East Palmerton Transmission Line is a Letter of

Notification under 52 Pa. Code Pa. Code § 57.72(d) rather than a full Application under 52 Pa Code §§ 57.71(a)-(c). Preparation of a full Application requires the completion of numerous studies, reports, maps and diagrams that are not required to prepare a Letter of Notification.

60. The Commission's regulation at 52 Pa. Code § 57.72(d) sets forth the circumstances under which an electric public utility may seek Commission approval for the siting and construction of a proposed high voltage transmission line by means of a Letter of Notification instead of a full Application as follows:

(d) Letter of notification in lieu of Application:

(1) A Letter of Notification may be filed with the commission in lieu of the Application process set forth in §§ 57.71 – 57.76 for the following:

(i) An HV line which is proposed to be located entirely on an existing transmission line right-of-way, so long as the size, character design, or configuration of the proposed HV line does not substantially alter the right-of-way.

(ii) An HV line which is proposed to be located entirely within a public road.

(iii) An HV line which is proposed to be located entirely within the applicant's existing transmission line right-of-way and the property of the sole customer to be served by the line, so long as the size, character, design, or configuration of the proposed line does not substantially alter the right-of-way.

(iv) A line for which the voltage is proposed to be increased above its present levels, so long as the size, character, design or configuration of the proposed line does not substantially alter the right-of-way.

(v) An HV line which is to be recondored or reconstructed so long as the size, character, design or configuration of the proposed line does not substantially alter the right-of-way.

(vi) An HV line having a proposed route of 2 miles or less.

52 Pa Code § 57.72 (d).

61. As proposed, the Siegfried – East Palmerton Transmission Line does not meet the strict definition of any one of the circumstances in which a Letter of Notification may be used, as set forth above. The proposed Siegfried – East Palmerton Transmission Line however, nearly

fits within multiple of the circumstances in which a Letter of Notification may be used in lieu of an Application. PPL Electric is requesting a waiver of the strict Application of the aforementioned regulations to allow PPL Electric to file a Letter of Notification in lieu of an Application for Commission review and approval to site and construct the proposed Siegfried-East Palmerton Transmission Line.

62. The Commission's Rules of Administrative Practice and Procedure at 52 Pa. Code § 5.43 allow for petitions for waiver of any of the Commission's regulations. More specifically, the Commission's transmission line siting regulations at 52 Pa. Code § 57.72(e) specifically permit petitions to request that portions of these specific siting regulations be waived. It states:

(e) The Commission or the presiding officer may — upon the petition of any party, upon the Commission's own motion, or upon the presiding officer's own motion — waive one or more or all of the requirements in this subchapter. The petition shall clearly state the requirements sought to be waived and the reasons therefor.

52 Pa. Code § 57.72(e).

63. PPL Electric respectfully requests a waiver of the strict Application of 52. Pa Code §57.72(d)(1) to permit PPL Electric to seek approval of the siting and construction of Siegfried-East Palmerton Transmission Line, which is one of three separate but related transmission Projects needed to modernize existing facilities in accordance with PPL Electric's Asset Optimization Plan.

B. WAIVER

64. Letters of Notification are permitted if the proposed transmission line is “an HV line which is to be recondored or reconstructed so long as the size, character, design or configuration of the proposed line does not substantially alter the right-of-way” or if the proposed transmission line is “located entirely on an existing transmission line right-of-way, so

long as the size, character design, or configuration of the proposed HV line does not substantially alter the right-of-way.” 52 Pa. Code § 57.72(d)(1)(i),(v). Here, all but 0.3 mile of the approximately 6.8 miles of the proposed Siegfried – East Palmerton Transmission Line will be reconstructed entirely within the existing rights-of-way. The short 0.3-mile diversion would be located in newly acquired right-of-way adjacent to the existing rights-of-way that was obtained for the Project at the request of a landowner.

65. As explained in the Letter of Notification, PPL Electric did not seek additional rights-of-way for the Reconstructed Line Segment of the Project because the existing rights-of-way are sufficient to accommodate the reconstructed transmission lines without the need for additional right-of-way. However, PPL Electric did acquire a new right-of-way adjacent to the D&L Trail and Lehigh River at the request of Lehigh Gap Nature Center. This property owner requested that the reconstructed line be located within the new rights-of-way to minimize impacts on its property, and PPL Electric agreed to accommodate their request. By shifting the centerline in this area, rights-of-way on two additional properties also had to be shifted. All three property owners, the Lehigh Gap Nature Center, Lehigh County and East Penn Township, agreed to the shifts and voluntarily granted PPL Electric the newly-acquired rights-of way.

66. For the reasons fully explained in the Letter of Notification, PPL Electric believes that the proposed Transmission Line will not “substantially alter the right-of-way.” Although the meaning of this phrase is uncertain, PPL Electric believes that the reconstructed segments of the proposed Siegfried-East Palmerton Transmission will not have significant incremental impacts on the existing rights-of-way for the following reasons:

- (a) The line will be constructed entirely within existing right-of-way, except only a limited area of new right-of-way that was acquired at the request of a property owner.
- (b) Approximately 4.2 miles of the existing transmission line will be consolidated from two parallel single-circuit lines to one double-circuit line.

(c) The average structure height is only increasing by approximately 30 feet and the total number of structures is significantly decreasing within the existing right-of-way.

(d) New structures will be placed in close proximity to the existing structures.

(e) No structures will be placed on a property that does not already have an existing pole.

67. The Commission has approved similar requests granting waivers of certain regulations regarding Commission Review of Siting and Construction of Electric Transmission Lines at 52 Pa Code § 57.71 *et seq.* For example, in *Petition for Waiver of Certain Provisions of the Pennsylvania Public Utility Commission's Regulations for Commission Review of Siting and Construction of Electric Transmission Lines set forth at 52 Pa. Code § 57.71 et seq.*, Docket No. P-2008-2037618 (June 27, 2008), the Commission approved Penelec's request for a waiver from Section 57.72(d) of the Commission's siting regulations. Penelec proposed to connect a new ethanol plant to the grid by extending a 115 kV transmission line. The total length of the project was 3.9 miles. The route for the extension would follow an existing 34.5 kV circuit for approximately 3.1 miles, after which it would require construction of 0.3 miles in new right-of-way and an additional 0.5 miles of new construction located on the ethanol plant property. The project also required 10 to 15 feet of additional rights-of-way on both sides of the existing circuit. The Commission noted that most of the line extension in question was located on an existing right-of-way of a 34.5 kV line and across the property of the sole customer being served by the line. The Commission further noted that, for the most part, the extension is a rebuild of an existing line, and was not significantly longer than the two-mile standard at § 57.72(d)(1)(vi). The Commission therefore approved Penelec's request for a waiver and ordered Penelec to file a Letter of Notification.

68. If the Commission approves the waiver request, this Joint Petition for Waiver and Letter of Notification may be used for the proposed Siegfried-East Palmerton Transmission

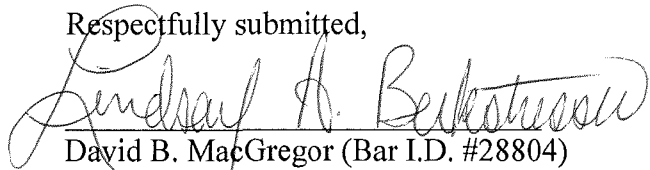
instead of a full application. All of the information necessary for the Commission to decide whether to approve the siting and construction of the proposed Transmission Line is included in the attachments hereto.

69. For the reasons provided above, PPL Electric requests that the Commission approve this waiver request and accept this Joint Petition for Waiver and Letter of Notification requesting approval to site and reconstruct the proposed Siegfried – East Palmerton Transmission Line.

IV. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission grant the request for a waiver and approve the siting and construction of the proposed Siegfried-East Palmerton #1 & #2 183/69 kV Transmission Lines and Associated Tap Lines to be constructed in Washington Township in Lehigh County, and the Borough of Palmerton and Lower Towamensing and East Penn Townships, Carbon County, Pennsylvania, that is explained above and in the Attachments hereto.

Respectfully submitted,



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Date: April 20, 2018

Attorneys for PPL Electric Utilities Corporation

VERIFICATION

I, DAVID BONENBERGER, 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: 4/19/18

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