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File #: 2507/140066

June 28, 2011

BY HAND

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street, 2nd Floor North  
P.O. Box 3265  
Harrisburg, PA 17105-3265

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SECRETARY'S BUREAU

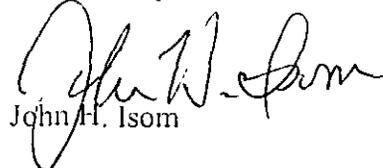
**RE: Letter of Notification of PPL Electric Utilities Corporation, Filed Pursuant to 52 Pa. Code, Chapter 57, Subchapter G, for Approval of the Reconstruction of a Portion of the Whippain-Buxmont 230 kV Transmission Line in Salford, Lower Salford, Franconia and Towamencin Townships, Montgomery County, Pennsylvania - Docket No. A-2011-**

Dear Secretary Chiavetta:

Enclosed, for filing, are an original and six (6) copies of the Letter of Notification of PPL Electric Utilities Corporation, together with seven (7) copies of the accompanying attachments which are contained in a separately-bound volume in the above-referenced proceeding. Also enclosed is a CD containing copies of the attachments.

As indicated on the certificate of service, copies of the Letter of Notification and accompanying attachments are being served by certified mail, return receipt requested upon the property owners and the involved governmental agencies and municipalities. If you have any questions concerning this matter, please contact me at the address or telephone numbers provided above.

Respectfully Submitted,

  
John H. Isom

JHI/jl

Enclosures

Rosemary Chiavetta, Secretary  
June 28, 2011  
Page 2

cc: Certificate of Service  
Robert F. Young  
Nicholas Okoro  
Paul T. Diskin  
Kimberly Hafner

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**RE: LETTER OF NOTIFICATION OF  
PPL ELECTRIC UTILITIES  
CORPORATION, FILED PURSUANT TO  
52 PA CODE CHAPTER 57,  
SUBCHAPTER G, FOR APPROVAL OF  
THE RECONSTRUCTION OF A  
PORTION OF THE WHITPAIN-  
BUXMONT 230 KV TRANSMISSION  
LINE IN SALFORD, LOWER SALFORD  
FRANCONIA AND TOWAMENCIN  
TOWNSHIPS IN MONTGOMERY  
COUNTY, PENNSYLVANIA**

**Docket No. A-2011-\_\_\_\_\_**

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**LETTER OF NOTIFICATION OF  
PPL ELECTRIC UTILITES CORPORATION**

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**TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:**

PPL Electric Utilities Corporation (“PPL Electric”) hereby files, pursuant to 52 Pa. Code § 57.72(d), this Letter of Notification to request that the Pennsylvania Public Utility Commission (“Commission”) approve the reconstruction in place of a portion of the Whitpain-Buxmont 230 kV Transmission Line. In support thereof, PPL Electric states the following:

**I. OVERVIEW**

1. PPL Electric proposes to rebuild a portion of the Whitpain-Buxmont 230 kV Transmission Line (“Whitpain-Buxmont Line”). The portion of the Whitpain-Buxmont Line which PPL Electric proposes to rebuild is approximate 7.7 miles in length and begins near Schlosser Road at the boundary of PPL Electric’s service territory and PECO Energy Company’s

(“PECO”) service territory. It continues north and terminates at PPL Electric’s Buxmont 230 kV Taps, near the intersection of Morwood Road and Beltz Road in Salford Township, Montgomery County.<sup>1</sup>

2. The Whitpain-Buxmont Line was built and placed in service in 1928 and is now 83 years old. It needs to be replaced because it has deteriorated substantially since it was placed in service. The foundations, the structure members, hardware, insulators, conductors and lightning protection all have been exposed to elements and are not capable of continuing to provide dependable service into the future.

3. PPL Electric proposes to minimize impacts of rebuilding the Whitpain-Buxmont Line by using its existing route and right-of-way. The right-of-way is sufficient to accommodate the rebuilt Line and, in order to reduce the possibility of vegetation-related outages, has already been cleared of vegetation that could interfere with the operation of a high voltage transmission line.

4. This Letter of Notification for the rebuilding of the Whitpain-Buxmont Line is the fourth such filing of PPL Electric under its Vintage Conductor Program. Under this Program, PPL Electric has identified old and deteriorated transmission lines that require reinforcement in order for PPL Electric to continue to provide safe and reliable service to its customers. Most of the transmission lines in the Program were originally constructed in the 1920s and 1930s.

5. Presently, the structures for the Whitpain-Buxmont Line are steel lattice towers. A detailed inspection of the structures has revealed that the concrete foundations are in poor

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<sup>1</sup> The entire Whitpain-Buxmont Line is 16.98 miles in length. The portion of the Line that is not owned and operated by PPL Electric is owned and operated by PECO. The portion of the Line owned and operated by PECO is not a subject of this letter of notification.

condition and many would need to be replaced. Further, many steel members of the lattice structures are severely weakened by corrosion, bent or missing.

6. The Whippen-Buxmont Line has been part of PPL Electric's backbone bulk power system and has been relied upon in system planning for 83 years. It is still required by PPL Electric to provide adequate and reliable service to customers. Abandoning the Line, therefore, is not a reasonable option.

7. PPL Electric analyzed whether it would be more appropriate to rehabilitate the Line or to rebuild it. PPL Electric determined that it would be slightly less expensive to rebuild the Line and that a rebuilt Line would have a much longer expected service life than a rehabilitated 83-year-old Line. It is therefore clearly more cost effective to rebuild the Line.

8. In addition, the rebuilt Line would have new conductors with substantially greater capacity.

## **II. INTRODUCTION**

9. The complete name of the Applicant is PPL Electric Utilities Corporation. Its principal address is:

Two North Ninth Street  
Allentown, Pennsylvania 18101.

10. PPL Electric is a Pennsylvania corporation which supplies electric distribution, transmission and provider of last resort electric supply services pursuant to the regulatory jurisdiction of the Commission to approximately 1.4 million customers. Its service territory covers approximately 10,000 square miles in all or portions of twenty-nine counties in eastern and central Pennsylvania.

11. PPL Electric's attorneys are:

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PPL Electric's attorneys are authorized to receive all notices and communications regarding this Application.

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

- Attachment 1            Necessity Statement.
- Attachment 2            Engineering Description.
- Attachment 3            Siting Analysis and Environmental Assessment.
- Attachment 4            Design Criteria and Safety Practices.
- Attachment 5            Magnetic Field Management Practices.
- Attachment 6            List of Involved Governmental Agencies,  
Municipalities and Other Public Entities.
- Attachment 7            List of Owners of Property within the Right-of-

Way.

13. This Letter of Notification and the Attachments listed above, which are incorporated herein by reference, provide all of the information required for a Letter of Notification under the Commission's regulations at 52 Pa. Code § 57.72(d).

### **III. PROJECT SUMMARY**

14. The portion of the Whitpain-Buxmont Line, which PPL Electric proposes to rebuild, is located in Salford, lower Salford, Franconia, and Towamencin Townships, in Montgomery County. It is approximately 7.7 miles in length.

15. The Whitpain-Buxmont Line originates at the Whitpain Substation, in Whitpain Township, Montgomery County. The entire length of the Line is 16.98 miles. The portion of the Line that is not owned and operated by PPL Electric is owned and operated by PECO. The portion of the Line owned by PPL Electric begins near Schlosser Road in Towamencin Township at the boundary of PPL Electric's service territory and PECO's service territory. It continues north and terminates at PPL Electric's Buxmont 230 kV Taps, near the intersection of Morwood and Beltz Roads in Salford Township, Montgomery County.

16. The present Whitpain-Buxmont Line has a single circuit and is supported by steel lattice structures which average 90 feet in height. The average span length is approximately 1,100 feet.

17. The rebuilt Line will be supported primarily by steel monopoles structures with upswept steel arms.

18. Angle structures may consist of single, two- or three- pole structures, depending on the severity of the angle.

19. All poles will be installed on concrete foundations.

20. In total, the project will require the installation of approximately 38 structures. The average span length will be 1,100 feet; the structures will average about 120 feet in height.

21. PPL Electric intends to construct the new poles adjacent to the existing lattice towers along the centerline of the right-of-way, although the location of some new structures may be shifted or adjusted slightly to reduce environmental impacts, due to engineering design requirements, or to accommodate reasonable requests from property owners. Present structures will be removed.

22. Pictures of the propose monopole structures to be used to rebuild the Whitpain-Buxmont Line are provided in Figure 1 to Attachment 2, the Engineering Description.

23. There will initially be three 1,590 KCMIL,<sup>2</sup> 45/7 stranding ACSR<sup>3</sup> power conductors for the Line.

24. Lightning protection initially will be provided by a 0.752 inch diameter optical ground wire with 48 single mode fibers. The steel overhead shield wire will consist of ½ inch extra high strength steel.

25. The minimum ground clearance will be 32 feet, which will occur at the maximum thermal conductor temperature of 125° C.

26. The Whitpain-Buxmont Line will be designed and constructed to comply with, and will generally surpass, the applicable minimum standards established in the National Electric Safety Code (“NESC”).

27. The rebuilt Line will be constructed for single circuit operation.

28. The estimated cost to rebuild the Line with one circuit is \$11,270,000.

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<sup>2</sup> KCMIL stands for “thousand circular mills.” A circular mil is the cross-sectional areas of a wire one mil in diameter, where 1 KCMIL = 0.5067 mm<sup>2</sup>.

<sup>3</sup> ACRS stands for “aluminum conductor steel reinforced.”

29. Subject to the Commission's approval, construction of the project is scheduled to start in August, 2013, to meet an in service date of November, 2014.

#### IV. NECESSITY

30. The Whitpain-Buxmont 230 kV Transmission Line is required to enable PPL Electric to continue to provide adequate and reliable service in the area. If it were not rebuilt and if there were an outage on the Hosensack – Buxmont 230 kV Transmission Line, the result would be a complete loss of supply at the Buxmont 230-69 kV Substation. Under such circumstances, the design of the Buxmont Substation includes a load shed scheme if the two Buxmont transformers were out of service. If implemented, the scheme would drop approximately 79 MVA of load during a summer peak by opening switches on the Buxmont-Hatfield #1 and #2 69 kV Lines. The load would remain interrupted until repairs of the Hosensack-Buxmont 230 kV Line have been completed.

31. From a reliability perspective, it is unacceptable to serve the Buxmont Substation with only one 230 kV line (*i.e.*; Hosensack – Buxmont # 3), which would occur if PPL Electric did not rebuild the Whitpain – Buxmont Line due to the amount of load that would be interrupted and the length of the interruption. PPL Electric's "Reliability Principles and Practices" (RP&P) document does not permit any dropping of customer load when a substation power transformer is out of service (a contingency). An outage of both Buxmont transformers would occur if only a single 230 kV line supplied the electrical power to Buxmont Substation and there was an outage of that line.

32. Furthermore, PPL Electric's practice is to avoid load loss for a single event (N-1) that occurs on the 230 kV system. An N-1 contingency is the loss of a single element in a power system. Under an N-1 contingency, where the only 230 kV line supplying electrical power to the

Buxmont Substation were out of service, the RP&P requires that the bulk power system have adequate capability to withstand that unscheduled contingency. In this situation, because the local 69 kV system cannot support all of the customer load served by the Buxmont and Elroy Substations through a networked configuration, the load shedding scheme at the Buxmont Substation would drop customer load. For these reasons, the Whitpain – Buxmont 230 kV Transmission Line must not be removed from the 230 kV system.

#### **V. REHABILITATE V. REBUILD**

33. Because it is necessary for the Whitpain-Buxmont Line to remain in service, PPL Electric undertook an analysis to determine whether the Line should be rebuilt or rehabilitated. The analysis included a detailed inspection of a statistically significant portion of the structures. The inspection revealed the following:

- a. Most of the structures have severe foundation conditions that require replacement.
- b. Many base plates are substantially corroded.
- c. Many of the structures have bent, deformed or missing members, which reduce their ability to support conductors and hardware.
- d. Most insulators are original and have reduced insulation levels due to long-term exposure to contaminants. The original insulators are well beyond their expected useful lives. All insulators and hardware need to be replaced due to age and deteriorated condition.
- e. The grounding system at each structure leg would require upgrading by adding counterpoise.

f. All conductors need to be replaced due to their age and deteriorated condition.

g. The overhead shield wires require replacement due to age and conditions of the materials. In addition, the wires may have to be repositioned in order to bring the tower-line structures up to current lightning protection standards. Some line segments do not have the appropriate shielding angle, which makes the tower-line more susceptible to lightning strikes.

34. In order to determine whether the Line should be rehabilitated or rebuilt, PPL Electric evaluated the cost of each alternative. Based on the evaluation, PPL Electric concluded that it would be slightly less expensive to rebuild the Line rather than rehabilitate it.

35. Rebuilding the Line would provide additional benefits. First, the rebuilt Line would have a much longer expected useful life. A rebuilt Line with modern structures, conductors and hardware can be expected to remain in service for approximately 80 years. A rehabilitated Line, in contrast, with many portions of the structure already 83 years old could be expected to remain in service for only about 30 years. As a result, the life cycle cost of rebuilding the Line is far less than rehabilitating the Line.

36. Rebuilding the Line also will provide PPL Electric with the opportunity to build the Line to meet modern clearance requirements under the NESC and to implement its Electric and Magnetic Field Management Practices, increase the Lines' carrying capacity..

## **VI. SITING ANALYSIS**

37. Once it was determined that the Whippain-Buxmont Line should be rebuilt, PPL Electric undertook an analysis to determine whether there was an alternative route that would have a lesser impact than rebuilding within the existing right-of-way on all factors of the natural

and human environmental, while avoiding unreasonable routes, high or unnecessary costs and non-standard design requirements to the extent practical.

38. Although PPL Electric is seeking approval for the rebuild of a portion of the Whitpain-Buxmont 230 kV transmission line through this Letter of Notification, which does not require an analysis of alternative routes, PPL Electric deemed it appropriate to conduct such a review. PPL Electric believes that the additional review is appropriate given the length of the line to be rebuilt and the varying geography the line crosses.

39. The PPL Electric owned portion of the existing Whitpain-Buxmont 230 kV right-of-way traverses numerous high-density residential areas, commercial districts, and open farmlands between the Whitpain connection area (southern end) and the Buxmont Tap location (northern end). PPL Electric determined, as explained below, through a review of the surrounding landscape that any alternative route outside of the existing right-of-way would result in significantly greater impacts to both the social and natural environments and increase project costs. Therefore, the existing Whitpain-Buxmont 230 kV right-of-way was selected as the best option for rebuilding the transmission line.

40. PPL Electric conducted a siting analysis to determine whether a reasonable alternative route for the PPL Electric owned portion of the Whitpain-Buxmont 230 kV Transmission Line could be developed. Initial aspects of this process involved review of a broad study area to identify existing land use, evaluation of potential new residential, commercial, or other developments, and recognition of the natural and cultural elements within the study area. During this phase, major constraints to a potential alternative route, such as the high-density development on the east side of the Pennsylvania Turnpike, were identified and used to define the study area. Evaluation of the study area also noted potential alignment options along existing

transmission line and pipeline rights-of-way, highway corridors, and undeveloped areas, such as stream valleys and agricultural areas.

41. Information from a study area field review assessment, conducted in the Fall of 2010, was added to a high-resolution aerial map to aid with the alternative route appraisal. This field study information was primarily the location of new residential developments that had been built since the imagery was captured. Steeply sloped forested areas were also identified as potential constraints. These constraints were located primarily in the central section of the study area. Additional Geographic Information System (“GIS”) information, such as locations of streams, wetlands, county and local parks, schools, and cultural resource feature locations were also added to the map to further describe the existing landscape. These features helped to define opportunity and constraint areas for transmission line development. Many of the more environmentally sensitive areas were located within the southern section of the study area, near the Whitpain connection area.

42. Potential routes identified during the field review were digitized on the map and assessed. Other routes that might be feasible based on review of the map were also generated. Most of the paths identified through field and map review were overland routes that used agricultural fields or open commercial areas to provide a link between the Whitpain connection area and the Buxmont tap location. These potential routes were convoluted and indirect due to the need to avoid residential units. To circumvent some residential areas, undeveloped stream valleys were evaluated. These streams were typically associated with the Perkiomen Creek and Skippack Creek watersheds, which have a Pennsylvania Department of Environmental Protection (“PADEP”) designated use of Trout Stocked Fishery. Portions of these routes would also necessitate crossing the Evansburg State Park, which is located along the Skippack Creek.

Use of these stream valleys and public parks would increase environmental impacts and undergo a more intensive permitting process. Development of these alternative routes would also require the acquisition of new rights-of-way from landowners, some of whom may oppose the Project. Assuming these easements were obtained, the right-of-way corridor would also need to be cleared of all tall-growing vegetation, and new access roads would need to be created for the construction process and ongoing maintenance. The impacts associated with these overland paths from a social and natural environmental perspective would be significantly greater than using the existing right-of-way.

43. Sections of these alternative routes also involved paralleling existing transmission line or pipeline rights-of-way, but these routes are constrained by high-density residential development areas and restricted to building the new transmission line within the existing rights-of-way. Co-locating the rebuilt Whippain-Buxmont Line within an existing electric transmission line right-of-way would not be practical. Rebuilding existing structures to accommodate multiple circuits would cause PPL Electric to incur additional costs. Building a new transmission line within an existing pipeline right-of-way may not be feasible from an engineering perspective because the pipeline rights-of-way are too narrow, and the transmission line would have to be constructed away from the center line of the right-of-way to avoid damaging the pipeline. In many areas, these options would also involve the additional social, natural, and engineering impacts associated with the need to acquire and create a new right-of-way and easement adjacent to the existing transmission line or pipeline rights-of-way, where land is available.

44. Ultimately, although some potential alternatives were identified, none of these options were practicable due to the significant social, natural environment, and economic costs.

All of the alternatives would require acquisition of new right-of-way, require the permitting of new stream and wetland crossings, and be from fifty percent to eighty percent longer than the existing line. The greater length of the options would cause PPL Electric to incur additional costs and increase social and environmental impacts. Based on this evaluation of the alternative route options, PPL Electric concluded that the existing Whippain-Buxmont 230 kV Line was the best option.

## **VII. IMPACTS ON NATURAL AND HUMAN ENVIRONMENTS**

45. The rebuild of the Whippain-Buxmont Line will have only minimal impacts on the natural and human environments.

46. A review of the Delaware Valley Regional Commission (DVRC) Land Use data and mapping indicates that the northern portion (approximately one-fourth the length of the transmission line) of the study area is dominated by agricultural land uses in Salford and Franconia Townships with smaller single-family residential areas that are traversed by a series of transmission lines. The remaining three-fourths of the study area are dominated by residential subdivisions with parcels denoted as commercial or agricultural interspersed. These residential subdivisions range in nature from smaller lots on cul-de-sac roads in the middle portions of the study area to larger lots adjacent to agricultural areas in the southernmost portions of the study area.

47. Based on 2000 data from the DVRC, single-family residential and agricultural land uses occupy the most amount of land in the study area. Evansburg State Park, which provides the highest concentration of forest-covered land, is in the southern end of the study area.

48. Pursuant to 52 Pa. Code § 69.1101, PPL Electric reviewed the comprehensive plans and zoning ordinances applicable to the study area.

49. The Comprehensive Plan for Montgomery County similarly indicates that the land use in the study area (based on 2000 imagery) consists of a mix of land uses ranging from commercial to open space/natural features (Montgomery County Planning Commission 2005a).

50. As part of the “Community Identity Plan” section of its comprehensive plan, Montgomery County has identified several goals to help curb continued urban sprawl throughout the County. The focus of the plan is to “create a sense of place” at both the municipal and neighborhood development levels. This goal is accomplished through the development by the townships of zoning districts that define allowable uses within each district.

51. In general, zoning requirements within the townships that comprise the study area seek to preserve open space in rural areas and concentrate growth in previously developed areas. Preserving open space is done by zoning for large lot sizes and limiting the size of structures and amount of impervious area that can be developed at a given lot.

52. In general, the study area contains all or portions of numerous agricultural areas. In this area of Montgomery County, agriculture and single-family home developments are the two land uses that cover the greatest amount of area. These agricultural districts and single-family home developments are spread relatively evenly throughout the study area.

53. Based upon reviews of the Montgomery County Comprehensive Plan, Salford Township Open Space Plan (Montgomery County Planning Commission 2005b), Franconia Township Open Space Plan (Montgomery County Planning Commission 2005c), Lower Salford Township Open Space Plan (Montgomery County Planning Commission 2006), and the Towamencin Township Open Space Plan (Waetzman Planning Group 2006), each of these entities has focused on preserving open space and rural communities as much as possible while focusing future development in areas that are already being serviced by existing utilities and

infrastructure. Local zoning and planning regulations have also been developed to ensure that rural lands are preserved whenever possible.

54. Generally, using the existing right-of-way will be more consistent with the goals of the local comprehensive plans and zoning ordinances which are to preserve open space and rural areas and to concentrate growth in previously developed areas. Using the existing right-of-way will not increase the amount of land used to host utility infrastructure and will minimize intrusions into environmentally sensitive areas, reduce vegetation clearing and avoid using previously undeveloped areas for infrastructure. Use of the existing right-of-way will avoid any further use of rural, agricultural areas.

55. A desktop survey of historic architectural resources for the Project was conducted consisted of accessing the Pennsylvania Historical and Museum Commission's (PHMC) Cultural Resources Geographic Information System (CRGIS) to review available information on previously-recorded historic architectural sites on and near the transmission line right-of-way.

56. The survey revealed that there are several previously-recorded historic architectural resources within one mile of the Whitpain-Buxmont transmission line, including two National Register-listed resources: the Klein Meetinghouse in Franconia Township (key number 91020) and the Landis Homestead in Salford Township (key number 121073).

57. Additionally, there are 22 National Register-eligible sites within one mile of the proposed transmission line. Of these National Register-eligible sites, a few are very close to the transmission line right-of-way: the Towamencin Mennonite Church in Towamencin Township (key number 91483) and the Hechler Farm/Houbicki Property in Lower Salford Township (key number 79725). In addition to individual resources, there are National Register-Listed and -Eligible historic districts near the Whitpain-Buxmont transmission line. The National Register-

listed Bergey Bridge Historic District in Upper Salford (key number 00794) is approximately one mile to the west of the transmission line right-of-way. The National Register-eligible Alderfer-Groffs Mill Rural Historic District in Lower Salford (key number 104022) and Lederach Historic District in Lower Salford (key number 105849) are located approximately one mile to the west of the transmission line right-of-way as well.

58. If consultation with the PHMC indicates that a historic architectural survey is required, it will be conducted within an area of potential effects (APE) for visual effects. Such a survey would encompass the transmission line and surrounding area up to two miles from the site. During this survey, historic architectural resources that have not been previously documented at the state level will be recorded.

59. Effects on any historic architectural sites will be primarily visual resulting from the greater height of the new structures. Use of taller structures, however, is not expected to have a substantially greater impact on the right-of-way because the existing lattice towers are complex structures with numerous crossbars and members and greater width. Further, rebuilding the Whipnain-Buxmont Line in place in an existing, cleared right-of-way will result in lesser visual impacts on any historic resources than a new line in an area where a line and cleared right-of-way do not already exist.

60. PPL Electric believes that the impacts of rebuilding the Whipnain-Buxmont Line in place will have minimal impacts on historic and architectural resources. The Whipnain-Buxmont Line is surrounded by modern residential subdivisions, some remaining farm fields, and industrial structures, including warehouses and a water tank. If, however, the PHMC determines that impact assessments are necessary for the previously recorded National Register-listed and -eligible resources, these assessments will be performed as required. In order to conduct such

assessments, the height and design of the new transmission line towers will be used to determine the visual effects. If the transmission line results in an adverse effect on eligible or listed resources, measures will be developed and taken to mitigate adverse effects of transmission line construction.

61. Review of the Pennsylvania Historical and Museum Commission (PHMC) Bureau for Historic Preservation (BHP) Cultural Resources Geographic Information System (CRGIS) reveals 19 recorded archaeological sites within one mile of the Whippen-Buxmont Line corridor, none of which have been determined eligible for the National Register of Historic Places (PHMC 2010). Two of the 19 archaeological sites are directly on the right-of-way. Site 36MG121 is a prehistoric site and Site 36MG212 contains both historic and prehistoric components. The eligibility of both sites is undetermined due to insufficient data. If feasible, these sites will be avoided when selecting pole locations.

62. Previous surveys encompassing portions of the transmission line corridor include Phase I and II surveys for two residential developments (ER No. 1992-3898-091 and ER. No. 2003-2141-091), a Phase I survey for the Morris Road Bridge replacement (ER No. 2002-6142-091), and a Phase I pipeline survey (ER No. 1988-1585-042). None of the archaeological sites are illustrated on **Figure 5** at the request of the PHMC. This is done to reduce the potential for disturbances from vandalism.

63. Proximity to water has been found to be the best predictor of prehistoric archaeological site location. Therefore, areas within 150 meters (500 ft) of a stream, spring, or wetland are considered to have a high probability for prehistoric sites. Areas more distant from water have a lower probability for prehistoric sites.

64. Pre-nineteenth century historic archaeological sites are generally located near streams. Historic-period maps will be consulted to identify areas of high probability for later historic archaeological sites. Locations of extant above-ground historic resources also have a high probability for historic archaeological deposits. If consultation with the PHMC indicates that a Phase I archaeological survey is required, it will be conducted within an area of potential effects encompassing all areas of anticipated ground disturbance from transmission line construction. Should potentially significant archaeological sites be identified, a Phase II survey will be conducted to determine their eligibility for the National Register. If National Register-eligible sites are present within the area of potential effects and cannot be avoided, measures will be taken to mitigate the adverse effects of transmission line construction.

65. The Whitpain-Buxmont line intersects nine creeks as it runs from Salford Township in the north to Towamencin Township in the south. Five of these streams are named streams and four streams are unnamed tributaries to named streams. Based on review of Pennsylvania Department of Environmental Protection (PADEP) Title 25 Chapter 93 classifications, five of the nine streams are classified as Warm Water Fisheries (WWF); one of the nine streams is classified as a Cold Water Fishery (CWF); seven of the nine streams are classified as providing for Migratory Fishes (MF); and two of the nine streams were not listed under Title 25 Chapter 93) (PADEP 2010a). According to DEP's e-MapPA website, all nine of these streams have been classified by the DEP under Title 25 Chapter 93 as Trout Stocked Fisheries (TSF) (PADEP 2010b). These streams are subject to regulation by the United States Army Corps of Engineers.

66. Based on review of the U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI), the Whitpain-Buxmont Line intersects one wetland system in addition to the stream crossings explained above. The single wetland system intersected by the Whitpain-

Buxmont line is mapped as a 0.318-acre emergent wetland system. The Cowardin classification of the wetland indicates that it is a Palustrine Emergent Narrow Leaved Persistent Temporary (PEM5A) wetland.

67. The NWI provides a general overview of the potential wetlands that may be located within an area. For federal and state permitting purposes, wetlands and waterways within the study area will be delineated according to regulatory standards, surveyed, and illustrated on development plans. Impacts to these natural features may require mitigation. PPL Electric will obtain and adhere to the terms and conditions of all required permits.

68. A review of Federal Emergency Management Agency (FEMA 2010) floodplain data for the study area indicates that the Whitpain-Buxmont Line intersects several areas mapped as occurring within a 100-year floodplain. Most of these areas are associated with the stream corridors discussed previously. Presently, these features are spanned by the transmission lines and no new impacts are anticipated for this project.

69. Use of the existing corridor for the Whitpain-Buxmont Line will have the least impact on water resources because it will require the least vegetation clearing and will involve no new crossings of water resources.

70. The *Montgomery County, Pennsylvania Natural Areas Inventory* identified one special concern site within the study area (Rhodes 2007). The site, referred to as the Skippack Creek Conservation Landscape, is located at the southern edge of the study area where the Whitpain-Buxmont Line intersects the Skippack Creek in Towamencin Township. This site is near the Evansburg State Park, the largest conserved open space area in Montgomery County. Of particular conservation concern, two small populations of early buttercup (*Ranunculus fascicularis*), a Pennsylvania endangered species, persist at sites in Evansburg State Park. A

botanist may be required to perform habitat assessments within this area to determine the likelihood of occurrence and presence/absence of this species.

71. Red-belly turtle (*Pseudemys rubriventris*), a threatened species in Pennsylvania, was observed in Skippack Creek in 2006. In addition, a review of the Pennsylvania Natural Diversity Inventory (PNDI) database was conducted for the study area (PHNP 2010). Results from the Pennsylvania Fish and Boat Commission (PAFBC) indicated the potential presence of red-belly turtles (*Pseudemys rubriventris*), a threatened species in Pennsylvania. This turtle species is known to inhabit relatively large, deep streams, rivers, ponds, lakes, and marshes with permanent water and ample basking sites. A more thorough site evaluation will need to be conducted, primarily focused on Skippack Creek, and sent to PAFBC for their review. Thus, a PFBC-qualified redbelly turtle biologist will likely be required to complete a habitat assessment for any work associated with Skippack Creek. PPL Electric will clear all conflicts prior to the start of construction.

72. A result from the US Fish and Wildlife Service (USFWS) also notes the potential presence of the federally threatened bog turtle (*Glyptemys muhlenbergii*). This species prefers to live in shallow, spring-fed bogs, swamps, marshy meadows, and pastures with soft, muddy bottoms, slow-flowing waters. Only USFWS qualified bog turtle surveyors can conduct the Phase I habitat or Phase II presence/absence surveys required by USFWS. No impacts were noted by the Pennsylvania Game Commission (PGC).

73. Results of the review further indicate the potential presence of eight plant species of concern identified by the Pennsylvania Department of Conservation and Natural Resources (DCNR), who requires that a qualified botanist conduct the survey of the project area for these species. Certain of these species are currently unlisted in Pennsylvania and are not a target

species for the required survey, but due to their ecological significance, DCNR is recommending that they be voluntarily added to the survey to avoid potential impacts. PPL Electric will comply with this recommendation.

### **VIII. HEALTH AND SAFETY**

74. The rebuild of the Whitpain-Buxmont Line will not cause any unreasonable risk to the health and safety of persons in its vicinity.

75. The Engineering Description of the proposed Whitpain-Buxmont Line is provided in Attachment 2 accompanying this Letter of Notification.

76. The proposed Whitpain-Buxmont Line will not create any unreasonable risk of danger to the public health or safety. The Whitpain-Buxmont Line will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable NESC minimum standards and all applicable legal requirements. Descriptions of NESC standards, PPL Electric's design criteria, and PPL Electric's safety practices are provided in Attachment 4 hereto.

77. Attachment 5 accompanying this Letter of Notification explains PPL Electric's standards for Electric and Magnetic Field Management.

78. In general, PPL Electric constructs its transmission lines with ground clearances greater than those required under the NESC in order to reduce electric and magnetic fields from transmission lines.

79. In addition, where feasible, PPL Electric will use reverse phasing techniques to reduce electric and magnetic fields. However, since the Whitpain – Buxmont 230 kV Transmission Line is being reconstructed for single circuit operation, reducing magnetic fields by reverse phasing is not possible.

80. Generally, PPL Electric will implement additional measures to reduce electric and magnetic fields where doing so can be accomplished at little or no cost and where the measures will not interfere with the operation of the transmission line.

81. The proposed Whitpain-Buxmont Line was reviewed with representatives of Salford, Franconia, Lower Salford and Towamencin Townships and Montgomery County. Neither the townships nor the County objects to the Project.

### **IX. LETTER OF NOTIFICATION**

82. PPL Electric is proceeding by means of a Letter of Notification, instead of a full Application, pursuant to the Commission's regulations at 52 Pa. Code § 57.72(d). The proposed rebuild of the Whitpain-Buxmont Line qualifies for use of a Letter of Notification under 52 Pa. Code § 57.72(d)(1)(i) because the Whitpain-Buxmont Line will be located entirely on an existing transmission line right-of-way and because the size, character, design or configuration of the proposed Line will not substantially alter the right-of-way. The Line also qualifies for use of a Letter of Notification under 52 Pa. Code § 57.72(d)(1)(v) because it is to be reconstructed and because the size, character, design and configuration of the proposed Line will not substantially alter the right-of-way. The rebuild of the Whitpain-Buxmont Line will not substantially alter PPL Electric's existing right-of-way for the following reasons:

a. The existing right-of-way is 100 feet wide, which is sufficient for the rebuilt Line. No additional right-of-way is required for the project.

b. Although the structures for the rebuilt Line will be taller than the structures for the existing Line, the rebuilt Line is expected to have a lesser effect on the right-of-way. The present structures are steel lattice structures which have four supports and numerous, complex cross-members and braces. In contrast, most of the rebuilt structures will be monopoles with simple upswept arms to support the conductors.

c. In addition, the existing lattice towers are wider than the rebuilt structures. The existing lattice towers are approximately 53 feet in width. In contrast, the maximum width of the future monopole structures and the upswept arms will be approximately 38 feet for the single circuit construction.

d. The rebuilt structures will have a much smaller footprint on the right-of-way. Lattice towers require four foundations per structure, and the structures have a footprint of approximately 800 square feet. A modern monopole structure, in contrast, has a single foundation with a footprint of approximately 64 square feet.

## **IX. PROCEDURE**

83. Attachment 6 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 6 in accordance with 52 Pa. Code § 57.72(d)(3).

84. As soon as practicable after the filing of this Letter of Notification and the assignment by the Commission of a docket number, PPL Electric will publish notice of the filing in newspapers of general circulation in the area of the proposed Whippain-Buxmont Line. Such notice will contain: (a) the date this Letter of Notification was filed with the Commission; (b) a brief description of the proposed reconstruction project and its location; (c) locations where the complete Letter of Notification may be reviewed by the public; and (d) an instruction that the interested parties should contact Secretary Rosemary Chiavetta at the Commission's Harrisburg address.

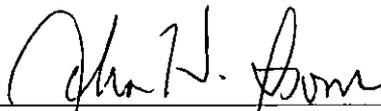
85. This Letter of Notification is filed on the date set forth below. As provided in 52 Pa. Code § 57.72(d)(5), the Commission will review and, by order, approve or disapprove this Letter

of Notification. If the Commission approves this Letter of Notification, the proposed Whitpain-Buxmont Line will be constructed as proposed herein without the formal application process set forth at 52 Pa. Code §§ 57.71, *et seq.*

**X. CONCLUSION**

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission approve the reconstruction of the Whippain-Buxmont Line in Salford, Lower Salford, Franconia and Towamencin Townships, Montgomery County, Pennsylvania, as explained above and in the Attachments hereto.

Respectfully submitted,



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Date: June 28, 2011

Attorneys for PPL Electric Utilities Corporation

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2011 JUN 28 PM 4: 03  
PA TUC  
SECRETARY'S BUREAU

**VERIFICATION**

:

I, Gregory N. Dudkin, being the Senior Vice President of Operations 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: 6/24/11

  
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## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing **Letter of Notification** has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

### VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pennsylvania Historical and  
Museum Commission  
Bureau of Historic Preservation  
Commonwealth Keystone Building  
400 North Street, 2<sup>nd</sup> Floor  
Harrisburg, PA 17120-0053  
Attn: Douglas C. McLearen, Chief

Pennsylvania Department of Transportation  
Commonwealth Keystone Building  
400 North Street, 8<sup>th</sup> Floor  
Harrisburg, PA 17120  
Attn: Honorable Allen D. Biehler, P.E.,  
Secretary

Department of Environmental Protection  
PO Box 2063  
Market Street State Office Building  
Harrisburg, PA 17105-2063  
Attn: Office of Field Operations

Mr. Mark Freeborn, Chairman  
Salford Township Planning Commission  
139 Ridge Road  
PO Box 54  
Tylersport, PA 18971

Ms. Karen Landis, Secretary  
Salford Township  
139 Ridge Road  
PO Box 54  
Tylersport, PA 18971

Mr. Gerald DeLong, Chairman  
Franconia Township Planning Commission  
PO Box 128  
671 Allentown Road  
Franconia, PA 18924

Mr. Kevin Barver, Manager  
Franconia Township  
PO Box 128  
671 Allentown Road  
Franconia, PA 18924

Mr. Manus McHugh, Chairman  
Lower Salford Township  
Planning Commission  
379 Main Street  
Harleysville, PA 19438

Mr. Del Plank, Manager  
Lower Salford Township  
379 Main Street  
Harleysville, PA 19438

Mr. Brett MacKay, Chairman  
Towamencin Township  
Planning Commission  
PO Box 303  
Kulpsville, PA 19443

Mr. Bob Ford, Manager  
Towamencin Township  
PO Box 303  
Kulpsville, PA 19443

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PA HISTORIC  
SECRETARY'S BUREAU

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RECEIVED

Mr. Drew Shaw  
Section Chief: Environmental Planning  
Montgomery County Planning Commission  
PO Box 311  
Norristown, PA 19401

Montgomery County Commissioners  
Mr. James R. Matthews, Chairman  
PO Box 311  
Norristown, PA 19401

PECO Energy Company  
C/O Real Estate & Facilities N3-3  
2301 Market St  
Philadelphia PA 19103

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98 Morwood Rd  
Telford PA 18969

Interstate Energy Corp  
2 N Ninth St  
Allentown PA 18101

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P O Box 1516  
Kulpsville PA 19443

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Telford PA 18969

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857 Ruth Rd  
Telford PA 18969

Glenn R & Nancy R Moyer  
941 Long Mill Rd  
Telford PA 18969

Robert S & Marianne P Landis  
886 Morwood Rd  
Harleysville PA 19438

Luke J & Rachelle L Bergey  
885 Mill Rd  
Harleysville PA 19438

David H & Marie G Reinford  
833 Mill Rd  
Harleysville PA 19438

Harold A & Patricia J Hunsicker  
798 Hunsicker Rd  
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M Chad & Julie A Yoder  
175 Orchard Ln  
Harleysville PA 19438

Kingscote Community Association  
P O Box 460  
Harleysville PA 19438

Harleysville Homestead Inc  
P O Box 1181  
Blue Bell PA 19422

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Harleysville PA 19438

R&J Marcho Family Partnership  
Marcho Homestead Partnership LP  
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James B & Elizabeth A Cheyney  
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Angelo L Jr & Josephine C Tornetta  
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Harleysville PA 19438

Westrum Harleysville II LLC  
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Fort Washington PA 19034

S & S Investments  
194 Nassau St  
Princeton NJ 08542

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John & Kimberly White  
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Harleysville PA 19438

Rosecliff Manor Community  
P O Box 436  
Harleysville PA 19438

First Montgomery Associates LPI  
C/O Easley McCaleb & Assoc  
3609 C Chain Bridge Rd  
Fairfax VA 22030

Harleysville Mutual Ins Co  
C/O Harleysville LTD  
355 Maple Ave  
Harleysville PA 19438

Lower Salford Limited Partnership  
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R Lawrence & Lucy L Derstine  
488 Harleysville Pike  
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Store Road LLC  
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Blue Bell PA 19422

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A Michael Stenger  
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Mary Kosow  
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James Barrow & Cristina Doria  
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Patricia D & Ronald D Shaw  
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Bridgeport PA 19405

Commonwealth of Pennsylvania  
C/O Department of Forests & Waters  
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Rachel Carson State Office Building  
Harrisburg PA 17105-8552

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2540 Kriebel Rd  
Harleysville PA 18438

John J & Anne Bazik  
2225 Kerr Rd  
Harleysville PA 19438

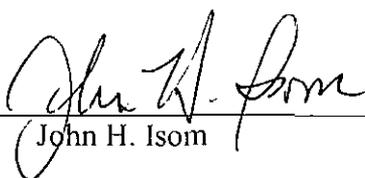
Robert & Doris M Klause  
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Carmen S & Christine C Christy  
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William F & Margaret Oehler  
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Donna Sickenberger  
3420 Fry Rd  
Harleysville PA 19438

Date: June 28, 2011

  
\_\_\_\_\_  
John H. Isom