POST & SCHELL PC
ATTORNEYS AT LAW

17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
717-731-1970 Main
717-731-1985 Main Fax
www.postschell.com

Christopher T. Wright

cwright@postschell.com
717-612-6013 Direct
717-731-1985 Direct Fax
File #: 140066

November 23, 2015

VIA HAND DELIVERY

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

Re: Letter of Notification of PPL Electric Utilities Corporation, Filed Pursuant to 52 Pa. Code Chapter 57, Subchapter G, for Approval to Rebuild a Portion of an Existing 230 kV Transmission Line and to Construct Two New Segments of 230 kV Transmission Lines in Archbald, Blakely, and Jessup Boroughs, Lackawanna County, Pennsylvania to Interconnect a New Independent Power Producer to the Electric Grid - Docket No. A-2015-

Dear Secretary Chiavetta:

Enclosed for filing is the Letter of Notification of PPL Electric Utilities Corporation in the above-referenced proceeding. A CD containing a copy of the Letter of Notification and Attachments in Support of the Letter of Notification is also enclosed.

As indicated on the Certificate of Service, copies of the Letter of Notification are being served by certified mail, return receipt requested upon the involved governmental agencies, municipalities and property owners.

Subject to Commission approval, construction is scheduled to begin in Spring of 2016 to support an in-service date of June 1, 2017.

If you have any questions concerning this matter, please contact me at the address or telephone numbers provided above.

Respectfully submitted,

Christopher T. Wright

CTW/jl
Enclosures

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

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

PA Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120-0053
Attn: Mr. Douglas C. McLearen, Chief

PA Department of Transportation
Honorable Leslie S. Richards, Secretary
c/o Office of Chief Counsel
Commonwealth Keystone Building
400 North Street, 8th Floor
Harrisburg, PA 17120
Attn: William J. Cressler

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

Office of Consumer Advocate
555 Walnut Street
Forum Place, 5th Floor
Harrisburg, PA 17101-1923

Bureau of Investigation & Enforcement
PO Box 3265
Commonwealth Keystone Building
400 North Street, 2nd Floor West
Harrisburg, PA 17105-3265

Office of Small Business Advocate
Commerce Building
300 North Second Street, Suite 1102
Harrisburg, PA 17101

Lackawanna County Planning
& Economic Development
Scranton Electric Building
507 Linden Street
Scranton, PA 18503

Lackawanna County
Board of Commissioners
Courthouse Administration Building
200 Adams Avenue, 6th Floor
Scranton, PA 18503
Attn: Jim Wansacz, Chairman

Archbald Borough
400 Church Street
Archbald, PA 18403
Attn: Ed Fairbrother, Mayor

Archbald Borough Planning Commission
400 Church Street
Archbald, PA 18403
Attn: Karl Pfieffenberger, Chairman

Archbald Borough Council
400 Church Street
Archbald, PA 18403
Attn: Joseph Simon, President

Blakely Borough
1439 Main Street
Peckville, PA 18452
Attn: Jeanette Acciare-Mariani, Maryor

Blakely Borough Council
1439 Main Street
Peckville, PA 18452
Attn: Joseph J. Quinn, President

Blakely Borough Planning Commission
1439 Main Street
Peckville, PA 18452
Attn: Al Leri, Chairman

Jessup Borough
395 Lane Street
Jessup, PA 18434
Attn: Beverly Valvano Merkel, Mayor

Jessup Borough Council
395 Lane Street
Jessup, PA 18434
Attn: James F. Brunozzi, President

Jessup Borough Planning Commission
395 Lane Street
Jessup, PA 18434
Attn: Gene Varzaly, Chairman

PPL Electric Utilities Corporation
2 North Ninth Street
Allentown, PA 18101

Daniel Ewan
Vice President, Thermal Development
Lackawanna Energy Center LLC
One South Wacker Drive, Suite 1900
Chicago, IL 60606

Pine Line, Inc.
Route 6
Eynon, PA 18403

Woodbury Estates, Inc.
859 Enterprise Street
Dickson City, PA 18519

Pompey Coal Company
520 Spruce Street
Scranton, PA 18503

Davlisa Ent,Inc.
46 Public Square, Suite 600
Wilkes Barre, PA 18701

PA Northeast Regional Railroad Authority
280 Cliff Street
Scranton, PA 18503

Daniel Siniawa
851 Commerce Blvd., Front 207
Dickson City, PA 18519

Date: November 23, 2015

Christopher T. Wright

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Letter of Notification of PPL Electric Utilities Corporation, Filed Pursuant to 52 Pa. Code Chapter 57 Subchapter G, for Approval to Rebuild a Portion of an Existing 230 kV Transmission Line and to Construct Two New Segments of 230 kV Transmission Lines in Archbald, Blakely, and Jessup Boroughs, Lackawanna County, Pennsylvania to Interconnect a New Independent Power Producer to the Electric Grid	:	Docket No. A-2015-_____

LETTER OF NOTIFICATION

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PPL Electric Utilities Corporation ("PPL Electric") hereby files, pursuant to 52 Pa. Code § 57.72(d), this Letter of Notification to seek approval from the Pennsylvania Public Utility Commission ("Commission") to rebuild a portion of an existing 230 kV transmission line and to construct two new segments of 230 kV transmission lines necessary to interconnect the proposed new Lackawanna Energy Gas-Fire Power Plant ("Power Plant") with the electric grid (hereinafter, the "Project"). Upon Commission approval, the Power Plant will be interconnected to the PPL Electric transmission system by: (i) rebuilding approximately 3.1 miles of existing 230 kV transmission line within the existing right-of-way; (ii) constructing approximately 0.4 miles of new single-circuit 230 kV transmission line on PPL Electric-owned property to interconnect the rebuilt line with the Lackawanna 500-230-69 kV Substation located in Blakely Borough; and (iii) constructing approximately 0.5 miles of new single-circuit 230 kV

transmission line within new right-of-way to interconnect the rebuilt 230 kV transmission line with the Lackawanna Energy Power Plant in Jessup Borough. The Project will be located in Archbald, Blakely, and Jessup Boroughs, Lackawanna County, Pennsylvania. PPL Electric has provided information regarding this Project to these political subdivisions.

The proposed Project is necessary to connect the Power Plant to the electric grid. The Project has been reviewed and approved through the PJM Interconnection LLC ("LLC") generation interconnection process. Subject to the Commission's approval, construction is scheduled to begin in spring of 2016 to support the June 1, 2017, in-service date of the Power Plant. In support thereof, PPL Electric states as follows:

I. INTRODUCTION

1. This Letter of Notification is filed by PPL Electric, a public utility that provides electric distribution, transmission, and provider of last resort services in Pennsylvania subject to the regulatory jurisdiction of the Commission.

2. PPL Electric's address is PPL Electric Utilities Corporation, Two North Ninth Street, Allentown, Pennsylvania 18101.

3. PPL Electric's attorneys are:

Paul E. Russell (Bar I.D. # 21643)
Kimberly A. Klock (I.D. # 89716)
PPL Services Corporation
Office of General Counsel
Two North Ninth Street
Allentown, PA 18101
Voice: 610.774.4254
Fax: 610.774.6726
E-mail: perussell@pplweb.com
E-mail: kklock@pplweb.com

David B. MacGregor (Bar I.D. # 28804)
Christopher T. Wright (Bar I.D. # 203412)
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
Voice: 717.731.1970
Fax: 717.731.1985
E-mail: dmacgregor@postschell.com
E-mail: cwright@postschell.com

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

4. PPL Electric furnishes electric service to approximately 1.4 million customers throughout its certificated service territory, which includes all or portions of twenty-nine counties and encompasses approximately 10,000 square miles in eastern and central Pennsylvania. PPL Electric is a "public utility" and an "electric distribution company" as defined in Sections 102 and 2803 of the Pennsylvania Public Utility Code, 66 Pa.C.S. §§ 102, 2803.

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

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

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

7. This Letter of Notification and accompanying Attachments, which are incorporated herein by reference, contain all the information required by 52 Pa Code § 57.72(d)(4).

II. THE PROJECT

A. NEED FOR THE PROJECT

1. Existing System

8. PPL Electric's existing Lackawanna 500-230-69 kV Substation is located in Blakely Borough and currently supplies 60,590 customers.

9. The existing Lackawanna-Peckville #3 230 kV Transmission Line extends approximately 2.4 miles from the Lackawanna 500-230-69 kV Substation to the Peckville 230-69 kV Substation. The Lackawanna-Peckville #3 230 kV Transmission Line currently is inactive.

10. The existing Blooming Grove-Peckville 230 kV Transmission Line extends approximately 29 miles from the Peckville 230-69 kV Substation to the Blooming Grove 230-69 kV Substation, which currently supplies 26,107 customers.

11. The existing single-circuit 230 kV line between the Lackawanna 500-230-69 kV Substation and the Blooming Grove 230-69 kV Substation is installed on wood H-frame and steel lattice structures.

12. A description, one-line diagram, and map of the existing system are provided in the Necessity Statement included as Attachment 1 to this Letter of Notification.

2. Need for the Project

13. An independent power producer, Lackawanna Energy Center LLC ("Lackawanna Energy") plans to construct the proposed new Power Plant in Jessup Borough, Lackawanna County, Pennsylvania.

14. The planned new Power Plant will be interconnected as a 1370 MW combined cycle natural gas-fired facility. The Power Plant will consist of three natural gas-fired turbines that are each coupled with one heat recovery steam generator that delivers steam to a single steam turbine generator.

15. The gas turbine systems generate electricity by burning natural gas, and energy normally lost in the exhaust and cooling systems from this process is instead captured in the heat recovery unit and converted into useful thermal energy, as steam.

16. In order to deliver the power produced from the Power Plant to the electric market, the Power Plant must be interconnected with the electric grid.

17. Transmission Owners, such as PPL Electric, are required by federal law to provide open access to their transmission systems. As explained below, and in Attachment 1 to this Letter of Notification, through the PJM generation interconnection process, PJM and PPL Electric determined that the proposed Project is necessary to connect Lackawanna Energy's planned new Power Plant to the electric grid.

18. PJM is a Federal Energy Regulatory Commission ("FERC") approved Regional Transmission Organization ("RTO") charged with ensuring the reliability of the electric transmission system under its functional control and coordinating the movement of wholesale electricity in all or parts of thirteen states and the District of Columbia, including most of Pennsylvania and New Jersey. PPL Electric is a member of PJM.

19. As a FERC-accepted RTO, PJM administers the process for the interconnection of all new generation facilities to the PJM Transmission Grid, pursuant to the PJM Open Access Transmission Tariff – Part VI (Interconnections with the Transmission System), Subpart A – Generation Interconnection Procedures. PJM's queue-based interconnection process offers developers the flexibility to explore their respective generation interconnection business opportunities, while at the same time evaluating the feasibility and impacts of interconnecting the generating unit into the existing transmission system. A description of PJM's interconnection procedures is provided in Attachment 1 to this Letter of Notification.

20. Lackawanna Energy applied for and received PJM approval to interconnect with PPL Electric's existing 230 kV transmission line located in close proximity to the site for the planned new Power Plant.

21. Through the PJM interconnection process described above, PJM and PPL Electric determined that the interconnection of the proposed Power Plant with PPL Electric's transmission system will require construction of approximately 4.0 miles of high capacity 230 kV transmission line from the proposed Lackawanna Energy Power Plant in Jessup Borough to PPL Electric's existing Lackawanna 500-230-69 kV Substation in Blakely Borough. The point of interconnection will occur at the dead-end structure located at the Lackawanna Energy Power Plant.

22. The need for this Project, including a description of the Lackawanna Energy interconnection request and PJM approval, is provided in Attachment 1 to this Letter of Notification.

B. THE PROPOSED PROJECT

23. The proposed new Power Plant will be located in Jessup Borough, Lackawanna County approximately one mile southeast of PPL Electric's Peckville 230-69 kV Substation.

24. Upon Commission approval, the Power Plant will be interconnected to the PPL Electric transmission system by: (i) rebuilding approximately 3.1 miles of existing 230 kV transmission line within the existing right-of-way; (ii) construction of approximately 0.4 miles of new single-circuit 230 kV transmission line on PPL Electric-owned property to interconnect the rebuilt line with the Lackawanna 500-230-69 kV Substation located in Blakely Borough; and (iii) construction of approximately 0.5 miles of new single-circuit 230 kV transmission line within new right-of-way between the rebuilt 230 kV transmission line and the point of interconnection with the Lackawanna Energy Power Plant in Jessup Borough.

25. These three segments of the proposed Project are further described below. A description, one-line diagram, and map of the proposed Project are provided in the Necessity Statement included as Figures 1-3 and 1-4 to Attachment 1 to this Letter of Notification.

26. The total estimated cost of the Project is approximately $21.2 million.[1] Lackawanna Energy will pay for the entire cost of the Project.

27. Upon Commission approval, the Project has a scheduled construction start date of spring 2016 to support the June 1, 2017, in-service date of the Power Plant.

1. First Segment of the Project

28. The first segment of the Project requires the construction of approximately 0.4 miles of new single-circuit 230 kV transmission line between the Lackawanna 500-230-69 kV Substation located in Blakely Borough and the existing Lackawanna-Peckville #3 230 kV Transmission Line located in Archbald Borough.

29. This segment of new 230 kV transmission line will be located entirely on PPL Electric's property owned in fee for the existing Lackawanna 500-230-69 kV Substation and the associated transmission lines interconnected with the Lackawanna 500-230-69 kV Substation. No new rights-of-way are required for this segment of the Project.

30. The first segment of the Project will require four new single-circuit, weathering steel monopoles. The 230 kV steel monopoles will be approximately 124 feet in height and will be self-supported on concrete caisson foundations. A depiction of the type of monopoles used for this segment of the Project is provided in Attachment 2 to this Letter of Notification.

31. The new 230 kV circuit for the first segment will utilize three phase conductors and two overhead ground wires. The phase conductors will be a triple-bundle of 1590 kcmil,[2]

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[1] The estimated cost for the proposed Project is an order-of-magnitude estimate developed using averages of recent costs for similar projects and without an in-depth analysis or field investigation. The estimated cost is subject to change as the constructability of the Project, sequent of construction, and other factors that may affect cost are identified and analyzed as the Project progresses.

[2] A kcmil or circular mil is the cross-sectional area of a wire one mil in diameter, where 1 kcmil = 0.5067 mm^2.

45/7 stranding ACSR[3] conductors. The overhead ground wires will each be 48-count, 0.752-inch diameter fiber optical ground wires that will provide lightning protection and communication between substation breakers that remove the line from service should a fault occur.

2. Second Segment of the Project

32. The second segment of the Project requires the rebuild of approximately 3.1 miles of existing single-circuit 230 kV transmission line within the exiting right-of-way. Importantly, if the 3.1 miles of existing single-circuit 230 kV transmission line are not rebuilt as part of this Project, a new separate transmission line would have to be built where one does not presently exist in order to interconnect the Power Plant with the electric grid.

33. The second segment will extend approximately 2.4 miles from the Lackawanna-Peckville #3 230 kV Transmission Line to the Peckville 230-69 kV Substation. The second segment will continue approximately 0.7 miles from the Peckville 230-69 kV Substation to a point on the existing single-circuit located just west of Breaker Street in Jessup Borough. In total, the second segment requires the rebuild of approximately 3.1 miles of the existing single-circuit 230 kV transmission line.

34. The second segment of the Project will be rebuilt entirely within the existing right-of-way.

35. There are 29 H-frame and 4 steel lattice structures currently within the second segment of the Project that will be replaced by 29 new single-circuit, weathering steel monopoles. The new steel monopoles will be located immediately adjacent to the existing structures ("pole for pole") along the rebuilt segment. Further, no new steel monopoles will be placed on any property that currently does not have an existing structure. The new 230 kV steel monopoles will be approximately 126 feet in height and will be self-supported on concrete

[3] ACSR stands for aluminum conductor steel reinforced.

caisson foundations. A depiction of the type of monopoles used for this segment of the Project is provided in Figures 2-3 through 2-6 of Attachment 2 to this Letter of Notification.

36. The rebuilt 230 kV circuit for the second segment will utilize three conductors and two overhead ground wires. The phase conductors will be 1590 kcmil, 45/7 stranding ACSR conductors. The overhead ground wires will each be 48-count, 0.752-inch diameter fiber optical ground wires that will provide lightning protection and communication between substation breakers that remove the line from service should a fault occur.

3. Third Segment of the Project

37. The third segment of the Project requires the construction of approximately 0.5 miles of new single-circuit 230 kV transmission line to interconnect the planned new Power Plant with the rebuilt 230 kV transmission line described above for the second segment of the Project.

38. The third segment of the Project will extend approximately 0.5 miles from the end of the rebuilt 230 kV transmission line, located just west of Breaker Street in Jessup Borough, to the point of interconnection for the new Power Plant located in Jessup Borough.

39. The third segment of the Project will be constructed within right-of-way to be obtained by PPL Electric. All costs required to obtain the rights-of-way and easements across the three parcels will be paid entirely by Lackawanna Energy.

40. The third segment of the Project will require four new single-circuit, weathering steel monopoles. The 230 kV steel monopoles will be approximately 153 feet in height and will be self-supported on concrete caisson foundations. A depiction of the type of monopoles used for this segment of the Project is provided in Attachment 2 to this Letter of Notification.

41. The new 230 kV circuit for the third segment will utilize three conductors and two overhead ground wires. The phase conductors will be 1590 kcmil, 45/7 stranding ACSR

conductors. The overhead ground wires will each be 48-count, 0.752-inch diameter fiber optical ground wires that will provide lightning protection and communication between substation breakers that remove the line from service should a fault occur.

III. HEALTH AND SAFETY

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

43. The Project will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable National Electrical Safety Code ("NSEC") minimum standards and all applicable legal requirements. Descriptions of PPL Electric's design criteria and safety practices are provided in Attachment 4 to this Letter of Notification.

44. Under PPL Electric's Magnetic Field Management Program, the Project will be designed for ground clearances that are a minimum of five feet higher than the required NESC minimum ground clearance for 230 kV lines, which should reduce any potential for exposure to magnetic fields.[4] A description of PPL Electric's Magnetic Field Management Program is provided in Attachment 2 to this Letter of Notification.

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

46. The closest airport is the Reed Airport, a private airport, located approximately 7 miles east of the Project area. PPL Electric does not anticipate any interference with airport operations because of the distance from the Project area and the presence of existing electrical facilities in the Project area. However, PPL Electric will file any required documentation with

[4] Reverse phasing does not apply to the Project because the Project is a single-circuit 230 kV transmission line.

both the Federal Aviation Administration and the Pennsylvania Department of Transportation Bureau of Aviation.

IV. DESCRIPTION OF THE RIGHT-OF-WAY

47. Under the PJM-approved Interconnection Construction Agreement, the Project will require approximately 3.1 miles of existing single-circuit 230 kV transmission line to be rebuilt with higher capacity, triple-bundle conductors to accommodate the additional load from the Power Plant. One end of the rebuilt, higher capacity conductors will be interconnected with the Lackawanna 500-230-69 kV Substation by construction of approximately 0.4 miles of new 230 kV transmission line. The other end of the rebuilt, higher capacity conductors will be interconnected with the Lackawanna Energy Power Plant by construction of approximately 0.5 miles of new single-circuit 230 kV transmission line.

48. These three segments of the proposed Project are further described below and in the Attachments to this Letter of Notification. An aerial exhibit is provided at the end of Attachment 3 to this Letter of Notification.

A. RIGHT-OF-WAY FOR THE THREE SEGMENTS OF THE PROJECT

1. First Segment of New 230 kV Transmission Line on PPL Electric-Owned Property

49. The first segment of the Project requires the construction of approximately 0.4 miles of new 230 kV transmission line within new right-of-way between the existing PPL Electric Lackawanna Substation located in Blakely Borough and the existing Lackawanna-Peckville #3 230 kV Transmission Line located in Archbald Borough.

50. This segment of new 230 kV transmission line will be located entirely on PPL Electric's property owned in fee for the existing Lackawanna 500-230-69 kV Substation and

associated transmission lines interconnected with the Lackawanna 500-230-69 kV Substation. No new rights-of-way are required for this segment of the Project.

2. Second Segment of Rebuilt 230 kV Transmission Line

51. The second segment of the Project requires reconstruction of approximately 3.1 miles of existing 230 kV transmission line. Importantly, if the 3.1 miles of existing single-circuit 230 kV transmission line is not rebuilt as part of this Project, a new separate transmission line would have to be built where one does not presently exist today in order to interconnect the Power Plant with the electric grid.

52. PPL Electric's existing transmission corridor consists of fee-owned property and right-of-way that varies from 200 to 425 feet in width. The existing fee-owned property and right-of-way is sufficient to accommodate all construction activities associated with the rebuild of the second segment of the Project. No additional right-of-way is required to accommodate this segment of the Project.

53. Further, the second segment of the Project will have minimal impacts to the existing right-of-way. Although the new steel monopoles will be higher, they will have a smaller footprint than the existing wooden H-frame and steel lattice structures, the new structures will be located "pole for pole" with the existing structures, and no new structures will be placed on any property that currently does not have an existing structure.

3. Third Segment of New Rebuilt 230 kV Transmission Line on New Right-of-Way

54. The third segment of the Project requires the construction of approximately 0.5 miles of new single-circuit 230 kV transmission line to interconnect the planned new Power Plant with the rebuilt 230 kV transmission line described above for the second segment of the Project. The third segment of the Project will extend approximately 0.5 miles from the end of

the rebuilt 230 kV transmission line, just west of Breaker Street in Jessup Borough, to the point of interconnection for the new Power Plant located in Jessup Borough.

55. This segment of the Project will be constructed within right-of-way to be obtained by PPL Electric.

56. This segment will traverse three parcels previously owned by Pompey Coal Company.[5] PPL Electric will obtain right-of-way and easements for the construction and operation of the new 230 kV transmission line across two of the three parcels. The third parcel will be acquired by Lackawanna Energy for construction of the Power Plant. Lackawanna Energy will convey to PPL Electric the right-of-way and easement necessary for the construction and operation of the new 230 kV transmission line across the third parcel. The right-of-way for the third segment will be accessed through a new permanent access road to be obtained by PPL Electric.

B. LAND USE AND ENVIRONMENT

57. Land use impacts are anticipated to be minimal because the majority of the Project will be constructed within PPL Electric's existing right-of-way or on property owned in fee by PPL Electric.[6] This right-of-way also contains the Lackawanna-Peckville 69 kV Transmission Line. As previously mentioned, new structures will be placed in approximately the same locations as the existing structures.

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[5] PPL Electric provided a packet of information to fully notify the current landowner that PPL Electric will ultimately own and operate the third segment of the Project. The packet provides information about the proposed Project and informs the landowner of their legal rights and PPL Electric's legal rights with regard to this Project. This information includes the two notices that are required by 52 Pa. Code § 57.91.

[6] Approximately 3.5 miles of the total 4.0 miles required for this project will be constructed within right-of-way or property owned by PPL Electric.

58. The 0.5-mile segment of new construction (segment three) that requires new right-of-way will be constructed within a forested, reclaimed mining area owned by Pompey Coal Company.

59. Where possible, PPL Electric will use and update previously established access roads for construction to further reduce interference with existing land uses.

60. The 0.4 mile-long right-of-way for segment one and the 3.1 mile-long existing right-of-way for segment two are currently maintained in accordance with PPL Electric's Vegetation Management Program. In order to traverse the Peckville Substation property, which is owned in fee by PPL Electric, some additional tree clearing will be required within PPL Electric-owned property. The new 0.5-mile-long right-of-way for segment three of the proposed Project will require a new 150-foot-wide right-of-way to be cleared.

61. In areas where vegetation management is required to complete the Project, PPL Electric will apply its "Specifications for Initial Clearing and Control of Vegetation On or Adjacent to Electric Line Right-of-Way Through Use of Herbicides, Mechanical and Hand clearing Techniques" to mitigate any impacts. Tree clearing activities also will follow conditions as outlined in the Pennsylvania Natural Diversity Inventory ("PNDI") review and approval process. Tree clearing will be completed before construction begins.

62. The second segment crosses the Lackawanna River Heritage Trail, which parallels the Lackawanna River. PPL Electric has historically used a small asphalt-paved portion of the trail that is located on PPL Electric property to access the existing transmission line near the Peckville Substation. PPL Electric will coordinate with the trail operator during and after construction to minimize impacts. PPL Electric will restore the trail as needed following

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

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

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

65. The Project area was reviewed with the Pennsylvania Historical and Museum Commission ("PHMC"). The PHMC has concluded that the Project will have no impacts on historic structures, or archaeological resources.

66. It is anticipated that the Project will have minimal impacts on delineated streams and wetlands because the majority of the Project will be constructed within an existing right-of-way, and because the new tower structures will be placed in close proximity to the existing tower structures. PPL Electric expects that all streams can be spanned and will attempt to avoid wetland impacts to the extent practical.[7] All wetlands within the work area will be protected with matting to minimize impacts.

67. PPL Electric will obtain all permits required by the County Conservation District, the Pennsylvania Department of Environmental Protection and the U.S. Army Corps of Engineers and will comply will all of the terms and conditions placed on those permits.

68. PPL Electric has conducted an online PNDI database review to obtain information regarding endangered and threated species in close proximity to the Project. Based on this review, the Pennsylvania Fish and Boat Commission, the Department of Conservation and Natural Resources, and the U.S. Fish and Wildlife Service ("UWFWS") reported that the Project

[7] A General Permit 5 (GP-5) will be required for the overhead crossing of the Lackawanna River, and temporary impacts to the floodway of an Unnamed Tributary to the West Branch Tinklepaugh Creek caused by the replacement of an existing structure. A Submerged Lands License Agreement (SLLA) will also be required for the overhead crossing of the Lackawanna River, which is a state-navigable waterway. A General Permit 7 (GP-7) will be required for a permanent road crossing of an Unnamed Tributary to West Bank Tinklepaugh Creek.

will not impact any threated or endangered species, or special concern species and resources located within the project area. The Pennsylvania Game Commission (PGC) indicated that further review is required for potential impacts to the eastern small-footed bat (*Myotis leibii*), which is a Pennsylvania threatened species, and the northern long-eared bat (*Myotis septentrionalis*), which is a Pennsylvania species of concern and was recently listed as a federally threatened species.

69. PPL Electric conducted a habitat survey of the Project area to identify potential habitat for the eastern small-footed bat. One potential habitat was identified within the right-of-way for segment 3, approximately 200 feet southeast of Breaker Street in Jessup Borough. The habitat survey was provided to PGC on November 3, 2014. In a letter dated August 28, 2015, the PGC advised that no habitat mitigation is required provided that PPL Electric removes vegetation in this area by hand.

70. In addition, one potential bat hibernaculum was identified in a cave adjacent to an existing access road within the third segment of the Project. PPL Electric therefore proposed to use an alternate access road to avoid any potential impacts to the bat hibernaculum. PGC requested a hibernacula study for the eastern small-footed bat in the vicinity of the potential hibernaculum. The bat hibernacula study will be conducted between in the fall of 2015. Once the bat hibernacula study is complete, PPL Electric will consult with the PGC to determine if any additional avoidance measures are required.

71. PPL Electric conducted a second updated PNDI review for the northern long-eared bat on May 26, 2014. The updated PNDI review did not result in any known or potential impacts to the northern long-eared bat. Therefore, no further coordination with the USFWS is required.

V. NOTICE

72. PPL Electric has provided information regarding the Project to representatives of Blakely, Archbald, and Jessup boroughs, Lackawanna County, Pennsylvania. These entities have not objected to the proposed Project.

73. PPL Electric has provided information regarding the Project to all owners of property within both the existing and new right-of-way required for the Project.

74. Copies of this Letter of Notification will be served on the governmental agencies, municipalities, and other public entities agencies in accordance with 52 Pa. Code § 57.72(d)(3).

75. Copies of this Letter of Notification will be served on these landowners in accordance with 52 Pa. Code § 57.72(d)(3).

VI. LETTER OF NOTIFICATION

76. PPL Electric is proceeding by means of a Letter of Notification instead of a full Siting Application. On November 19, 2015, the Commission issued an Order at Docket No. P-2015-2497851 granting PPL Electric's request to submit this Letter of Notification in lieu of a full Siting Application for Commission review and approval of the proposed Project.

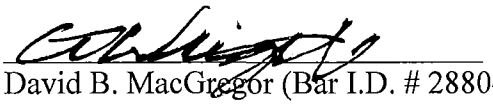
77. This Letter of Notification is filed on the date set forth below. As provided in 52 Pa. Code § 57.72(d)(5), the Commission will review and, by order, approve or disapprove this Letter of Notification. If the Commission approves this Letter of Notification, the proposed Project will be constructed as proposed herein without the formal application process set forth at 52 Pa. Code §§ 57.71, *et seq.*

VII. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission approve (i) the rebuild of approximately 3.1 miles of existing 230 kV transmission line within the existing right-of-way; (ii) construction of

approximately 0.4 miles of new single-circuit 230 kV transmission line on PPL Electric-owned property to interconnect the rebuilt line with the Lackawanna 500-230-69 kV Substation located in Blakely Borough; and (iii) construction of approximately 0.5 miles of new single-circuit 230 kV transmission line within new right-of-way to interconnect the rebuilt 230 kV transmission line with the to interconnect the rebuilt 230 kV transmission line with the Lackawanna Energy Gas-Fire Power Plant in Jessup Borough, as explained above and in the attachments hereto.

Respectfully submitted,



Paul E. Russell (Bar I.D. # 21643)
Kimberly A. Klock (I.D. $ 89716)
Associate General Counsel
PPL Services Corporation
Two North Ninth Street
Allentown, PA 18101
Voice: 610.774.4254
Fax: 610.774.6726
E-mail: perussell@pplweb.com
E-mail: kklock@pplweb.com

David B. MacGregor (Bar I.D. # 28804)
Christopher T. Wright (Bar I.D. # 203412)
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
Voice: 717.731.1970
Fax: 717.731.1985
E-mail: dmacgregor@postschell.com
E-mail: cwright@postschell.com

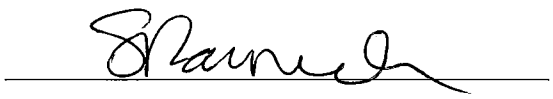
Date: November 23, 2015

Attorneys for PPL Electric Utilities Corporation

VERIFICATION

I, Stephanie Raymond being the Vice President-Transmission and Substations at PPL Electric Utilities Corporation, hereby state that the facts above set forth are true and correct to the best of my knowledge, information and belief and that I expect PPL Electric Utilities Corporation to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 relating to unsworn falsification to authorities.

Date: 11/20/15



Before the
Pennsylvania Public Utility Commission

LACKAWANNA ENERGY – LACKAWANNA 230 KV TRANSMISSION LINE

ATTACHMENTS IN SUPPORT OF THE
Letter of Notification

Application Docket No._____

Submitted by: PPL Electric Utilities Corporation

ATTACHMENT 1

LACKAWANNA ENERGY – LACKAWANNA 230 KV TRANSMISSION LINE

NECESSITY STATEMENT

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ATTACHMENT 1

LACKAWANNA ENERGY – LACKAWANNA 230 KV TRANSMISSION LINE

NECESSITY STATEMENT

A. INTRODUCTION

PPL Electric Utilities Corporation (PPL Electric) seeks approval from the Pennsylvania Public Utility Commission ("Commission" or "PUC") for the construction of a single-circuit 230 kV transmission line to interconnect the proposed Lackawanna Energy Gas-Fired Power Plant ("Power Plant") to be constructed by Lackawanna Energy Center LLC ("Lackawanna Energy"), an independent power producer. As described below, PPL Electric proposes to rebuild a portion of an existing 230 kV transmission line and to construct two new segments of 230 kV transmission lines necessary to interconnect the planned Power Plant with the electric grid (hereinafter, the "Project"). The Project will be located in Archbald, Blakely, and Jessup Boroughs, Lackawanna County, Pennsylvania.

As explained below, Transmission Owners, such as PPL Electric, are required by federal law to provide open access to their transmission systems. Through the PJM Interconnection LLC ("PJM") generation interconnection process described below, PJM and PPL Electric determined that the proposed Project is necessary to connect Lackawanna Energy's planned new Power Plant to the electric grid.

The proposed Project will require approximately 3.1 miles of existing single-circuit 230 kV transmission line to be rebuilt with higher capacity, triple-bundle conductors to accommodate the additional load from the Power Plant. One end of the rebuilt, higher capacity conductors will be interconnected with the Lackawanna 500-230-69 kV Substation by construction of approximately 0.4 miles of new 230 kV transmission line. The other end of the rebuilt, higher capacity conductors will be interconnected with the Lackawanna Energy Power Plant by construction of approximately 0.5 miles of new single-circuit 230 kV transmission line. These three segments of the proposed Project are further described below.

B. EXISTING SYSTEM

PPL Electric's existing Lackawanna 500-230-69 kV Substation is located in Blakely Borough and currently supplies 60,590 customers. The existing Lackawanna-Peckville #3 230 kV Transmission Line extends approximately 2.4 miles from the Lackawanna 500-230-69 kV Substation to the Peckville 230-69 kV Substation, which currently is inactive. The existing Blooming Grove-Peckville 230 kV Transmission Line extends approximately 29 miles from the Peckville 230-69 kV Substation to the Blooming Grove 230-69 kV Substation, which currently supplies 26,107 customers. A one-line diagram and map of the existing system are provided as Figures 1-1 and 1-2, respectively.

C. NEED FOR THE PROJECT

1. Overview of PJM's Role

In 1996, the Federal Energy Regulatory Commission's ("FERC") issued Order No. 888, which requires Transmission Owners to offer access to their transmission systems to third parties on a non-discriminatory basis. FERC's Order No. 890 requires open and transparent transmission planning. Both orders focus on creating a level playing field to make the transmission system accessible to all market participants at fair prices. FERC Order 1000, which was issued in the summer of 2011, requires local transmission planners to participate in regional planning processes. It also requires regional authorities to allow cost recovery for transmission that is necessary to achieve public policy goals, which include bringing clean and renewable power to market. Finally, FERC Order 1000 provides procedures for non-incumbent developers (non-Transmission Owners) to construct, operate, and maintain new transmission facilities necessary to interconnect with the electric grid.

As a FERC-approved RTO, PJM administers the process for the interconnection of all new generation facilities to the PJM Transmission Grid, pursuant to the PJM Open Access Transmission Tariff – Part VI (Interconnections with the Transmission System), Subpart A – Generation Interconnection Procedures. PJM's queue-based interconnection process offers

developers the flexibility to explore their respective generation interconnection business opportunities.

Under these procedures, new generation applicants may request interconnection service by submitting an Interconnection Request. As part of the Interconnection Request, the generator requesting interconnection is required to identify points of interconnection with the PJM transmission grid. Upon receipt of the completed Interconnection Request, the project is placed in a PJM interconnection queue.

PJM staff, in coordination with any affected Transmission Owner(s), undertakes a Generation Interconnection Feasibility Study and System Impact Study. The Generation Interconnection Feasibility Study assesses the practicality and cost of interconnecting the generating unit into the PJM system. The System Impact Study is a comprehensive regional analysis of the impact of adding the new generation facility to the system and an evaluation of the impact on deliverability to PJM load in the particular PJM region where the generator facility is located.

Upon completion of the Generation Interconnection Feasibility Study and System Impact Study, a Generation Interconnection Facilities Study is performed by PJM, in coordination with any affected Transmission Owner(s). The Generation Interconnection Facilities Study documents the engineering design work necessary to begin construction of any transmission facilities required to interconnect the new generation with the electric grid. The Generation Interconnection Facilities Study also provides the cost estimate for the facilities and network upgrades necessary to accommodate the project, as well as an estimate of the time required to complete detailed design and construction of the facilities and upgrades.

If the results of the Generation Interconnection Facilities Study are acceptable to the new interconnection applicant and the affected Transmission Owner(s), an Interconnection Construction Service Agreement is executed. The construction of any interconnection facilities required to interconnect a generator project with the PJM transmission grid is performed in accordance with the terms and conditions specified in the Interconnection Construction Service Agreement.

2. The Lackawanna Energy Power Plant

Lackawanna Energy is proposing to construct and operate a combined cycle 1370 MW natural-gas fired Power Plant. The Power Plant will consist of three natural gas fired turbines that are each coupled with one heat recovery steam generator that delivers steam to a single steam turbine generator. The gas turbine systems burn natural gas to generate electricity. Energy normally lost in the exhaust and cooling system is instead captured in the heat recovery unit and converted into useful thermal energy, in the form of steam. In order to get power produced from the Power Plant to the electric market, the Power Plant must be interconnected with the electric grid.

In order to deliver the power into the electric grid, the Power Plant must interconnect with the existing transmission system. Lackawanna Energy applied for and received PJM approval to interconnect with PPL Electric's existing 230 kV transmission line located in close proximity to the site for the planned new Power Plant.

Through the PJM interconnection process described above, PJM and PPL Electric determined that the interconnection of the proposed Power Plant with PPL Electric's transmission system will require construction of approximately 4.0 miles of high capacity 230 kV transmission line from the proposed Lackawanna Energy Power Plant in Jessup Borough to PPL Electric's existing Lackawanna 500-230-69 kV Substation in Blakely Borough. The point of interconnection (POI) will occur at the dead-end structure located at the Lackawanna Energy Power Plant. Under the Interconnection Construction Service Agreement, Lackawanna Energy requested PPL Electric to build the facilities necessary to interconnect the Power Plant with the existing transmission system.

The Lackawanna Energy interconnection request and approval are available on the PJM website at: http://www.pjm.com/planning/generation-interconnection/generation-queue-active.aspx. The original Project is referred in the PJM Generation Interconnection Queue as

"X4-048" which indicates its queue position in the PJM interconnection process. The modified proposal is referred to as "Y2-089."[1]

D. PROPOSED SYSTEM

The Lackawanna Energy Power Plant will be located in Jessup Borough, Lackawanna County approximately 1 mile southeast of PPL Electric's Peckville 230-69 kV Substation. Upon Commission approval, the Power Plant will be interconnected to the PPL Electric transmission system by: (i) rebuilding approximately 3.1 miles of existing 230 kV transmission line within the existing right-of-way; (ii) constructing approximately 0.4 miles of new single-circuit 230 kV transmission line on PPL Electric-owned property to interconnect the rebuilt line with the Lackawanna 500-230-69 kV Substation located in Blakely Borough; and (iii) constructing approximately 0.5 miles of new single-circuit 230 kV transmission line within new right-of-way between the rebuilt 230 kV transmission line and the POI with the Lackawanna Energy Power Plant in Jessup Borough. These three segments of the proposed Project are further described below. A one-line diagram and map of the proposed Project are provided in Figures 1-3 and 1-4, respectively.

The first segment of the Project requires the construction of approximately 0.4 miles of new single-circuit 230 kV transmission line between the Lackawanna 500-230-69 kV Substation located in Blakely Borough and the existing Lackawanna-Peckville #3 230 kV Transmission Line located in Archbald Borough. This segment of new 230 kV transmission line will be located entirely on PPL Electric's property owned in fee for the existing Lackawanna 500-230-69 kV Substation and associated transmission lines interconnected with the Lackawanna 500-230-69 kV Substation.

[1] Lackawanna Energy signed an Interconnection Construction Service Agreement for their first interconnection request for a 1000 MW plant (X4-048). In January 2014 Lackawanna Energy submitted a subsequent interconnection request for another 370 MW of capacity for a total of 1370 MW (Y2-089). The Y2-089 request is currently going through the PJM study process. A copy of the Y2-089 interconnection request can be found on the PJM website: ftp://www.pjm.com/planning/project-queues/impact_studies/y2089_imp.pdf.

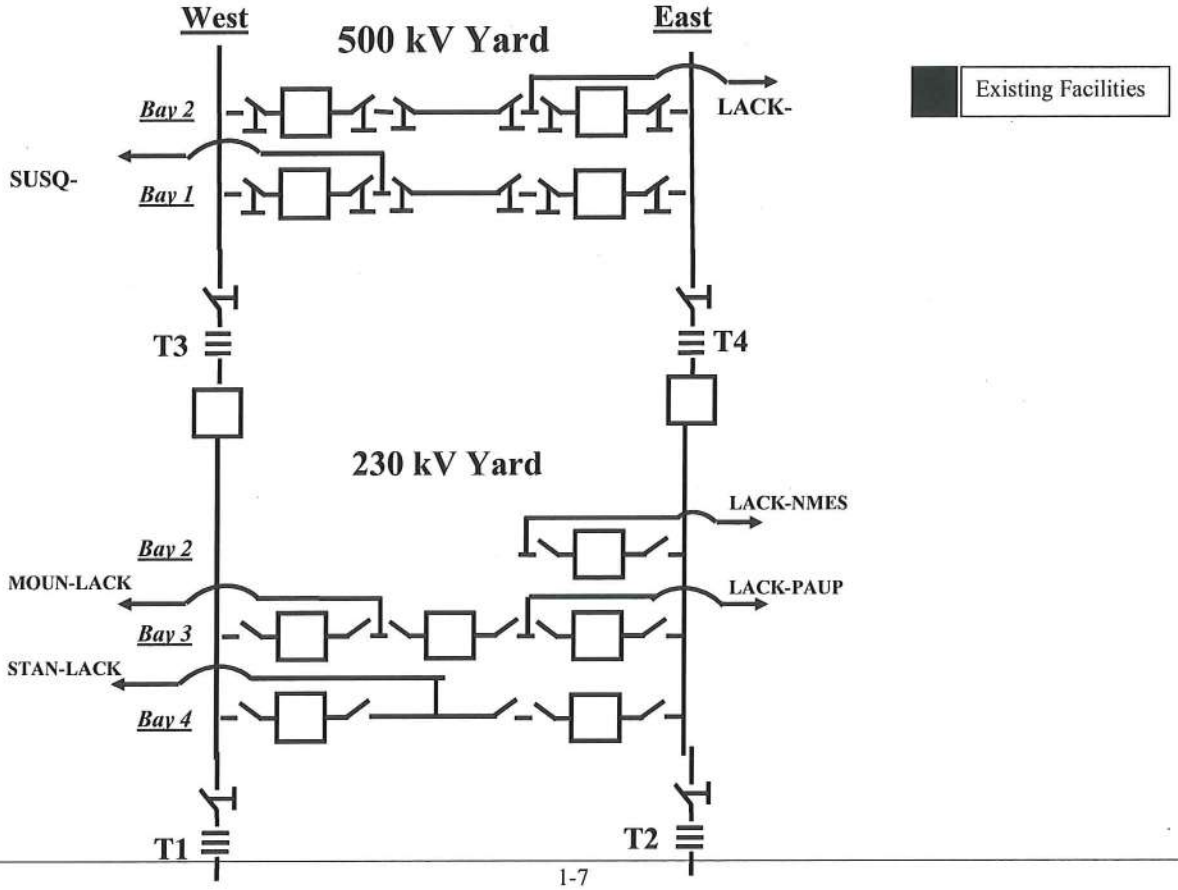
The second segment of the Project requires the rebuild of approximately 3.1 miles of existing single-circuit 230 kV transmission line within the exiting right-of-way. Importantly, if the 3.1 miles of existing single-circuit 230 kV transmission line is not rebuilt as part of this Project, a new separate transmission line would have to be built where one does not presently exist today in order to interconnect the Power Plant with the electric grid. The second segment will extend approximately 2.4 miles from the Lackawanna 500-230-69 kV Substation to the Peckville 230-69 kV Substation. The second segment will continue approximately 0.7 miles from the Peckville 230-69 kV Substation to a point on the existing single-circuit located just west of Breaker Street in Jessup Borough.

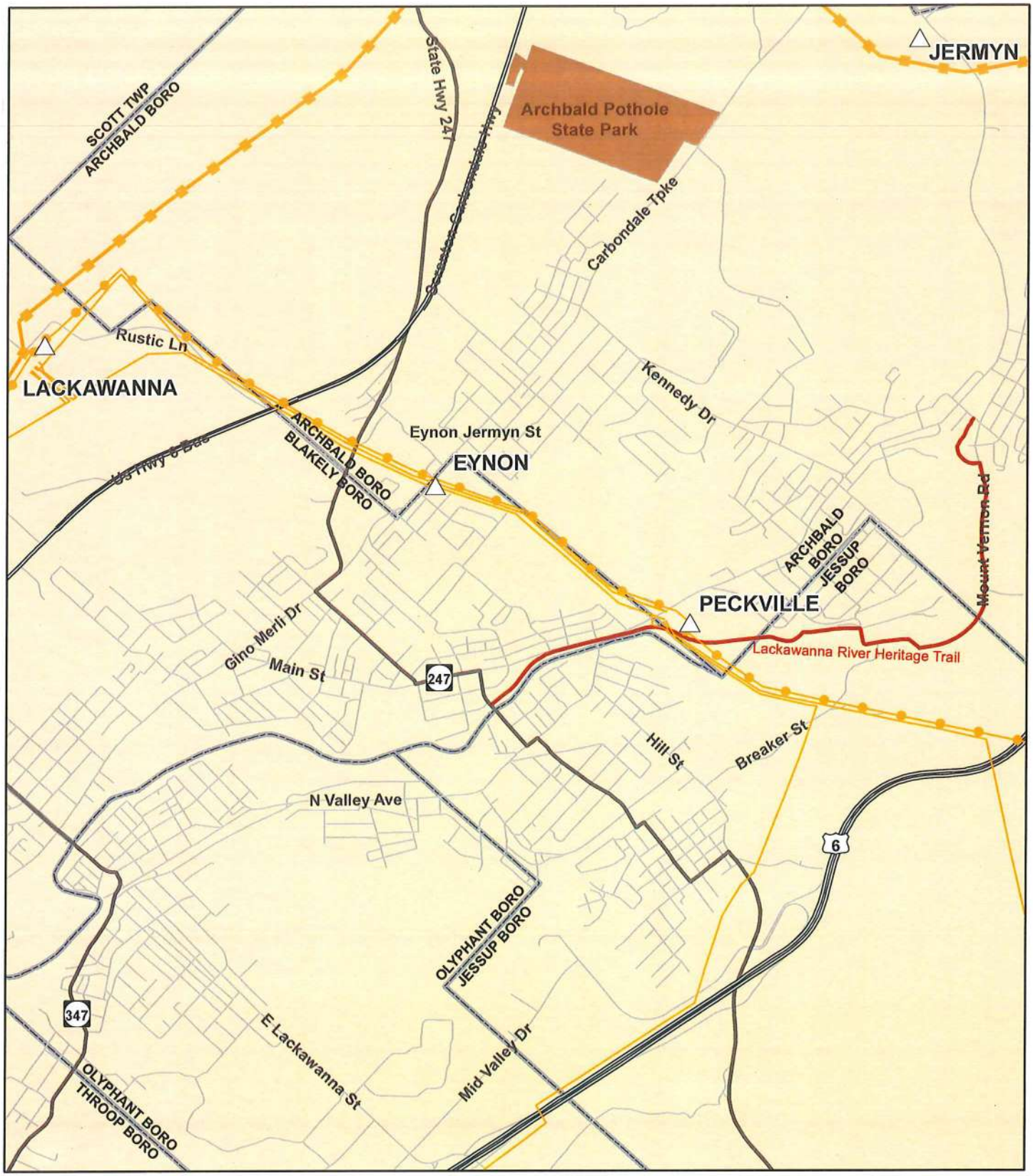
The third segment of the Project requires the construction of approximately 0.5 miles of new single-circuit 230 kV transmission line to interconnect the planned new Power Plant with the rebuilt 230 kV transmission line described above for the second segment of the Project. The third segment of the Project will extend approximately 0.5 miles from the end of the rebuilt 230 kV transmission line, just west of Breaker Street in Jessup Borough, to the point of interconnection for the new Power Plant located in Jessup Borough. This segment of the Project will be constructed within right-of-way to be obtained by PPL Electric.

Under the PJM-approved Interconnection Construction Service Agreement, the required new 230 kV transmission line will be constructed by PPL Electric. Upon completion and receipt of all necessary approvals and permits, all three segments of the new 230 kV transmission line will be owned and operated by PPL Electric. PPL Electric is therefore seeking Commission approval for siting and construction of the new transmission line.

The estimated cost to design and construct the interconnection 230 kV tie line is approximately $21.2 million. The entire cost of the Project will be paid for by Lackawanna Energy. Subject to the Commission's approval, construction is scheduled to begin in spring of 2016 to support the June 1, 2017 in-service date of the Power Plant.

Figure 1-1. Functional One-Line Diagram of Existing Lackawanna Substation





Legend

- Substation
- Trail

Existing Transmission

- 500kV
- 230kV
- Below 230kV
- State Park
- Municipality Boundary

Figure 1-2: Existing Facilities

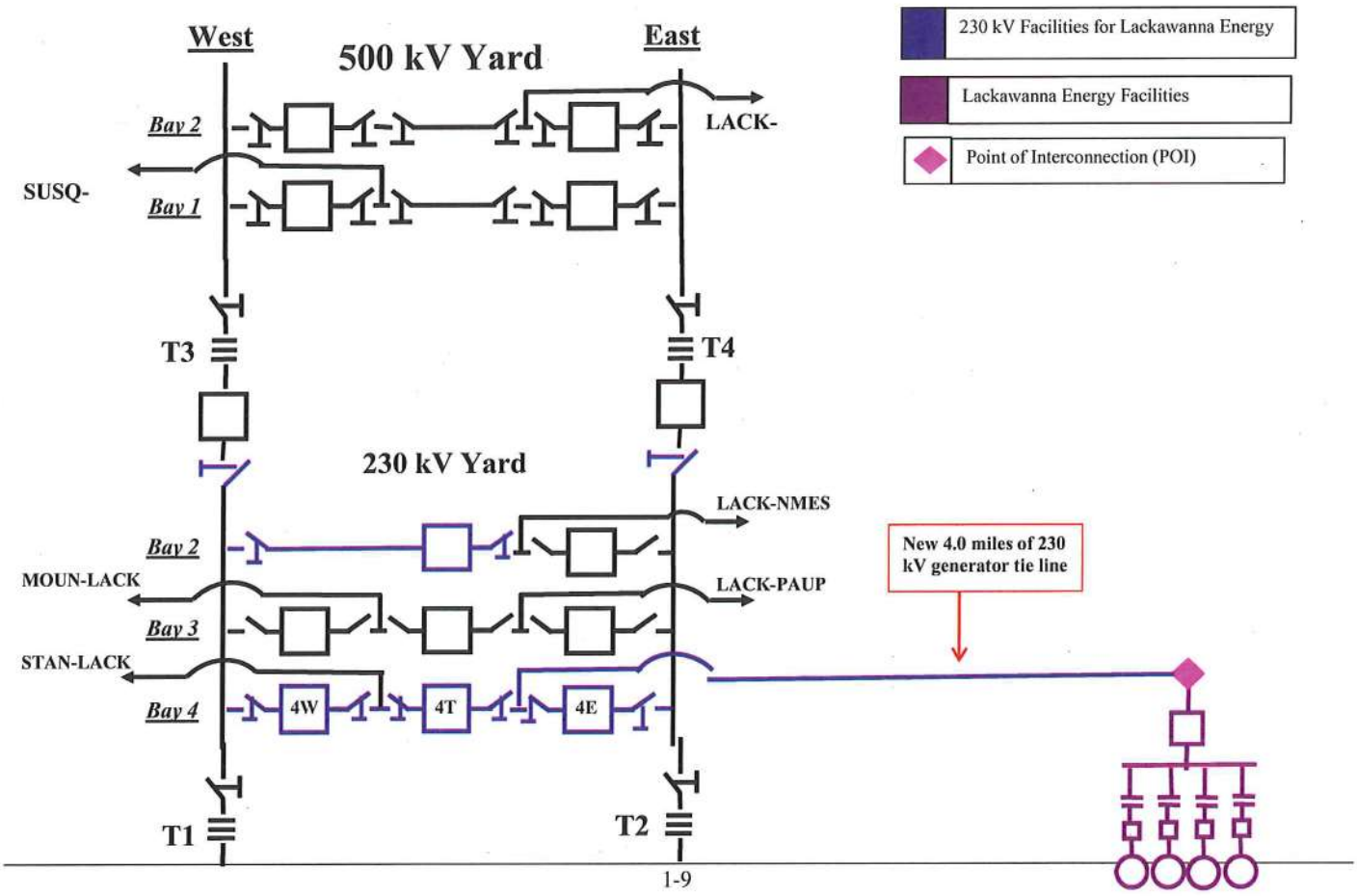
N W E S

0 2,000 4,000 Feet

ppl Louis Berger

Projected Coordinate System: PA State Plane, North.
Datum: North American Datum of 1983 (NAD83).
Projection: Lambert Conformal Conic.
Linear Unit: Feet.
Ellipsoid: Geodetic Reference System 80.

Figure 1-3. Functional One-Line Diagram of Proposed System



Legend

- Substation
- Rebuild Segment
- New Construction Segment
- Trail

Existing Transmission

- 500kV
- 230kV
- Below 230kV
- State Park
- Municipality Boundary

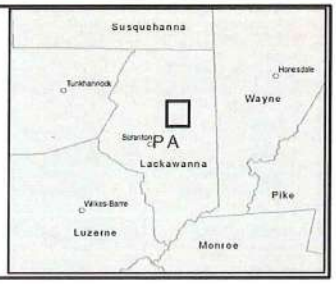
Figure 1-4: Proposed Facilities

N W E S

0 2,000 4,000 Feet

ppl Louis Berger

Projected Coordinate System: PA State Plane, North.
Datum: North American Datum of 1983 (NAD83).
Projection: Lambert Conformal Conic.
Linear Unit: Feet.
Ellipsoid: Geodetic Reference System 80.



ATTACHMENT 2

LACKAWANNA ENERGY – LACKAWANNA 230 KV TRANSMISSION LINE

ENGINEERING STATEMENT

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FIGURE 2-4: TYPICAL RIGHT RUNNING ANGLE STEEL MONOPOLE STRUCTURE 2-7

FIGURE 2-5: TYPICAL LEFT RUNNING ANGLE STEEL MONOPOLE STRUCTURE 2-8

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ATTACHMENT 2

LACKAWANNA ENERGY – LACKAWANNA 230 KV TRANSMISSION LINE

ENGINEERING STATEMENT

A. DESCRIPTION OF THE PROPOSED LINE

PPL Electric Utilities Corporation (PPL Electric) seeks approval from the Pennsylvania Public Utility Commission ("Commission" or "PUC") for the construction of a single-circuit 230 kV transmission line to interconnect the proposed Lackawanna Energy Gas-Fired Power Plant ("Power Plant") to be constructed by Lackawanna Energy Center LLC ("Lackawanna Energy"), an independent power producer. Pursuant to the PJM Interconnection LLC ("PJM") approved interconnection process described in Attachment 1, the Power Plant will be interconnected to the PPL Electric transmission system by rebuilding a portion of an existing 230 kV transmission line and constructing two new segments of 230 kV line (the "Project").

As described in Attachment 1, upon Commission approval, the Power Plant will be interconnected to the PPL Electric transmission system by: (i) rebuilding approximately 3.1 miles of existing 230 kV transmission line within the existing right-of-way; (ii) constructing approximately 0.4 miles of new single-circuit 230 kV transmission line on PPL Electric-owned property to interconnect the rebuilt line with the Lackawanna 500-230-69 kV Substation located in Blakely Borough; and (iii) constructing approximately 0.5 miles of new single-circuit 230 kV transmission line within new right-of-way to interconnect the rebuilt 230 kV transmission line with the Power Plant in Jessup Borough. Engineering descriptions of these three segments of the proposed Project are provided below.

The first segment of the Project requires the construction of approximately 0.4 miles of new single-circuit 230 kV transmission line between the Lackawanna 500-230-69 kV Substation located in Blakely Borough and the existing Lackawanna-Peckville #3 230 kV

Transmission Line located in Archbald Borough. The first segment of the Project will require four new single-circuit, weathering steel monopoles. The 230 kV steel monopoles will be approximately 124 feet in height and will be self-supported on concrete caisson foundations. A depiction of the type of monopoles used for this segment of the Project is provided in Figures 2-3 through 2-7.

The second segment of the Project requires the rebuild of approximately 3.1 miles of existing single-circuit 230 kV transmission line within the existing right-of-way (ROW).[1] The existing 230 kV line currently uses wooden H-frame and steel lattice structures that are approximately 80 feet in height. Depictions of the existing steel lattice and wooden H-frame structures are provided in Figures 2-1 and 2-2. There are 29 H-frame and 4 steel lattice structures within the second segment of the Project that will be replaced by 29 new single-circuit, weathering steel monopoles. The new steel monopoles will be located immediately adjacent to the existing structures ("pole for pole") along the rebuilt segment. Further, no new steel monopoles will be placed on any property that currently does not have an existing structure. The new 230 kV steel monopoles will be approximately 126 feet in height and will be self-supported on concrete caisson foundations. A depiction of the type of monopoles used for this segment of the Project is provided in Figures 2-3 through 2-6.

The third segment of the Project requires the construction of approximately 0.5 miles of new single-circuit 230 kV transmission line to interconnect the planned new Power Plant with the rebuilt 230 kV transmission line described above for the second segment of the Project. The third segment of the Project will extend approximately 0.5 miles from the end of the rebuilt 230 kV transmission line, just west of Breaker Street in Jessup Borough, to the point of interconnection for the new Power Plant located in Jessup Borough. This segment of the Project will be constructed within right-of-way to be

[1] As explained in Attachment 1, the second segment will extend approximately 2.4 miles from the Lackawanna 500-230-69 kV Substation to the Peckville 230-69 kV Substation. The second segment will continue approximately 0.7 miles from the Peckville 230-69 kV Substation to a point just west of Breaker Street in Jessup Borough of the existing single-circuit.

obtained by PPL Electric. The third segment of the Project will require four new single-circuit, weathering steel monopoles. The 230 kV steel monopoles will be approximately 153 feet in height and will be self-supported on concrete caisson foundations. The new steel monopoles are depicted in Figures 2-3 through 2-6.

The new 230 kV circuit for the entire Project will utilize three phase conductors and two overhead ground wires. Each phase conductor will be composed of a triple-bundle of 1590 kcmil,[2] 45/7 stranding ACSR[3] conductors. The overhead ground wires will each be 48-count, 0.752-inch diameter fiber optical ground wires that will provide lightning protection and communication between substation breakers that remove the line from service should a fault occur.

The proposed new 230 kV lines will be designed to comply with, and generally exceed, current National Electrical Safety Code (NESC) standards. Design specifications and safety rules practiced by PPL Electric are set forth in PPL Electric's Design Criteria and Safety Practices, which is provided as Attachment 4. The minimum conductor to ground clearance will be 32 feet, which occurs at a maximum thermal conductor temperature of 140 degrees Celsius.

The estimated cost to design and construct the Project is approximately $21.2 million[4]. The entire cost of the Project will be the responsibility of Lackawanna Energy, which will own the Power Plant.

[2] A kcmil or circular mil is the cross-sectional area of a wire one mil in diameter, where 1 kcmil = 0.5067 mm².
[3] ACSR stands for aluminum conductor steel reinforced.
[4] The estimated cost for the proposed Project is an order-of-magnitude estimate developed using averages of recent costs for similar projects and without an in-depth analysis of filed investigation. The estimated cost is subject to change as the constructability of the Project, sequence of construction, and other factors that may affect cost are identified and analyzed as the Project progresses.

B. MAGNETIC FIELD MANAGMENT

PPL Electric's Magnetic Field Management Program is applied to new and reconstructed transmission line projects. The company does not believe that the current scientific evidence demonstrates that magnetic fields cause any adverse health effects or pose a health or safety danger to the public. Nevertheless, PPL Electric has determined, as a matter of policy, to design its new and rebuilt transmission lines to reduce magnetic fields when that can be done at low or no cost and consistent with functional requirements. PPL Electric's Magnetic Field Management Program has been developed to implement that policy decision. To reduce magnetic field exposures, the program generally prescribes the use of a line design that provides five feet higher ground clearance than NESC standards, and reverse phasing of new double-circuit lines where it is feasible to do so at low or no cost.

The Project is a single-circuit 230 kV transmission line and, therefore, reverse phasing does not apply. However, the Project will be designed for ground clearances that are a minimum of five feet higher than the required NESC minimum ground clearance for 230 kV lines, which should reduce the potential for exposure to magnetic fields.

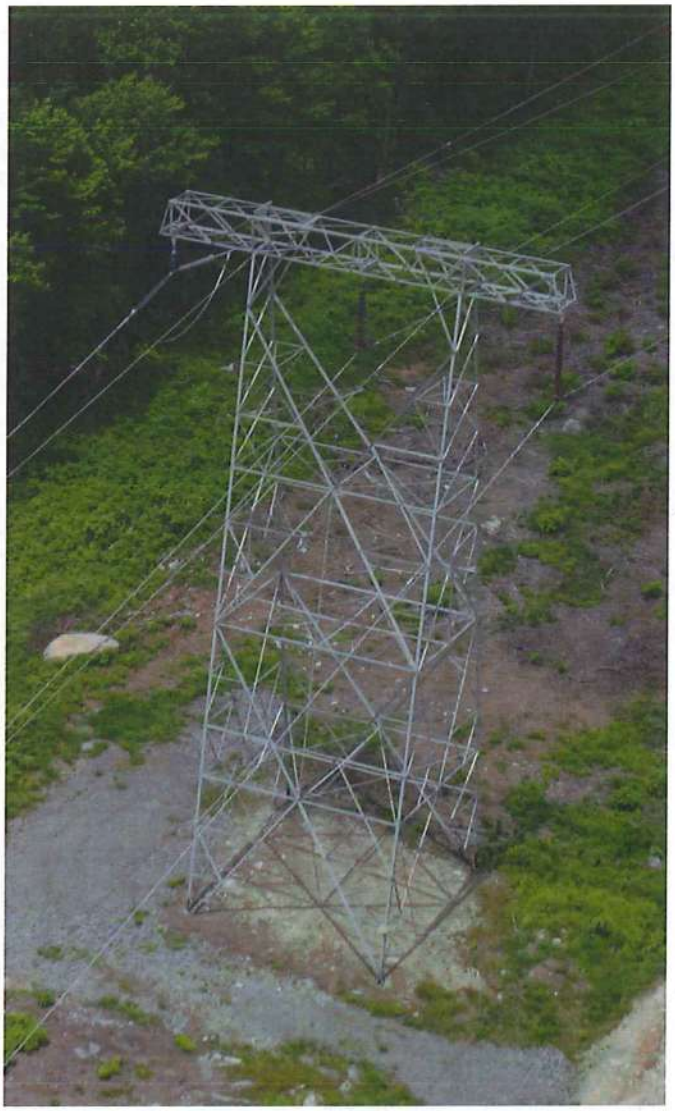

Figure 2-1. Typical Existing Steel Lattice Structure

Figure 2-2. Typical Existing Wooden H-Frame Structure

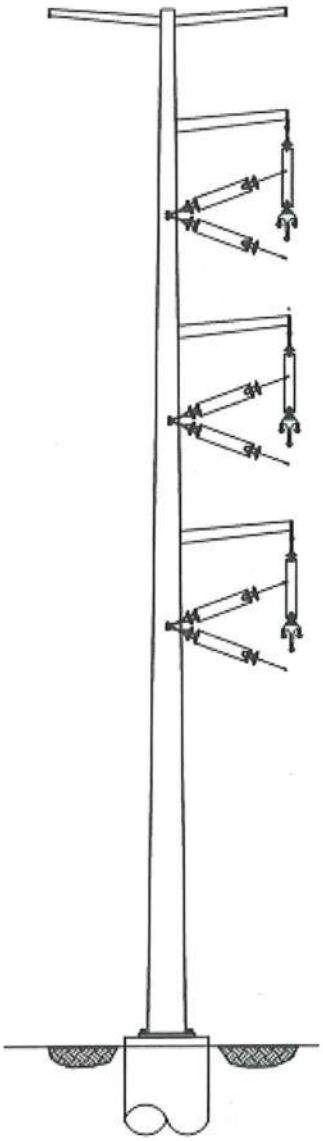

Figure 2-3: Typical Deadend Steel Monopole Structure

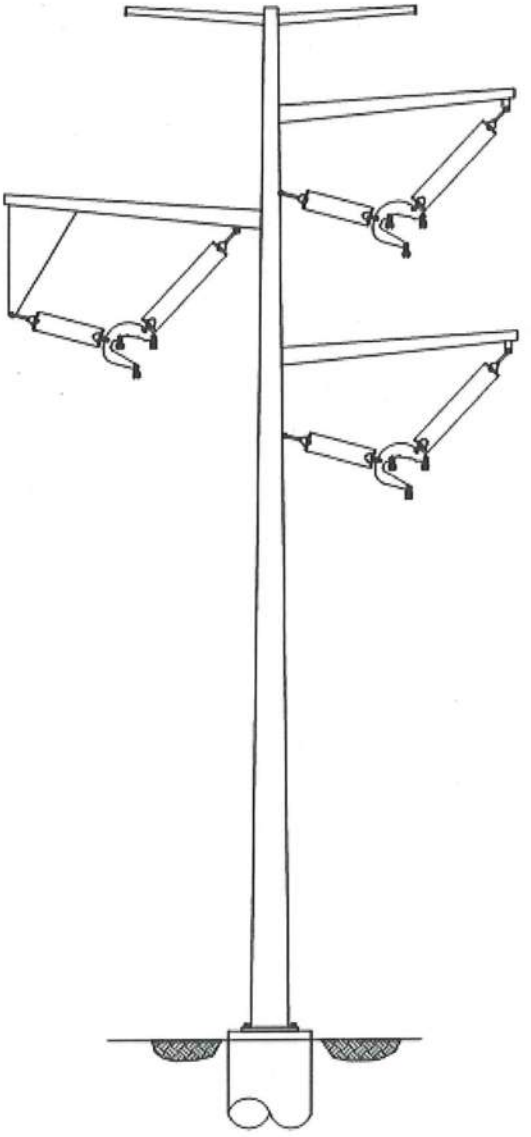

Figure 2-4: Typical Right Running Angle Steel Monopole Structure

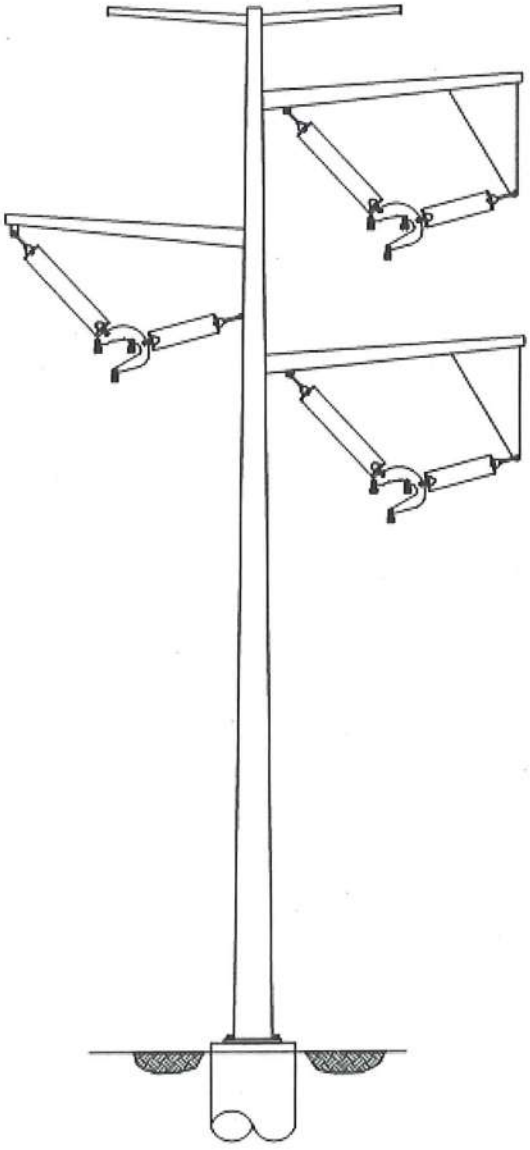

Figure 2-5: Typical Left Running Angle Steel Monopole Structure

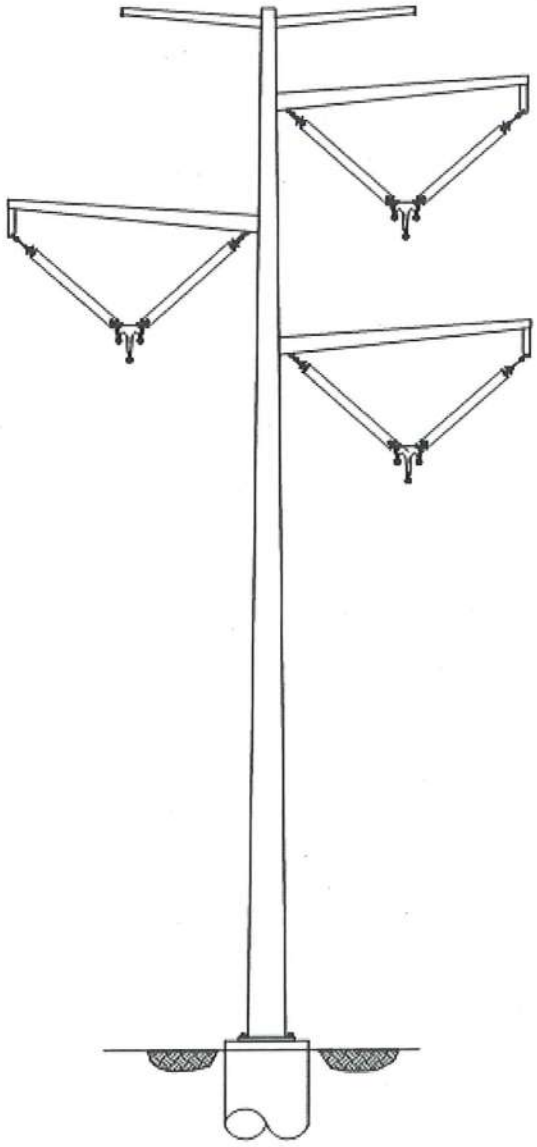

Figure 2-6. Typical Tangent Steel Monopole

ATTACHMENT 3

LACKAWANNA ENERGY – LACKAWANNA 230 KV TRANSMISSION LINE

DESCRIPTION OF THE RIGHT OF WAY

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ATTACHMENT 3

LACKAWANNA ENERGY – LACKAWANNA 230 KV TRANSMISSION LINE
DESCRIPTION OF THE RIGHT OF WAY

A. INTRODUCTION

PPL Electric Utilities Corporation ("PPL Electric") seeks approval from the Pennsylvania Public Utility Commission ("Commission" or "PUC") for the construction of a single-circuit 230 kV transmission line to interconnect the proposed Lackawanna Energy Gas-Fired Power Plant ("Power Plant") to be constructed by Lackawanna Energy Center LLC ("Lackawanna Energy"), an independent power producer. Pursuant to the PJM Interconnection LLC ("PJM") approved interconnection process described in Attachment 1, the Power Plant will be interconnected to the PPL Electric transmission system by rebuilding a portion of an existing 230 kV transmission line and constructing two new segments of 230 kV line (the "Project").

As described in Attachment 1, upon Commission approval, the Power Plant will be interconnected to the PPL Electric transmission system by: (i) rebuilding approximately 3.1 miles of existing 230 kV transmission line within the existing right-of-way; (ii) constructing approximately 0.4 miles of new single-circuit 230 kV transmission line on PPL Electric-owned property to interconnect the rebuilt line with the Lackawanna 500-230-69 kV Substation located in Blakely Borough; and (iii) constructing approximately 0.5 miles of new single-circuit 230 kV transmission line within new right-of-way to interconnect the rebuilt 230 kV transmission line with the Lackawanna Energy Power Plant in Jessup Borough.

Table 3-1 identifies the distance the proposed Project will traverse within each municipality.

Table 3-1. Municipalities Crossed	
Municipality	**Distance (miles)**
Jessup Borough	0.9
Blakely Borough	1.3
Archbald Borough	1.8

PPL Electric provided information about the proposed Project to each municipality and Lackawanna County.

B. RIGHT-OF-WAY DESCRIPTION

Under the PJM-approved Interconnection Construction Agreement, the Project will require approximately 3.1 miles of existing single-circuit 230 kV transmission line to be rebuilt with higher capacity, triple-bundle conductors to accommodate the additional load from the Power Plant. One end of the rebuilt, higher capacity conductors will be interconnected with the Lackawanna 500-230-69 kV Substation by construction of approximately 0.4 miles of new 230 kV transmission line. The other end of the rebuilt, higher capacity conductors will be interconnected with the Power Plant by construction of approximately 0.5 miles of new single-circuit 230 kV transmission line. These three segments of the proposed Project are further described below and in Attachments 1 and 2. An aerial exhibit is provided at the end of Attachment 3.

1. First Segment of New 230 kV Transmission Line on PPL Electric-Owned Property

The first segment of the Project requires the construction of approximately 0.4 miles of new 230 kV transmission line between the existing PPL Electric Lackawanna 500-23-69 kV Substation located in Blakely Borough and the existing Lackawanna – Peckville #3 230 kV Transmission Line located in Archbald Borough. This segment of new 230 kV transmission line will be located entirely on PPL Electric's property owned in fee for the existing Lackawanna 500-230-69 kV Substation and associated transmission lines interconnected with the Lackawanna 500-230-69 kV Substation. No new rights-of-way are required for this segment of the Project.

2. Second Segment of Rebuilt 230 kV Transmission Line

The second segment of the Project requires reconstruction of approximately 3.1 miles of existing single-circuit 230 kV transmission line. The second segment will extend approximately 2.4 miles from the Lackawanna 500-230-69 kV Substation to the Peckville 230-69 kV Substation, and will then continue approximately 0.7 miles from the Peckville 230-69 kV Substation to a point just west of Breaker Street in Jessup Borough.

PPL Electric's existing transmission corridor consists of fee-owned property and right-of-way that varies from 200 to 425 feet in width. The existing fee-owned property and right-of-way is sufficient to accommodate all construction activities associated with the rebuild of the second segment of the Project. No additional right-of-way is required to accommodate this segment of the Project.

Importantly, if the 3.1 miles of existing single-circuit 230 kV transmission line is not rebuilt as part of this Project, a new separate transmission line would have to be built where one does not presently exist today in order to interconnect the Power Plant with the electric grid. Further, the second segment of the Project will minimize impacts to the existing right-of-way. Although the new steel monopoles will increase in height, the new steel monopoles will have a smaller footprint than the existing wooden H-frame and steel lattice structures, the new structures will be located "pole for pole" with the existing structures, and no new structures will be placed on any property that currently does not have an existing structure.

3. Third Segment of New Rebuilt 230 kV Transmission Line on New Right-of-Way

The third segment of the Project requires the construction of approximately 0.5 miles of new single-circuit 230 kV transmission line to interconnect the planned new Power Plant with the rebuilt 230 kV transmission line described above for the second segment of the Project. The third segment of the Project will extend approximately 0.5 miles from the end of the rebuilt 230 kV transmission line, just west of Breaker Street in Jessup

Borough, to the point of interconnection for the new Power Plant located in Jessup Borough.

This segment of the Project will be constructed within right-of-way to be obtained by PPL Electric. Segment three of the Project will traverse three parcels previously owned by Pompey Coal Company ("Pompey").[1] PPL Electric will obtain right-of-way and easements for the construction and operation of the new 230 kV transmission line across two of the three parcels. The third parcel will be acquired by Lackawanna Energy for construction of the Power Plant. Lackawanna Energy will convey to PPL Electric the right-of-way and easement necessary for the construction and operation of the new 230 kV transmission line across the third parcel. PPL Electric also will obtain an easement for a permanent access road to the new right-of-way within the third segment of the Project.

C. ENVIRONMENTAL ASSESSMENT

PPL Electric conducted an online Pennsylvania Natural Diversity Inventory (PNDI) database review on October 29, 2014.[2] Based on this review, the Pennsylvania Fish and Boat Commission (PFBC), the Department of Conservation and Natural Resources (DCNR), and the U.S. Fish and Wildlife Service (USFWS) reported that the Project will not impact any threatened or endangered species, or special concern species and resources located within the Project area. The Pennsylvania Game Commission (PGC) indicated that further review is required for potential impacts to the eastern small-footed bat (*Myotis leibii*), which is a Pennsylvania threatened species, and the northern long-eared bat (*Myotis septentrionalis*), which is a Pennsylvania species of concern and was recently listed as a federally threatened species. As described below, PPL Electric conducted both of those reviews.

[1] PPL Electric provided a packet of information to fully notify the current landowner that PPL Electric will ultimately own and operate the third segment of the Project. The packet provides information about the proposed Project and informs the landowner of their legal rights and PPL Electric's legal rights with regard to this Project. This information includes the two notices that are required by 52 Pa. Code § 57.91.

[2] PNDI No. 20141029472170

At the request of PGC, PPL Electric conducted a habitat survey of the Project area to identify potential habitat for the eastern small-footed bat. Eastern small-footed bat habitat primarily consists of caves and mines during the winter and caves, mines and rock outcrops during the summer. Several potential habitat areas were identified within the existing and proposed right-of-way. Only one of these potential habitat areas is within zone of work for the proposed Project. The one potential habitat is located within the right-of-way for segment 3, approximately 200 feet southeast of Breaker Street in Jessup Borough. The habitat survey was provided to PGC on November 3, 2014. In a letter dated August 28, 2015, the PGC advised that no habitat mitigation is required provided that PPL Electric removes vegetation in this area by hand.

One potential bat hibernaculum, or winter shelter, was identified in an abandoned mine/cave adjacent to an existing access road. PPL Electric proposes to use an alternate access road to avoid any potential impacts to the bat hibernaculum. PGC requested a hibernacula study for the eastern small-footed bat in the vicinity of the potential hibernaculum. The bat hibernacula study will be conducted between in the fall of 2015. Once the bat hibernacula study is complete, PPL Electric will consult with the PGC to determine if any additional avoidance measures are required.

A second updated PNDI review was completed on May 26, 2014,[3] to include the northern long-eared bat. The updated PNDI review did not result in any known or potential impacts to the northern long-eared bat. Therefore, no further coordination with the USFWS is required.

On behalf of PPL Electric, PPL Electric's environmental permitting consultant, STV, submitted a letter to the Pennsylvania Historical and Museum Commission (PHMC) in November 2014 to request information on any archeological or historic architectural resources located within the Project area. In a letter dated December 5, 2014,[4] the PHMC indicated that additional information was needed to assess the Project's potential impact

[3] PNDI No. 20150526514250
[4] ER 2015-0262-069-A

to cultural resources. STV provided the additional information requested by PHMC on May 4, 2015. On June 10, 2015, PHMC issued a letter stating that the proposed Project would have no impacts on historic structures or archaeological resources.

Impacts to land use are anticipated to be minimal because the majority of the Project (3.5 of 4 miles) will be constructed within PPL Electric's existing right-of-way. The existing right-of-way currently is maintained in accordance with PPL Electric's Vegetation Management Program. This right-of-way also contains the Lackawanna – Peckville 69 kV Transmission Line. As previously mentioned, new structures will be placed in approximately the same locations as the existing structures. The 0.5-mile segment of new construction that requires new right-of-way will be constructed within a forested, reclaimed mining area owned by Pompey Coal Company. PPL Electric will use and update previously established access roads for construction where possible to further reduce interference with existing land uses.

No communication towers, pipelines, or other utilities will be affected by the Project. The closest airport is the Reed Airport, a private airport, located approximately 7 miles east of the Project area. PPL Electric does not anticipate any interference with airport operations because of the distance from the Project area and the presence of existing electrical facilities in the Project area. However, PPL Electric will file any required documentation with both the Federal Aviation Administration and the Pennsylvania Department of Transportation Bureau of Aviation.

The second segment presently crosses the Lackawanna River Heritage Trail, which parallels the Lackawanna River. PPL Electric has historically used a small asphalt-paved portion of the trail that is located on PPL Electric property to access the existing transmission line near the Peckville Substation. The portion of the trail crossed by the transmission line and used for temporary construction access will be temporarily unavailable during construction. PPL Electric will coordinate with the trail operator during and after construction to minimize impacts. PPL Electric will restore the trail as needed following construction. No additional impacts are anticipated to any unique

geological, scenic or natural areas, state lands, national parks, state parks, local parks, recreational areas or natural landmarks located within the Project area.

PPL Electric conducted a stream and wetland delineation of the Project area in October 2014. A General Permit 5 (GP-5) will be required for the overhead crossing of the Lackawanna River, and temporary impacts to the floodway of an Unnamed Tributary to the West Branch Tinklepaugh Creek caused by the replacement of an existing structure. A Submerged Lands License Agreement (SLLA) will also be required for the overhead crossing of the Lackawanna River, which is a state-navigable waterway. A General Permit 7 (GP-7) will be required for a permanent road crossing of an Unnamed Tributary to West Bank Tinklepaugh Creek. It is anticipated that the Project will have minimal impacts on delineated streams and wetlands because the majority of the Project will be constructed within an existing right-of-way, and because the new tower structures will be placed in close proximity to the existing tower structures. PPL Electric expects that all streams can be spanned and will attempt to avoid wetland impacts to the extent practical. Approximately 3,000 square feet of temporary wetland impacts are anticipated during Project construction. Temporary impacts will consist of timber matting through non-regulated areas that are covered by a Pennsylvania Department of Environmental Protection waiver. Therefore, the temporary wetland impacts are also covered by the waiver. No permanent wetland impacts will result from the Project. PPL Electric will obtain all permits required by the County Conservation District, the Pennsylvania Department of Environmental Protection and the U.S. Army Corps of Engineers and will comply with all of the terms and conditions placed on those permits.

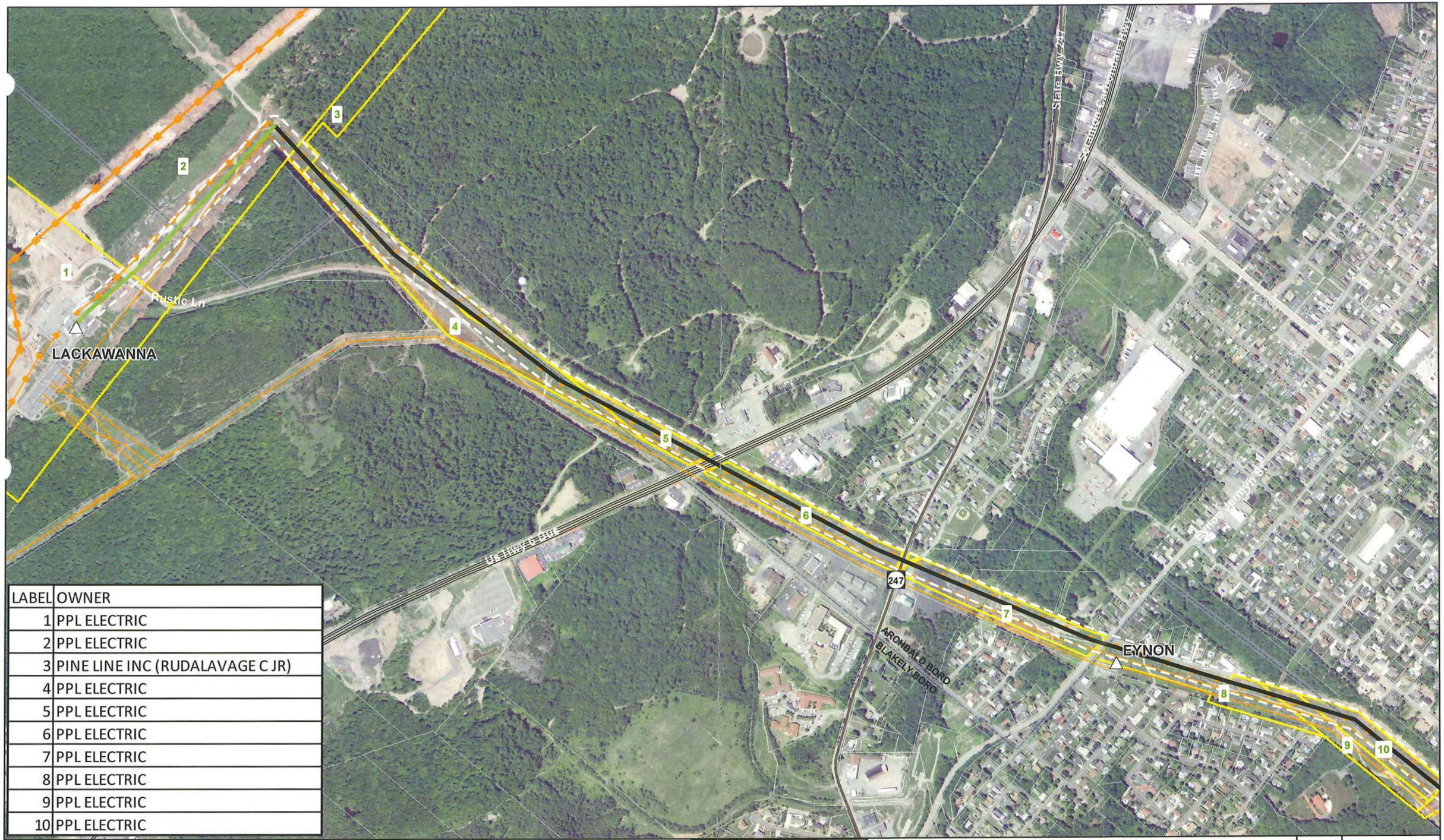
D. VEGETATION MANAGEMENT

Tree clearing will be completed before construction begins. The 0.4 mile-long right-of-way for the first segment currently is maintained in accordance with PPL Electric's Vegetation Management Program and no additional tree clearing is anticipated. PPL Electric owns most of the adjacent parcels along this first segment, which are all forested

and undeveloped outside of the existing PPL Electric right-of-way and fee-owned property.

The 3.1 mile-long existing right-of-way for the second segment also is maintained in accordance with PPL Electric's Vegetation Management Plan. In order to traverse the Peckville Substation property, which is owned in fee by PPL Electric, some additional tree clearing will be required within PPL Electric-owned property.

The new 0.5-mile-long right-of-way for the third segment of the proposed Project will require a new 150-foot-wide right-of-way to be cleared. In areas where vegetation management is required to complete the Project, PPL Electric will apply its "Specifications for Initial Clearing and Control of Vegetation On or Adjacent to Electric Line Right-of-Way Through Use of Herbicides, Mechanical and Hand Clearing Techniques" to mitigate any impacts. Tree clearing activities also will follow conditions as outlined in the PNDI review and approval process.



LABEL	OWNER
1	PPL ELECTRIC
2	PPL ELECTRIC
3	PINE LINE INC (RUDALAVAGE C JR)
4	PPL ELECTRIC
5	PPL ELECTRIC
6	PPL ELECTRIC
7	PPL ELECTRIC
8	PPL ELECTRIC
9	PPL ELECTRIC
10	PPL ELECTRIC

Legend
- Substation
- Rebuild Segment
- New Construction Segment
- ROW
- Parcel within ROW
- Parcel Boundary

Existing Transmission
- 500kV
- 230kV
- Below 230kV

Figure 3-1A : Aerial Map

Geographic Coordinate System: State Plane Pennsylvania North
Datum: North American Datum of 1983 (NAD 1983)

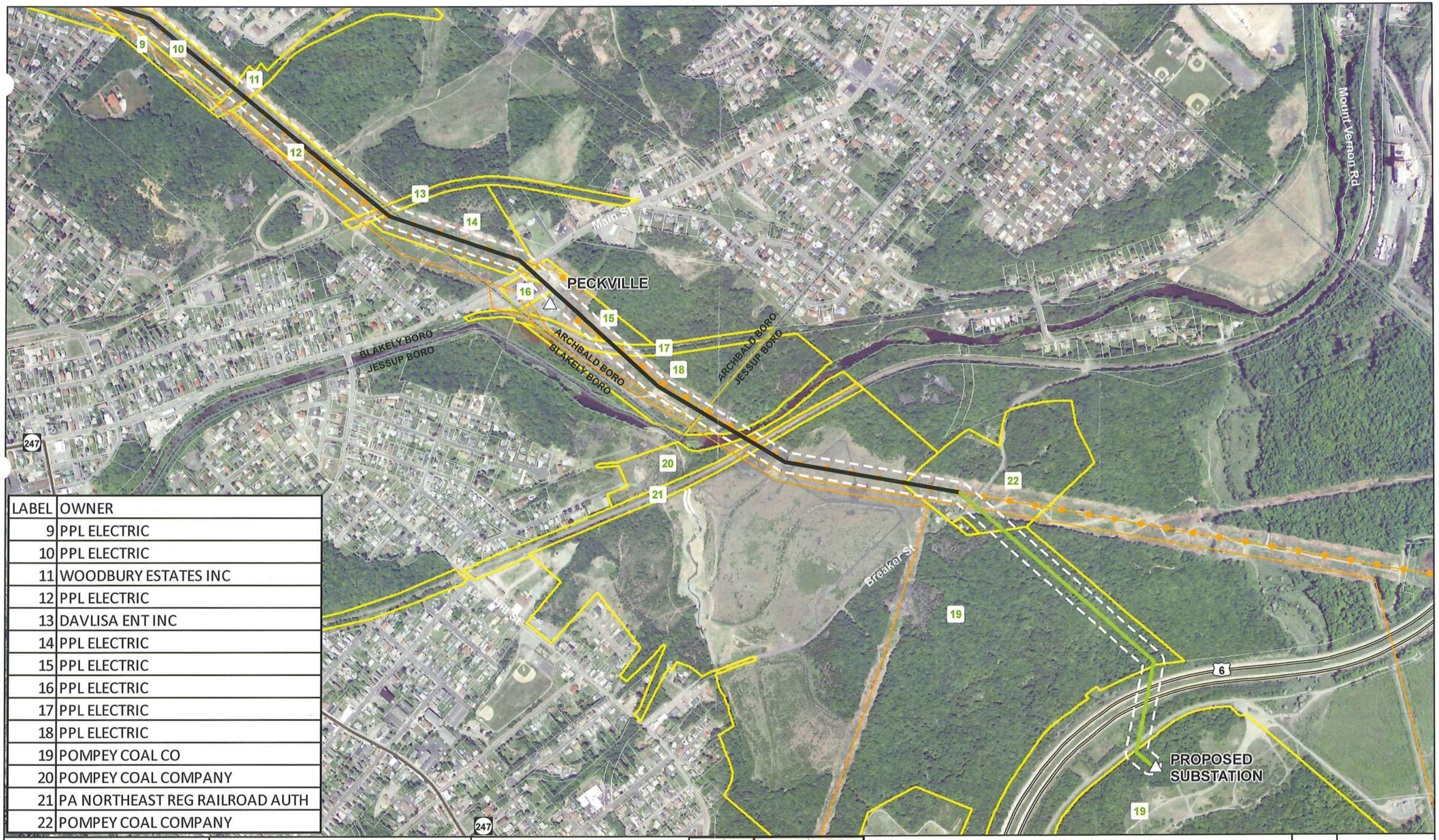
County: Lackawanna

0 325 650 975 Feet

N W E S

ppl

Scale:	1" = 650'
Sheet:	1 of 2
Date:	August 2015



LABEL	OWNER
9	PPL ELECTRIC
10	PPL ELECTRIC
11	WOODBURY ESTATES INC
12	PPL ELECTRIC
13	DAVLISA ENT INC
14	PPL ELECTRIC
15	PPL ELECTRIC
16	PPL ELECTRIC
17	PPL ELECTRIC
18	PPL ELECTRIC
19	POMPEY COAL CO
20	POMPEY COAL COMPANY
21	PA NORTHEAST REG RAILROAD AUTH
22	POMPEY COAL COMPANY

Legend
- Substation
- Rebuild Segment
- New Construction Segment
- ROW
- Parcel within ROW
- Parcel Boundary

Existing Transmission
- 500kV
- 230kV
- Below 230kV

Figure 3-1B : Aerial Map

Geographic Coordinate System: State Plane Pennsylvania North
Datum: North American Datum of 1983 (NAD 1983)

County: Lackawanna

0 325 650 975 Feet

N W E S

ppl

Scale:	1" = 650'
Sheet:	2 of 2
Date:	August 2015

ATTACHMENT 4

LACKAWANNA ENERGY – LACKAWANNA 230 KV TRANSMISSION LINE

PPL DESIGN CRITERIA AND SAFETY PRACTICES

The National Electrical Safety Code (NESC) is a set of rules to safeguard people during the installation, operation, and maintenance of electric power lines. The NESC contains the basic provisions considered necessary for the safety of employees and the public. Although it is not intended as a design specification, its provisions establish minimum design requirements. PPL Electric Utilities Corporation (PPL Electric) has developed design specifications and safety rules which meet or surpass all requirements specified by the NESC.

Engineering Design Criteria and Parameters

The NESC includes loading requirements and clearances for the design, construction, and operation of power lines. The "loads" on conductors and supporting structures are the mechanical forces that develop from the weight of the conductors, the weight of ice on the conductors, plus wind pressure on the conductors and supporting structures. Loading requirements are the loads on the conductors and structures that are anticipated assuming certain ice and wind conditions. Loading requirements always contain "safety factors" to allow for unknown or unanticipated contingencies. The clearances and loading requirements contained in the NESC were developed to ensure public safety and welfare.

PPL transmission line design standards meet or surpass the NESC standards. For example, the relative order of grades of construction for conductors and supporting structures is B, C, and N; Grade B being the highest. According to the NESC standards, construction Grades B, C, or N may be used for transmission lines (except at crossings of railroad tracks and limited access highways where Grade B construction is specified). However, PPL designs all of its transmission lines for Grade B construction. The use of Grade B design and construction specifies enhancements such as larger-minimum crossarm dimensions, larger-minimum conductor size, and increased safety factors.

Another example is the design parameters utilized to account for ice and wind loadings on the overhead ground wire (OHGW) and power conductors. The NESC standard ice and wind design magnitudes for the PPL territory are 0.5 inch thickness of radial ice combined with four pounds per square foot horizontal wind pressure (equivalent to 40-mile per hour wind velocity). The conductor sags and tensions used in line designs are the result of various ice and wind combinations, depending on the elevation at the line location and line design voltage. The conductor sags and tensions used in the design of all PPL transmission lines are at least 0.5-inch ice combined with eight pounds wind pressure (equivalent to 57 miles per hour wind velocity). This means that PPL lines are designed to operate safely and reliably during inclement weather even more severe than assumed by the NESC. In addition, PPL transmission lines are designed with more clearance to the ground than required by the NESC. The tables below compare PPL and NESC ground clearances for lines of various voltages.

138 kV

	Vertical Clearance to Ground	
Surface Underneath Conductors	NESC Standard	PPL Design
Roads, streets, alleys	21 Ft.	30 Ft.
Other land traversed by vehicles (such as cultivated field, forest, etc.)	21 Ft.	30 Ft.
Spaces accessible to pedestrians only	17 Ft.	30 Ft.
Railroad tracks	31 Ft.	35 Ft.

230 kV

Surface Underneath Conductors	Vertical Clearance to Ground NESC Standard	PPL Design
Roads, streets, alleys	23 Ft.	32 Ft.
Other land traversed by vehicles (such as cultivated field, forest, etc.)	23 Ft.	32 Ft.
Spaces accessible to pedestrians only	19 Ft.	32 Ft.
Railroad tracks	31 Ft.	36 Ft.

500 kV

Surface Underneath Conductors	Vertical Clearance to Ground NESC Standard	PPL Design
Roads, streets, alleys	28 Ft.	53 Ft.
Other land traversed by vehicles (such as cultivated field, forest, etc.)	28 Ft.	53 Ft.
Spaces accessible to pedestrians only	24 Ft.	53 Ft.
Railroad tracks	38 Ft.	53 Ft.

A relay protection system is used to protect the public safety and welfare as well as equipment and the transmission system. Relay protection is installed for all transmission lines to automatically de-energize the line in the unlikely event that the line or supporting structure fails and the line contacts the ground.

Periodic Maintenance Program on All Transmission Lines

To ensure continued public safety and integrity of service, a periodic maintenance and inspection program is implemented for every transmission line. The program is administered through the use of helicopter patrols, with supplemental foot and structure climbing patrols. A number of helicopter patrols are performed on all lines annually. The

two-man helicopter crew flies parallel, to the left, and above the line so that the observer can look for signs of line damage or deterioration and observe clearances between vegetation and conductors. The observations are included in a report that is forwarded to the appropriate department for corrective action.

Foot and structure climbing patrol programs for a transmission line begin approximately three to five years after the line is energized, unless a helicopter patrol reports a need for earlier action. The frequency of foot patrols varies from once every year to once every several years depending on line type and age.

An assigned foot patroller checks right-of-way conditions, including access roads, bridges, pole washouts, tower footers, vegetation height and clearance to conductors, pole and tower deterioration and, with the use of binoculars, insulators, and condition of hardware. Identified problems are included in a report that is forwarded to the appropriate department for corrective action.

A scheduled line outage is required to perform an overhead patrol because of "hands-on" inspection of hardware. Overhead patrols are conducted on a schedule determined by line age, operating record, and observed general condition. The necessary repairs are also done during the inspection outage.

Personnel Safety Rules

The following are a few of the PPL Electric safety rules that demonstrate the Company's concern for employee safety:

- Work procedures have been developed to allow work to be performed on energized facilities in a safe manner. When lines or apparatus are removed from service to be worked on, the Energy Control Process system is applied. This system provides that a red tag must be physically placed on the control handle of the de-energized equipment. The red tag may be removed only after proper authorization to energize the equipment. Various other tags are used for limited

operations and informational purposes. Employees will not apply or remove a tag or change the status of tagged equipment unless authorized.

- Temporary safety grounds are used on de-energized facilities for employee safety during maintenance, construction, or reconstruction work. Safety grounds are wires connecting the de-energized facility to an electrical ground. If the facility should be energized, the safety grounds will divert the current directly to ground and reduce the likelihood of personal injury. The conductor size and attachment clamps of temporary safety grounds must be capable of conducting anticipated fault currents. Rubber gloves, rubber sleeves, and additional rubber protective equipment are used as required when applying or removing temporary safety grounds to or from the lines or apparatus to be grounded. An approved nonconductive working stick of sufficient length to allow workers to maintain the following required minimum clearances is used to test that the line has been de-energized and to apply temporary safety grounds:

Voltage-kV	Minimum Clearance
138	3'-7"
230	5'-3"
500	11'-3"

Before applying grounds, a test is done to confirm that the line is de-energized. The voltage test device is checked before and after use to assure reliability. When ground pins are used to establish proper ground points, they are driven to a depth of not less than four feet as near vertical as possible.

- Poles or structures are inspected and examined for structural integrity before climbing. If there is any reason to believe that a pole is unsafe, it is stabilized before work is performed. Appropriate safety gear in the form of body belts, safety straps, hard hats, gloves, etc., is worn by linemen during line work activity.