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File #: 165216

May 16, 2016

VIA ELECTRONIC FILING

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: Petition of PPL Electric Utilities Corporation for Waiver of Certain Provisions of the Pennsylvania Public Utility Commission’s Regulations at 52 Pa. Code § 57.71 et seq., for the Siting and Reconstruction of Approximately 4.7 Miles of Transmission Line in Allen Township, Northampton County, and North Whitehall Township, Lehigh County, Pennsylvania to Interconnect New Siegfried Substation 230 kV and 69 kV Switchyards to the Electric Grid - Docket No. P-2016-

Dear Secretary Chiavetta:

Enclosed for filing is the Petition for Waiver of PPL Electric Utilities Corporation in the above-referenced proceeding.

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

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

Rosemary Chiavetta, Secretary

May 16, 2016

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cc: Certificate of Service
Office of Consumer Advocate
Office of Small Business, Advocate
Bureau of Investigation &, Enforcement
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 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 for Historic Preservation
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120-0053
Attn: Mr. Douglas C. McLearen, Chief

Pennsylvania 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

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

Lehigh Valley Planning Commission
961 Marcon Boulevard, Suite 310
Allentown, PA 18109
Attn: Mr. Becky A. Bradley, AICP

Northampton County Council
Northampton County Courthouse
669 Washington Street
Easton, PA 18042
Attn: Mr. John Cusick, President

Allen Township Planning Commission
4714 Indian Trail Road
Northampton, PA 18067
Attn: Mr. W. Eugene Clater, Chairman

Allen Township
4714 Indian Trail Road
Northampton, PA 18067
Attn: Ms. Ilene Eckhart,
Township Manager

Allen Township Board of Supervisors
4714 Indian Trail Road
Northampton, PA 18067
Attn: Mr. Bruce Frack, Chairman

Lehigh County Board of Commissioners
Lehigh County Government Center
17 South Seventh Street
Allentown, PA 18101
Attn: Mr. Brad Osborne, Chair

North Whitehall Township Planning
Commission
3256 Levans Road
Coplay, PA 18037
Attn: Mr. Brian Horwith, Chairman

North Whitehall Township
3256 Levans Road
Coplay, PA 18037
Attn: Mr. Jeff Bartlett, Township Manager

North Whitehall Township
Board of Supervisors
3256 Levans Road
Coplay, PA 18037
Attn: Mr. Ronald J. Heintzelman,
Chairman

Cihylik Farms
3960 Cherryville Road
Northampton, PA 18067

Lehigh County
17 South 7th Street
Allentown, PA 18101

Northampton Borough Municipal Authority
1 Clear Springs Drive
Northampton, PA 18067
Attn: Stephen J. Kerbacher,
General Manager

Pennsylvania Lines, LLC
110 Franklin Road
Roanoke, VA 24042

M&T Real Estate Ventures, LLC
3029 College Heights Blvd
Allentown, PA 18101

Date: May 16, 2016



Christopher T. Wright

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of PPL Electric Utilities :
Corporation for Waiver of Certain :
Provisions of the Pennsylvania Public : Docket No. P-2016-_____
Utility Commission’s Regulations at 52 Pa. :
Code § 57.71 *et seq.*, for the Siting and :
Reconstruction of Approximately 4.7 Miles :
of Transmission Line in Allen Township, :
Northampton County, and North Whitehall :
Township, Lehigh County, Pennsylvania to :
Interconnect New Siegfried Substation 230 :
kV and 69 kV Switchyards to the Electric :
Grid :

PETITION FOR WAIVER

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PPL Electric Utilities Corporation (“PPL Electric”) hereby files this Petition for Waiver, pursuant to 52 Pa Code §§ 5.43 and 57.72(e), seeking a waiver of certain of the Pennsylvania Public Utility Commission’s (“Commission”) regulations governing the review and approval of the siting and reconstruction of high voltage electric transmission lines set forth at 52 Pa. Code §§ 57.71 *et seq.* As described below, the aging 230 kV and 69 kV switchyards within the existing Siegfried 230-138-69 kV Substation (“Siegfried Substation”) have reached an age and condition that they must be replaced in order to ensure safe and reliable service to electric customers in Northampton, Lehigh, and Carbon Counties, Pennsylvania. PPL Electric therefore proposes to construct new 230 kV and 69 kV switchyards adjacent to the existing Siegfried Substation. PPL Electric will seek Commission approval of the transmission lines necessary to interconnect the new Siegfried Substation 230 kV and 69 kV switchyards to the electric grid (hereinafter, the “Project”).

Upon Commission approval, the new Siegfried Substation 230 kV and 69 kV switchyards will be interconnected to the electric grid by: (i) construction of approximately 4.13 miles of new transmission lines at the substation site; and (ii) reconductoring approximately 0.52 miles of existing transmission lines within the existing rights-of-way. In total the proposed Project will require the construction and reconductoring of approximately 4.7 miles of 230 kV and 138 kV transmission lines. The proposed transmission lines primarily will be located in Allen Township, Northampton County, with approximately 600 feet located in and North Whitehall Township, Lehigh County.

Although the Project does not meet the strict definition of any one of the circumstances in which a Letter of Notification may be used, it nearly fits within several of the circumstances for which a Letter of Notification may be used in lieu of a full Siting Application. For this reason and as more fully explained below, PPL Electric believes that a waiver of the siting regulations on these facts is reasonable and in the public interest.

In order to construct the proposed Project, PPL Electric will, in the near future, submit an appropriate filing with the Commission seeking approval for the construction and reconductoring of the 230 kV and 138 kV transmission lines associated with the Project. Importantly, PPL Electric is not herein seeking approval to site and construct the Project. Rather, the sole purpose of this Petition for Waiver is to determine the type of filing that PPL Electric should submit to the Commission -- a Letter of Notification under 52 Pa. Code § 57.72(d) or a full Siting Application under 52 Pa. Code §§ 57.72(a)-(c) -- to seek approval of the siting and reconstruction of the Project. All parties potentially affected by the Project will be served with the future filing and will have the full opportunity to participate in that future proceeding.

For the reasons explained below, PPL Electric submits that the Project is eligible for a waiver from the requirements of a full Siting Application under 52 Pa Code §§ 57.72(a)-(c), and that it is appropriate and reasonable for the Project to be filed as a Letter of Notification under 52 Pa. Code § 57.72(d) to seek Commission approval of the siting and construction of the Project.

I. INTRODUCTION

1. This Petition for Waiver 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:

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PPL Electric’s attorneys are authorized to receive all notices and communications regarding this Petition for Waiver.

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 417 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 Petition for Waiver includes the following accompanying attachments:

- Attachment 1 Aerial Map of Existing 230 kV Facilities
- Attachment 2 Aerial Map of Proposed 230 kV Facilities
- Attachment 3 Aerial Map of Existing 138 kV Facilities
- Attachment 4 Aerial Map of Proposed 138 kV Facilities
- Attachment 5 Aerial Map of Existing 138/69 kV Facilities
- Attachment 6 Aerial Map of Proposed 138/69 kV Facilities
- Attachment 7 List of Land Owners Within Existing and Proposed Rights-of-Way

7. This Petition for Waiver and accompanying Attachments, which are incorporated herein by reference, contain all the information required by 52 Pa Code §§ 5.43 and 57.72(e).

II. PETITION FOR WAIVER

A. OVERVIEW

8. The purpose of this Petition for Waiver is to obtain from the Commission such waivers as are necessary or appropriate to permit PPL Electric to proceed by means of a Letter of Notification for the construction and reconductoring of approximately 4.7 miles of 230 kV and 138 kV transmission lines in Allen Township, Northampton County, and North Whitehall Township, Lehigh County, Pennsylvania.

9. As explained below, approximately 4.13 miles of the Project will be constructed entirely on site for the rebuilt Siegfried Substation, and approximately 0.52 miles of existing transmission line will be reconducted within the existing rights-of-way using the existing tower structures. PPL Electric submits that the most practical and efficient method to obtain Commission review and approval for the siting of the Project is a Letter of Notification under 52 Pa. Code Pa. Code § 57.72(d) rather than a full Siting Application under 52 Pa Code §§ 57.72(a)-(c). The use of a Letter of Notification will provide all the information necessary for the Commission and interested parties to fully review and determine whether the Potential Project should be approved.

10. Further, the use of a Letter of Notification will permit PPL Electric to complete the filings required for approval in a much shorter period of time than would be required to prepare a complete Siting Application for the Project. Importantly, the proposed new and reconducted transmission lines are required to interconnect the planned new Siegfried Substation 230 kV and 69 kV switchyards with the electric grid. The planned new 230 kV and 69 kV switchyards have an in-service date of December 2019. Regulatory review in a shorter period of time will enable PPL Electric to complete construction of the Project and maintain the construction and in-service dates without compromising the reliability of electric service received by the approximately 26,000 customers served from the Siegfried Substation.

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

(d) Letter of notification in lieu of Application:

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

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

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

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

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

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

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

52 Pa Code § 57.72 (d).

12. As proposed, the Project does not meet the strict definition of any one of the circumstances in which a Letter of Notification may be used. The Project, however, nearly fits within several of the circumstances in which a Letter of Notification may be used in lieu of a Siting Application. PPL Electric is requesting a waiver of the strict application of the aforementioned regulations to allow PPL Electric to file a Letter of Notification in lieu of a Siting Application for Commission review and approval to site and construct the Project.

13. The Commission's Rules of Administrative Practice and Procedure at 52 Pa. Code § 5.43 allow for petitions for waiver of any of the Commission's regulations. More specifically,

the Commission’s transmission line siting regulations at 52 Pa. Code § 57.72(e) permit petitions to request that portions of these specific siting regulations be waived. It states:

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

52 Pa. Code § 57.72(e).

14. PPL Electric respectfully requests a waiver of the strict application of 52. Pa Code §57.72(d)(1) to permit PPL Electric to seek approval of the proposed Project to interconnect the new Siegfried Substation 230 kV and 69 kV switchyards with the electric grid.

B. PURPOSE OF THE PROJECT

15. The existing Siegfried Substation is one of the largest substations in the PPL Electric service area. The Siegfried Substation serves more than 160 MW of load in parts of Northampton, Lehigh and Carbon Counties, Pennsylvania. The Siegfried Substation is a critical part of both the bulk and non-bulk electric systems¹ serving customers throughout PPL Electric’s service territory.

16. The Siegfried Substation was originally built in the early 1920s as a 230-69 kV substation, *i.e.*, with 230 kV and 69 kV switchyards.² The 230 kV switchyard feeds three 230-69 kV transformers that “step down” the voltage from 230 kV to 69 kV and, in turn, feed the 69 kV

¹ The bulk electric system (“BES”) includes transmission facilities operated at voltages of 100 kV or higher, and the non-bulk electric system (“non-BES”) includes transmission facilities operated at voltages less than 100 kV.

² A switchyard is an interconnection that, unlike a step-up or step-down transformer, maintains voltage.

switchyard.³ The 69 kV switchyard feeds ten 69 kV transmission lines serving customers in Northampton, Lehigh and Carbon Counties.⁴

17. In the late 1970s, a 138 kV switchyard was installed at the Siegfried Substation site. The 230 kV switchyard at the Siegfried Substation feeds two 230-138 kV transformers that “step down” the voltage from 230 kV to 138 kV and, in turn, feed the 138 kV switchyard. The 138 kV switchyard supplies six 138 kV transmission lines that serve the region.

18. The aging equipment at the 230 kV and 69 kV switchyards, including the three 230-69 kV transformers, have reached the end of their useful life, do not meet modern design standards, and must be replaced to continue to provide safe and reliable service to customers.

19. In addition, Section 8.2 of the PJM Interconnection, LLC (“PJM”) Manual 07: PJM Protection Standards (February 27, 2014) (“PJM Manual 07”), requires that there must be a protective device (fault-interrupting device) between a bulk electric system transmission line and the high side of a transformer.⁵ Currently, the three 230-69 kV transformers at the Siegfried Substation tap directly into 230 kV transmission lines.⁶ Thus, the current 230 kV switchyard at the Siegfried Substation is not in compliance with Section 8.2 of the PJM Manual 07.

³ The nation’s electric system is comprised of three basic components: generation, transmission, and distribution. Generating plants typically produce electricity at a relatively low voltage. Transformers located adjacent to the generating plants increase or “step up” the voltage to transmission-level voltages such as 230 kV or 500 kV, depending on the size of the generating facility and the distance the electricity must travel for delivery to customers. After the voltage is “stepped up,” the power is transmitted to substations, where the voltage level is sequentially “stepped down” for ultimate delivery into the distribution system.

⁴ Distribution transformers then further reduce the voltage from primary to secondary distribution levels for ultimate delivery to customers.

⁵ The PJM Manual 07 establishes minimum design standards and requirements for bulk power facility protection systems within PJM. Transmission owners within the PJM service territory, such as PPL Electric, are required to operate and design their transmission systems in compliance with the limits set forth in the PJM Manual 07 for protection standards. Although the existing 230-69 kV transformers at the Siegfried Substation are grandfathered from compliance, all new transformers must meet the design standards set forth in PJM Manual 07.

⁶ Three 230-69 kV transformers were manufactured in the 1950-1960s and are directly tapped into 230 kV transmission lines supplying the bulk electric system: the Siegfried #1 230-69 kV Transformer is directly tapped into the Martins Creek – Siegfried #1 230 kV Transmission Line; the Siegfried #2 230-69 kV Transformer is directly tapped into the Martins Creek – Siegfried #2 230 kV Transmission Line; and the Siegfried #3 230-69 kV Transformer is directly tapped into the Siegfried – East Palmerton #3 230 kV Transmission Line.

20. Because the Siegfried Substation is a critical component to the backbone 230 kV bulk electric system under the functional control of PJM, the Siegfried Substation cannot be decommissioned.

21. To address these issues and to ensure customers continue to receive safe and reliable service, PPL Electric proposes to build new, modern 230 kV and 69 kV switchyards at the Siegfried Substation. The existing 138 kV switchyard at the Siegfried Substation will remain in-place. However, the new 230 kV and 69 kV switchyards will be relocated to a new substation site.

22. The existing Siegfried Substation site is not large enough to accommodate modern 230 kV and 69 kV switchyards that comply with the PJM Manual 07 minimum design standards and requirements. Further, the existing Siegfried Substation was constructed on the side of a hill adjacent to the Lehigh River. As a result, rebuilding the 230 kV and 69 kV yards in-place would pose significant and costly construction challenges due to the transmission outages that would be required.

23. In addition, rebuilding the 230 kV and 69 kV switchyards in place would result in a less reliable design, compared to relocating the switchyards to a less restrictive location, and would result in significant outage risks to the bulk electric system during construction.

24. For these reasons, PPL Electric proposes to build new 230 kV and 69 kV switchyards on a site located immediately adjacent to the existing Siegfried Substation site.

25. The new 230 kV and 69 kV switchyards will be located approximately 500 feet east of the existing Siegfried Substation. The proposed site for the new 230 kV and 69 kV switchyards is approximately 62 acres.⁷ PPL Electric currently owns approximately 18 acres of

⁷ The Northampton Borough Municipal Authority currently has an easement on the site for the new 230 kV and 69 kV switchyards. A copy of this Petition is being served on the Borough Municipal Authority.

the proposed site and has reached an agreement in principal with the landowner to acquire the remaining 44 acres needed for the new 230 kV and 69 kV switchyards and associated aerial transmission lines.⁸

26. The proposed site for the new 230 kV and 69 kV switchyards is ideal because it is located adjacent to the existing substation site and already crossed by the existing 230 kV and 69 kV transmission lines, which will minimize the amount of new transmission lines that need to be constructed to interconnect the new switchyards with the electric grid. In addition, the proposed site is located on top of a hill, rather than on a slope, and farther away from the Lehigh River.

27. The construction of the new, modern 230 kV and 69 kV switchyards at the Siegfried Substation will resolve all of the reliability concerns described above, meet all modern design requirements, and provide the region with the required electric power supply reinforcement.

28. The construction of the new 230 kV and 69 kV switchyards was presented before the PJM sub-regional RTEP committee for the mid-Atlantic zone on July 29, 2015, and is included in the RTEP as supplemental project number s0958.1.

C. DESCRIPTION OF THE PROJECT

29. In order to interconnect the new Siegfried Substation 230 kV and 69 kV switchyards with the electric grid, PPL Electric proposes to construct or reconductor a total of approximately 4.7 miles of 230 kV and 138 kV transmission lines. Specifically, this project will require the construction of approximately 4.13 miles of new transmission lines at the substation site, and the reconductoring of approximately 0.52 miles of existing transmission lines within the existing rights-of-way.

⁸ The agreement to acquire the site for the new 230 kV and 69 kV switchyards and associated aerial transmission lines will be formally memorialized once all the terms and conditions have been finalized.

30. The segments of transmission line to be constructed or reconducted as part of this Project are further explained below.

1. 230 kV Transmission Lines

31. The following 230 kV circuits currently are interconnected with the existing 230 kV switchyard at the Siegfried Substation: (i) Siegfried – Frackville 230 kV single-circuit; (ii) Siegfried – East Palmerton #3 230 kV single-circuit; (iii) Siegfried – Harwood 230 kV single-circuit; (iv) Siegfried – Martins Creek #1 230 kV single-circuit; and (v) Siegfried – Martins Creek #2 230 kV single-circuit. An aerial depiction of the existing 230 kV configuration is provided as Attachment 1.

32. Each of these 230 kV transmission lines will be removed from the existing 230 kV switchyard and re-terminated into the planned new 230 kV switchyard located adjacent to the existing Siegfried Substation site. To do so, PPL Electric proposes to construct short segments of new 230 kV transmission lines from the existing lines to the new 230 kV switchyard.

33. In addition, two new transmission lines, the Siegfried Transformer #4 and Siegfried Transformer #5 230 kV transmission lines, will be constructed to interconnect the new 230 kV switchyard with the existing 138 kV switchyard that will remain in place. Also, a new temporary 230 kV tie line between the existing 230 kV switchyard and the new 230 kV switchyard will be constructed to avoid outages during the construction phase.⁹

34. In total, PPL Electric proposes to construct approximately 1.88 miles of new 230 kV transmission lines, including the temporary 230 kV tie line. Table 1 below shows the total lengths of each new 230 kV transmission line to be constructed as part of this project.

⁹ The temporary 230 kV tie line and supporting structures will be constructed to avoid outages during the construction phase and will be removed upon completion of the Project.

Table 1 - New 230 kV	
Transmission Circuit	Length (feet)
Siegfried – East Palmerton #3 230 kV	1,260
Siegfried – Frackville 230 kV	1,940
Siegfried – Harwood 230 kV	1,220
Martins Creek – Siegfried #1 230 kV	670
Martins Creek – Siegfried #2 230 kV	915
Siegfried Transformer #4 230 kV	1,050
Siegfried Transformer #5 230 kV	1,540
Siegfried Substation Temporary 230 kV Tie	1,340
230 kV Total (feet)	9,935
230 kV Total (miles)	1.88

35. All new 230 kV transmission lines and associated structures/towers will be located entirely on the property for the new Siegfried Substation 230 kV and 69 kV switchyards.

36. PPL Electric also proposes to reconductor approximately 0.41 miles of certain existing 230 kV transmission lines in place to connect the new deadend structure located on the new Siegfried Substation property. Table 2 below shows the total lengths of each segment of 230 kV transmission line to be reconducted as part of this project.

Table 2 - Reconductored 230 kV	
Transmission Circuit	Length (feet)
Siegfried – Frackville 230 kV	1,290
Martins Creek – Siegfried #2 230 kV	850
230 kV Total (feet)	2,140
230 kV Total (miles)	0.41

37. No additional rights-of-way or new tower structures will be required to reconductor these 230 kV transmission lines. Rather, a small segment of conductor on each 230 kV transmission line will be replaced with new conductor using the existing tower structures.

38. In total, PPL Electric proposes to construct approximately 1.88 miles of new 230 kV transmission line located entirely on the substation site, and to reconductor approximately

0.41 miles of existing 230 kV transmission lines within the existing rights-of-way. An aerial depiction of the proposed 230 kV configuration is provided as Attachment 2.

2. 138 kV Transmission Lines

39. Currently, there are two 138 kV double circuits, the Siegfried – Allentown #1 & #2 and Siegfried – Jackson #1 & #2 138 kV Transmission Lines, that traverse the site for the new Siegfried Substation 230 kV and 69 kV switchyards. An aerial depiction of the existing 138 kV configuration is provided as Attachment 3.

40. In order to accommodate the construction and location of the new 230 kV and 69 kV switchyards, these 138 kV circuits will need to be re-routed around the new switchyards and tied back into the existing 138 kV switchyard that will remain in place. To do so, PPL Electric proposes to construct approximately 1.36 miles of new 138 kV transmission lines. Table 3 below shows the total lengths of each new 138 kV transmission circuit to be constructed as part of this project.

Table 3 - New 138 kV	
Transmission Circuit	Length (feet)
Siegfried – Allentown #1 & #2 138 kV	3,145
Siegfried – Jackson #1 & #2 138 kV	4,010
138 kV Total (feet)	7,155
138 kV Total (miles)	1.36

41. All new 138 kV transmission lines and associated structures/towers will be located entirely on the existing Siegfried Substation property and the property for the new Siegfried Substation 230 kV and 69 kV switchyards.

42. PPL Electric also proposes to re-conductor approximately 0.12 miles of the existing Siegfried – Jackson #1 & #2 138 kV Transmission Line in place to connect to the new deadend structure located on the new Siegfried Substation property. Table 4 below shows the total length of the of 138 kV transmission line to be re-conducted as part of this project.

Table 4 - Reconductored 138 kV	
Transmission Circuit	Length (feet)
Siegfried – Jackson #1 & #2 138 kV	625
138 kV Total (feet)	625
138 kV Total (miles)	0.12

43. No additional rights-of-way or new tower structures will be required to reconductor these 138 kV transmission lines. Rather, a small segment of conductor on each 138 kV transmission line will be replaced with new conductor using the existing tower structures.

44. In total, PPL Electric proposes to construct approximately 1.36 miles of new 138 kV transmission line located entirely on the substation site, and to reconductor approximately 0.12 miles of existing 138 kV transmission lines within the existing rights-of-way. An aerial depiction of the proposed 138 kV configuration is provided as Attachment 4.

3. 138/69 kV Transmission Lines

45. Currently there are a total of ten 69 kV transmission lines that terminate into the existing 69 kV switchyard at the Siegfried Substation. Each of these 69 kV transmission lines will be removed from the existing 69 kV switchyard and re-terminated into the planned new 69 kV switchyard located adjacent to the existing Siegfried Substation site.

46. Because PPL Electric does not need Commission approval to site, construct, or relocate transmission lines with a design voltage of less than 100 kV, 52 Pa. Code § 57.71, the 69 kV transmission lines are not the subject of this Petition for Waiver or any future filing seeking Commission approval of the siting and construction of the Project. However, PPL Electric proposes to rebuild certain existing 69 kV transmission lines for future 138 kV operation (138/69 kV) and, therefore, the Company will seek Commission approval of the siting and construction of these 138/69 kV lines as part of this Project.

47. Currently, the following 69 kV transmission lines terminate into the existing 69 kV switchyard: (i) the Siegfried – East Palmerton #1 69 kV single circuit; (ii) the Siegfried – East Palmerton #2 69 kV single circuit; (iii) the Hauto – Siegfried #1 69 kV single circuit; (iv) the Hauto – Siegfried #4 69 kV single circuit. In addition, the existing double-circuit Siegfried – South Whitehall 138/69 kV Transmission Line, which presently operates at 69 kV but is designed for future 138 kV operation, terminates into the existing 69 kV switchyard. An aerial depiction of these 69 kV and 138/69 kV circuits is provided as Attachment 5.

48. Each of these 69 kV and 138/69 kV transmission lines will be removed from the existing 69 kV switchyard and re-terminated into the planned new 69 kV switchyard located adjacent to the existing Siegfried Substation site. To do so, PPL Electric proposes to construct short segments of new 69 kV transmission lines from the existing lines to the new 69 kV switchyard.

49. PPL Electric proposes to rebuild the four single-circuit 69 kV lines into a double-circuit 138/69 kV transmission line, which will be named the Siegfried – Hauto #1 & #2 138/69 kV Transmission Line. The new double-circuit Siegfried – Hauto #1 & #2 138/69 kV Transmission Line will be interconnected with the new Siegfried Substation 69 kV switchyard by construction of approximately 0.34 miles of new 138/69 kV transmission line located entirely on the Siegfried Substation property and the site for the planned new 230 kV and 69 kV switchyards.

50. To interconnect this existing 138/69 kV transmission line with the new Siegfried Substation 69 kV switchyard, PPL Electric proposes to construct approximately 0.90 miles of new 138/69 kV transmission line as shown in Table 5 below.

Table 5 - New 138/69 kV Transmission Line	
Transmission Circuit	Length(feet)
Siegfried – Hauto #1 & #2 138/69 kV (currently called Hauto – Siegfried #1 & #4 69 kV and Siegfried – East Palmerton #1 & #2 69 kV)	2,220
Siegfried – Mickleys #1 and #2 138/69 kV (currently called Siegfried – South Whitehall) ¹⁰	2,515
138/69 kV Total (feet)	4,735
138/69 kV Total (miles)	0.90

51. This new segment of 138/69 kV transmission lines and associated structures/towers will be located entirely on the existing Siegfried Substation property and the site for the planned new 230 kV and 69 kV switchyards. This 138/69 kV circuit will be renamed the Siegfried – Mickleys #1 & #2 138/69 kV Transmission Line. An aerial depiction of the proposed 138/69 kV configuration is provided as Attachment 6.

4. Summary

52. In order to interconnect the planned new Siegfried Substation 230 kV and 69 kV switchyards with the electric grid, PPL Electric proposes to construct approximately 4.13 miles of new transmission lines, which includes: (i) 1.88 miles of new 230 kV transmission line; (ii) 1.36 miles of new 138 kV transmission line; and (iii) 0.90 miles of new 138/69 kV transmission line. All new transmission line and supporting tower structures will be located entirely on the existing Siegfried Substation property and/or the property for the new Siegfried Substation 230 kV and 69 kV switchyard.

53. PPL Electric also proposes to reconductor approximately 0.52 miles of existing transmission lines within the existing rights-of-way, which includes: (i) 0.41 miles of existing

¹⁰ The Siegfried – South Whitehall 138/69 kV Transmission Line is presently designed for future 138 kV operation, but currently operated at 69 kV. PPL Electric intends to rename the line to Siegfried – Mickleys in order to conform with PPL transmission line naming standards.

230 kV transmission line; and (ii) 0.12 miles of existing 138 kV transmission line. No additional rights-of-way or new tower structures will be required to reconductor these transmission lines.

D. WAIVER

54. Letters of Notification are permitted if the proposed transmission line has “a proposed route of 2 miles or less.” 52 Pa. Code § 57.72(d)(1)(vi). Letters of Notification are also permitted if the proposed transmission line is to be “reconstructed so long as the size, character, design or configuration of the proposed [high voltage] transmission line does not substantially alter the right-of-way.” 52 Pa. Code § 57.72(d)(1)(iii).

55. The proposed Project would require a total of approximately 4.7 miles of new and reconstructed transmission lines to interconnect the planned new Siegfried Substation 230 kV and 69 kV switchyards with the existing electric grid. Although the proposed Project is greater than the 2-mile threshold for a Letter of Notification, the individual components of the Project qualify for a Letter of Notification.

56. As explained above, the proposed Project requires the construction of approximately 4.13 miles of new transmission lines. However, all new transmission lines and associated tower structures will be located entirely on the existing Siegfried Substation property and/or the property for the planned new Siegfried Substation 230 kV and 69 kV switchyards. PPL Electric currently owns the existing Siegfried Substation property, owns a significant portion of the property for the new 230 kV and 69 kV switchyards, and currently is in the process of acquiring the remainder of the property for new switchyards. Thus, all new transmission lines and supporting structures necessary for the proposed project will be located on property to be owned entirely by PPL Electric. PPL Electric submits that this segment of the Project qualifies as a Letter of Notification because it will be located entirely on PPL Electric-owned property.

57. As explained above, the proposed Project also requires the reconductoring of approximately 0.52 miles of existing transmission lines within the exiting rights-of-way. The existing rights-of-way are sufficient to accommodate all construction activities associated with the reconductoring segment of the Project. Further, the reconductoring of these existing transmission lines will not substantially alter the existing right-of-way because the transmission lines will be reductedored in place using the existing tower structures. PPL Electric submits that this segment of the Project qualifies as a Letter of Notification because it is less than 2 miles, involves the reconstruction of existing transmission lines, and does not substantially alter the existing rights-of-way.

58. Although the Project does not meet the strict definition of any one of the circumstances in which a Letter of Notification may be used, as set forth above, it nearly fits within several of the circumstances in which a Letter of Notification may be used in lieu of an Application. PPL Electric is requesting a waiver of the strict application of the aforementioned regulations to allow PPL Electric to file a Letter of Notification in lieu of a Siting Application for Commission review and approval to site and construct the Project.

59. In substance, the Project is very similar to a project that qualifies for a Letter of Notification under Sections 57.72(d)(1) of the Commission's regulations, 52 Pa. Code § 57.72(d)(1). PPL Electric submits that the additional information provided by and the time and expense required to prepare a full Siting Application is not needed for the Commission's review of this Project. For example, a full Siting Application would require an extensive analysis and review of alternative routes. Here, however, the vast majority of the Project involves construction on the new substation site located immediately adjacent to the existing substation site. Consequently, an alternative analysis for the transmission line routes would be

meaningless. Stated otherwise, the time and expense needed to prepare a full Siting Application for this Project would serve no useful purpose.

60. The Commission has approved similar requests granting waivers of certain regulations regarding Commission Review of Siting and Construction of Electric Transmission Lines at 52 Pa Code § 57.71 *et seq.*, including, but not limited to:

- *Petition of PPL Electric Utilities Corporation for Waiver of Certain Provisions of the Pennsylvania Public Utility Commission's Regulations at 52 Pa. Code § 57.71 et seq., for the Siting and Reconstruction of Approximately 4.0 Miles of 230 kV Transmission Line in Archbald, Blakey, and Jessup Boroughs, Lackawanna County, Pennsylvania to Interconnect a New Independent Power Producer to the Electric Grid, Docket No. P-2015-2497851 (November 19, 2015) (approving a waiver from Section 57.72(d) for the construction approximately 4.0 miles of new and reconstructed 230 kV transmission line within the existing right-of-way, within new right-of-way, and on the substation property);*
- *Petition of Duquesne Light Company for Waiver of Certain Provisions of the Pennsylvania Public Utility Commission's Regulations at 52 Pa. Code § 57.71 et seq., for the Siting and Relocation of Existing Transmission Facilities in Brighton, Vanport, Potter, and Center Townships, Beaver County, Pennsylvania to Accommodate a Potential New Industrial Facility, Docket No. P-2014-2401906 (May 22, 2014) (approving a waiver from Section 57.72(d) for the construction of a 2.5 mile 138 kV transmission line that would involve the construction of 1.7 miles of new transmission line on the property of a new customer to be served and 0.8 miles of new transmission line within new rights-of-way);*
- *Letter of Notification of West Penn Power Company filed pursuant to 52 Pa. Code Chapter 57 with respect to reconstruction and relocation of the Allegheny Ludlum No. 2 138 kV Transmission Line in the City of Lower Burrell, Westmoreland County, Pennsylvania, Docket No. A-2012-2281399, 2012 Pa. PUC LEXIS 381 (March 1, 2012) (approving the construction of a 2.7-mile transmission line project under 52 Pa. Code § 57.72(d)(1)(v) and (vi) because a portion of the transmission line is to be reconducted or reconstructed and a separate portion being relocated is less than two miles in length);*
- *In Re: Petition of West Penn Power Company for Waiver of Certain Provisions of the Pennsylvania Utility Commission's Regulations for Commission Review of Siting and Construction of Electric Transmission Lines set forth at 52 Pa. Code § 57.71 et seq., Docket No. P-2010-2166223, 2010 Pa. PUC LEXIS 860 (May 20, 2010) (approving a waiver from Section 57.72(d) for the construction of a 10.3-mile 138 kV transmission line project that involved the rebuild of 9.9 miles of existing transmission line and the construction of 0.4 miles of new transmission); and*

- *Petition for Waiver of Certain Provisions of the Pennsylvania Public Utility Commission's Regulations for Commission Review of Siting and Construction of Electric Transmission Lines set forth at 52 Pa. Code § 57.71 et seq.*, Docket No. P-2008-2037618, 2008 Pa. PUC LEXIS 448 (June 27, 2008) (approving a waiver from Section 57.72(d) for the construction of a 3.9-mile 115 kV transmission line to connect a new ethanol plant to the grid).

61. For the reasons provided above, PPL Electric requests that the Commission approve this waiver of the strict application of the Commission's siting regulations and allow PPL Electric to file a Letter of Notification in lieu of a Siting Application for Commission review and approval to site and construct the Project.

E. NOTICE

62. All owners of property traversed by the proposed Project are listed in Attachment 7. Copies of this Petition for Waiver will be served on these landowners.

63. PPL Electric also requests that the Commission publish notice of this filing in the *Pennsylvania Bulletin*, and that a reasonable deadline for intervention be set as part of that notice.

64. If the Commission approves the waiver request, a Letter of Notification may be used for the Project instead of a full Siting application. Alternatively, if the Commission denies this waiver request, a Siting Application will be filed for Commission approval of the Project.

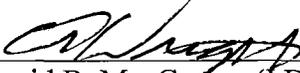
65. Upon Commission's disposition of this Petition for Waiver, PPL Electric will file the appropriate filing, *i.e.*, either a Letter of Notification or a Siting Application. All of the information necessary for the Commission to decide whether to approve the siting and construction of the Project will be included with the applicable filing. Any parties that want to participate in the proceeding or potentially oppose the siting approval for the Project will have the full opportunity to participate in the future proceeding when it is filed.

III. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission grant the request for a waiver described above and in the Attachments hereto, and allow PPL Electric Utilities Corporation to file a Letter of Notification in lieu of a Siting Application for Commission review and approval of the siting, construction, and reconductoring of the transmission lines necessary to interconnect the planned new Siegfried Substation 230 kV and 69 kV switchyards as described above and in the Attachments hereto.

Respectfully submitted,

Paul E. Russell (I.D. # 21643)
Kimberly A. Klock (ID # 89716)
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Date: May 16, 2016

Attorneys for PPL Electric Utilities Corporation

Attachment 1

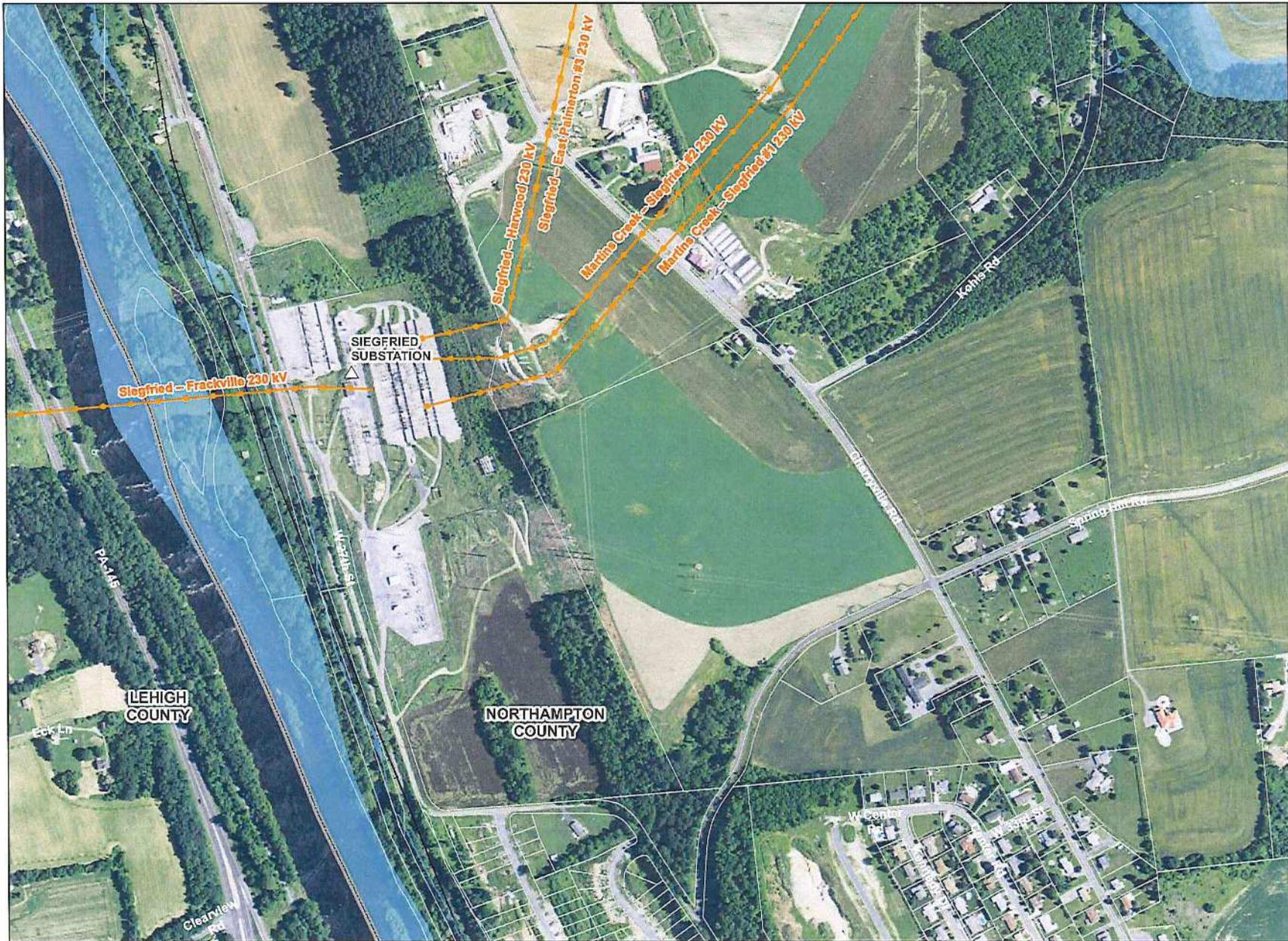
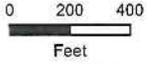


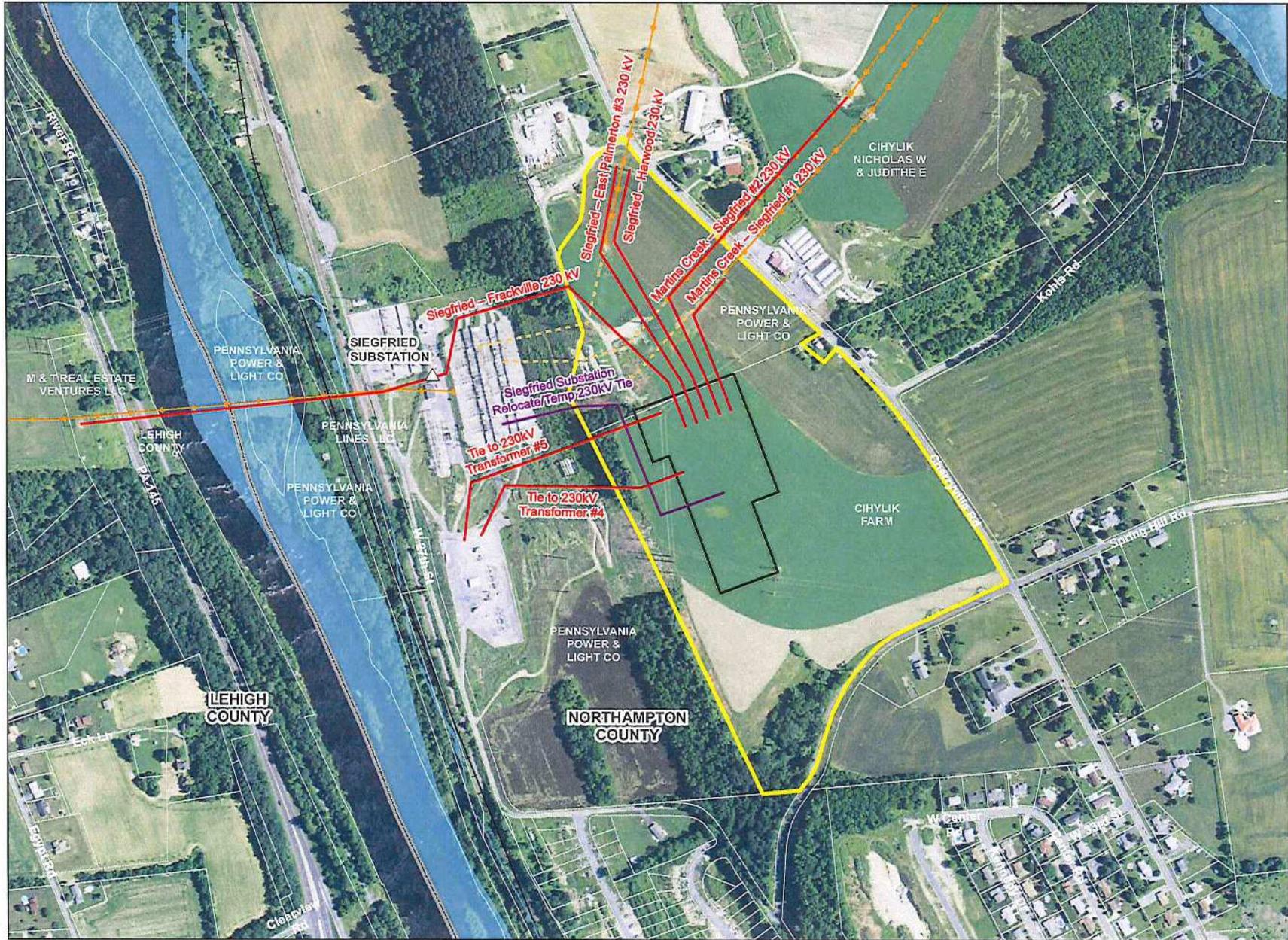
Figure 1-2A
Existing Facilities -
230kV Transmission

- △ Substation
- Existing Transmission**
- 230kV
- Stream
- ▭ County
- ▭ Parcel
- ▭ Floodplain
- +— Railroad



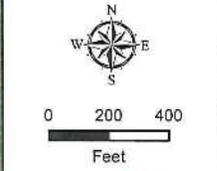
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Attachment 2



**Figure 1-4A
Proposed Facilities -
230 kV Transmission**

- Substation
- Proposed Substation Connection
- Temporary 230kV Connection
- Proposed Substation Fence/line
- Stream
- Railroad
- Proposed Substation Parcel
- Parcel
- County
- Floodplain
- Existing Transmission**
- 230kV
- 138kV
- Transmission To Be Removed



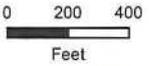
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Attachment 3



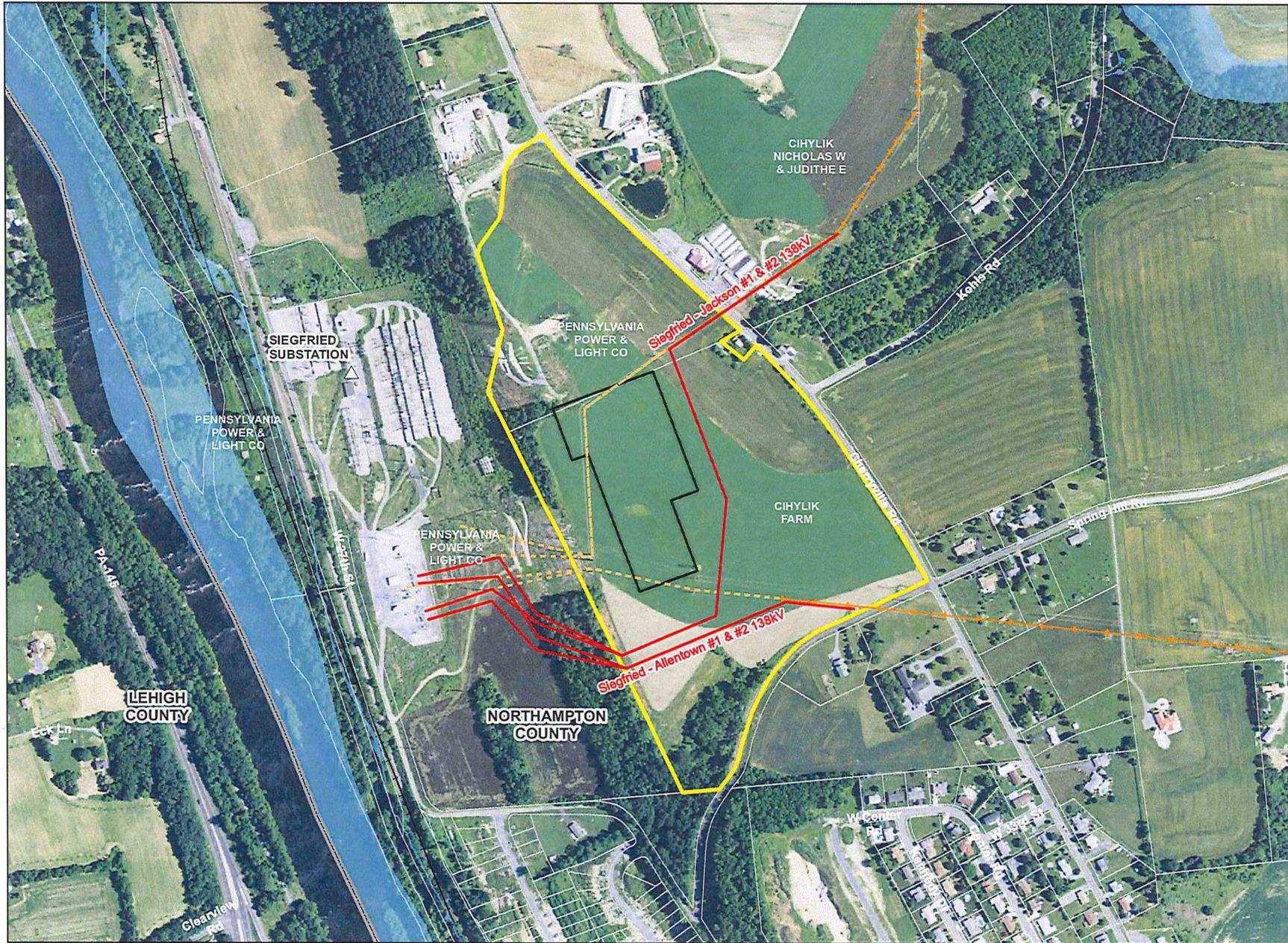
**Figure 1-2B
Existing Facilities -
138kV Transmission**

- △ Substation
- Existing Transmission**
- 138kV
- Stream
- ▭ County
- ▭ Parcel
- ▭ Floodplain
- +— Railroad



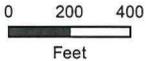
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Projection: Lambert Conformal Conic

Attachment 4



**Figure 1-4B
Proposed Facilities -
138 kV Transmission**

-  Substation
-  Proposed Substation Connection
-  Proposed Substation Fenceline
-  Stream
-  Railroad
-  Proposed Substation Parcel
-  Parcel
-  County
-  Floodplain
- Existing Transmission**
-  138kV
-  Transmission To Be Removed



Coordinate System:
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Datum: North American 1983
Projection: Lambert Conformal Conic

Attachment 5

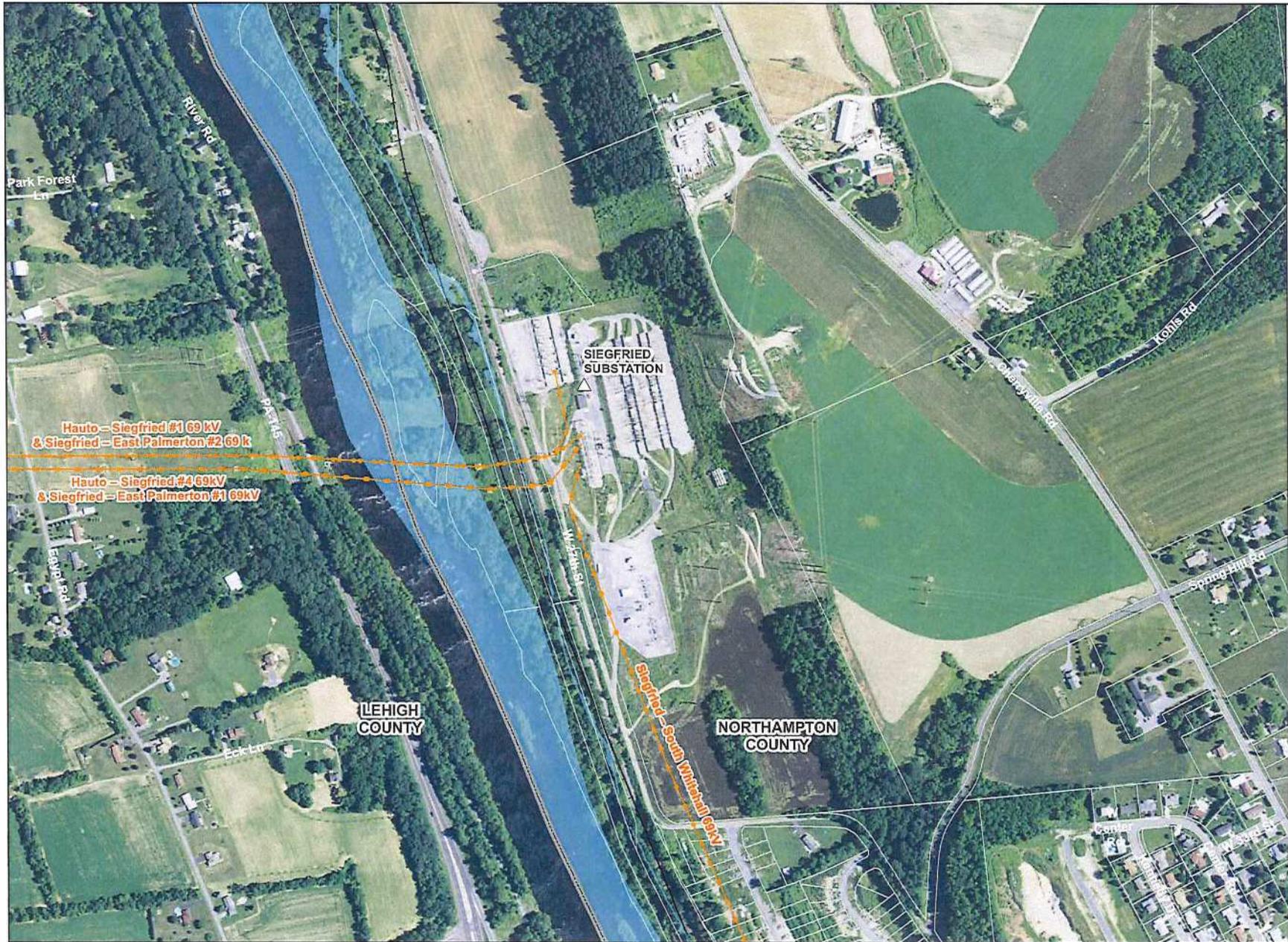
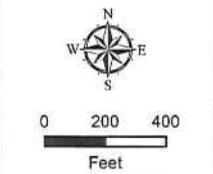


Figure 1-2C
Existing Facilities -
Future 138/69kV
Transmission

- Substation
- Existing Transmission**
- 69kV
- Stream
- County
- Parcel
- Floodplain
- Railroad



Coordinate System:
 NAD 1983 State Plane Pennsylvania South
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 Projection: Lambert Conformal Conic

Attachment 6

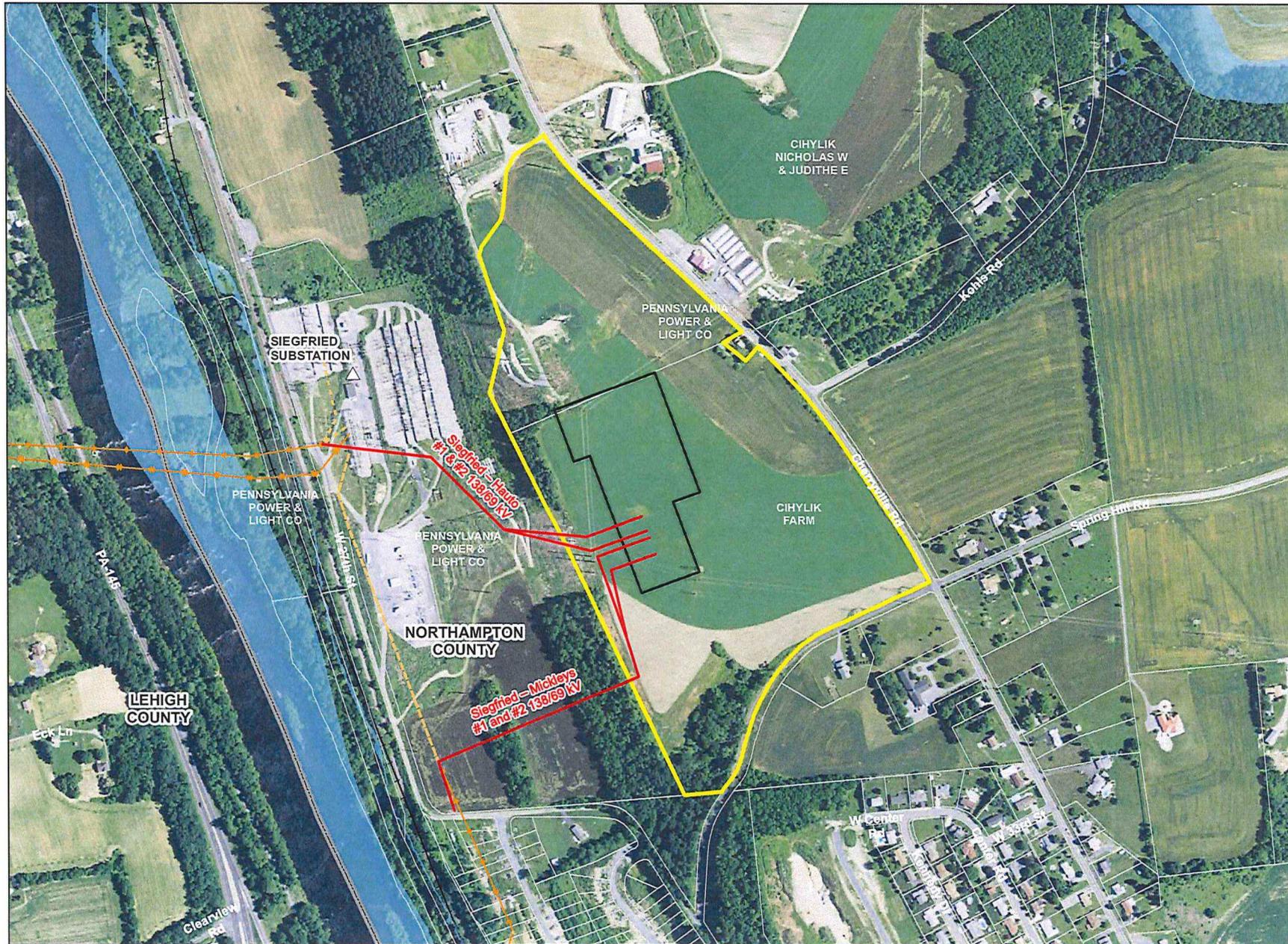
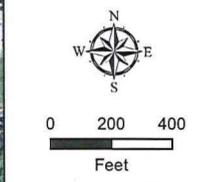


Figure 1-4C
Proposed Facilities -
138/69 kV Transmission

- Substation
- Proposed Substation Connection
- Proposed Substation Fenceline
- Stream
- Railroad
- Proposed Substation Parcel
- Parcel
- County
- Floodplain
- Existing Transmission**
- 138kV
- Transmission To Be Removed



Coordinate System:
 NAD 1983 State Plane Pennsylvania South
 Datum: North American 1983
 Projection: Lambert Conformal Conic

Attachment 7

ATTACHMENT 7
SIEGFRIED SUBSTATION RELOCATION PROJECT
LIST OF OWNERS OF PROPERTY OWNERS RECEIVING APPLICATIONS

Cihylik Farms
3960 Cherryville Road
Northampton, PA 18067

Pennsylvania Lines, LLC
110 Franklin Road
Roanoke, VA 24042

Lehigh County
17 South 7th Street
Allentown, PA 18101

M&T Real Estate Ventures, LLC
3029 College Heights Blvd
Allentown, PA 18101

Northampton Borough Municipal
Authority
Attn: Stephen J. Kerbacher, General
Manager
1 Clear Springs Drive
Northampton, PA 18067

VERIFICATION

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

Date: 5/9/16