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File #: 209803

December 19, 2025

VIA ELECTRONIC FILING

Matthew Homsher, 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 Build Approximately 1.1 Miles Of New Parallel Double Circuit 230 kV Transmission Taps That Are Needed to Connect the Existing Susquehanna-Harwood #1 & #2 Transmission Lines on the New Tomhicken 230 kV Switchyard That Are Respectively Located in Luzerne County, Pennsylvania.
Docket No. A-2025-_____

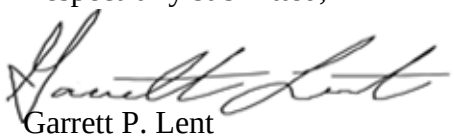
Dear Secretary Homsher:

Attached for filing is the Letter of Notification of PPL Electric Utilities Corporation ("PPL Electric") in the above-referenced proceeding. 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. Construction of the Project will commence upon the Commission's approval of this filing, with an estimated construction start date March 30, 2026, with an anticipated in-serve date of December 15, 2026.

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

The associated $350.00 filing fee has been paid by Post & Schell, P.C. as of the time of filing.

Respectfully submitted,



Garrett P. Lent

GPL/dmc
Attachment

cc: Deb Backer (*via email; w/attachment*)
Jordan Van Order (*via email; w/attachment*)
Certificate of Service

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 § 57.72(d)(3).

VIA CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Pennsylvania Bureau of Investigation and Enforcement
Pennsylvania Public Utility Commission
Commonwealth Keystone Building 400 North Street
2nd Floor, Room-N201
Harrisburg, Pennsylvania 17120
Attn: Alison Kaster

Pennsylvania Department of Environmental Protection
400 Market Street
10th Floor Rachel Carson State Office Building
Harrisburg, Pennsylvania 17101
Attn: Regional Permit Coordination Office

Pennsylvania Department of Transportation
Commonwealth Keystone Building
400 North Street, Fifth Floor
Harrisburg, Pennsylvania 17120
Attn: Jeffrey M. Spotts, Chief Counsel

Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, Second Floor
400 North Street
Harrisburg, Pennsylvania 17120-0053
Attn: Catherine N. Lantzy, Chief Counsel

Pennsylvania Department of Conservation and Natural Resources
Rachel Carson State Office Building
400 Market Street
Harrisburg, Pennsylvania 17105-8767
Attn: Rebecca Bowen, Chief, Conservation Science & Ecological Resources Division

Pennsylvania Game Commission
2001 Elmerton Avenue
Harrisburg, Pennsylvania 17110-9797
Attn: Timothy Haydt, Director, Bureau of Wildlife Habitat Management

Pennsylvania Fish and Boat Commission
Centre Region Office
595 East Rolling Ridge Drive
Bellefonte, Pennsylvania 16823-9620
Attn: Christopher A. Urban, Chief, Natural Diversity Section

Pennsylvania Office of Consumer Advocate
555 Walnut Street 5th Floor Forum Place
Harrisburg, Pennsylvania 17101-1923
Attn: Darryl A. Lawrence, Consumer Advocate

Pennsylvania Office of Small Business Advocate
555 Walnut Street
1st Floor Forum Place
Harrisburg, Pennsylvania 17101
Attn: NazAarah Sabree, Small Business Advocate

U.S. Army Corps of Engineers
Baltimore District Corporate
Communication Office
2 Hopkins Plaza
Baltimore, Maryland 21201
Attn: Planning Division

U.S. Fish and Wildlife Service
Pennsylvania Field Office
110 Radnor Road, Suite 101
State College, Pennsylvania 16801
Attn: Jodie Mamuscia, Field Office Supervisor

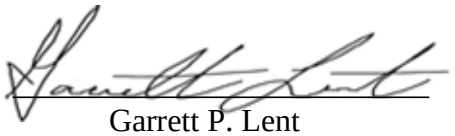
Luzerne County Planning Commission
200 North River Street
Wilkes-Barre, Pennsylvania 18711
Attn: N. Brian Caverly, Chair

Luzerne County Conservation District
325 Smiths Pond Road
Shavertown, Pennsylvania 18708
Attn: John (Jay) Wilkes, Chairman and Public Director

Hazle Township
P.O. Box 506,
Harleigh, PA 18225

NP Hazleton Holdings 1, LLC
3315 North Oak Trafficway,
Kansas City, Missouri 64116

Dated: December 19, 2025



Garrett P. Lent

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 Build Approximately 1.1 Miles Of New parallel Double Circuit 230 kV Transmission Taps That Are Needed to Connect the Existing Susquehanna-Harwood #1 & #2 Transmission Lines to the New Tomhicken 230 kV Switchyard That Are Respectively Located in Luzerne County, Pennsylvania	:	Docket No. A-2025-_____

LETTER OF NOTIFICATION

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PPL Electric Utilities Corporation ("PPL Electric" or the "Company") hereby files this Letter of Notification pursuant to Sections 57.72(d)(1)(iii) and (vi) of the Pennsylvania Public Utility Commission's ("PUC" or the "Commission") regulations, 52 Pa. Code § 57.72(d)(1)(iii) and (vi), to build approximately 1.1 miles of new double-circuit 230 kilovolt ("kV") transmission taps ("Tap Lines") that are needed to connect the existing Susquehanna-Harwood #1 & #2 230 kV Transmission Lines to the new Tomhicken 230 kV Switchyard (the "Project"). The Project also includes the construction of two new 0.1-mile-long 230 kV transmission lines ("Connecting Lines") from the Tomhicken 230 kV Switchyard to a new customer-owned 230-34 kV substation. The new 230 kV Connecting Lines, Tap Lines and Tomhicken 230 kV Switchyard are located in Hazle Township, Luzerne County, Pennsylvania.[1]

[1] For a complete list of municipalities and counties crossed by the Project, please refer to **Attachment 5** to this Letter of Notification.

The Company received multiple load requests, and the scope to serve these load requests will be performed in two phases.[2] As explained in greater detail below, the first phase of the Project ("Phase 1"), subject to this Letter of Notification, is needed to connect one of the requesting customers (the "Customer") who is requesting transmission level service in Hazle Township, Luzerne County, Pennsylvania to the 230 kV system. PPL Electric's system planners determined that splitting the adjacent Susquehanna-Harwood #1 & #2 230 kV Transmission Lines, creating the Susquehanna-Tomhicken #1 & #2 230 kV and Tomhicken-Harwood #1 & #2 230 kV lines, and providing 230 kV service from the new Tomhicken 230kV Switchyard is the optimal solution to serve the Customer's initial requested load. The second phase of transmission expansion ("Phase 2") is needed to address future electrical needs and demands associated with this Customer and with other load requests, as well as PPL Electric's system needs. However, Phase 2 is not the subject of this Letter of Notification, and will be the subject of a future submission before the Commission.[3]

Subject to the Commission's approval, construction will begin on March 30, 2026 to support an in-service date of December 15, 2026. PPL Electric will own, operate, and maintain the new Tomhicken Switchyard, 230 kV Tap Lines, and Connecting Lines. The Customer will construct, own, operate, and maintain their 230-34 kV substation. The total estimated cost of this Project, as described below, is approximately $59.9 Million.

In support thereof, PPL Electric states as follows:

[2] While the instant LON is needed forthwith to connect the Customer to the 230kV grid through the Customer-owned substation and the Tomhicken Switchyard, PPL Electric did receive more than one customer request for transmission level service. As such, PPL Electric anticipates that the Tomhicken Switchyard will eventually interconnect to a second, customer-owned substation. However, any future project or constructions needed to interconnect the other requesting customer will be undertaken as the subject of a future, standalone filing before the Commission.

[3] Additional detail regarding Phase 2 is provided for informational purposes only in **Attachment 1 – Necessity Statement**.

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 as follows:

PPL Electric Utilities Corporation
827 Hausman Road
Allentown, Pennsylvania 18104

3. PPL Electric's attorneys are:

Michael J. Shafer (I.D. # 205681)
PPL Services Corporation
645 Hamilton Street, Suite 700
Allentown, PA 18101
Voice: 610-774-2599
Fax: 610-774-4102
E-mail: mjshafer@pplweb.com

David B. MacGregor (I.D. # 28804)
Garrett P. Lent (I.D. # 321566)
Hayley E. Wilburn (I.D. # 336055)
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: glent@postschell.com
E-mail: hwilburn@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 1.5 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 Statement.
- Attachment 3 Description of Project Area.
- Attachment 4 PPL Electric Design Criteria and Safety.
- Attachment 5 Agency and Landowner List.

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

8. PPL Electric has a right and obligation to provide retail electric service in a manner that is efficient, safe, reliable, and resilient to meet the needs of the electric system and the service expectations of its customers. To meet this duty, PPL Electric applies its transmission asset management planning procedure, which includes system performance and condition assessments. These performance and condition assessments identify system needs and prioritize projects based on several variables such as equipment age, condition, maintenance schedule, customer needs, and impact on system reliability and performance to ensure a reliable electric grid and reasonable service to its customers.

9. As explained in greater detail below and in **Attachment 1 – Necessity Statement**, this Project is necessary to accommodate multiple customer requests to serve new and future load located in Hazle Township, Luzerne County, Pennsylvania.

10. The Project will most immediately serve the substation-owning Customer, who is requesting 230 kV electrical service with an in-service date of December 15, 2026 and an initial load of 240 megawatts ("MW"). It is anticipated that this load will increase in stages to approximately 1,980 MW by 2033. Due to the size of the requested load, the Customer will be most appropriately supplied from the 230 kV network, which is considered to be transmission level service. As the Customer's load continues to ramp up, additional improvements to the 230 kV network in this area will be required to continue to provide reliable service to the area.

11. Expedient initiation of adequate and reliable service to new high-load customers seeking to enter PPL Electric's system is critical for the Commonwealth of Pennsylvania's continued economic development. This interest is addressed by the Project. Moreover, high-load customers connecting to PPL Electric's Bulk Electric System ("BES") will ultimately reduce the transmission rates charged by PPL Electric to its other transmission level customers. The Project would further that interest and result in lower rates for other of PPL Electric's transmission level customers.

12. The Project as proposed addresses the prospective Customer's high-load transmission service in a cost-efficient manner, as opposed to the alternatives evaluated by PPL Electric, such as expanding the existing Harwood 230 kV Substation. Project alternatives are addressed at further length in **Attachment 1 – Necessity Statement**.

13. Further, the Project as proposed produces reliability benefits by creating another path for power to travel south from the Susquehanna 230 kV Switchyard. This will increase operational flexibility, improve the Company's ability to take line outages in the area, and improve overall 230 kV system reliability. These benefits are further explained in **Attachment 1 – Necessity Statement**.

14. Additionally, the Project as proposed will produce net economic benefits for the Commonwealth of Pennsylvania, and for PPL Electric's other transmission-level ratepayers, as explained in further length below and in **Attachment 1 – Necessity Statement**. Therefore, and for the reasons more fully explained below, the Commission should approve the Project as proposed.

1. Existing System

15. The Susquehanna-Harwood #1 & #2 230 kV lines are part of PPL Electric's 230 kV Bulk Electric network.

16. These transmission lines transfer power south from the Susquehanna 230 kV Switchyard (near the Susquehanna Nuclear Station) to the Harwood 230-69 kV Substation (Luzerne County), East Palmerton 230-69 kV Substation (Carbon County), and Siegfried 230-138-69 kV Substation (Northampton County).

17. The Susquehanna Switchyard and Siegfried Substation are connected to multiple other 230 kV lines. The 230 kV network moves power from the generators to regional supply substations.

18. At the regional substations, the 230 kV is stepped down to 69 kV and/or 138 kV. The distribution substations in the surrounding area are supplied via transmission lines operating at 69 kV or 138 kV.

19. The existing double-circuit 230 kV transmission lines include 1113 kcmil[4], 54/19 stranding, "Finch" ACSS[5] conductor wires and are supported by double-circuit steel lattice towers. The arrangement also includes two optical ground wires ("OPGW").

[4] A kcmil is a thousand circular mils. A circular mil is the cross-sectional area of a wire one mil in diameter, where 1 kcmil = 0.5067 mm^2.
[5] ACSS stands for aluminum conductor steel supported.

20. A map of the existing system configuration is provided as **Figure 1-1,** in **Attachment 1 – Necessity Statement.**

2. Identification of Need

21. While the Company anticipates that this Project will eventually facilitate service multiple customers, due to multiple customer requests, the Project is immediately needed to serve a new prospective Customer located in Hazle Township.

22. The prospective Customer is requesting 230 kV electrical service with an in-service date of December 15, 2026 and an initial load of 240 MW. The Customer's load will increase in stages to approximately 1,980 MW by 2033.

23. PPL Electric will carry out the projects necessary to serve this Customer's load request in two separate phases. Phase 1, subject to this Letter of Notification, is needed to connect the Customer requesting transmission-level service in Hazle Township, Luzerne County, Pennsylvania to the 230 kV system. PPL Electric's system planners determined that splitting the adjacent Susquehanna-Harwood #1 & #2 230 kV Transmission Lines, creating the Susquehanna-Tomhicken #1 & #2 230 kV and Tomhicken-Harwood #1 & #2 230 kV lines, and providing 230 kV service from the proposed Tomhicken Switchyard is the optimal solution to serve the Customer's initial requested load.

24. As described in **Attachment 1 – Necessity Statement**, Phase 2 will be needed to address the Customer's future electrical needs and demands, as well as PPL Electric's system needs. Phase 2 will be submitted in a subsequent filing, which PPL Electric anticipates may necessitate a full siting application. PPL Electric notes that the phases are being submitted separately because only the first phase is required to meet the Customer's in-service request; Phase 2 will not be necessary until the Customer's load increases at a future date. Phase 1, i.e., the Project,

is located entirely on property owned by the Customer or by PPL Electric and, as such, requires a Letter of Notification only.

25. Moreover, high-load customers connecting to PPL Electric's BES will ultimately reduce the transmission rates charged by PPL Electric to its other transmission level customers. The Project would further that interest and result in lower rates for other of PPL Electric's transmission level customers.

B. THE PROPOSED PROJECT

26. To appropriately serve the prospective Customer's initial load and limit impacts to the local community, PPL Electric proposes to build the Tomhicken 230 kV Switchyard, which will be a new breaker-and-a-half 230 kV switchyard, and extend four 230 kV lines to the Customer's substation, all located within the Customer-owned parcel ("Proposed Solution"). The Tomhicken 230 kV Switchyard is required due to the number of lines needed by the Customer and the size of the requested load.

27. The new Tomhicken 230 kV Switchyard will be constructed in a breaker-and-a-half arrangement.

28. Under Section III of PJM's minimum planning and design standards, three terminal lines and radial bus station configurations are both discouraged for use in new BES substation construction because of the considerable potential for detrimental effects on transmission system reliability.

29. The proposed Tomhicken 230 kV Switchyard will be constructed on the same Customer-owned parcel as the Customer's 230-34 kV substation and facilities. PPL Electric will acquire the necessary land and right-of-way ("ROW") from the customer for the new Tomhicken 230 kV Switchyard, Tap Lines, and Connecting Lines.

30. Building the Tomhicken 230 kV Switchyard on the Customer-owned parcel is optimal since PPL Electric has existing 230 kV transmission lines traversing the property. The Proposed Solution will allow PPL Electric to break the transmission lines on the customer owned parcel and extend them to the new switchyard; significantly reducing impacts to landowners and the surrounding environment by limiting the amount of new transmission line construction necessary to connect the new 230 kV switchyard to the electric grid.

31. The new Tomhicken 230 kV Switchyard will be located adjacent to the customer-owned 230-34 kV substation, further limiting the amount of impact and new transmission facilities required. The Tomhicken 230 kV Switchyard will also provide additional operational flexibility to serve customer load and meet future system needs.

32. The Project will require the construction of approximately 1.1 miles of new 230 kV transmission lines to connect the existing Susquehanna-Harwood #1 & #2 230 kV lines into the new Tomhicken 230 kV Switchyard.

33. The Project will also extend two new 230 kV transmission lines for approximately 0.1 miles from the new Tomhicken Switchyard to the new Customer-owned 230-34 kV substation. This Project is part of PJM Supplemental Number S3528, specifically segments S3528.1, S3528.6, and S3528.11.

34. The additional paths from the Susquehanna 230 kV Switchyard to the Tomhicken and Harwood 230 kV Switchyards will prevent the thermal overload of the Susquehanna-Tomhicken #1 & #2 230 kV and Tomhicken-Harwood #1 & #2 230kV lines.

35. These upgrades will also increase the operational flexibility and resiliency of the 230 kV system and allow for future load growth. These reinforcements will be submitted in a separate PUC filing.

36. Phase 1, the Proposed Solution here, will allow PPL Electric to provide safe and reliable transmission-level service to the customer while maintaining the reliability of the BES. Additionally, this solution is the least impactful option to landowners and the local community among the feasible alternatives. A map of the proposed system alignment is provided as **Figure 1-2** in **Attachment 1 – Necessity Statement**.

37. Importantly, as explained in **Attachment 1 – Necessity Statement**, the Project as proposed also avoids significant environmental, community, and landowner impact as compared to the new installation contemplated by PPL Electric.

38. This Project will allow PPL Electric to serve the Customer in an adequate, efficient, safe, and reliable manner, as required by the Public Utility Code, while meeting the minimum design standards set forth by PJM, as described in **Section 3.0 of Attachment 1 – Necessity Statement**. 66 Pa.C.S. § 1501. The estimated cost of the Project is $59.9 million. PPL Electric serves customers taking service at 69 kV and above at its LP-5 rate class. Pursuant to Rule 4(C)(4) of the Company's Commission-approved tariff, LP-5 customers are required to pay for costs of upgrades necessary to serve their load. Tariff Rule 4(C)(4) Supp. No. 194 to Electric Pa. P.U.C. No. 201, Tenth Revised Page No. 8.[6] However, certain upgrades that also benefit other PPL Electric customers and/or the transmission grid may be excluded from the interconnecting customer's obligation and added to PPL Electric's transmission rate base. As such, it is PPL Electric's policy that upgrades to the networked BES made in connection with LP-5 customer interconnections will generally be excluded from the customer's obligation and be included in transmission rate bases. At a minimum, the cost of the customer's direct connection facilities is the sole responsibility of the connecting customer. Other upgrades, including PPL Electric

[6] PPL Electric currently has a pending base rate proceeding at Docket No. R-2025-3057164. As a part of this proceeding, PPL Electric has proposed revisions to Rate LP-5.

substations/switchyards will be evaluated on a case-by-case basis to determine if the upgrades provide benefits to other customers and/or the transmission grid. Examples of benefits to other customers that would cause an upgrade to be included in transmission rates include, but are not limited to:

- Added system reliability;
- Increased capacity/lower congestion;
- Lower impedance;
- Improved asset condition of existing facilities;
- Service to multiple transmission customers and/or retail feeders;
- Increased resiliency and operational flexibility;
- Expanded capacity for new generation flow and interconnections

39. Based on a review of the proposed system improvements derived from this Project, it was determined that PPL Electric is responsible for approximately $38.4 Million (~64% of the total Project costs) and the Customer is responsible for approximately $21.8 Million (~36% of the total Project costs).

III. HEALTH AND SAFETY

40. The Tap Lines and Connecting Lines will not create any unreasonable risk of danger to public health or safety. The proposed lines will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable National Electrical Safety Code ("NESC") minimum standards and all applicable legal requirements. Descriptions of the NESC standards, PPL Electric's design criteria, and PPL Electric's safety practices are provided in **Attachment 4 – Design and Safety Criteria** to this Letter of Notification.

41. **Attachment 4** accompanying this Letter of Notification also explains PPL Electric's standards for Magnetic Field Management.

42. PPL Electric's Magnetic Field Management Program is applied to new and reconstructed transmission line projects. Although there is no current scientific evidence demonstrating that magnetic fields cause any adverse health effects or pose a health or safety threat to the public, PPL Electric has established a policy to design its new and rebuilt transmission lines to reduce magnetic fields.

43. To lower magnetic field exposures, the program generally prescribes the use of a line design that provides ground clearances higher than the required minimum NESC ground clearance and reverse phasing of new double-circuit lines where it is feasible to do so at low or no cost. The implementation of additional modifications to reduce magnetic field levels is considered, provided those modifications can be made at low or no cost and will not interfere with the operation of the line.

44. The program will be applied to this Project and the Project is designed with clearances that are at least 3 feet higher than NESC standards.

IV. DESCRIPTION OF THE RIGHT-OF-WAY

45. The Project is located on property owned by PPL Electric or by the Customer.[7] The Project will support the Customer's facilities by connecting it to the Tomhicken 230 kV Switchyard and, ultimately, the existing electric grid.

46. The entire Project is within Hazle Township, Luzerne County, Pennsylvania. PPL Electric has provided information about the proposed Project to representatives of Hazle Township and Luzerne County.

47. The proposed Tomhicken 230 kV Switchyard and Customer-owned substation will be co-located approximately 1.8 miles southwest of State Route 93 (SR 93) and the Interstate 81 (I-81) interchange, outside the incorporated borough of West Hazleton.

48. As explained in **Attachment 1 – Necessity Statement**, PPL Electric plans to construct the new Tomhicken 230 kV Switchyard and 230 kV Tap and Connecting Lines to interconnect the Customer's 230 kV substation with the Transmission Grid. The 230 kV Tap Lines will be located partially within existing PPL fee-owned property and within approximately 11 acres of 150-foot-wide ROW located on the Customer's property, which the Customer will be required to and has agreed to grant to PPL Electric. The Project requires the installation of 13 new structures, which will be constructed on properties owned by PPL Electric or by the Customer.

V. LAND USE AND ENVIRONMENTAL EVALUATION

49. A network of existing and new access roads will be utilized during construction of the transmission lines, switchyard, and substation. New access roads will be constructed and located within the 150-foot-wide ROW acquired from the Customer. A detailed map of the

[7] An approximately 60 acre tract of the customer property will be acquired by PPL Electric for the new Tomhicken Switchyard. The proposed PPL Electric parcel is identified on Figure 3-1.

Tomhicken 230 kV Switchyard, 230 kV Tap and Connecting Lines, Customer-owned substation, and 230 kV transmission lines to be removed is provided in **Figure 3-1** in **Attachment 3 – Description of Project Area.**

50. As explained above in **Attachment 3 – Description of Project Area**, construction of the proposed Project will take place entirely within existing or soon-to-be acquired ROW. Therefore, it is anticipated that the Project will have minimal incremental impacts on land use in the area.

51. The Project Area is generally bounded to the north by Black Creek and Grassy Path Road; to the east by undeveloped forested land owned by the customer; to the south by commercial/industrial warehouses associated with Humboldt Industrial Park and Stony Creek; and to the west by residential properties within the community of Eagle Rock Resort. Land uses immediately surrounding the Project Area predominantly consist of vacant forested land or developed residential land.

52. The closest communications tower is located approximately 1.7 miles northeast of the Project. A natural gas pipeline operated by UGI Utilities, Inc. travels northwest to southeast and is crossed by the Project. An abandoned railroad (Lehigh Valley Railroad) owned by Norfolk Southern traverses 0.4 miles north of the Project, generally in an east-west direction.

53. Additionally, an existing PPL Electric distribution line crosses the Project in a general north/northwest to south/southeast direction between proposed Structures S5 and S6, as well as proposed Structures S2 and S3. The PPL Electric distribution line will be relocated within the Customer's property as part of the Project, because its current location is in conflict with the planned location of the Customer-owned substation.

54. The closest active airport relative to the Project Area is the Hazleton Regional Airport, a publicly owned facility, located approximately 3.8 miles northeast of the Project. Additionally, one private heliport, the Lehigh Valley Hospital Heliport, is located approximately 5 miles southeast of the Project.

55. PPL Electric does not anticipate any interference with airport or heliport operations since the Project consists of new electrical facilities that are of a similar height as the existing electrical facilities in the immediate Project Area. However, PPL Electric will file any required documentation with the Federal Aviation Administration.

56. The proposed Project will not affect any national parks, state parks, local parks, recreational areas, or natural landmarks, or other conserved lands as none are located within the Project Area.

57. An online review of the Project Area and surrounding landscape was conducted through the Pennsylvania Historical and Museum Commission ("PHMC") State Historic and Archaeological Resource Exchange site. State Historic Preservation Office ("SHPO") eligible and listed structures and districts within 1 mile of the Project Area are limited to only one eligible district resource: The Lehigh Valley Railroad. The abandoned railroad is located approximately 0.3 miles north of the Project Area, traversing in a general east-west direction, and is not crossed or spanned by the Project. The Project will not affect the abandoned railroad.

58. PPL Electric has coordinated with the PHMC for the modifications being made to the transmission lines. This coordination is required to receive permits to construct the Project.. PPL Electric does not anticipate any impacts to SHPO-listed or -eligible structures or districts. Furthermore, based on the referenced coordination with PHMC and as per a PHMC letter dated

April 17, 2025, no archaeological or historic architectural resources will be affected by the proposed project.

59. No unique geological, scenic, or natural areas are crossed by the Project, according to the Pennsylvania Department of Conservation and Natural Resources ("DCNR").

60. A Natural Area Inventory ("NAI") has been prepared by The Nature Conservancy in collaboration with the Pennsylvania Natural Heritage Program ("PNHP") for Luzerne County (2006). The Humboldt Barren NAI area is an exceptional-rated natural heritage area located approximately 1,000 feet south/southeast of the Project. This area is characterized as "a dwarf tree forest natural community on a broad high-elevation ridgetop." The Project does not cross the natural areas with supporting habitat identified within the NAI. Additionally, the majority of the NAI contains developed land associated with the Humboldt Industrial Park.

61. No other NAI areas or other unique natural features are located within 1 mile of the Project.

62. The Project Area is located on gradually undulating land, primarily surrounded by undeveloped forest. Topography within the Project Area ranges between approximately 1,300 feet and approximately 1,700 feet above mean sea level ("msl"). Soils present within the Project Area predominantly consist of silty and sandy loams, ranging between 3 and 25 percent slopes.

63. Erosion and Sedimentation ("E&S") control plans will be developed and implemented for the Project to minimize the displacement of soils. These plans will require prior approval from the Luzerne County Conservation District. Coverage under the National Pollutant Discharge Elimination System ("NPDES") permit (PAG-02, Discharges of Stormwater Associated with Construction Activities) will also be required from the Pennsylvania Department of Environmental Protection ("PADEP") as needed. During construction, PPL Electric will adhere to

all conditions specified in the NPDES permit. Impacts to local soil resources are anticipated to be minimal.

64. The prospective Customer retained an environmental consultant to identify and delineate all waterways and wetlands on its entire property subject to the Project. The Customer's consultant identified 13 wetlands, six waterbodies, three unnamed tributaries ("UNTs") flowing north to Black Creek, and two UNTs flowing northeast to Stony Creek.

65. Of these features, one freshwater emergent ("PEM") wetland and one UNT to Black Creek are crossed by the project. The wetland and stream are not anticipated to be impacted during construction. These delineated features are located on the portion of the Customer's property which the Customer has agreed to grant to PPL Electric, generally between proposed Structures N2 and N3. No other delineated features on the Customer's property are crossed by the Project, as these features are generally concentrated in the vicinities of Black Creek to the north and Stony Creek to the south.

66. PPL Electric conducted a wetland delineation on the portion of its property containing the existing Susquehanna-Harwood 230 kV Transmission Line and identified three wetlands and four tributaries to Stony Creek. Minimal impacts to wetlands are anticipated for the Project. PPL Electric will avoid impacts to wetlands and streams where possible by aerially spanning these features.

67. PPL Electric will obtain all necessary permits from PADEP and the United States Army Corps of Engineers ("USACE") and will comply with all the terms and conditions placed on those permits. PPL Electric also will consult with the Luzerne County Conservation District, prepare any required soil erosion and sedimentation control plans, and obtain NPDES permits and comply with any conditions placed on those permits.

68. The National Flood Hazard Layer for Luzerne County, Pennsylvania was obtained through the Federal Emergency Management Agency ("FEMA") Flood Map Service Center website and analyzed for 100-year floodplains and regulatory floodway within the Project Area and surrounding landscape. Based on review of this data, the Project crosses no FEMA 100-year floodplain nor FEMA regulatory floodway. Black Creek to the north and Stony Creek to the south of the Project Area are both within FEMA Zone A, a 100-year floodplain, and has a 1-percent-annual-chance of inundation due to a flood event.

69. No impacts to the floodplain area of either Black Creek or Stony Creek are anticipated by the proposed Project activities, since the proposed switchyard, substation, and 230 kV structures will be constructed outside of the 100-year floodplains. PPL Electric will coordinate with local agencies for regulated floodplain activities where required.

70. The Project will be located entirely within property owned by either PPL Electric or the Customer. The existing Susquehanna-Harwood 230kV Transmission Line ROW has been largely cleared of vegetation as part of PPL Electric's standard vegetation management practices.

71. The site for the new PPL Electric switchyard and the Customer-owned substation is located in an undeveloped wooded area and vegetation clearing is anticipated to accommodate the construction of the new Tomhicken Switchyard and Customer-owned substation. In fall 2024, the Customer began vegetation removal in anticipation of the future development.

72. On March 1, 2024, the customer's consultant ran a Pennsylvania Natural Diversity Inventory ("PNDI") to assess the potential presence of threatened and endangered species and/or special concern species on the customer's property. Specific agencies reviewing the Project included the Pennsylvania Game Commission ("PGC"), Pennsylvania Fish & Boat Commission

("PFBC"), PA Department of Conservation and Natural Resources ("DCNR"), and U.S. Fish and Wildlife Service ("USFWS").

73. On November 27, 2024, PPL Electric ran a PNDI for their property crossed by the existing Susquehanna-Harwood 230kV Transmission Line. Both the PGC and PFBC indicated no further consultation is required for the Project. The DCNR search indicated that the Project is located within the range of the *Bartonia paniculata ssp. paniculata*, a special concern species of screw-stem found in sandy or peaty acidic wetlands. According to the Luzerne County NAI, screw-stem is present within the county. PPL Electric will coordinate with DCNR to use avoidance measures or replanting if the botanical area is impacted.

74. The DCNR search indicated that the Project is located in range of a special concerns species. Based on this review, the DCNR determined potential impacts to the following threatened or endangered plant species or plant species of special concern:

- Variable Sedge
- Fall Dropseed Muhly
- Yellow-fringed Orchid
- Lupine
- Screw-stem
- Hartford Fern
- Rough-leaved Aster
- White-fringed Orchid
- Herbaceous Vernal Pond
- Hemlock-Mixed Hardwood Palustrine Forest
- Pitch Pine – Rhodora – Scrub Oak Woodland

75. The DCNR requested that a botanical survey be completed for the above listed species by a qualified botanist at the appropriate time of year, and the agency recommended that a Wild Plant Management Permit be obtained before botanical surveys occur.

76. A field survey for Screw-Stem was conducted on August 7 and 8, 2025, per the request of DCNR and the results/observations were submitted to DCNR via a Field Survey Summary Report.

77. DCNR issued a Clearance Letter, dated September 29, 2025, stating, in summary, *with compliance to the stated minimization and conservation measures, DCNR has determined that no impact is likely and no further coordination with the agency is needed for the project.*

78. The PGC advised a conservation measure and deferred comments to the USFWS, and the PFBC reported no known impacts to threatened and endangered species and/or special concern species and resources within the Project Area. Therefore, no further consultation with PGC or PFBC is required for this Project.

79. The USFWS search indicated that the Project is located in range of a special concern species or resource and a sensitive species. Given the Project Area contains suitable bat habitat, including rock outcrops, caves, forest canopy, wetlands, and streams, the Customer completed bat habitat surveys on a portion of PPL Electric's property and the entire customer property from June through October of 2024. All necessary studies have been completed, and PPL Electric will comply with all permit conditions.

80. Overall, nine rock outcrops located on the property were identified as potential bat hibernacula. Four of these areas were located in the northwest portion of the Customer's property, four were identified in the southern portion of the property, and one was observed in the northeast portion of the property. Ultimately, the consultant who performed the investigation determined

that tree clearing associated with the Project (conducted between October 1st and March 31st) would not impact potential summer roosting sites or winter hibernacula, given that the identified areas are located outside of the proposed limits of disturbance. The customer commenced tree clearing activities for the Project in fall 2024.

81. PPL Electric will continue to consult with the jurisdictional agencies regarding potential impacts to protected species, complete all required surveys; obtain all necessary approvals and permits for Project construction; and comply with all conditions placed on those permits.

82. If vegetation management is required within the existing ROWs, PPL Electric will apply its "Specifications for Transmission Vegetation Management LA-79827" to minimize potential impacts.

VI. NOTICE

83. PPL Electric has reached out to residents located immediately adjacent to PPL Electric's and the prospective customer's fee owned parcels. Copies of the Letter of Notification will be served upon landowners in accordance with 52 Pa. Code § 57.72(d)(3). A list of the landowners impacted by this project is provided in **Attachment 5 – Landowner and Agency List.**

84. PPL Electric has provided information regarding the Project to representatives of Hazle Township in Luzerne County, Pennsylvania. Hazle Township has not objected to the proposed Project. Copies of this Letter of Notification will be served on the governmental agencies, municipalities, and other public entities and organizations in accordance with 52 Pa. Code § 57.72(d)(3). A list of these entities and organizations is also provided in **Attachment 5**.

VII. LETTER OF NOTIFICATION

85. PPL Electric is proceeding by means of a Letter of Notification, instead of a full Application, pursuant to the Commission's regulations at 52 Pa. Code § 57.72(d)(1)(iii) and (vi).

86. The proposed Project qualifies for use of a Letter of Notification because it will be located entirely within the applicant's existing transmission line ROW and the property of the customer to be served by the line, and because it has a proposed route of 2 miles or less.

87. 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*.

VIII. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission approve the proposed Project located in Luzerne County, Pennsylvania, that is explained above and in the Attachments hereto, by no later than March 26, 2026.

Respectfully submitted,

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Date: December 19, 2025 Attorneys for PPL Electric Utilities Corporation

PPL ELECTRIC
ATTACHMENT 1

TOMHICKEN 230 KV SWITCHYARD PROJECT

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1.0 INTRODUCTION

PPL Electric Utilities Corporation ("PPL Electric") is requesting Pennsylvania Public Utility Commission ("PUC" or "Commission") approval to build approximately 1.1 miles of new double-circuit 230 kilovolt ("kV") transmission taps ("Susquehanna-Tomhicken #1 & #2 230 kV and Tomhicken-Harwood #1 & #2 230 kV lines" or "Tap Lines") that are needed to connect the existing Susquehanna-Harwood #1 & #2 230 kV Transmission Lines to the new Tomhicken 230 kV Switchyard (the "Project"). The Project also includes the construction of two new 0.1-mile-long 230 kV transmission lines ("Connecting Lines") from the Tomhicken 230 kV Switchyard to a new customer-owned 230-34 kV substation. The new 230 kV Connecting Lines, Tap Lines and Tomhicken Switchyard are located in Hazle Township, Luzerne County, Pennsylvania. PPL Electric has designed the proposed transmission line system so that it fits entirely within property owned by the customer (the "Customer") or by PPL Electric. PPL Electric is working with the Customer to finalize necessary easements.

The Project is needed to accommodate multiple customer requests[1] to serve new and future load in the area. The scope of work required to serve this load is comprised of two phases. Only the first phase of the Project is the subject of this Letter of Notification. Any additional high-voltage ("HV") transmission line work associated with the second phase of work will be the subject of a future letter of notification or siting application, as may be necessary and appropriate under the Commission's regulations.

As explained in greater detail below, the first phase of the Project ("Phase 1") involves the construction of new HV transmission lines. Phase 1, subject to this Letter of Notification, is needed to connect the Customer requesting transmission level service in Hazle Township, Luzerne County, Pennsylvania to the 230 kV system. PPL Electric's system planners determined that splitting the adjacent Susquehanna-Harwood #1 & #2 230 kV Transmission Lines, creating the Susquehanna-Tomhicken #1 & #2 230 kV

[1] While the instant LON is needed forthwith to connect the Customer to the 230kV grid through the Customer-owned substation and the Tomhicken Switchyard, PPL Electric did receive more than one customer request for transmission level service. As such, PPL Electric anticipates that the Tomhicken Switchyard will eventually interconnect a second, customer-owned substation. However, any future project or constructions needed to interconnect the other requesting customer will be undertaken as the subject of a future, standalone filing before the Commission.

and Tomhicken-Harwood #1 & #2 230 kV lines, and providing 230 kV service from the new Tomhicken 230kV Switchyard is the optimal solution to serve the Customer's initial requested load.

PPL Electric anticipates that a second phase of transmission expansion ("Phase 2") will be needed to address the future electrical needs and demands associated with this Customer and with other load requests, as well as PPL Electric's own system needs. At a future date, Phase 2 will be submitted in an appropriate filing before the PUC. PPL Electric notes that the phases are being submitted separately because only the first phase is required to meet the Customer's in-service request; Phase 2 will not be necessary until the Customer's load increases at a future date. Additionally, the Company anticipates that Phase 2 will require a full siting application.

As such, PPL Electric herein seeks Commission approval to split the Susquehanna-Harwood #1 & #2 230 kV Transmission Lines and extending the Tap Lines to the new Tomhicken 230 kV Switchyard, as well as providing new Connecting Lines from the Tomhicken Switchyard to the Customer-owned 230-34 kV substation.

The Project is required to comply with:

- The PPL Electric Utilities Corporation General Tariff to provide non-discriminatory service to a customer facility at 69,000 kV or above service at the LP-5 rate schedule.
- PPL Electric's general right and obligation to serve customers in its service territory, subject to the terms and conditions of its tariffs and their certificate of public convenience[2].

The Project as proposed represents the optimal solution that allows PPL Electric to serve the Customer's load. Importantly, the new load that will result from interconnecting this Customer with the transmission grid as proposed by this Project will also positively impact transmission rates paid by PPL Electric customers, and provide PPL Electric an opportunity to enhance the existing transmission system.

[2] *See, e.g.*, 66 Pa.C.S. §§ 1103, 1501, 2802(12); 52 Pa. Code §§ 57.19; *Popowsky v. Pa. PUC*, 910 A.2d 38, 48-56 (Pa. 2006); *Pa. Gas Co. v. Pub. Serv. Comm'n*, 83 Pa. Super. 557, 565-66 (1924); *Philadelphia Transp. Co. v. Pa. PUC*, 37 A.2d 138, 147 (Pa. Super. 1944); *Application of Leatherstocking Gas Co., LLC, for Approval to Supply Natural Gas Serv. to the Pub. in N. Susquehanna Cnty., in the Twps. of Bridgewater, Forest Lake, Great Bend, Harmony, New Milford, and Oakland, and in the Boroughs of Great Bend, Hallstead, Lanesboro, Montrose, New Milford, Oakland and Susquehanna*, Docket No. A-2011-2275595, 2012 Pa. PUC LEXIS 1391, at *22 (Order entered Aug. 30, 2012).

Subject to the Commission's approval, construction will begin on March 30, 2026, to support an in-service date of December 15, 2026. PPL Electric will own, operate, and maintain the proposed Tomhicken Switchyard, Tap Lines and Connecting lines. The Customer will construct, own, operate, and maintain their 230 -34 kV substation. The total estimated cost of this Project, as described below, is approximately $59.9 million. The Customer is responsible for approximately $21.5 million, and PPL Electric is responsible for approximately $38.4 million. These costs do not include the Customer costs for their own dedicated substation and their site improvements to support our new proposed infrastructure on their site.

2.0 BACKGROUND

PPL Electric has a right and obligation to provide retail electric service in a manner that is adequate, efficient, safe, reliable, and reasonable to meet the needs of the electric system and the expectations of its customers.

PPL Electric is a public utility that provides electric service to approximately 1.5 million customers throughout 29 central and eastern Pennsylvania counties. The Susquehanna-Harwood #1 & #2 230 kV lines are part of PPL Electric's 230 kV Bulk Electric network. These transmission lines transfer power south from the Susquehanna Nuclear Station to the Harwood Substation (Luzerne County), East Palmerton Substation (Carbon County) and Siegfried Substation (Northampton County).

3.0 TRANSMISSION SYSTEM PLANNING PROCESS

The nation's interconnected transmission grid ("Transmission Grid") serves as the backbone for the safe and reliable delivery of large amounts of electricity from generating stations over substantial distances to customers served by transmission and local distribution systems. It is critical that the Transmission Grid be planned and designed to ensure reliable electric service is provided under all loading conditions or when certain elements of the Transmission Grid are out of service (system contingencies) due to planned or unplanned outages.

Robust Transmission Planning assures that the transmission system can supply electricity to all customer loads in a manner that is reliable and economical. This System Planning process ensures that both the Bulk Electric System ("BES")[3] and non-Bulk Electric System (non-BES)[4] are planned and constructed so that:

- They can accommodate forecasted system flows during summer and winter peak load;
- They can adequately serve each customer's need regarding capacity, voltage, and reliability for all load levels throughout the daily load cycle;
- They can sustain contingencies and disturbances with minimal customer service interruptions; and
- They are in conformance with North American Electric Reliability Corporation ("NERC"), PJM Interconnection, LLC ("PJM"), and the Transmission Owner's reliability criteria for all normal and emergency operating conditions.

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 (100kV and above) and coordinating the movement of electricity in all or parts of thirteen states and the District of Columbia, including Pennsylvania.[5]

New load customers are covered under Attachment M-3 Procedure of the Open Access Transmission Tariff ("OATT").[6] PPL Electric submits to PJM and presents the supplemental project assumptions and methodology yearly at the PJM Subregional Regional Transmission Expansion Planning ("RTEP") December meeting.[7] The supplemental project driver of "Customer Service" is used for new customer requests. PPL Electric submits the project need information to PJM detailing the requested load amount,

[3] Includes transmission facilities operated at voltages of 100 kV or higher.

[4] Includes transmission facilities operated at voltages less than 100 kV.

[5] As more fully explained in the Letter of Notification, PPL Electric notes that this Letter of Notification, if approved, would resolve the issues involved in the proceeding pending before FERC at FERC Docket No. ER ER24-2172.

[6] PJM OPEN ACCESS TRANSMISSION TARIFF: https://www.pjm.com/directory/merged-tariffs/oatt.pdf

[7] PPL 2024 Annual M-3 Project Assumptions and Methodology: https://www.pjm.com/-/media/committeesgroups/committees/srrtep-ma/2023/20231213/20231213-item-05---2024-ppl-planning-assumptions.ashx

location, and requested in-service date. PPL Electric then presents the need at the next TEAC (>200 kV) or Subregional-RTEP (<200 kV) meeting. At a subsequent meeting, PPL Electric presents the proposed solution to serve the requested load. PPL Electric provides the solution files to PJM including changes to the network model, contingency changes, and short-circuit model changes. PJM then studies the proposed solution to ensure that the changes do no harm (DNH test) to the system by creating overloads, voltage violations, or other criteria violations. PPL Electric will include in the solution any upgrades that are required to serve the customer load in the DNH case year. When the project passes the DNH test a supplemental project number is assigned and PPL Electric submits the project into the local plan. The project then is added into the RTEP model in the next case creation cycle. Any customer load increases above the DNH harm case year will be included in the PPL Electric's Load Forecast submission to PJM. The load increases are then incorporated into the RTEP case creation. Any overloads, voltage violations, or other criteria violations caused by the increase of load on PPL Electric's system are then resolved through the PJM Competitive Planning Process.

This Project has gone through the M-3 Supplemental Project Process and the DNH tests. The Project was assigned supplemental number 3528.

4.0 THE NEED FOR THE PROJECT

4.1 Existing System

The Susquehanna-Harwood #1 & #2 230 kV lines are part of PPL Electric's 230 kV Bulk Electric network. These transmission lines transfer power south from the Susquehanna 230 kV Switchyard (near the Susquehanna Nuclear Station) to the Harwood 230-69 kV Substation (Luzerne County), East Palmerton 230-69 kV Substation (Carbon County), and Siegfried 230-138-69 kV Substation (Northampton County). The Susquehanna Switchyard and Siegfried Substation are connected to multiple other 230 kV lines. The 230 kV network moves power from the generators to regional supply substations. At the regional substations, the 230 kV is stepped down to 69 kV and/or 138 kV. The distribution substations in the surrounding area are supplied via transmission lines operating at 69 kV or 138 kV.

A map of the existing system configuration is provided as **Figure 1-1**.

4.2 Project Need

While PPL Electric expects load growth from multiple customers in the area of the Project, the first new Customer, located in Hazle Township, is requesting electrical service with an in-service date of December 15, 2026, and an initial load of 12 megawatts ("MW"). While the Project proposed is this Letter of Notification is needed to serve the initial load of the Customer, PPL Electric anticipates that the initial Customer's load will increase in stages to approximately 965 MW by 2031. Due to the size of the requested load, the Customer is most appropriately supplied from the 230 kV network. Moreover, as the Customer's load continues to ramp up, it is anticipated that additional improvements to the 230 kV network in this area will be required at a later date, i.e., under the Phase 2 of work that will be the subject of a future filing, to continue to provide reliable service to the area.

The Project is principally required to comply with PPL Electric's obligation to provide service to customers upon a request for the same, subject to reasonable terms and conditions. In this case, PPL Electric specifically notes that, consistent with its Tariff, PPL Electric and the Customer have voluntarily negotiated a service agreement which contemplates the provision of the requested service to the Customer, but which also contains financial safeguards to ensure that PPL Electric's customers are insulated from the costs of the Project. In addition, PPL Electric anticipates that new, incremental load upon the transmission system will have a positive impact upon the transmission rates paid by its customers.

In addition to these direct protections and benefits, the expedient initiation of adequate and reliable service to new high-load customers seeking to enter PPL Electric's system is critical for the Commonwealth of Pennsylvania's continued economic development. Such new, incremental high-load customers can result in additional job growth and tax base for the Commonwealth.

Moreover, the connection of high-load customers to PPL Electric's BES will ultimately reduce the transmission rates charged by PPL Electric to its other customers.

5.0 ALTERNATIVES

PPL Electric performed a comprehensive analysis to identify feasible and cost-effective solutions to best serve the prospective Customer, consistent with its obligations to provide non-discriminatory service to a customer above 69 kV, while seeking to minimize impacts upon the local environment and surrounding community.

PPL Electric evaluated the following alternatives to serve the Customer at 230 kV, focused initially on serving the Customer's initial load and also allowing for Phase 2 work to be completed at a later date to accommodate increased load:

1) Expand the Harwood 230 kV Substation by installing three new 230 kV bays. This alternative would require relocation of the existing 230 kV capacitor to accommodate the new 230 kV bays and installation of seven new 230 kV breakers, as well as re-termination of the existing Susquehanna #1 & #2 lines into the new bay positions. In addition to the substation expansion, two new double-circuit 230 kV transmission lines (four circuits total) would need to be installed over approximately 3 miles within new greenfield right-of-way ("ROW") and connect to the Customer's 230-34 kV substation. This solution was not selected due to the significant environmental, community, and landowner impact anticipated by the installation of approximately 3 miles of new 230 kV transmission lines, which were not present under the other alternative evaluated. In addition, the ultimate demand of the customers served by this Project is anticipated to be approximately 2000 Megawatts. This factor, combined with the need anticipated as part of the scope of Phase 2, would build out all but one line position at Harwood substation. This would limit the ability of PPL Electric to accommodate other requests and load growth in the Hazleton area.
2) Split and extend the existing Susquehanna-Harwood #1 & #2 230 kV Transmission Lines to terminate into a new 230 kV switchyard. In addition, extend two double-circuit 230 kV transmission lines from the new 230 kV switchyard to the new Customer-owned 230-34 kV substation ("Proposed Solution").

6.0 PROPOSED SOLUTION

To appropriately serve the Customer's initial load and limit impacts to the local community, PPL Electric proposes to build a new breaker-and-a-half 230 kV switchyard and extend four 230 kV lines to the Customer's substation, all located within the Customer-owned parcel. The new breaker-and-a-half switchyard is required due to the number of lines needed by the Customer and the size of the requested load.

The new Tomhicken 230 kV Switchyard will be constructed in a breaker-and-a-half arrangement. Section III of the PJM minimum planning and design standards refers to Substation Bus Configurations and Substation Design Recommendations.[8] Under PJM's standards, three terminal lines and radial bus station configurations are discouraged for use in new BES substation construction because of the considerable potential for detrimental effects on transmission system reliability. Acceptable standards for substations are noted as ring bus configurations, breaker-and-a-half-arrangements, and double breaker–double bus arrangements. Breaker-and-a-half arrangements are the preferred design because of the balance of operational flexibility and cost that this design affords.

The proposed Tomhicken 230 kV Switchyard will be constructed on the same Customer-owned parcel as the Customer's 230-34 kV substation and facilities. PPL Electric will acquire the necessary land and ROW from the Customer for the new Tomhicken 230 kV Switchyard, Tap Lines and Connecting Lines. Building the new switchyard on the Customer-owned parcel is optimal since PPL Electric has existing 230 kV transmission lines traversing the property. The Proposed Solution will allow PPL Electric to split the transmission lines on the Customer-owned parcel and extend them to the new switchyard. This will significantly reduce impacts to adjacent landowners and the surrounding environment, as compared to the other alternative, by limiting the amount of new transmission line construction necessary to connect the new Tomhicken 230 kV Switchyard to the electric grid. The Tomhicken 230 kV Switchyard will be located adjacent to the Customer-owned 230-34 kV substation, further limiting the amount of impact and new transmission facilities required. The proposed Tomhicken 230 kV Switchyard will also provide

[8] PJM Substation Bus Configurations and Substation Design: https://www.pjm.com/~/media/planning/design-engineering/maac-standards/section-iii-sub-bus-config.ashx

additional operational flexibility to serve customer load and meet future system needs. The Tomhicken 230 kV Switchyard will add the ability to connect additional 230 kV circuits to support the 230 kV system to address load growth in the Hazleton area.

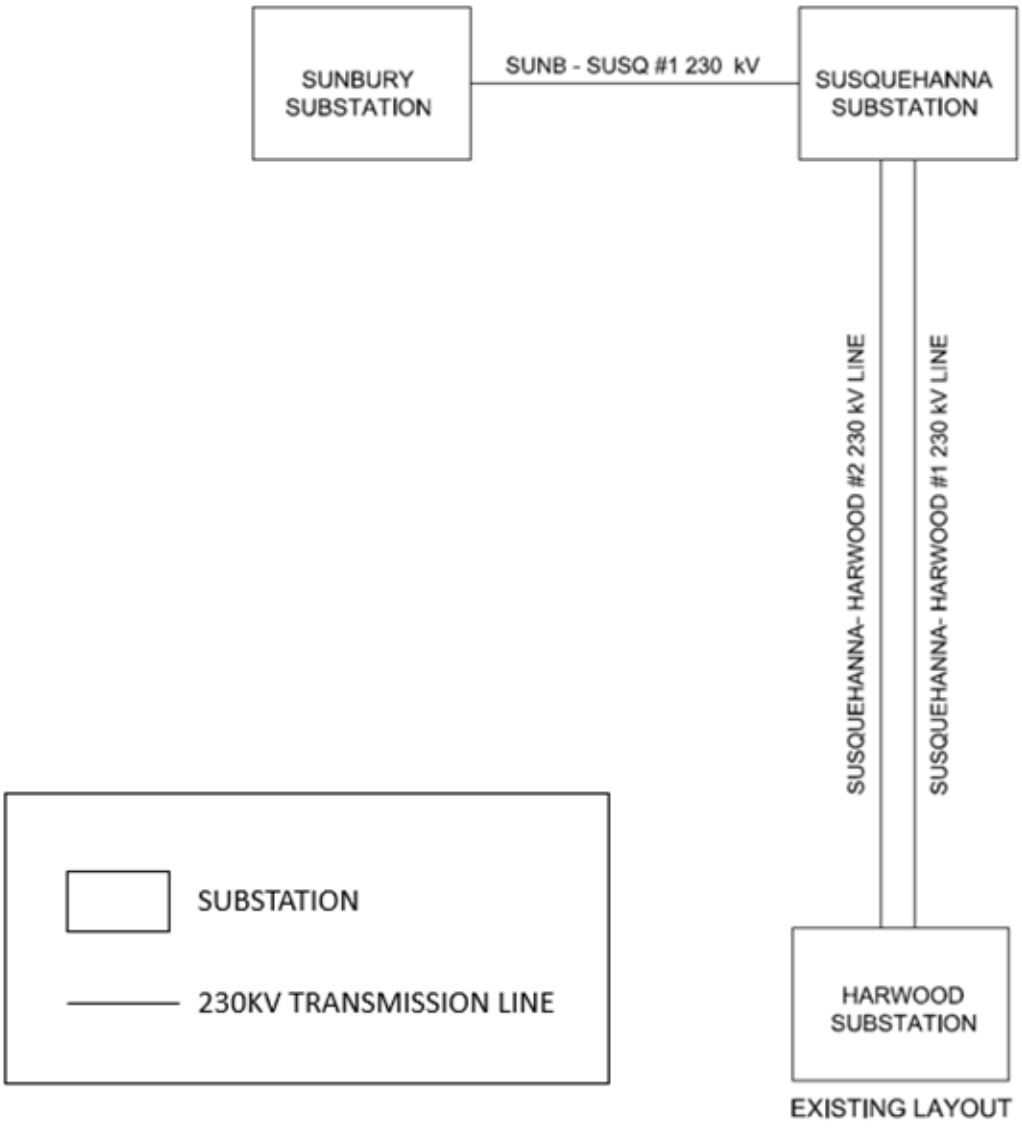
The Project will require the construction of approximately 1.1 miles of new 230 kV transmission lines to connect the existing Susquehanna-Harwood #1 & #2 230 kV lines into the new Tomhicken 230 kV Switchyard. The Project will also extend two 230 kV transmission lines for approximately 0.1 miles from the new Tomhicken 230 kV Switchyard to the new Customer-owned 230-34 kV substation. This Project is part of PJM Supplemental Number S3528, specifically segments S3528.1, S3528.6, and S3528.11.

Phase 2 of the supplemental project will be submitted at a later date in a separate PUC filing, in order to accommodate additional anticipated load from new customers. PPL Electric provides this additional detail at this time for informational purposes only. Phase 2, as accepted by PJM, includes additional reinforcements of the 230 kV system from the Susquehanna 230 kV Switchyard to the Tomhicken 230 kV Switchyard and Harwood 230-69 kV Substation, via a new 230 kV switchyard ("Nescopeck 230 kV Switchyard"). The existing Sunbury-Susquehanna 230 kV line will be split into the new Nescopeck 230 kV Switchyard. The section of the Sunbury-Susquehanna #1 230 kV line between the Nescopeck 230 kV Switchyard and the Susquehanna 230 kV Switchyard will be rebuilt to double-circuit 230 kV operation. Two new 230 kV lines will be extended south from the Nescopeck 230 kV Switchyard, with one line terminating at the Tomhicken 230 kV Switchyard and one line terminating at the Harwood 230-69 kV Substation. The additional paths from the Susquehanna 230 kV Switchyard to the Tomhicken 230 kV Switchyard and Harwood 230-69 kV Substation will prevent the thermal overload of the Susquehanna-Tomhicken #1 & #2 230 kV and Tomhicken-Harwood #1 & #2 230 kV lines. These upgrades will also increase operational flexibility and resiliency of the 230 kV system. These upgrades will allow for load growth of the Customer as well as other customers in the Hazleton area. Phase 2 is part of PJM Supplemental Number S3528, specifically segments S3528.2, S3528.3, S3528.5, S3528.7, S3528.8, and S3528.10

The proposed solution will allow PPL Electric to provide safe and reliable transmission level service to the Customer while maintaining reliability of the BES. Additionally, this solution is the least impactful

option to landowners and the local community among the feasible alternatives. A map of the proposed system alignment is provided as **Figure 1-2**.

Figure 1-1: Existing System Configuration



Existing 230 kV Structure
Existing 230 kV Transmission Line
Existing PPL ROW
Existing Distribution Line
Approximate Pipeline
Parcel Boundary
Existing PPL-Owned Parcel

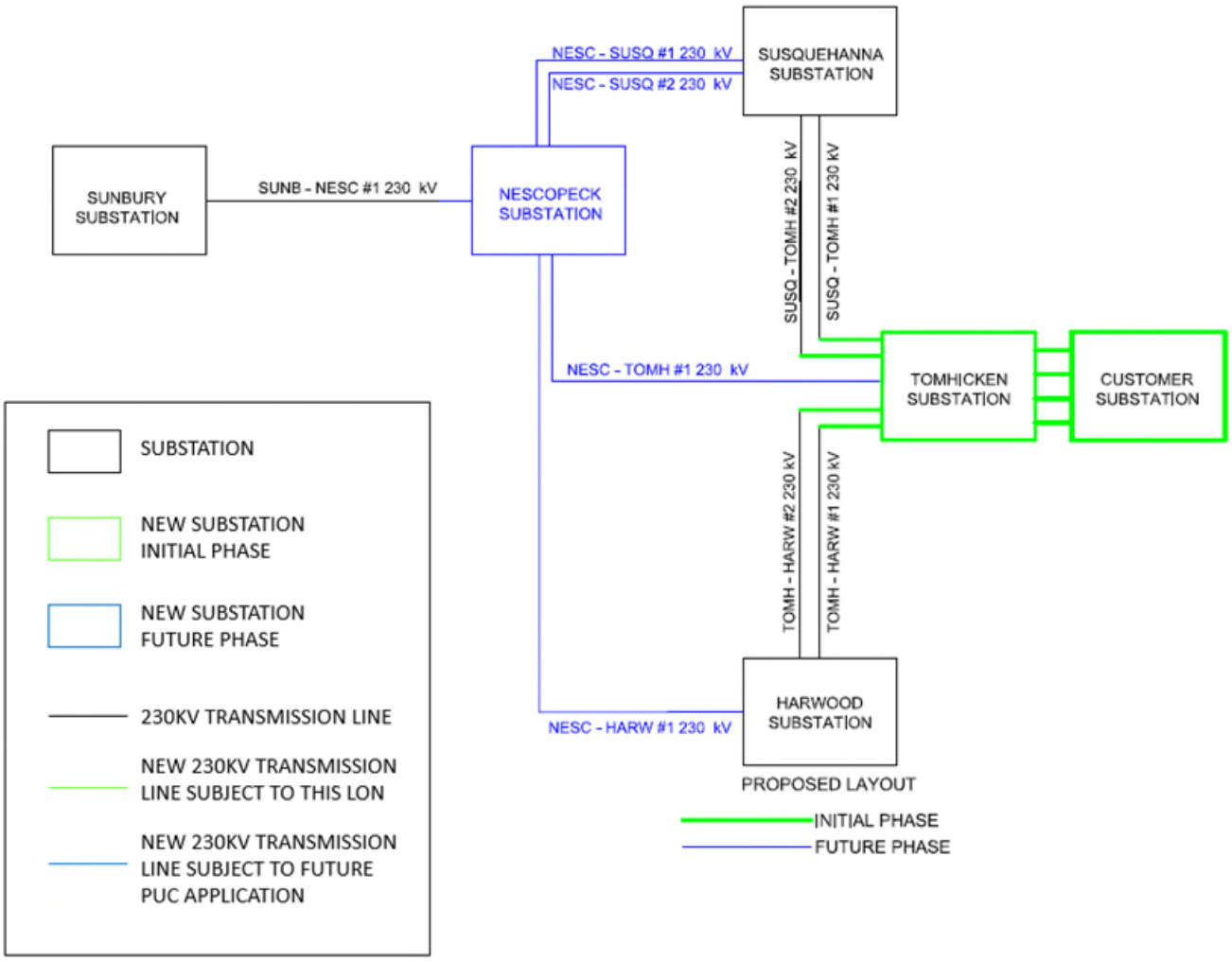
Roads, Railroads, Municipalities (PASDA 2022)
Parcels (Luzerne Co. 2024)
Rivers (USGS 2022)

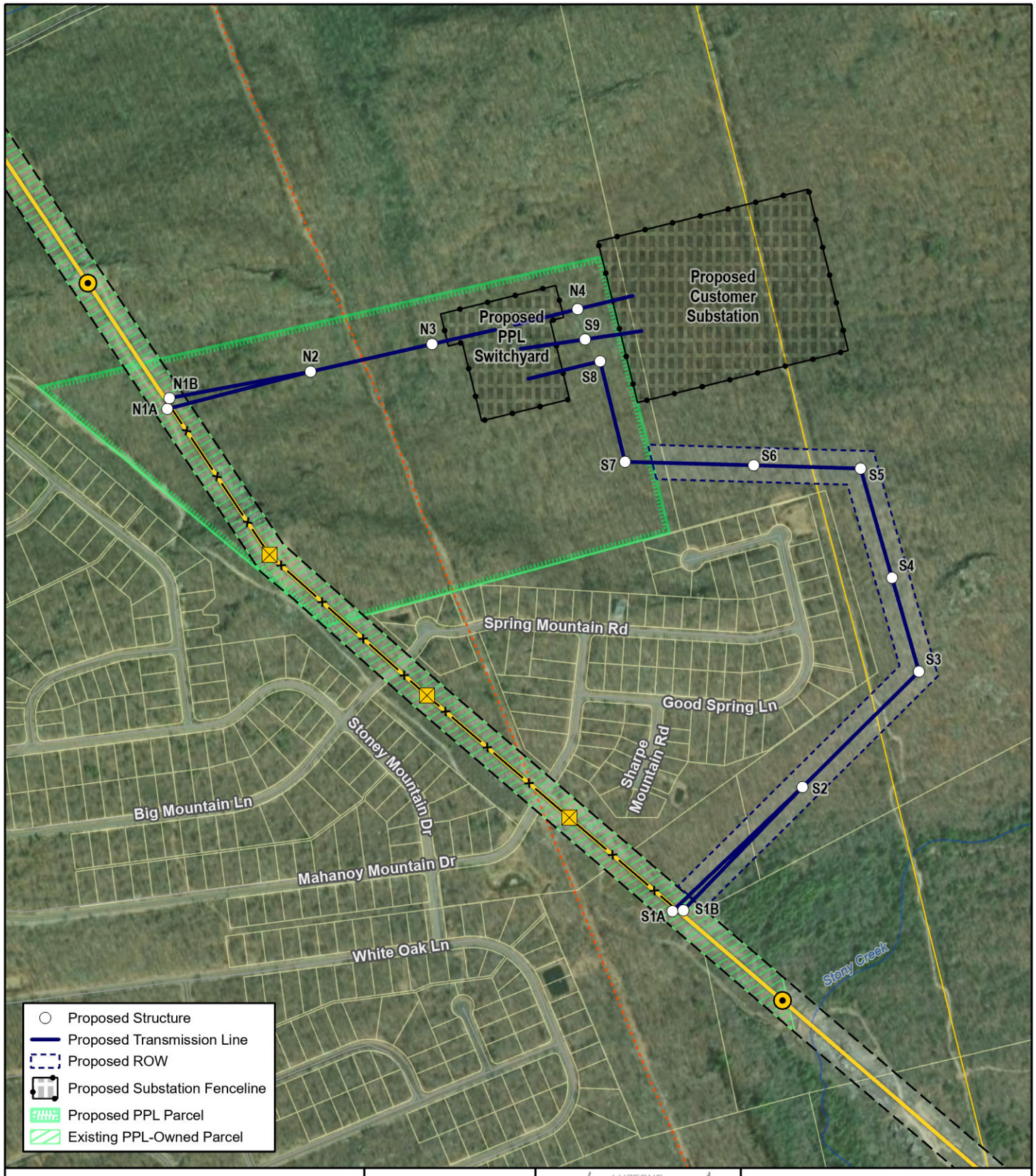
Coordinate System:
State Plane Pennsylvania North
Datum: North American 1983

Figure 1-1
Existing System Configuration
Tomhicken 230 kV
Transmission Line Project

0 300 600 Feet

Figure 1-2: Proposed System Configuration





Existing Structure to Remain
Existing Structure to be Removed
Existing Transmission Line to be Removed
Existing 230 kV Transmission Line
Approximate Pipeline
Existing Distribution Line
Existing PPL ROW
Parcel Boundary

Roads, Railroads, Municipalities (PASDA 2022)
Parcels (Luzerne Co. 2024)
Rivers (USGS 2022)

Coordinate System:
State Plane Pennsylvania North
Datum: North American 1983

Figure 1-2
Proposed System Configuration
Tomhicken 230 kV
Transmission Line Project

0 300 600 Feet

PPL ELECTRIC
ATTACHMENT 2

TOMHICKEN 230KV SWITCHYARD PROJECT

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1.0 INTRODUCTION

As explained in **Attachment 1 – Necessity Statement** to this Letter of Notification ("LON"), and in the LON and other associated attachments, PPL Electric Utilities Corporation ("PPL Electric") is requesting Pennsylvania Public Utility Commission ("PUC" or "Commission") approval to build approximately 1.1 miles of new double-circuit 230 kilovolt ("kV") transmission taps ("Susquehanna-Tomhicken #1 & #2 230 kV and Tomhicken-Harwood #1 & #2 230 kV lines" or "Tap Lines") that are needed to connect the existing Susquehanna-Harwood #1 & #2 230 kV Transmission Lines to the new Tomhicken 230 kV Switchyard (the "Project"). The Project also includes constructing two new 0.1-mile-long 230 kV transmission lines ("Connecting Lines") from the Tomhicken 230 kV Switchyard to a new customer-owned 230-34 kV substation. The new 230 kV Connecting Lines, Tap Lines and Tomhicken Switchyard are located in Hazle Township, Luzerne County, Pennsylvania. PPL Electric has designed the proposed transmission line system so that it fits entirely within existing PPL Electric right-of-way ("ROW") and the customer's (the "Customer") property. PPL Electric is working with the Customer to finalize necessary easements.

As explained in greater detail in **Attachment 1 – Necessity Statement**, the Project is needed to accommodate multiple customer requests[1] to serve new and future load in the area, including the request of the Customer who will own the new 230-34 kV substation. The scope of work required to serve this load is comprised of two phases. Only the first phase of the Project is the subject this Letter of Notification. Any additional high-voltage ("HV") transmission line work associated with the second phase of work will be the subject of a future letter of notification or siting application, as may be necessary and appropriate under the Commission's regulations.

The first phase of the Project ("Phase 1") involves the construction of new HV transmission lines to accommodate multiple customer requests to serve new and future load in the area, including the request of the Customer who will own the new 230-34kV substation. The Customer is initially requesting transmission level service in Hazle Township, Luzerne County, Pennsylvania to the

[1] While the instant LON is needed forthwith to connect the Customer to the 230kV grid through the Customer-owned substation and the Tomhicken Switchyard, PPL Electric did receive more than one customer request for transmission level service. As such, PPL Electric anticipates that the Tomhicken Switchyard will interconnect to a second, customer-owned substation. However, any future project or constructions needed to interconnect the other requesting customer will be undertaken as the subject of a future, standalone filing before the Commission.

230 kV system. To meet the Customer's initial needs, PPL Electric's system planners determined that splitting the adjacent Susquehanna-Harwood #1 & #2 230 kV Transmission Lines, creating the Susquehanna-Tomhicken #1 & #2 230 kV and Tomhicken-Harwood #1 & #2 230 kV lines, and providing 230 kV service from the new Tomhicken 230kV Switchyard is the optimal solution to serve the Customer's initial requested load.

PPL anticipates that a second phase of transmission expansion ("Phase 2") will be needed in order to address future electrical needs and demands associated with this Customer and with other load requests, as well as PPL Electric's system needs. PPL Electric provides this additional detail at this time for informational purposes only. Phase 2 will require construction of a new 230 kV switchyard ("Nescopeck 230 kV Switchyard") west of the existing Susquehanna 230 kV Switchyard. The existing Sunbury-Susquehanna 230 kV line will be split into the new Nescopeck 230 kV Switchyard. The section of the Sunbury-Susquehanna 230 kV line between the Nescopeck 230 kV Switchyard and the Susquehanna 230 kV Switchyard will be rebuilt to double-circuit 230 kV operation. Two new 230 kV lines will be extended south from the new Nescopeck 230 kV Switchyard with one line terminating at the Tomhicken 230 kV Switchyard and one line at the Harwood 230-69 kV Substation. Phase 2 will resolve projected overloads on the Susquehanna-Tomhicken 230 kV lines due to customer load addition. This project will create another path for power to travel south from the Susquehanna 230 kV Switchyard. This will increase operational flexibility, the ability to take line outages in the area, and reliability of the 230 kV system. The newly-created path south from the Susquehanna 230 kV Switchyard will allow this Customer to connect to the system as well as other load customers in the Hazleton area. At a future date, Phase 2 will be submitted in an appropriate filing before the PUC. PPL Electric notes that the phases are being submitted separately because only the first phase is required to meet the Customer's in-service request; the second phase will not be necessary until the Customer's load increases at a future date. Additionally, the Company anticipates that Phase 2 will require a full siting application.

The proposed transmission line system will be designed according to, and generally exceed, all National Electrical Safety Code ("NESC") standards. Design specifications and safety rules adhered to by PPL Electric are included as **Attachment 4**.

2.0 DESCRIPTION OF THE EXISTING AND PROPOSED 230 KV LINES AND STRUCTURES

The existing double-circuit 230 kV transmission lines include 1113 kcmil[2], 54/19 stranding, "Finch" ACSS[3] conductor wires and are supported by double-circuit steel lattice towers. The arrangement also includes two optical ground wires ("OPGW").

A detailed aerial exhibit of the Project alignment is provided as **Figure 3-1** in **Attachment 3 – Description of Project Area.**

The three existing structures to be removed range in height between 130 and 133 feet, with an average height of 132 feet. The proposed monopole structures to be constructed will range in height from between approximately 100 and 140 feet with an average height of approximately 118 feet. **Table 2-1** provides a summary of the number and heights of the existing and proposed structures. **Figures 2-1** through **2-4** depict typical structure types that will be used for the new 230 kV transmission lines.

Table 2-1. Existing and New Transmission Line Structures

Transmission Line	No. of Existing Structures	Existing Structure Height Range (feet)	Proposed No. of New Structures	Proposed Structure Height Range (feet)	Applicable Framing/ Specifications
Existing Susquehanna-Harwood 230 kV (to be removed)	3	130-133	0	N/A	N/A
Proposed Susquehanna-Tomhicken 230 kV (N1-N3)	0	N/A	3	105-140	7-009-001 7-009-004 7-009-005
Proposed Tomhicken-Harwood 230 kV (S1-S8)	0	N/A	8	100-140	7-009-001 7-009-004 7-009-005 7-009-061
Connecting Structure (N4)	0	NA	1	110	7-009-004
Future Use Connecting Structure (S9)	0	N/A	1	115	7-009-004

[2] A kcmil is a thousand circular mils. A circular mil is the cross-sectional area of a wire one mil in diameter, where 1 kcmil = 0.5067 mm^2.
[3] ACSS stands for aluminum conductor steel supported.

Table 2-1. Existing and New Transmission Line Structures					
Transmission Line	**No. of Existing Structures**	**Existing Structure Height Range (feet)**	**Proposed No. of New Structures**	**Proposed Structure Height Range (feet)**	**Applicable Framing/ Specifications**
Total	**3**		**13**		

As explained in **Attachment 1 – Necessity Statement**, the approximate 1.3 miles (1.1 miles of Tap Lines and two 0.1-mile segments of Connecting Lines) of new 230 kV transmission lines to be constructed and the approximate 0.8 miles of existing transmission lines to be removed are located entirely on property owned by the Customer or PPL Electric. PPL Electric owns the existing Susquehanna-Harwood 230 kV 150-foot-wide ROW corridor in this area. Since the rebuilt 230 kV transmission lines are contained entirely within these properties, no new ROW is required on land not already owned by the Customer or PPL Electric (see **Attachment 3 – Description of Project Area**).

The new Susquehanna-Tomhicken 230 kV Tap Line will be extended approximately 0.3 miles and include three new steel monopole support structures. The new Tomhicken-Harwood 230 kV Tap Line will be extended approximately 0.8 miles and will include 8 new steel monopole structures. Additionally, there will be two 0.1-mile Connecting Lines, and two new steel monopole support structures utilized to interconnect the new Tomhicken Switchyard and the Customer-owned substation. Please see **Figure 3-1** in **Attachment 3** – **Description of Project Area.**

The new 230 kV transmission lines will be double-circuit and have two OPGWs. The conductors will be 1590 kcmil[4], 54/19 stranding, "Falcon" ACSR[5]. The fiber optic ground wire will be dual 144 count OPGW. The minimum conductor-to-ground clearance will be approximately 33.5 feet, which occurs at a maximum conductor temperature of 125°C (257°F). The design minimum conductor clearances and conductor thermal ratings for the proposed 230 kV lines are shown in **Tables 2-2** and **2-3**. Design specifications and safety rules practiced by PPL Electric are included in **Attachment 4** – **Design Criteria and Safety**.

[4] A kcmil wire size is the equivalent cross-sectional area in thousands of circular mils. A circular mil is the area of a circle with a diameter of one thousandth (0.001) of an inch.
[5] ACSR stands for aluminum conductor steel reinforced.

Table 2-2. Design for Minimum Conductor Clearances for Selected Conductor[6]	
Condition	**Transmission Double-Circuit Design**
Heavy Ice (1” Ice at 0°C ambient temperature)	33.5 feet (Clearance-to-Ground)
Predicted extreme thermal load (125°C conductor temperature)	33.5 feet (Clearance-to-Ground)
Predicted blowout (6 psf, 16°C ambient temperature)	11.5 feet (Lateral movement)

Table 2-3. Conductor Thermal Rating 1590 kcmil 54/19 Stranding Falcon ACSR – 125°C Normal Maximum Conductor			
Condition	**Ambient Temperature (°C)**	**Wind Speed (Ft./sec)**	**Ampacity (Amps)**
Summer Normal	35	0	3000
Winter Normal	10	0	3700
Summer Emergency	35	2.533	4000
Winter Emergency	10	2.533	4500

[6] Clearances based on an initial maximum tension of 6,000-10,000 pounds at 0.5-inch ice, 0°F, 4# wind and maximum ruling span of 200-1,250 feet.

Figure 2-1. Typical 230 kV Double-Circuit Steel Pole

0° to 1° Suspension Structure (7-009-001)

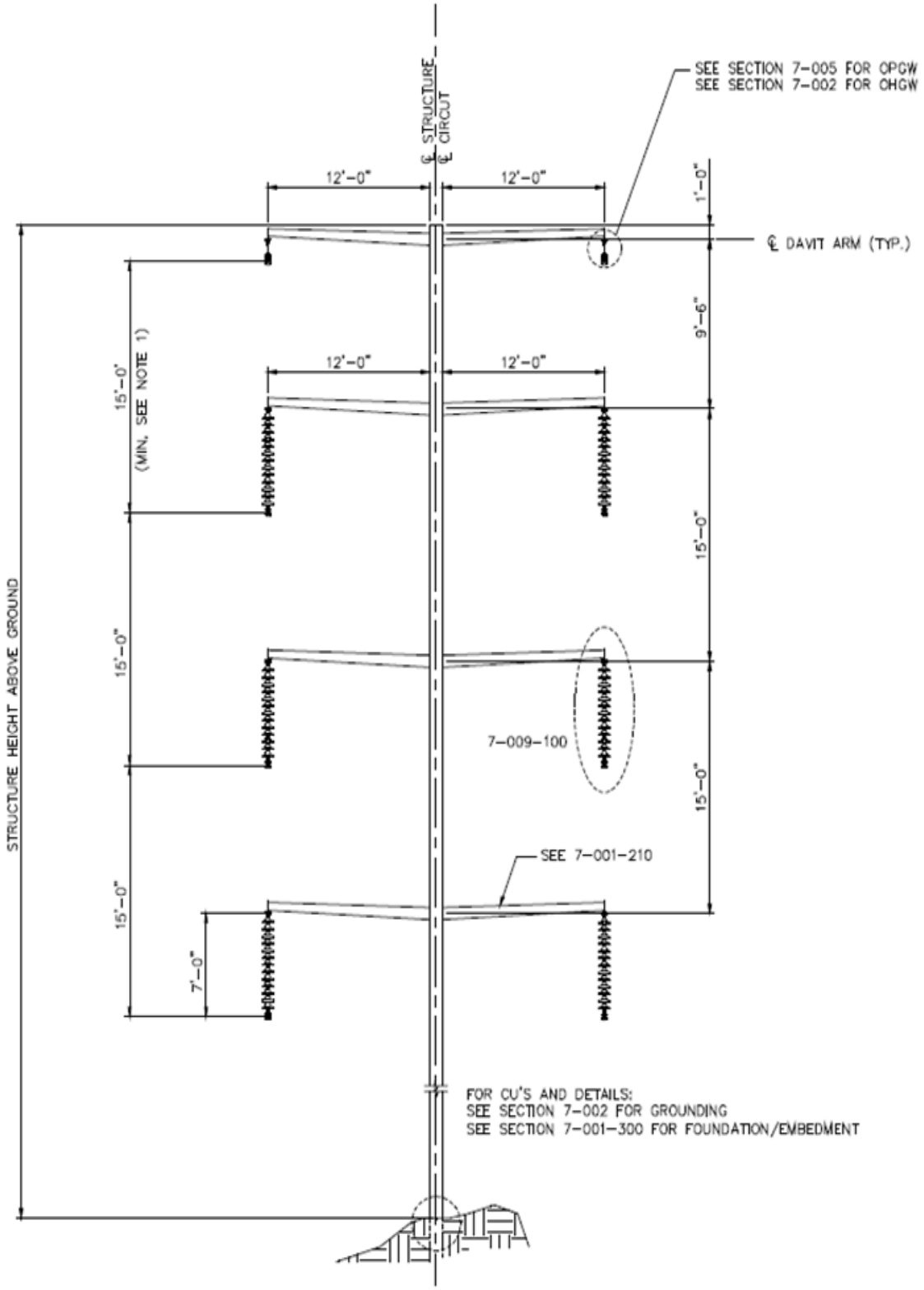


Figure 2-2. Typical 230 kV Double-Circuit Steel Pole

0° to 90° Angle Tension on Arm Structure (7-009-004)

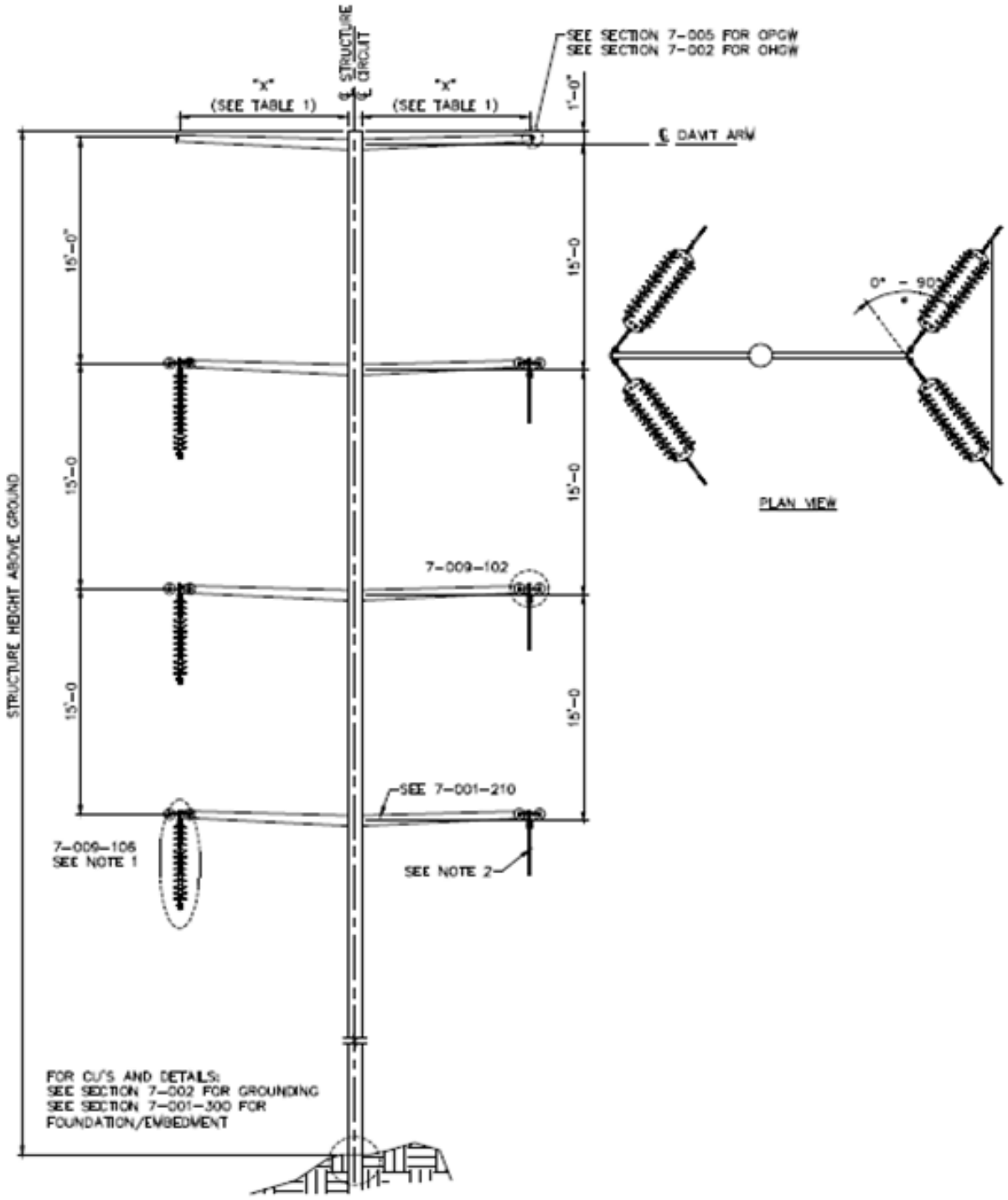


Figure 2-3. Typical 230 kV Double-Circuit Steel Pole
0° to 90° Angle Tension on Pole Structure (7-009-005)

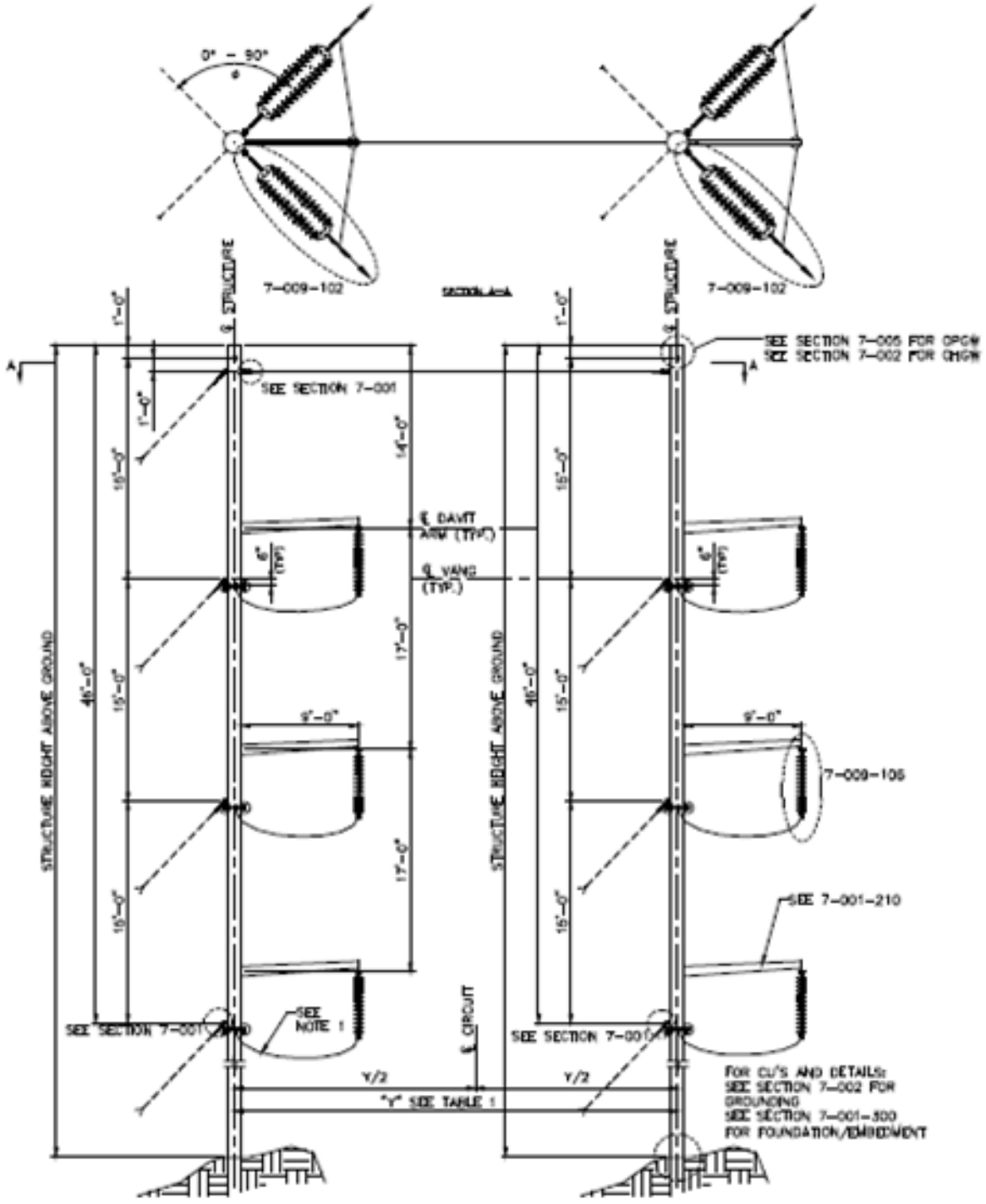
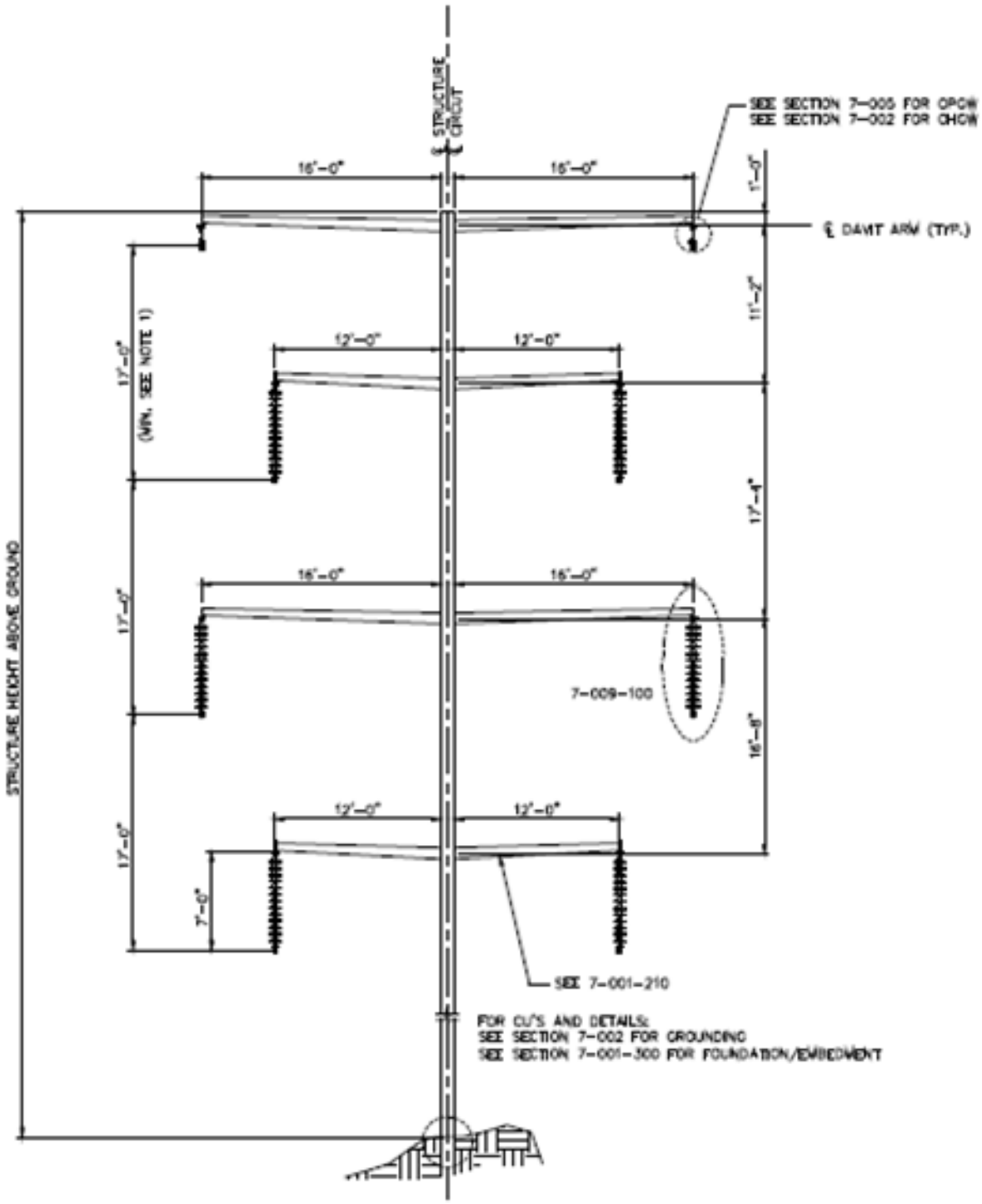


Figure 2-4. Typical 230 kV Long Span Double-Circuit Steel Pole 0° to 1° Suspension Structure (7-009-061)



PPL ELECTRIC
ATTACHMENT 3

TOMHICKEN 230 KV SWITCHYARD PROJECT

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1.0 INTRODUCTION

As explained in **Attachment 1 – Necessity Statement** to this Letter of Notification ("LON"), and in the LON and other associated attachments, PPL Electric Utilities Corporation ("PPL Electric") is requesting Pennsylvania Public Utility Commission ("PUC" or "Commission") approval to build approximately 1.1 miles of new double-circuit 230 kilovolt ("kV") transmission taps ("Susquehanna-Tomhicken #1 & #2 230 kV and Tomhicken-Harwood #1 & #2 230 kV lines" or "Tap Lines") that are needed to connect the existing Susquehanna-Harwood #1 & #2 230 kV Transmission Lines to the new Tomhicken 230 kV Switchyard (the "Project"). The Project also includes constructing two new 0.1-mile-long 230 kV transmission lines ("Connecting Lines") from the Tomhicken 230kV Switchyard to a new customer-owned 230-34 kV substation. The new 230 kV Connecting Lines, Tap Lines and Tomhicken Switchyard are located in Hazle Township, Luzerne County, Pennsylvania. PPL Electric has designed the proposed transmission line system so that it fits entirely within existing PPL Electric right-of-way ("ROW") and the customer's (the "Customer") property. PPL Electric is working with the Customer to finalize necessary easements.

As explained in greater detail in **Attachment 1 – Necessity Statement**, the Project is needed to accommodate multiple customer requests[1] to serve new and future load in the area, including the request of the Customer who will own the new 230-34 kV substation. The scope of work required to serve this load is comprised of two phases. Only the first phase of the Project is the subject this LON. Any additional high-voltage ("HV") transmission line work associated with the second phase of work will be the subject of a future letter of notification or siting application, as may be necessary and appropriate under the Commission's regulations.

The first phase of the Project ("Phase 1") involves the construction of new HV transmission lines. Phase 1, subject to this Letter of Notification, is needed to connect the Customer requesting transmission level service in Hazle Township, Luzerne County, Pennsylvania to the 230 kV system. PPL Electric's system planners determined that splitting the adjacent Susquehanna-

[1] While the instant LON is needed forthwith to connect the Customer to the 230kV grid through the Customer-owned substation and the Tomhicken Switchyard, PPL Electric did receive more than one customer request for transmission level service. As such, PPL Electric anticipates that the Tomhicken Switchyard will eventually interconnect to a second, customer-owned substation. However, any future project or constructions needed to interconnect the other requesting customer will be undertaken as the subject of a future, standalone filing before the Commission.

Harwood #1 & #2 230 kV Transmission Lines, creating the Susquehanna-Tomhicken #1 & #2 230 kV and Tomhicken-Harwood #1 & #2 230 kV lines, and providing 230 kV service from the new Tomhicken 230 kV Switchyard is the optimal solution to serve the Customer's initial requested load.

PPL Electric anticipates that a second phase of transmission expansion ("Phase 2") will be needed to address future electrical needs and demands associated with this Customer and with other load requests, as well as PPL Electric's system needs. PPL Electric provides this additional detail at this time for informational purposes only. Phase 2 will involve the construction of a new 230 kV switchyard ("Nescopeck 230 kV Switchyard") west of the existing Susquehanna 230 kV Switchyard. The existing Sunbury-Susquehanna 230 kV line will be split into the new Nescopeck 230 kV Switchyard. The section of the Sunbury-Susquehanna 230 kV line between the Nescopeck 230 kV Switchyard and the Susquehanna 230 kV Switchyard will be rebuilt to double-circuit 230 kV operation. Two new 230 kV lines will be extended south from the new Nescopeck 230 kV Switchyard with one line terminating at the Tomhicken 230 kV Switchyard and one line at the Harwood 230-69 kV Substation. Phase 2 will resolve projected overloads on the Susquehanna-Tomhicken 230 kV lines due to the customer load addition. This project will create another path for power to travel south from the Susquehanna 230 kV Switchyard. This will increase operational flexibility, the ability to take line outages in the area, and reliability of the 230 kV system. The newly created path south from the Susquehanna 230 kV Switchyard will allow this Customer to connect to the system as well as other load customers in the Hazleton area. At a future date, Phase 2 will be submitted in an appropriate filing before the PUC. PPL Electric notes that the phases are being submitted separately because only the first phase is required to meet the Customer's in-service request; Phase 2 will not be necessary until the Customer's load increases at a future date. Additionally, the Company anticipates that Phase 2 will require a full siting application.

The Project is located on property owned by PPL Electric and by the Customer. The Project will support the Customer's facilities by connecting them to the Tomhicken Switchyard and ultimately, the existing electric grid. The entire Project is within Hazle Township, Luzerne County, Pennsylvania. PPL Electric has provided information about the proposed Project to representatives from Hazle Township and Luzerne County.

The proposed Tomhicken Switchyard and Customer substation will be co-located approximately 1.8 miles southwest of the State Route 93 (SR 93) and Interstate 81 (I-81) interchange, outside the incorporated borough of West Hazleton.[2] As explained in **Attachment 1 – Necessity Statement**, PPL Electric plans to construct the new Tomhicken Switchyard and 230 kV Tap and Connecting Lines to interconnect the Customer's 230 kV substation with the Transmission Grid. The 230 kV Tap Lines will be located partially within existing PPL Electric fee-owned property and within approximately 11 acres of 150-foot-wide ROW located on the Customer's property, which the Customer will be required to and has agreed to grant to PPL Electric.

The Project requires the installation of 13 new structures, which will be constructed on properties owned by PPL Electric or the Customer. A network of existing and new access roads will be utilized during construction of the transmission lines, switchyard, and substation. New access roads will be constructed and located within the 150-foot-wide ROW. A detailed map of the proposed Project is provided in **Figure 3-1.**

[2] PPL Electric notes that it has discussed the Project with the Borough of West Hazelton. Based upon these discussions and the Company's understanding of certain zoning requirements applicable in this borough, PPL Electric will submit a petition for exemption from local zoning requirements related to the Project, as explained in greater detail in the Letter of Notification.

Susquehanna-Tomhicken #1 & #2 230 kV Lines

From the existing Susquehanna Substation, the Susquehanna-Tomhicken #1 & #2 230 kV Transmission Lines travel south towards the proposed Tomhicken Switchyard. The ROW for the section near the proposed Tomhicken Switchyard is further described below and shown in **Figure 3-1**:

- From Structure N1A/N1B, the Project extends east approximately 0.3 miles to the proposed Tomhicken Switchyard. The lines involve one double-circuit steel pole suspension structure (7-009-001), one double-circuit steel pole angle tension on arm structure (7-009-004), and one double-circuit steel angle tension on pole structure (7-009-005). These structures are to be located on PPL Electric fee-owned property acquired from the Customer.

Tomhicken-Harwood #1 & #2 230 kV Lines

From the existing Harwood Substation, the Tonhicken-Harwood #1 & #2 230 kV Transmission Lines travel north towards the proposed Tomhicken Switchyard. The ROW for the section near the proposed Tomhicken Switchyard is further described below and shown in **Figure 3-1**:

- From Structure S1A/S1B, the Project extends northeast and north approximately 0.8 miles to the proposed Tomhicken Switchyard. The lines involve two double-circuit steel pole suspension structures (7-009-001), four double-circuit steel pole angle tension on arm structures (7-009-004), one double-circuit steel angle tension on pole structure (7-009-005), and one long-span double-circuit steel pole suspension structure (7-009-061). These structures are located partially on PPL Electric fee-owned property and partially on Customer property where easements have been acquired from the Customer.

Connecting Lines

From the proposed Tomhicken Switchyard, the two Connecting Lines travel east approximately 0.1 mile to the proposed Customer-owned substation. This segment includes two double-circuit steel pole angle tension on arm structures (7-009-004). These structures are located partially on PPL Electric fee-owned property and partially on Customer property where easements have been acquired from the Customer.

2.0 LAND USE

PPL Electric evaluated the existing land uses on the PPL Electric and Customer-owned properties, within the existing ROW, and within 0.25 mile of the Project centerline ("Project Area"). This broader Project Area was reviewed to provide a sense of the landscape in which the Project is located. Based on review of current aerial maps, land use in the Project Area is 90% forest and 10% existing utility ROW[3]. The Project Area is generally bounded to the north by Black Creek and Grassy Path Road, to the east by undeveloped forested land owned by the Customer, to the south by commercial/industrial warehouses associated with Humboldt Industrial Park and Stony Creek, and to the west by residential properties within the community of Eagle Rock Resort. Land uses immediately surrounding the Project Area predominantly consist of vacant forested land or developed residential land.

The closest communications tower is located approximately 1.7 miles northeast of the Project. A natural gas pipeline operated by UGI Utilities, Inc., travels northwest to southeast and is crossed by the Project. An abandoned railroad (Lehigh Valley Railroad) owned by Norfolk Southern traverses 0.4 miles north of the Project, generally in an east-west direction. Additionally, an existing PPL Electric distribution line crosses the Project in a general north/northwest to south/southeast direction between proposed Structures S5 and S6, as well as proposed Structures S2 and S3. The PPL Electric distribution line will be relocated within the Customer's property as part of the Project, because its current location is in conflict with the planned location of the Customer-owned substation.

The closest active airport relative to the Project Area is the Hazleton Regional Airport, a publicly owned facility, located approximately 3.8 miles northeast of the Project. Additionally, one private heliport, the Lehigh Valley Hospital Heliport, is located approximately 5 miles southeast of the Project. PPL Electric does not anticipate any interference with airport or heliport operations since the Project consists of new electrical facilities that are of a similar height as the existing electrical facilities in the immediate Project Area. However, PPL Electric will file any required documentation with the Federal Aviation Administration.

[3] Associated ROW for the existing Susquehanna-Harwood #1 & #2 230 kV Transmission Lines.

Conserved Lands

The proposed Project will not affect any national parks, state parks, local parks, recreational areas, or natural landmarks, or other conserved lands as none are located within the Project Area.

3.0 CULTURAL RESOURCES

An online review of the Project Area and surrounding landscape was conducted through the Pennsylvania Historical and Museum Commission ("PHMC") State Historic and Archaeological Resource Exchange site. State Historic Preservation Office ("SHPO") eligible and listed structures and districts within 1 mile of the Project Area are limited to only one eligible district resource: The Lehigh Valley Railroad. The abandoned railroad is located approximately 0.4 miles north of the Project Area, traversing in a general east-west direction, and is not crossed or spanned by the Project. The Project will not affect the abandoned railroad.

PPL Electric has coordinated with the PHMC for the modifications being made to the transmission lines. This coordination is required to receive permits to construct the Project. PPL Electric does not anticipate any impacts to SHPO-listed or -eligible structures or districts. Furthermore, based on the referenced coordination with PHMC and as per a PHMC letter dated April 17, 2025, no archaeological or historic architectural resources will be affected by the proposed project.

4.0 NATURAL FEATURES

Unique Natural Features

No unique geological, scenic, or natural areas are crossed by the Project, according to the Pennsylvania Department of Conservation and Natural Resources ("DCNR").

A Natural Area Inventory ("NAI") has been prepared by The Nature Conservancy in collaboration with the Pennsylvania Natural Heritage Program ("PNHP") for Luzerne County (2006). The Humboldt Barren NAI area is an exceptional-rated natural heritage area located approximately 1,000 feet south/southeast of the Project. This area is characterized as "a dwarf tree forest natural community on a broad high-elevation ridgetop." The Project does not cross the natural areas with

supporting habitat identified within the NAI. Additionally, the majority of the NAI contains developed land associated with the Humboldt Industrial Park.

No other NAI areas or other unique natural features are located within 1 mile of the Project.

Soils

The Project Area is located on gradually undulating land, primarily surrounded by undeveloped forest. Topography within the Project Area ranges between approximately 1,300 feet and approximately 1,700 feet above mean sea level ("msl"). Soils present within the Project Area predominantly consist of silty and sandy loams, ranging between 3 and 25 percent slopes.

Erosion and Sedimentation ("E&S") control plans will be developed and implemented for the Project to minimize the displacement of soils. These plans will require prior approval from the Luzerne County Conservation District. Coverage under the National Pollutant Discharge Elimination System ("NPDES") permit (PAG-02, Discharges of Stormwater Associated with Construction Activities) will also be required from the Pennsylvania Department of Environmental Protection ("PADEP") as needed. During construction, PPL Electric will adhere to all conditions specified in the NPDES permit. Impacts to local soil resources are anticipated to be minimal.

Waterways and Wetlands

The Customer retained an environmental consultant to identify and delineate all waterways and wetlands on its entire property subject to the Project. The Customer's consultant identified 13 wetlands, six waterbodies, three unnamed tributaries ("UNTs") flowing north to Black Creek, and two UNTs flowing northeast to Stony Creek. Of these features, one freshwater emergent ("PEM") wetland and one UNT to Black Creek are crossed by the project. The wetland and stream are not anticipated to be impacted during construction. These delineated features are located on the portion of the Customer's property proposed for future PPL Electric ownership, generally between proposed Structures N2 and N3. No other delineated features on the portion of the Customer's property proposed for future PPL Electric ownership were identified, as these features are generally concentrated in the vicinities of Black Creek to the north and Stony Creek to the south.

This information is being used to minimize wetland and waterway impacts where feasible. The Customer will obtain all necessary permits from PADEP and the United States Army Corps of Engineers (the "USACE") and will comply with all terms and conditions placed on those permits. Additionally, the Customer will consult with Luzerne County Conservation District, prepare any required soil erosion and sedimentation control plans, and obtain NPDES permits and comply with any conditions placed on those permits.

PPL Electric conducted a wetland delineation on their property containing the existing Susquehanna-Harwood 230 kV Transmission Line and identified three wetlands and four tributaries to Stony Creek. Minimal impacts to wetlands are anticipated for the Project. PPL Electric will avoid impacts to wetlands and streams where possible by aerially spanning these features. PPL Electric will obtain all necessary permits from PADEP and USACE and will comply with all the terms and conditions placed on those permits. PPL Electric also will consult with the Luzerne County Conservation District, prepare any required soil erosion and sedimentation control plans, and obtain NPDES permits and comply with any conditions placed on those permits.

100-Year Floodplains and Regulatory Floodway

The National Flood Hazard Layer for Luzerne County, Pennsylvania was obtained through the Federal Emergency Management Agency ("FEMA") Flood Map Service Center website and analyzed for 100-year floodplains and regulatory floodway within the Project Area and surrounding landscape. Based on review of this data, the Project crosses no FEMA 100-year floodplain nor FEMA regulatory floodway. Black Creek to the north and Stony Creek to the south of the Project Area are both within FEMA Zone A, a 100-year floodplain, and has a 1-percent-annual-chance of inundation due to a flood event.

No impacts to the floodplain area of either Black Creek or Stony Creek are anticipated by the proposed Project activities, since the proposed switchyard, substation, and 230 kV structures will be constructed outside of the 100-year floodplains. PPL Electric will coordinate with local agencies for regulated floodplain activities where required.

Vegetation

The Project will be located entirely within property owned by PPL Electric and the Customer. The existing Susquehanna-Harwood 230 kV Transmission Line ROW has been largely cleared of vegetation as part of PPL Electric's standard vegetation management practices. The site for the new PPL Electric switchyard and the Customer's substation is located in an undeveloped wooded area and vegetation clearing is anticipated to accommodate the construction of the new Tomhicken Switchyard and Customer-owned substation. In fall 2024, the Customer began vegetation removal in anticipation of their future development, as well as PPL's proposed facilities.

5.0 THREATENED AND ENDANGERED SPECIES

On March 1, 2024, the Customer's consultant ran a Pennsylvania Natural Diversity Inventory ("PNDI") to assess the potential presence of threatened and endangered species and/or special concern species on the Customer's property. Specific agencies reviewing the Project included the Pennsylvania Game Commission ("PGC"), Pennsylvania Fish & Boat Commission ("PFBC"), PA Department of Conservation and Natural Resources ("DCNR"), and U.S. Fish and Wildlife Service ("USFWS").

The DCNR search indicated that the Project is located in range of a special concerns species. Based on this review, the DCNR determined potential impacts to the following threatened or endangered plant species or plant species of special concern:

- Variable Sedge
- Fall Dropseed Muhly
- Yellow-fringed Orchid
- Lupine
- Screw-stem
- Hartford Fern
- Rough-leaved Aster
- White-fringed Orchid
- Herbaceous Vernal Pond
- Hemlock-Mixed Hardwood Palustrine Forest
- Pitch Pine – Rhodora – Scrub Oak Woodland

The DCNR requested that a botanical survey be completed for the above listed species by a qualified botanist at the appropriate time of year, and the agency recommended that a Wild Plant Management Permit be obtained before botanical surveys occur. A botanical survey is to be conducted during the appropriate time of year, as requested by the DCNR.

The PGC advised a conservation measure and deferred comments to the USFWS, and the PFBC reported no known impacts to threatened and endangered species and/or special concern species and resources within the Project Area. Therefore, no further consultation with PGC or PFBC is required for this Project.

The USFWS search indicated that the Project is located in range of a special concern species or resource and a sensitive species. Given the Project Area contains suitable bat habitat, including rock outcrops, caves, forest canopy, wetlands, and streams, the Customer completed bat habitat surveys on a portion of PPL Electric's property and the entire Customer-owned property from June through October of 2024. Overall, nine rock outcrops located on the property were identified as potential bat hibernacula. Four of these areas were located in the northwest portion of the Customer's property, four were identified in the southern portion of the property, and one was observed in the northeast portion of the property. Ultimately the consultant who performed the investigation determined that tree clearing associated with the Project (conducted between October 1st and March 31st) would not impact potential summer roosting sites or winter hibernacula, given that the identified areas are located outside of the proposed limits of disturbance. The Customer commenced tree clearing activities for the Project in fall 2024.

On November 27, 2024, PPL Electric ran a PNDI for their property crossed by the existing Susquehanna-Harwood 230kV Transmission Line. Both the PGC and PFBC indicated no further consultation is required for the Project. The DCNR search indicated that the Project is located within the range of the *Bartonia paniculata ssp. paniculata*, a special concern species of screw-stem found in sandy or peaty acidic wetlands and yielded "Potential Impact – Further Review Required". According to the Luzerne County NAI, screw-stem is present within the county. On August 7 and 8, 2025, PPL's Electric's Permitting Contractor conducted the field survey for Screw-stem (*Bartonia paniculata ssp. paniculata*) and the results were submitted to the DCNR via

a Field Survey Summary Report. In response, the DCNR issued a letter, dated 9/29/2025, stating that no impact was anticipated per the survey with minimization and conservation measures with no further coordination needed for this project. However, PPL Electric will coordinate with DCNR to utilize minimization, conservation, and avoidance measures and adhere to all applicable regulations and permit requirements.

The USFWS search indicated that the Project is located in the vicinity of northern long-eared bat habitat. The USFWS response indicated tree removal should not occur from May 15th to August 15th. Because tree removal activities will occur outside of the active bat window, PPL Electric does not anticipate any impact to the northern long-eared bat.

PPL Electric will continue to consult with the jurisdictional agencies regarding potential impacts to protected species, complete all required surveys; obtain all necessary approvals and permits for Project construction; and comply with all conditions placed on those permits.

Figure 3-1. Aerial Map of the Project

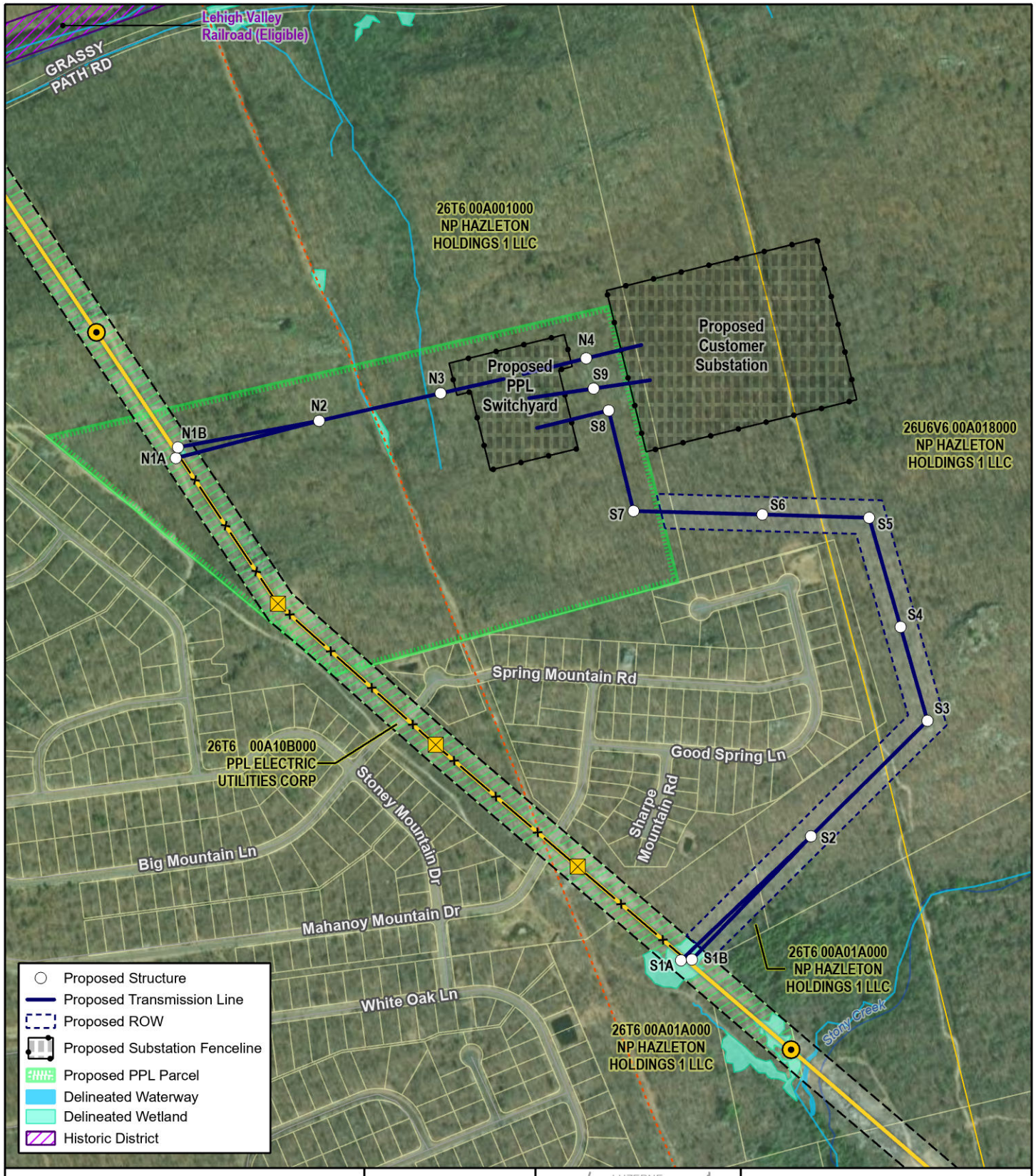

Figure 3-1
Aerial Map
Tomhicken 230 kV Transmission Line Project

PPL ELECTRIC
ATTACHMENT 4

TOMHICKEN 230 KV SWITCHYARD PROJECT

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1.0. DESIGN CONSIDERATIONS

PPL Electric Utilities Corporation's ("PPL Electric") new and rebuilt transmission lines are designed according to, and generally exceed, all National Electric Safety Code ("NESC") minimum standards. The NESC is a set of rules guiding safety standards 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 has developed design specifications and safety rules which meet or surpass all requirements specified by the NESC.

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 are designed to maintain public safety.

The NESC specifies strength and loading rules based on three different "grades of construction" for conductors and supporting structures:

- Grade B – This grade of construction provides the highest margin of safety and is required when the pole supports spans that cross limited access highways, railroads, and waterways.
- Grade C – This grade of construction is most common and provides a basic margin of safety. It is often utilized for the typical power and joint-use distribution pole.
- Grade N – This is the lowest grade of construction and is most often used for emergency and temporary construction.

PPL Electric designs all of its transmission lines for Grade B construction. The use of Grade B design and construction translates to higher levels of structural reliability and safety to withstand the environmental conditions of ice and/or wind loading.

PPL Electric's rigorous design standards are further incorporated into the parameters utilized to account for ice and wind loadings on the wires and structure. Structure loading and line designs must accommodate a variety of operating conditions as different ice and wind combinations can impact the conductor sags and tensions of the line. PPL Electric's transmission lines are designed to exceed NESC requirements by accounting for additional load cases due to various ice and wind loading conditions beyond what is required by NESC. This means that PPL Electric lines are designed to operate safely and reliably during extreme inclement weather. In addition, PPL Electric design standards include a clearance to ground buffer in excess of NESC required clearances to account for construction and design tolerances and the filling or grading of land within the right-of-way by property owners. This buffer also significantly reduces the risk of a property owner inadvertently contacting a transmission line. This has occurred on PPL Electric's system in the past and higher clearances minimize the likelihood of future occurrences.

Table 4-1. 69 kV Vertical Clearance to Ground

Surface Underneath Conductors	NESC Standard Clearance	PPL Electric Clearances
Roads, streets, and other areas subject to truck traffic	19.2 Ft.	22.2 Ft.
Other land traversed by vehicles such as cultivated grazing, forest, orchards, etc.	19.2 Ft.	22.2 Ft.
Spaces and ways subject to pedestrians or restricted traffic only	15.2 Ft.	22.2 Ft.
Track rails of railroads (except electrified railroads using overhead trolley conductors)	27.2 Ft.	30.2 Ft.

Table 4-2. 138 kV Vertical Clearance to Ground		
Surface Underneath Conductors	**NESC Standard Clearance**	**PPL Electric Clearances**
Roads, streets, and other areas subject to truck traffic	20.6 Ft.	23.6 Ft.
Other land traversed by vehicles such as cultivated grazing, forest, orchards, etc.	20.6 Ft.	23.6 Ft.
Spaces and ways subject to pedestrians or restricted traffic only	16.6 Ft.	23.6 Ft.
Track rails of railroads (except electrified railroads using overhead trolley conductors)	28.6 Ft.	31.6 Ft.

Table 4-3. 230 kV Vertical Clearance to Ground		
Surface Underneath Conductors	**NESC Standard Clearance**	**PPL Electric Clearances**
Roads, streets, and other areas subject to truck traffic	22.5 Ft.	25.5 Ft.
Other land traversed by vehicles such as cultivated grazing, forest, orchards, etc.	22.5 Ft.	25.5 Ft.
Spaces and ways subject to pedestrians or restricted traffic only	18.5 Ft.	25.5 Ft.
Track rails of railroads (except electrified railroads using overhead trolley conductors)	30.5 Ft.	33.5 Ft.

Table 4-4. 500 kV Vertical Clearance to Ground		
Surface Underneath Conductors	**NESC Standard Clearance**	**PPL Electric Clearances**
Roads, streets, and other areas subject to truck traffic	28.4 Ft.	31.4 Ft.
Other land traversed by vehicles such as cultivated grazing, forest, orchards, etc.	28.4 Ft.	31.4 Ft.
Spaces and ways subject to pedestrians or restricted traffic only	24.4 Ft.	31.4 Ft.
Track rails of railroads (except electrified railroads using overhead trolley conductors)	36.4 Ft.	39.4 Ft.

A relay protection system is also used on PPL Electric's transmission lines to protect public safety, as well as the equipment on the transmission system. The purpose of relay protection is to automatically de-energize the line in the unlikely event that the line or supporting structure fails and the line contacts the ground.

2.0. 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 using helicopter patrols, with supplemental foot patrols as needed. Helicopter patrols are performed on all lines on a predetermined frequency, depending on voltage level. The two-man helicopter crew flies parallel to 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.

3.0. PERSONNEL SAFETY RULES

Overall, PPL Electric designs and constructs projects with high regard to both public and employee safety and follows or exceeds all codes and requirements. The following are a few examples of PPL Electric's safety rules that demonstrate its dedication to employee and contractor safety:

- 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 has been received.
- Various other tags are used for limited operations and informational purposes.
- Employees or contractors 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 lineman 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.
- 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.
- 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.

4.0 MAGNETIC FIELD MANAGEMENT PLAN

PPL Electric's Magnetic Field Management Program is applied to new and reconstructed transmission line projects. Although there is no current scientific evidence demonstrating that magnetic fields cause any adverse health effects or pose a health or safety threat to the public, PPL Electric has established a policy to design its new and rebuilt transmission lines to reduce magnetic fields. To lower magnetic field exposures, the program generally prescribes the use of a line design that provides ground clearances higher than the required minimum NESC ground clearance and reverse phasing of new double circuit lines where it is feasible to do so at low or no cost. The implementation of additional modifications to reduce magnetic field levels is considered, provided those modifications can be made at low or no cost and will not interfere with the operation of the line.

The program will be applied to this Project and the Project is designed with clearances that are at least 3 feet higher than NESC standards.

PPL ELECTRIC
ATTACHMENT 5

TOMHICKEN 230KV SWITCHYARD PROJECT

State Agencies

Pennsylvania Bureau of Investigation and Enforcement
Pennsylvania Public Utility Commission
Commonwealth Keystone Building 400 North Street
2nd Floor, Room-N201 Harrisburg, Pennsylvania 17120
Attn: Alison Kaster

Pennsylvania Department of Environmental Protection
400 Market Street
10th Floor Rachel Carson State Office Building
Harrisburg, Pennsylvania 17101
Attn: Regional Permit Coordination Office

Pennsylvania Department of Transportation
Commonwealth Keystone Building
400 North Street, Fifth Floor
Harrisburg, Pennsylvania 17120
Attn: Jeffrey M. Spotts, Chief Counsel

Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, Second Floor 400
North Street Harrisburg, Pennsylvania 17120-0053
Attn: Catherine N. Lantzy, Chief Counsel

Pennsylvania Department of Conservation and Natural Resources
Rachel Carson State Office Building
400 Market Street Harrisburg, Pennsylvania 17105-8767
Attn: Rebecca Bowen, Chief, Conservation Science & Ecological Resources Division

Pennsylvania Game Commission
2001 Elmerton Avenue
Harrisburg, Pennsylvania 17110-9797
Attn: Timothy Haydt, Director, Bureau of Wildlife Habitat Management

Pennsylvania Fish and Boat Commission
Centre Region Office
595 East Rolling Ridge Drive
Bellefonte, Pennsylvania 16823-9620
Attn: Christopher A. Urban, Chief, Natural Diversity Section

Pennsylvania Office of Consumer Advocate
555 Walnut Street 5th Floor Forum Place
Harrisburg, Pennsylvania 17101-1923
Attn: Darryl A. Lawrence, Consumer Advocate

Pennsylvania Office of Small Business Advocate
555 Walnut Street
1st Floor Forum Place
Harrisburg, Pennsylvania 17101
Attn: NazAarah Sabree, Small Business Advocate

Federal Agencies

U.S. Army Corps of Engineers
Baltimore District Corporate Communication Office
2 Hopkins Plaza
Baltimore, Maryland 21201
Attn: Planning Division

U.S. Fish and Wildlife Service
Pennsylvania Field Office
110 Radnor Road, Suite 101
State College, Pennsylvania 16801
Attn: Jodie Mamuscia, Field Office Supervisor

County Agencies

Luzerne County Planning Commission
200 North River Street
Wilkes-Barre, Pennsylvania 18711
Attn: N. Brian Caverly, Chair

Luzerne County Conservation District
325 Smiths Pond Road
Shavertown, Pennsylvania 18708
Attn: John (Jay) Wilkes, Chairman and Public Director

Municipalities

Hazle Township
P.O. Box 506,
Harleigh, PA 18225

Landowners

NP Hazleton Holdings 1, LLC
3315 North Oak Trafficway,
Kansas City, Missouri 64116

VERIFICATION

I, JOSEPH B. LOOKUP, being the Vice President – Transmission & Distribution Planning and Asset Management at PPL Services 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: December 19, 2025

Joseph B. Lookup