

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Letter of Notification of PPL Electric :
Utilities Corporation, Filed Pursuant to :
52 Pa. Code Chapter 57 Subchapter G, : Docket No. A-2016-_____
for Approval to Reconductor :
Approximately 1.12 Miles of the :
Manor-Graceton 230 kV Transmission :
Line in Lancaster and York Counties, :
Pennsylvania :

LETTER OF NOTIFICATION

TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PPL Electric Utilities Corporation (“PPL Electric”) hereby files, pursuant to 52 Pa. Code § 57.72(d), this Letter of Notification to request approval from the Pennsylvania Public Utility Commission (“Commission”) to reconductor approximately 1.12 miles of the existing Manor-Graceton 230kV Transmission Line in Lancaster and York Counties, Pennsylvania (the “Project”). The Project is needed to resolve transmission line congestion as identified by PJM Interconnection, LLC (“PJM”) in the 2014 Regional Transmission Expansion Plan (“RTEP”) Market Efficiency Analysis. The proposed Project is a PJM baseline project approved in the PJM 2015 RTEP. Subject to the Commission’s approval, construction is scheduled to begin in October 2017 to support the in-service date of November 2017. In support thereof, PPL Electric states as follows:

I. INTRODUCTION

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

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

3. PPL Electric's attorneys are:

Kimberly A. Klock (ID #89716)
PPL Services Corporation
Two North Ninth Street
Allentown, PA 18101
Voice: 610-774-5696
Fax: 215-587-1444
E-mail: kklock@pplweb.com

David B. MacGregor (I.D. # 28804)
Christopher T. Wright (I.D. # 203412)
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
Voice: 717-731-1970
Fax: 717-731-1985
E-mail: dmacgregor@postschell.com
E-mail: cwright@postschell.com

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

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

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

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

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

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

II. THE PROJECT

A. NEED FOR THE PROJECT

1. Existing System

8. The existing double-circuit Manor – Graceton 230 kV Transmission Line is a 15.85-mile tie line connecting PPL Electric’s Manor Substation located in Manor Township, Pennsylvania to the Baltimore Gas & Electric Company (“BG&E”) owned Graceton Substation located in Graceton, Maryland.

9. PPL Electric owns 14.28 miles from the Manor Substation to the Pennsylvania/Maryland border, and BG&E owns the remaining 1.57 miles from the Pennsylvania/Maryland border to the Graceton Substation.

10. The Manor- Graceton 230 kV Transmission Line currently traverses the Susquehanna River near the Manor Substation. The river crossing is approximately 1.12 miles in length and traverses the Lancaster County/York County border. The river crossing starts in Lancaster County at the Manor Substation using a 3-pole steel structure and continues south approximately 2,990 feet to a steel lattice tower on Else Island, and then continues south

approximately 2,897 feet to a 3-pole steel structure located on the opposite side of the river in York County.

11. A description, aerial maps, and one-line diagram are provided in the Necessity Statement included as Attachment 1 to this Letter of Notification.

2. Need for the Project

12. With the exception of the 1.12-mile river crossing, PPL Electric rebuilt the Pennsylvania portion of the Manor – Graceton 230 kV Transmission Line in 2012 with high capacity conductors.¹

13. The 1.12-mile river crossing was not rebuilt at that time and currently utilizes lower capacity conductors. The lower capacity conductors along the 1.12-mile river crossing section of the Manor – Graceton 230 kV Transmission Line limits the rating of the entire line.

14. In the 2014 Market Efficiency Analysis, PJM identified the Manor – Graceton 230 kV Transmission Line to be congested due to a binding constraint at the river crossing. Specifically, PJM found that this binding constraint produces Market Congestion of approximately \$7.9 million and \$5.2 million using the 2019 and 2022 forecasts respectively.

15. Detailed descriptions of the PJM Market Efficiency Analysis and RTEP process are provided in Attachment 1 to this Letter of Notification.

¹ See Letter of Notification of PPL Electric Utilities Corporation filed pursuant to 52 Pa. Code Chapter 57 for approval of the reconstruction of the Pennsylvania portion of the Manor-Graceton 230 kV transmission line in Manor Township, Lancaster County and in Chanceford, Lower Chanceford and Peach Bottom Townships in York County, Pennsylvania, Docket No. A-2011-2219913 (Order entered Oct. 14, 2011).

B. THE PROPOSED PROJECT

16. To address the congestion issues identified by PJM's 2014 Market Efficiency Analysis, PPL Electric submitted a proposal in the 2015 FERC Order 1000 Market Efficiency Long Term Proposal Window to reconductor the river crossing section of the Manor – Graceton 230 kV Transmission Line and to upgrade the terminal equipment at the Manor Substation. PPL Electric's proposal was selected by PJM as the winning bid. Pursuant to Schedule 6 of the Operating Agreement with PJM, PPL Electric, as the successful bidder, must complete the baseline project.

17. PPL Electric herein seeks Commission approval to reconductor the approximately 1.12-mile river crossing section of the Manor – Graceton 230 kV Transmission Line with high capacity conductors using the existing tower structures. No new structures will be installed.

18. The double-circuit 230 kV design will utilize three power conductors per circuit. The new conductors will be 1033 kcmil² 54/19 ACCR³ "Curlew"⁴ conductors.

19. The existing overhead ground wire, shield wires, and marker balls along the river crossing spans will remain in place and continue to be used upon completion of the Project.

20. The proposed Project has been presented to various stake holders in the Transmission Expansion Advisory Committee (TEAC) meeting on September 10, 2015 and has been approved as baseline project b2690 in the PJM 2015 RTEP.

21. The total estimated cost to reconductor the 1.12-mile river crossing section of the Manor – Graceton 230 kV Transmission Line is approximately \$2.2 million.⁵

² A kcmil or circular mil is the cross-sectional area of a wire one mil in diameter, where 1 kcmil = 0.5067 mm².

³ ACCR stands for aluminum conductor composite reinforced.

⁴ Curlew is a technical term for a for a 1033 kcmil 54/19 ACCR conductor as defined in the American Society for Testing and Materials.

22. Upon Commission approval, the Project has a scheduled construction start date of October 2017 to support the in-service date of November 2017.

III. HEALTH AND SAFETY

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

24. The Project 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 PPL Electric’s design criteria and safety practices are provided in Attachment 4 to this Letter of Notification.

25. Consistent with its Magnetic Field Management Program, the reconductored segment of the double-circuit Manor – Graceton 230 kV Transmission Line will maintain existing ground clearances that are a minimum of five feet higher than the required NESC minimum ground clearance for 230 kV lines to minimize the potential for magnetic field exposure. A description of PPL Electric’s Magnetic Field Management Program is provided in Attachment 2 to this Letter of Notification.

IV. DESCRIPTION OF THE PROJECT AREA

26. The Manor – Graceton 230 kV Transmission Line currently traverses the Susquehanna River near the Manor Substation. The river crossing is approximately 1.12 miles in length and traverses the Lancaster County/York County border.

⁵ The estimated cost for the proposed Project is an order-of-magnitude estimate developed using averages of recent costs for similar projects and without an in-depth analysis of filed investigation. The estimated cost is subject to change as the constructability of the Project, sequence of construction, and other factors that may affect cost are identified and analyzed as the Project progresses.

27. As explained above, PPL Electric proposes to reconductor the 1.12-mile river crossing segment of the double-circuit Manor – Graceton 230 kV Transmission Line. The proposed Project will be located entirely within the existing right-of-way for the Manor – Graceton 230 kV Transmission Line and a Submerged Lands License Agreement for the aerial river crossing. No additional right-of-way is required to accommodate the construction, operation and maintenance of the reconducted segment of the Manor – Graceton 230 kV Transmission Line.

28. The proposed Project will use the existing tower structures. No new tower structures are required for the Project.

29. As explained in Attachment 3 to this Letter of Notification, land use and environmental impacts are anticipated to be minimal due to the fact that the Project will be constructed using the existing tower structures, and will be located entirely within the right-of-way for the Manor – Graceton 230 kV Transmission Line and a Submerged Lands License Agreement for the aerial river crossing. Where practical, PPL Electric will use previously established access roads for construction to further reduce interference with existing land uses.

30. The Project area previously has been cleared of vegetation. As a result, limited vegetation management will be required for this project. In areas where vegetation management is required to complete the project, PPL Electric will apply its “Specifications for Transmission Vegetation Management LA-79827” to mitigate any impacts.

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

32. PPL Electric does not anticipate any interference with airport operations because of the distance from the Project area, the presence of existing electrical facilities in the Project area, and the use of the existing tower structures.

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

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

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

36. PPL Electric will coordinate with the Pennsylvania Historical and Museum Commission (“PHMC”) regarding any potential impacts the proposed Project may have on cultural and archaeological resources.

37. The proposed Project will cross the Susquehanna River at the existing river crossing location. PPL Electric will confirm total anticipated impacts, obtain permits and other authorizations from the County Conservation District, Pennsylvania Department of Environmental Protection and the United States Army Corps of Engineers, as needed, and will comply with all of the terms and conditions placed on those permits or authorizations.

38. PPL Electric will acquire any required soil erosion and sedimentation control permits and will comply with any conditions placed on those permits.

39. PPL Electric has consulted with state and federal agencies to obtain information regarding endangered and threatened species in close proximity to the Project. As explained in Attachment 3 to this Letter of Notification, to minimize potential impacts to threatened and endangered species and/or special concern species and resources, all construction activities for this Project will take place between August 16th and February 14th.

V. NOTICE

40. PPL Electric has provided information regarding the Project to representatives of Manor Township, Lancaster County, and York County. These entities have not objected to the proposed Project.

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

42. Copies of this Letter of Notification will be served on the owners of land subject to the right-of-way and easement in accordance with 52 Pa. Code § 57.72(d)(3).

VI. LETTER OF NOTIFICATION

43. 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)(vi).

44. The proposed Project qualifies for use of a Letter of Notification because the proposed the reconductored 230 kV river crossing will be less than 2 miles (approximately 1.12 miles).

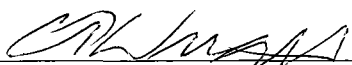
45. This Letter of Notification is filed on the date set forth below. As provided in 52 Pa. Code § 57.72(d)(5), the Commission will review and, by order, approve or disapprove this Letter of Notification. If the Commission approves this Letter of Notification, the proposed Project will be constructed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

VII. CONCLUSION

WHEREFORE, PPL Electric Utilities Corporation respectfully requests Pennsylvania Public Utility Commission approval to reconductor approximately 1.12 miles of the existing double-circuit Manor-Graceton 230 kV Transmission Line in Lancaster and York Counties, Pennsylvania, as explained above and in the Attachments hereto.

Respectfully submitted,

Kimberly A. Klock (ID #89716)
PPL Services Corporation
Two North Ninth Street
Allentown, PA 18101
Voice: 610-774-5696
Fax: 215-587-1444
E-mail: kklock@pplweb.com



David B. MacGregor (I.D. # 28804)
Christopher T. Wright (I.D. # 203412)
Post & Schell, P.C.
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601
Voice: 717-731-1970
Fax: 717-731-1985
E-mail: dmacgregor@postschell.com
E-mail: cwright@postschell.com

Date: October 12, 2016

Attorneys for PPL Electric Utilities Corporation

VERIFICATION

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

Date: 10/11/16

Stephanie R. Raymond