

**BEFORE
THE PUBLIC UTILITY COMMISSION**

Application Of PPL Electric Utilities Corporation, : A-2022-3030969
Filed Pursuant To 52 Pa. Code Chapter 57 :
Subchapter G, For Approval to Rebuild The :
Existing Summit-Lackawanna #1 And #2 230 Kv :
Transmission Lines Connecting the Summit :
230-69 Kv Substation and The Lackawanna :
500-230-69 Kv Substation in Lackawanna :
County, Pennsylvania :

Application Of PPL Electric Utilities Corporation : A-2022-3031013
Under 15 Pa.C.S. § 1511(C) For A Finding And :
Determination That the Service to Be Furnished :
By The Applicant Through Its Proposed Exercise :
Of The Power of Eminent Domain to Acquire A :
Certain Portion of The Lands of August and :
Diana Baker In Dickson City Borough And :
Scott Township, Lackawanna County, Pennsylvania :
For The Proposed Rebuilding of the :
Summit-Lackawanna #1 And #2 230 Kv :
Associated With the Proposed :
Summit-Lackawanna Project Is Necessary :
Or Proper for The Service, Accommodation, :
Convenience, Or Safety of The Public :

INITIAL DECISION

Before
Mary D. Long
Administrative Law Judge

INTRODUCTION

An application to rebuild an existing transmission line within the same right-of-way and waive the application of certain transmission line siting and study regulations is granted. An

application for eminent domain is also granted because the utility proved that the project is necessary to provide reliable electricity service.

HISTORY OF THE PROCEEDINGS

On February 14, 2022, PPL Electric Utilities Corporation (PPL Electric) filed a Joint Application and Petition for Waiver which requests approval to rebuild the existing double-circuit Summit-Lackawanna #1 and #2 230 kV Transmission Lines connecting the Summit 230-69 kV Substation and the Lackawanna 500-230-69 kV Substation in Lackawanna County, Pennsylvania. (Transmission Application, Docket A-2022-3030969). PPL Electric also filed an application for eminent domain to acquire a certain portion of the lands of August and Diana Baker in Dickson City Borough and Scott Township, Lackawanna County, in connection with the transmission line project. (Eminent Domain Application, Docket A-2022-3031013).

By hearing notice dated February 23, 2022, the Commission scheduled a prehearing conference to take place on April 26, 2022. The Commission published notice of the prehearing conference in the *Pennsylvania Bulletin* on March 12, 2022.¹ The *Pennsylvania Bulletin* notice also notified the public that formal protests were due on or before April 22, 2022. A prehearing conference order dated March 3, 2022, was served on the entities identified by PPL Electric as potentially affected by the project or required to be notified by the Commission's regulations. In addition to providing the time and date of the prehearing conference and the deadline for filing protests, the prehearing conference order informed these entities that if they did not attend the prehearing conference or notify the administrative law judge of their intent to participate, their name would be removed from the service list and they would not receive any pleadings, filings, discovery requests, written testimony or orders and decisions in this matter.

On March 1, 2022, August and Diana Baker filed protests to both the Transmission Application and the Eminent Domain Application.

¹ 52 Pa.B. 1568 (Mar. 12, 2022).

On March 12, 2022, PPL Electric also published notice to interested parties in *The Scranton Times* and filed a proof of publication with the Commission.

The prehearing conference convened as scheduled on April 26, 2022. Garrett P. Lent, Esquire appeared on behalf of PPL Electric. Attorneys Richard M. Williams and Richard Huffsmith appeared on behalf of the Bakers. No other interested parties appeared. Counsel for PPL Electric and the Bakers agreed to a schedule for serving written direct and rebuttal testimony and agreed to evidentiary hearings to begin on August 18, 2022, in-person in Harrisburg.

Both PPL Electric and the Bakers served written direct and rebuttal testimony. On July 15, 2022, the Parties filed a Joint Stipulation of Facts and on July 18, 2022, agreed that the hearing could be cancelled as neither party intended to cross-examine witnesses. On July 22, 2022, the Parties filed Joint Motions for the Admission of Evidence and to Amend the Briefing Schedule. I granted the motion on July 26, 2022, and directed the parties to file their evidence with the Secretary's Bureau on or before July 29, 2022. The Parties filed their testimony and exhibits as directed.

On August 19, 2022, PPL Electric and the Bakers filed main briefs. PPL Electric filed a reply brief on September 1, 2022. I closed the record by order entered on September 9, 2022. The record includes a transcript of 16 pages, the July 15, 2022 Joint Stipulation and the following testimony and exhibits:

PPL Electric Exhibit 1 – Joint Application and Petition for Waiver, including Attachments 1-6 thereto.

PPL Electric Statement No. 1 – Direct Testimony of Joseph B. Lookup.

PPL Electric Statement No. 2 – Direct Testimony of Barry A. Baker.

PPL Electric Exhibit 2 – Baker Condemnation Application.

PPL Electric Statement No. 1 (Baker) – Direct Testimony of Mark S. Safi.

PPL Electric Statement No. 2 (Baker) – Direct Testimony of Austin K. Weseloh, including PPL Electric Exhibits AKW-1 through AKW-7 attached thereto.

PPL Electric Statement No. 2-R (Baker) – Rebuttal Testimony of Austin K. Weseloh.

Baker Statement No. 1 – Direct Testimony of August Baker, including Exhibits 1-5 attached thereto.

FINDINGS OF FACT

1. PPL Electric is a public utility that provides electric distribution, transmission, and provider of last resort services in Pennsylvania subject to the regulatory jurisdiction of the Commission. Joint Stipulation ¶ 16.
2. 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 St. 1 at 3.
3. PPL Electric is also a “public utility” as defined by the Federal Power Act, 16 U.S.C. § 824(e), a transmission owner, and a member of PJM Interconnection, L.L.C. (“PJM”). PPL Electric St. 1 at 3.
4. PPL Electric is a Pennsylvania business corporation formed in 1920 and is subject to the Pennsylvania Business Corporation Law of 1988, P.L. 1444, No. 177, Section 103, as amended, 15 Pa. C.S. §§ 1101 et seq. Joint Stipulation ¶ 17.
5. PPL Electric proposes to rebuild the existing Summit-Lackawanna #1 and #2 230 kV Transmission Lines (Summit-Lackawanna Project or Project). PPL Electric Ex. 1.
6. The Project involves, among other things, the rebuilding approximately 5.5 miles of overhead 230 kV transmission lines that connect the Summit Substation and the Lackawanna Substation in Lackawanna County, Pennsylvania. Joint Stipulation ¶ 19.

7. The Summit-Lackawanna Project is required to address the substantial prevalence of pack-out rust² in the existing COR-TEN® lattice towers that comprise the existing Summit-Lackawanna #1 and #2 230 kV Transmission Lines. PPL Electric Exhibit 1 at 47-54; *see also* Joint Stipulation ¶ 20; PPL Electric Ex. 1, Attach. 1 at 4-12; PPL Electric St. 1 at 5-12.

8. PPL Electric has a responsibility to provide transmission assets and maintain them in an adequate, efficient, safe, reliable, and reasonable manner to meet the needs of the electric system and the expectations of its customers. PPL Electric St. 1 at 3.

9. The Summit-Lackawanna Project will rebuild the existing double-circuit Summit-Lackawanna #1 and #2 230 kV Transmission Lines. PPL Electric St. 1 at 12; PPL Electric Ex. 1 at 58.

10. The existing transmission lines are approximately 5.5 miles long and connect the Summit Substation and Lackawanna Substation. PPL Electric St. 1 at 5.

11. All the COR-TEN® lattice structures as well as the conductor at the 30 locations within the Summit-Lackawanna 1 and #2 230 kV Transmission Lines will be replaced. PPL Electric St. 1 at 12; PPL Electric Ex. 1 at 58.

12. The weathering-steel lattice towers that comprise the Summit-Lackawanna 1 and #2 230 kV Transmission Lines were originally constructed in the early 1970s. PPL Electric Ex. 1 at 47.

13. COR-TEN® lattice towers were commonly installed by the industry during this time because it was believed that the corrosion-resistant properties of weathering-steel would reduce future maintenance needs/costs. PPL Electric Ex. 1 at 48.

² “Pack-out rust” is a form of localized corrosion typical of steel components which results in rust packing between conjoined steel components. PPL Electric Ex. 1, Attach. 2 at 2.

14. These towers had an expected service life of approximately 75 years at the time they were installed. PPL Electric Ex. 1 at 47.

15. In 2013, PPL Electric utilized a third-party contractor to perform an assessment of the COR-TEN® lattice structures on its 230 kV transmission lines under a steel structure capital maintenance program. PPL Electric St. 1 at 6. PPL Electric explained the evaluation performed by the contractor in greater detail in Attachment 1 – Necessity Statement. *See* PPL Electric Ex. 1 at 48.

16. The assessment identified that 126 of 131 COR-TEN® structures (96%) inspected as a part of this assessment had one or more structure legs rated Condition C (poor) or Condition D (very poor); relatedly, twenty-five structures had one or more legs that were identified as “priority” and required immediate attention, and protective coating was applied to the 101 other non-priority structures. PPL Electric St. 1 at 6.

17. The asset health concerns revealed by the 2013 inspection were further heightened by the discovery of pack-out rust in the section joints of the COR-TEN® lattice towers. PPL Electric Ex. 1 at 49 (emphasis added).

18. The negative impacts of pack-out rust on COR-TEN® structures have diminished the expected service life the existing COR-TEN® lattice towers that comprise the Summit-Lackawanna #1 and #2 230 kV Transmission Lines from 75 to 50 years. PPL Electric Ex. 1 at 49.

19. PPL Electric subsequently contracted three additional independent, non-affiliated inspection companies to conduct evaluations of COR-TEN® lattice towers and determine the overall condition of these towers on the PPL Electric Transmission System in 2019. PPL Electric St. 1 at 7; PPL Electric Ex. 1 at 50.

20. The contractors’ reports revealed that “over 90% of the joints at each structure exhibited visible pack-out [rust] in the connections.” PPL Electric St. 1 at 7.

21. In addition, the reports showed that pack-out rust and section-loss was most prominent on the lower portions of the towers where there was higher likelihood of moisture build up. PPL Electric St. 1 at 7.

22. Another evaluation of COR-TEN® lattice towers was initiated in early 2020 to determine the full extent of the deterioration on the transmission system. PPL Electric St. 1 at 8.

23. PPL Electric's Data Analytics Team used a statistical analysis and model to comprehensively determine the overall condition of the COR-TEN® lattice towers in a cost-efficient manner. PPL Electric St. 1 at 8.

24. The results of the 2020 inspection program confirmed the severity of deterioration noted during the 2019 inspection. PPL Electric Ex. 1 at 51 (Table 1-1).

25. PPL Electric retained RTR Energy Solutions, Inc. ("RTR") to prepare a condition assessment of the Summit-Lackawanna #1 and #2 230 kV Transmission Lines in October 2021. PPL Electric St. 1 at 8-9.

26. RTR's assessment analyzed each joint of all 30 structures that comprise this transmission line. PPL Electric St. 1 at 9.

27. Each structure was then assessed with a condition rating of "Mild" (less than 25% of total joints contain pack-out rust), "Moderate" (more than 25% but less than 50% of total joints contain pack-out rust), or "Severe" (more than 50% of total joints contain pack-out rust). PPL Electric St. 1 at 9; PPL Electric Ex. 1 at 52.

28. The majority of the pack-out rust was observed in the lower sections of the post legs where horizontal and diagonal members are bolted to the post leg. PPL Electric Ex. 1 at 52.

29. No structures were in “Mild” condition and “[b]ased on the inspection results, the average structure...rated as ‘Moderate’ having over 40% of their total joints containing pack[-out] rust, indicating that those structures are on the more critical end of the spectrum for that condition rating.” PPL Electric Ex. 1 at 52.

30. At roughly 50 years of age, the COR-TEN® lattice towers that comprise the Summit-Lackawanna #1 and #2 230 kV Transmission Lines have exceeded their useful life and can no longer be relied upon to safely operate as designed. PPL Electric St. 1 at 49; PPL Electric Ex. 1 at 53.

31. Possible shearing of bolts, members disconnecting from lattice towers, or complete tower failure pose a major safety risk to both the public and PPL Electric employees. PPL Electric Ex. 1 at 53; Joint Stipulation ¶ 22; PPL Electric Ex. 1, Attach. 1 at 11; PPL Electric St. 1 at 10.

32. Mr. Lookup explained that “if these transmission lines fail, it is expected that the service of approximately 31,875 customers would be impacted for the next contingency.” PPL Electric St. 1 at 10-11; see also PPL Electric Ex. 1 at 53.

33. Customers impacted would include “customers such as Williams Pipeline Compressor Station 605, Metropolitan Insurance, Clark Summit Sewer, Clark Summit State Hospital, and PA American Water.” PPL Electric St. 1 at 10-11; *see also* PPL Electric Ex. 1 at 53.

34. The risks of structure failure increase where a wind event impacts a structurally compromised COR-TEN® lattice tower. PPL Electric Ex. 1 at 54.

35. The Project will immediately and fully resolve the deteriorated condition of the existing structures on a long-term basis by removing the existing COR-TEN® lattice towers and replacing them with steel monopoles. PPL Electric Ex. 1 at 16-17; Joint Stipulation ¶ 21; PPL Electric Ex. 1, Attach. 1 at 11; PPL Electric St. 1 at 10.

36. By rebuilding these structures, PPL Electric will resolve the existing COR-TEN® issue and avoid the possibility of the issue worsening and/or recurring with respect to these structures and developing into both a reliability and public safety issue. PPL Electric Ex. 1 at 16-17 (Joint Application and Petition for Waiver ¶ 33).

37. PPL Electric evaluated three potential solutions to address the degrading health of the Summit-Lackawanna #1 and #2 230 kV Transmission Lines. PPL Electric Ex. 1 at 54-58.

38. The first alternative PPL Electric considered was to replace each of the existing COR-TEN® lattice towers with new standard lattice tower structures. PPL Electric Ex. 1 at 54.

39. The first alternative would cost \$435,331 per structure and would require PPL Electric to replace the existing conductors in 2026, at an additional cost of \$192,789 per structure. PPL Electric Ex. 1 at 54.

40. The second alternative considered by PPL Electric was to remediate the entire lattice tower line, which would include replacing badly damaged members with galvanized steel members, installing new hardware and spacers, and cleaning pack-out rust from affected joints. PPL Electric Ex. 1 at 54.

41. Under the second alternative, the average cost to remediate each tower is approximately \$183,891. PPL Electric Ex. 1 at 55; *see also* PPL Electric Ex. 1 at Attach. 1 (explaining that this figure was developed using an average of three contractors' estimated costs to remediate each tower, which ranged from \$140,000 to \$240,000.)

42. The third alternative considered by PPL Electric was to fully rebuild the existing Summit-Lackawanna #1 and #2 230 kV Transmission Lines by removing the COR-TEN® lattice poles to replace them with monopoles. PPL Electric Ex. 1.

43. The total cost of the rebuild as proposed is \$16.2 million. PPL Electric Ex. 1 at 59.

44. The proposed rebuild is more cost-effective and much less risky than the remediation alternative. PPL Electric Ex. 1 at 57.

45. Concerns regarding (1) the lack of full-remediation experience with COR-TEN® lattice towers, (2) the lack of evidence of the long-term remediation effectiveness for COR-TEN® lattice towers, and (3) the possible return of pack-out rust in the joints of remediated COR-TEN® lattice tower structures, are fully avoided by the proposed rebuild contemplated by the Project. PPL Electric Ex. 1 at 57.

46. The proposed rebuild option avoids the ongoing O&M expense and additional, eventual reconductoring costs associated with the COR-TEN® lattice tower replacement alternative. PPL Electric Ex. 1 at 57.

47. The Project has the additional benefit of improving performance by increasing clearances and improving lightning performance by replacing the existing lattice towers with monopoles. PPL Electric Ex. 1 at 57.

48. The rebuilt Summit-Lackawanna #1 and #2 230 kV Transmission Lines associated with the Summit-Lackawanna Project will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable NESC minimum standards and all applicable legal requirements. PPL Electric Ex. 1 at 20 (Joint Application and Petition for Waiver ¶ 45); PPL Electric Ex. 1 at 87-93; *see also* Joint Stipulation ¶ 25.

49. PPL Electric's safety rules include: procedures to allow work to be performed on energized facilities in a safe manner, including specific tagging procedures; the use of temporary safety grounds on de-energized facilities for employee lineman safety during maintenance, construction, or reconstruction work; pre-grounding voltage tests to confirm a line

is de-energized; pre-climbing inspection of pole and/or structure integrity; and the required use of appropriate safety gear. PPL Electric Ex. 1 at 92.

50. PPL Electric has taken EMF mitigation into account and will follow PPL Electric's standards for Magnetic Field Management in connection with the Project. PPL Electric St. 1 at 17; see also PPL Electric Ex. 1 at 93; *see* Joint Stipulation ¶ 26.

51. Ground clearances for the proposed Project will be increased between approximately 3.0 and 7.0 feet higher than those required by the NESC standard, in order to reduce the magnetic field exposure. PPL Electric St. 1 at 17; *see also* PPL Electric Ex. 1 at 93.

52. The proposed rebuild of the Summit-Lackawanna #1 and #2 230 kV Transmission Lines will continue to allow for double-circuit operation, which will allow for reverse phasing. PPL Electric St. 1 at 17; *see also* PPL Electric Ex. 1 at 93.

53. A reduction in magnetic field exposure is anticipated due to the higher ground clearances and reverse phasing. PPL Electric St. 1 at 17; *see also* PPL Electric Ex. 1 at 93.

54. The Summit-Lackawanna Project will be constructed entirely within the existing right-of-way (ROW) currently occupied by the existing Summit-Lackawanna #1 and #2 230 kV Transmission Lines or on the same PPL Electric fee-owned properties as the existing transmission lines. PPL Electric Ex. 1 at 21 (Joint Application and Petition for Waiver ¶ 51).

55. In addition, the Project facilities will be rebuilt upon the same structure alignment as the existing facilities. PPL Electric Ex. 1 at 21 (Joint Application and Petition for Waiver ¶ 51).

56. The Project will also decrease the maximum height and average height of towers, and decrease the ground impacts of the structures comprising the Summit-Lackawanna

#1 and #2 230 kV Transmission Lines. PPL Electric Ex. 1 at 21 (Joint Application and Petition for Waiver ¶ 49).

57. The existing COR-TEN® lattice tower structures range in height from between approximately 120-170 feet with an average structure height of approximately 144 feet. PPL. St. 1 at 16.

58. The proposed double-circuit monopole structures to replace the COR-TEN® lattice towers will range in height between approximately 110 and 165 feet with an average structure height of approximately 140 feet. PPL. St. 1 at 16.

59. PPL Electric has provided information on the regulatory permit requirements and agency coordination regarding cultural and environmental resources. PPL Electric Ex. 1 at 70-86; *see also* PPL Electric St. 2.

60. PPL Electric has also conducted environmental studies within the existing corridor to support construction permitting. PPL Electric Ex. 1 at 32 (Joint Application and Petition for Waiver ¶ 78).

61. No national parks, state parks, local parks, recreational areas, or natural landmarks will be affected by the Project, because none are located in the Project Area. PPL Electric St. 2 at 6.

62. While two State Historic Preservation Office (“SHPO”) eligible properties were identified with respect to the Project (one located within the Project Area and one in close proximity to the Project Area), neither property is anticipated to be impacted by the Project and permitting requirements for the Project do not require further coordination with the PHMC. PPL Electric St. 2 at 7.

63. No federal or state designated unique geological, scenic, or natural areas will be affected by the Project, because none are located within the Project Area. PPL Electric St. 2 at 8.

64. While the Project is located near three Pennsylvania Natural Heritage Program identified natural areas, all of the areas are located outside the ROW and no impacts from the Project are anticipated. PPL Electric St. 2 at 11.

65. PPL Electric completed a Pennsylvania Natural Diversity Inventory (“PNDI”) for the Project and, while certain endangered or threatened animal and plant species were identified, the applicable state and federal agencies have confirmed that they either have no concerns regarding impacts on endangered or threatened species, or that they will work with PPL Electric to ensure that the construction does not negatively impact such species. PPL Electric St. 2 at 12-13 (identifying plant species of concern that PPL Electric has coordinated with the Pennsylvania Department of Conservation of Natural Resources to implement measures to protect and identifying animal species that PPL Electric has provided information to the United States Fish and Wildlife Service to demonstrate the Project will not impact).

66. PPL Electric will obtain all required permits prior to construction of the Project and will comply with any and all conditions placed on such permits by those agencies that have appropriate jurisdiction over environmental matters. PPL Electric St. 2 at 6; PPL Electric Ex. 1 at 70-86; *see also* Joint Stipulation ¶ 30.

67. 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 conditions placed on those permits. Joint Stipulation ¶ 30; PPL Electric St. 2 at 6, and PPL Electric Ex. 1, Attach. 5).

68. PPL Electric provided a detailed description of the Project Area and the route of each individual component of the Project. Joint Stipulation ¶ 28; PPL Electric Ex. 1, Attach. 1 at 4-12; PPL Electric St. 2 at 4-13.

69. A portion of the existing ROW that is occupied by the existing Summit-Lackawanna #1 and #2 230 kV Transmission Lines traverses a portion of the vacant land claimed by August and Diana Baker through multiple quit-claim deeds, and is situated in Dickson City Borough and Scott Township, Lackawanna County, Pennsylvania. Joint Stipulation ¶ 33.

70. This tract of land is located at parcel number 102030010005, Lackawanna County, Pennsylvania, which the Bakers purchased in 2009. Joint Stipulation ¶ 34; Baker St. 1 at 2.

71. The Bakers contend that the conveyance of the easement to PPL Electric was not valid, therefore, PPL Electric and the Bakers are parties to active and ongoing litigation before the Court of Common Pleas of Lackawanna County, *August Baker and Diana Baker v. PPL Electric Utilities Corp, and T&D Power, Inc.*, No.: 15-CV4264. Joint Stipulation ¶ 36; Baker St. 1 at 3-7.

72. PPL Electric filed the Eminent Domain Application to ensure it can timely proceed with construction of the Project, in the event that the Court of Common Pleas of Lackawanna County determines PPL Electric's rights are not superior to the Bakers' claims and the Parties cannot resolve their dispute. Joint Stipulation ¶ 43.

DISCUSSION

A. Legal Standards

1. Burden of Proof

The proponent of a rule or order in any Commission proceeding has the burden of proof.³ As the applicant, PPL Electric has the burden of proving that the proposed project meets

³ 66 Pa.C.S. § 332.

all the relevant statutory and regulatory requirements by a preponderance of the evidence.⁴ Additionally, any finding of fact necessary to support an adjudication of the Commission must be based upon substantial evidence, which is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.⁵ More is required than a mere trace of evidence or a suspicion of the existence of a fact sought to be established.⁶

As discussed in detail below, I find that PPL Electric has met its burden of proof. The Bakers generally do not oppose the Transmission Application and did not offer any evidence to rebut PPL Electric's evidence.

2. Legal Standards for the Approval of Transmission Lines

The threshold issue in the siting of a transmission line which a utility must establish is whether the upgraded or additional transmission line is "needed" in order to furnish the adequate facilities mandated by Section 1501 of the Public Utility Code:⁷

Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. Such service also shall be reasonably continuous and without unreasonable

⁴ Energy Conservation Council of Pa. v. Pa. Pub. Util. Comm'n, 25 A.3d 440 (Pa. Cmwlth. 2011)(Energy Conservation Council II); Energy Conservation Council of Pa. v. Pa. Pub. Util. Comm'n, 995 A.2d 465 (Pa. Cmwlth. 2010)(Energy Conservation Council I).

⁵ *Id.*

⁶ Norfolk & W. Ry. v. Pa. Pub. Util. Comm'n, 413 A.2d 1037 (Pa. 1980).

⁷ Application of PPL Electric Utilities Corporation Filed Pursuant to 52 Pa. Code Chapter 57, Subchapter G, for Approval of the Siting and Construction of the Pennsylvania Portion of The Proposed Susquehanna-Roseland 500 kV Transmission Line in Portions of Lackawanna, Luzerne, Monroe, Pike and Wayne Counties, Pennsylvania, Docket No. A-2009-2082652 (Order entered Feb. 12, 2010)(Susquehanna-Roseland 500 kV Transmission Line), *aff'd sub nom.*, Energy Conservation Council v. Pa. Pub. Util. Comm'n, 25 A.3d 440 (Pa. Cmwlth. 2011).

interruptions or delay. Such service and facilities shall be in conformity with the regulations and orders of the commission.^[8]

Section 57.76 of the Commission's regulations⁹ provide, at a minimum, the Commission will not grant an application for a proposed high voltage line unless it finds:

- (1) That there is a need for it.
- (2) That it will not create an unreasonable risk of danger to the health and safety of the public.
- (3) That it is in compliance with applicable statutes and regulations providing for the protection of the natural resources of this Commonwealth.
- (4) That it will have minimum adverse environmental impact, considering the electric power needs of the public, the state of available technology and the available alternatives.

3. Legal Standards for Eminent Domain

Section 1511 of the Business Corporation Law of 1988,¹⁰ statutorily grants a public utility, such as PPL Electric, the power or authority to take and condemn property for the purpose of providing electricity to the public. However, before a public utility may seek to exercise the authority to condemn property for an aerial transmission line, it must obtain approval from the Commission pursuant to Section 1511(c),¹¹ which provides, in pertinent part, as follows:

(c) The powers conferred by subsection (a) [for the running of aerial electric facilities] may be exercised to condemn property ... only after the Pennsylvania Public Utility Commission, upon

⁸ 66 Pa.C.S. § 1501.

⁹ 52 Pa. Code § 57.76(a)(1)-(4).

¹⁰ See 15 Pa.C.S. § 1511(a)(3).

¹¹ 15 Pa.C.S. § 1511(c).

application of the public utility corporation, has found and determined ... that the service to be furnished by the corporation through the exercise of those powers is necessary or proper for the service, accommodation, convenience or safety of the public.

Thus, on an application for condemnation, the Commission must determine whether the service—the transmission or distribution of electricity to or for the public that will be provided to the public if the subject property is condemned—is necessary or proper for the service, accommodation, convenience, or safety of the public.

B. Description of the Project

PPL Electric proposes to rebuild approximately 5.5 miles of existing double-circuit 230 kV transmission lines that connect the Summit Substation and Lackawanna Substation, i.e., the Summit-Lackawanna #1 and #2 230 kV Transmission Lines Project. These lines are currently supported by 30 COR-TEN® lattice tower structures. Based on the results of PPL Electric’s inspection and evaluation, PPL Electric has determined that these COR-TEN® lattice towers have deteriorated to the point that the towers should be replaced with 30 steel monopoles which will be located in roughly similar locations to the existing lattice towers.¹² The rebuilt transmission line will be within the same right-of-way in which the current line is located.

C. Request for Waiver of Regulations and Guidelines

The Summit-Lackawanna Project involves rebuilding an existing line on the same route in essentially the same configuration as the current transmission line. The lattice towers will be replaced with steel monopoles. But for the petition for eminent domain arising from the dispute with the Bakers regarding easement on their property,¹³ the proposed Summit-

¹² PPL Electric St. 2 at 4.

¹³ Joint Stipulation ¶¶ 36-39, 41. While PPL Electric explained that it acquired and possessed an easement to construct, operate and maintain, and from time to time to reconstruct its electric lines on the subject property, it nevertheless acknowledged that the Bakers had disputed these rights before the Court of Common Pleas of Lackawanna County. *See* PPL Electric Ex. 1 at 16-17; PPL Electric Ex. 2 at 9-10.

Lackawanna Project would qualify for filing as a Letter of Notification pursuant to 52 Pa. Code § 57.72(d)(1)(i) and (v).¹⁴ Thus, some of the information required by the Commission’s comprehensive siting regulations, in particular information pertaining to route selection and environmental analysis, are inapplicable to the Project. PPL Electric asks the Commission to waive certain regulations which require PPL Electric to include details in its application which, according to PPL Electric, are not applicable to the Project because the Project is limited to rebuilding an existing line completely within what PPL Electric contends is PPL Electric’s existing right-of-way. Although the Bakers dispute the validity of PPL Electric’s easement on a portion of the right-of-way, they do not oppose the waiver of the regulations.

Section 57.72(e) of the regulations¹⁵ specifically authorizes the presiding officer to waive requirements of the Commission’s siting regulations for transmission lines.¹⁶ As set forth below, PPL’s request will be granted. Given the nature of the application, which does not involve significant changes to the location of PPL’s existing facilities, but rather involves the replacement of the lattice towers with monopoles which will be located in proximity to the existing towers, no purpose would be served by requiring additional information that is irrelevant to the Commission’s consideration of the wisdom of the proposed Project.

The waiver of these regulations is consistent with the Commission’s recent decision in *Application of PPL Electric Utilities Corporation for Approval to Rebuild Approximately Six Miles of the Breinigsville-Alburtis 500 kV Transmission Line in Lower Macungie and Upper Macungie Townships, Lehigh County, Pennsylvania*.¹⁷ Like the application here, the Breinigsville-Alburtis project involved a rebuild of a transmission line in an

¹⁴ 52 Pa. Code § 57.72(d)(1)(i) authorizes the filing of a letter of notification where “[a]n HV line which is proposed to be located entirely on an existing transmission line right-of-way, so long as the size, character design or configuration of the proposed HV line does not substantially alter the right-of-way.” 52 Pa. Code § 57.72(d)(1)(v) authorizes the filing of a letter of notification where “[a]n HV line which is to be reconducted or reconstructed so long as the size, character, design or configuration of the proposed HV line does not substantially alter the right-of-way.”

¹⁵ 52 Pa. Code § 57.72(e).

¹⁶ See also 52 Pa. Code § 5.43.

¹⁷ Docket A-2019-3007945 (Order entered August 14, 2019) (*Breinigsville-Alburtis Order*).

existing right-of-way where the structures of line were replaced with similar structures. The project did not involve the acquisition of any additional right-of-way or any change in the route of the transmission line. The Commission concluded that it was appropriate to waive the application of certain sections of 57.72(c) as well as information required in Chapter 69 regarding route selection because this additional information was not necessary for the purpose of evaluating the project. *Breinigsville-Alburtis Order*.

PPL Electric contends that it is appropriate to waive compliance with Sections 57.72(c),(7), (8), (10) and (11).¹⁸ Subsections (c)(7) and (c)(8) require a description of studies regarding environmental impact and the identification of archaeological, geologic, historic, scenic or wilderness areas. Subsection (c)(10) requires a description of alternative routes and Subsection (c)(11) involves permitting requirements for other agencies. PPL Electric also seeks waiver of the Commission's policy and guidance regarding the siting and route selection of transmission facilities contained in Sections 69.3102 and 69.3106.¹⁹

PPL Electric finally seeks a waiver of the notice requirement in Section 57.72(c)(4), that would require PPL Electric to serve a notice of the filing of the application on certain state and local agencies. According to PPL, the state and local governments and agencies were served with a copy of the application in its entirety, therefore, a separate notice of filing is not necessary to provide these instrumentalities with an adequate description of the Project and notice of Commission proceedings related to the project.

I will grant PPL's request to waive Sections 57.72(c)(7),(8), (10), (11) as well as Sections 69.3102 and 69.3106. The Bakers do not object. Given the nature of the application, which does not involve significant changes to the location of PPL's existing facilities, no purpose would be served by requiring additional information that is irrelevant to the Commission's consideration of the wisdom of the proposed Project. PPL Electric included a detailed explanation for the bases of the requested waivers in Paragraphs 72-87 of its

¹⁸ 52 Pa. Code §§ 57.72(c),(7), (8), (10), (11).

¹⁹ 52 Pa. Code §§ 69.3102, 69.3106.

Application. Sufficient information regarding environmental and historical features and permits that are required to minimize the environmental impact of the constructions, such as erosion and sedimentation controls, was included with the application.

D. Consideration of the Application

1. Need

According to PPL Electric, the Summit-Lackawanna Project is required to address the substantial prevalence of pack-out rust in the existing COR-TEN® lattice towers that comprise the existing Summit-Lackawanna #1 and #2 230 kV Transmission Lines.²⁰ As set forth in more detail below, I agree.

The Project is needed to address asset health concerns that are being accelerated by increased incidences of pack-out rust.²¹ The weathering-steel lattice towers that comprise the Summit-Lackawanna 1 and #2 230 kV Transmission Lines were originally constructed in the early 1970s.²² COR-TEN® lattice towers were commonly installed by the industry during this time because it was believed that the corrosion-resistant properties of weathering-steel would reduce future maintenance needs/costs.²³ These towers had an expected service life of approximately 75 years at the time they were installed.²⁴

²⁰ PPL Electric Ex. 1, at 47-54.

²¹ PPL Electric St. 1 at 6. ‘Pack-out rust’ or ‘pack rust’ is a form of localized corrosion typical of steel components that develop a crevice into an open atmospheric environment, which results in rust packing between conjoined steel components. Pack-out rust accelerates the deterioration of asset health and can result in shearing off bolts, loss of structural integrity, members disconnecting from lattice towers, and tower failure. PPL Electric St. 1 at 6, n.1.

²² PPL Electric Ex. 1 at 47.

²³ *Id.* at 48.

²⁴ *Id.* at 47.

PPL Electric has conducted deliberate analyses of the prevalence of pack-out rust in COR-TEN® lattice towers, and the impacts of pack-out rust on the health of these assets. As explained by PPL Electric witness, Mr. Lookup, in 2013 PPL Electric utilized a third-party contractor to perform an assessment of the COR-TEN® lattice structures on its 230 kV transmission lines under a steel structure capital maintenance program.²⁵ The assessment identified that 126 of 131 COR-TEN® structures (96%) inspected as a part of this assessment had one or more structure legs rated Condition C (poor) or Condition D (very poor). Twenty-five structures had one or more legs that were identified as “priority” and required immediate attention, and protective coating was applied to the 101 other non-priority structures.²⁶ PPL Electric conducted repairs to the “priority” structures, and applied protective coating to the Condition C or D structures not identified as “priority” in 2014.²⁷ Ongoing inspections have confirmed these structures are continuing to degrade.²⁸

The asset health concerns revealed by the 2013 inspection were further heightened by the discovery of pack-out rust in the section joints of the COR-TEN® lattice towers.

PPL Electric subsequently contracted three additional independent, non-affiliated inspection companies to conduct evaluations of COR-TEN® lattice towers and determine the overall condition of these towers on the PPL Electric Transmission System in 2019.²⁹ The contractors’ reports revealed that “over 90% of the joints at each structure exhibited visible pack-out [rust] in the connections.”³⁰ In addition, the reports showed that pack-out rust and section-

²⁵ PPL Electric St. 1 at 6. PPL Electric explained the evaluation performed by the contractor in greater detail in Attachment 1 – Necessity Statement. *See* PPL Electric Ex. 1 at 48.

²⁶ PPL Electric St. 1 at 6.

²⁷ PPL Electric Ex. 1 at 48.

²⁸ PPL Electric St. 1 at 6.

²⁹ PPL Electric St. 1 at 7. The details of how these inspections were performed are explained in Attachment 1 – Necessity Statement. PPL Electric Ex. 1 at 50.

³⁰ PPL Electric St. 1 at 7.

loss was most prominent on the lower portions of the towers where there was higher likelihood of moisture build up.³¹

A further, more robust, evaluation of COR-TEN® lattice towers was initiated in early 2020 to determine the full extent of the deterioration on the transmission system.³² PPL Electric’s Data Analytics Team used an statistical analysis and model to comprehensively determine the overall condition of the COR-TEN® lattice towers in a cost-efficient manner.³³ The statistical analysis determined that inspection of 192 randomly selected COR-TEN® towers would provide a statistically significant representation of all 1,284 COR-TEN® towers on the PPL Electric system.³⁴ The results of the 2020 inspection program confirmed the severity of deterioration noted during the 2019 inspection.

Finally, PPL Electric retained RTR Energy Solutions, Inc. (RTR) to prepare a condition assessment of the Summit-Lackawanna #1 and #2 230 kV Transmission Lines in October 2021.³⁵ RTR’s assessment analyzed each joint of all 30 structures that comprise this transmission line.³⁶ Each structure was then assessed with a condition rating of “Mild” (less than 25% of total joints contain pack-out rust), “Moderate” (more than 25% but less than 50% of total joints contain pack-out rust), or “Severe” (more than 50% of total joints contain pack-out rust).³⁷

While pack-out rust was observed in joints all the way up some towers, the majority of it was observed in the lower sections of the post legs where horizontal and diagonal members are bolted to the post leg.³⁸ Moreover, none of the structures were in “Mild” condition

³¹ *Id.*

³² PPL Electric St. 1 at 8.

³³ *Id.*

³⁴ *Id.*

³⁵ PPL Electric St. 1 at 8-9.

³⁶ *Id.* at 9.

³⁷ *Id.*; PPL Electric Ex. 1 at 52.

³⁸ PPL Electric Ex. 1 at 52.

and “[b]ased on the inspection results, the average structure...rated as ‘Moderate’ [had] over 40% of their total joints containing pack[-out] rust, indicating that those structures are on the more critical end of the spectrum for that condition rating.”³⁹

PPL Electric has clearly demonstrated that the existing COR-TEN® lattice towers have deteriorated and have been brought to the end of their service life much sooner than would have been anticipated. At roughly 50 years of age, the COR-TEN® lattice towers that comprise the Summit-Lackawanna #1 and #2 230 kV Transmission Lines have exceeded their useful life and can no longer be relied upon to safely operate as designed.⁴⁰ Possible shearing of bolts, members disconnecting from lattice towers, or complete tower failure, pose a major safety risk to both the public and PPL Electric employees.⁴¹

These asset health concerns are also important because a failure of the Summit-Lackawanna #1 and #2 230 kV Transmission Lines would also likely result in reliability issues for PPL’s Bulk Transmission system.⁴² Mr. Lookup explained that “if these transmission lines fail, it is expected that the service of approximately 31,875 customers would be impacted for the next contingency.”⁴³ Customers impacted would include “customers such as Williams Pipeline Compressor Station 605, Metropolitan Insurance, Clark Summit Sewer, Clark Summit State Hospital, and PA American Water.”⁴⁴

PPL Electric also showed that the increased relevance of severe weather, and changing weather patterns, will impact the reliability of the existing COR-TEN® lattice towers.⁴⁵

³⁹ *Id.*

⁴⁰ PPL Electric Ex. 1 at 53.

⁴¹ *Id.*

⁴² *Id.*

⁴³ PPL Electric St. 1 at 10-11; *see also* PPL Electric Ex. 1 at 53.

⁴⁴ PPL Electric St. 1 at 10-11; *see also* PPL Electric Ex. 1 at 53.

⁴⁵ PPL Electric Ex. 1 at 54.

Specifically, the risks of failure increase where a wind event impacts a structurally compromised COR-TEN® lattice tower.⁴⁶

For these reasons, the Project is needed to immediately and fully resolve the deteriorated condition of the existing COR-TEN® lattice structures on a long-term basis. By removing the existing COR-TEN® lattice towers and replacing them with steel monopoles, PPL Electric will resolve the existing COR-TEN® issue and avoid the possibility of the issue worsening and/or recurring with respect to these structures. The Project will also avoid these asset health concerns from developing into both a reliability and public safety issue.

PPL Electric evaluated three potential solutions to address the degrading health of the Summit-Lackawanna #1 and #2 230 kV Transmission Lines.⁴⁷ The first alternative PPL Electric considered involved replacing each of the existing COR-TEN® lattice towers with new standard lattice tower structures.⁴⁸ As explained in Attachment 1 – Necessity Statement, this alternative would have an initial replacement cost of \$435,331 per structure.⁴⁹ However, this alternative would also require PPL Electric to replace the existing conductors in 2026 (i.e., when the conductors reached their end of life) at an additional \$192,789 per structure.⁵⁰ Moreover, there would be ongoing incremental O&M costs for these facilities for the remainder of their service lives.⁵¹

The second alternative considered by PPL Electric was to remediate the entire lattice tower line instead of replacing the towers. This alternative would include replacing badly damaged members with galvanized steel members, installing new hardware and spacers, and

⁴⁶ *Id.*

⁴⁷ PPL Electric Ex. 1 at 54-58.

⁴⁸ *Id.* at 54.

⁴⁹ *Id.*

⁵⁰ *Id.*.

⁵¹ *Id.*

cleaning pack-out from affected joints.⁵² The average estimated cost of remediation is approximately \$183,891/structure.⁵³ However, PPL Electric rejected this alternative due to substantial uncertainties regarding its immediate and long-term effectiveness to address the COR-TEN® issue.⁵⁴ Furthermore, while remediation could extend the life of the structures, re-evaluation (at a minimum) and possible subsequent remediation every 10 years following the initial remediation may be required.⁵⁵ In addition, the health and safety risks associated with the assets' advanced age and degree of deterioration are so great that remediation would fail to adequately address the poor asset health conditions.⁵⁶ Finally, PPL Electric explained that remediation would require additional O&M expense and would require the structures to be replaced in 30 years, resulting in additional duplicative projects to resolve the COR-TEN®-related asset health concerns.⁵⁷

The third alternative evaluated by PPL Electric (i.e., the Proposed Solution or the Project) was to fully rebuild the existing Summit-Lackawanna #1 and #2 230 kV Transmission Lines.⁵⁸ Importantly, the proposed rebuild is more cost-effective and much less risky than the remediation alternative.⁵⁹ In addition, the concerns regarding (1) the lack of full-remediation experience with COR-TEN® lattice towers, (2) the lack of evidence of the long-term remediation effectiveness for COR-TEN® lattice towers, and (3) the possible return of pack-out rust in the joints of remediated COR-TEN® lattice tower structures, are fully avoided by the proposed rebuild contemplated by the Project.⁶⁰ Furthermore, the proposed rebuild option avoids

⁵² *Id.*

⁵³ *Id.* at 55. As further explained in Attachment 1 – Necessity Statement, this figure was developed using an average of three contractors' estimated costs to remediate each tower, which ranged from \$140,000 to \$240,000. PPL Electric Ex. 1 at 50.

⁵⁴ PPL Electric Ex. 1 at 55.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.* at 56.

⁵⁸ PPL Electric Ex. 1 at 57.

⁵⁹ *Id.*

⁶⁰ *Id.*

the ongoing O&M expense and additional, eventual reconductoring costs associated with the replacement alternative.⁶¹ Finally, the Project has the additional benefit of improving performance by increasing clearances and improving lightning performance by replacing the existing lattice towers with monopoles.⁶²

The proposed Project is also more cost-effective than the identified alternatives on a long-term cost of service basis.⁶³ The total cost of the entire Project is approximately \$16.2 million.⁶⁴ On a total cost of service basis, the Proposed Solution is approximately 86% of the cost of Alternative 1 (i.e., replacing the existing structures) on a 45-year basis and 87% of the cost of Alternative 1 on 75-year basis.⁶⁵ In addition, on a total cost of service basis, the Proposed Solution is approximately 92% of the cost of Alternative 2 (i.e., remediating the existing structures) on a 45-year basis and 58% of the cost of Alternative 1 on 75-year basis.⁶⁶

In sum, the proposed Project will also improve overall reliability, safety, and system resiliency.⁶⁷ It will also resolve reliability contingencies that would occur should the transmission lines fail.⁶⁸ With respect to the COR-TEN® asset health condition, the Project will immediately and fully resolve the deteriorated condition of the existing structures on a long-term basis by removing the existing COR-TEN® lattice towers and replacing them with steel monopoles.⁶⁹ By rebuilding these structures, PPL Electric will resolve the existing COR-TEN® issue and avoid the possibility of the issue worsening and/or recurring with respect to these

⁶¹ *Id.*

⁶² *Id.*

⁶³ PPL Electric St. 1 at 12.

⁶⁴ PPL Electric Ex. 1 at 59.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ PPL Electric Exhibit 1, at pp. 16-17 (Joint Application and Petition for Waiver ¶ 33).

⁶⁸ *Id.*

⁶⁹ *Id.*

structures and developing into both a reliability and public safety issue.⁷⁰ PPL Electric fully investigated alternatives to replacing the existing lattice towers and concluded that the full rebuild, as proposed in the application, was the least expensive and most cost effective alternative.

2. Risk of Danger to Health and Safety of the Public

The second requirement under Section 57.76 of the Commission's regulations for approval of the siting and construction of transmission lines is that the project will not create an unreasonable risk of danger to the health and safety of the public.⁷¹ As explained below, the proposed transmission lines will be designed, constructed, and maintained to ensure the health and safety of the public.

The rebuilt Summit-Lackawanna #1 and #2 230 kV Transmission Lines associated with the Summit-Lackawanna Project will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable NESC minimum standards and all applicable legal requirements.⁷² The Commission has held in numerous cases that transmission lines that meet or exceed the NESC requirements do not create an unreasonable risk of danger to the health and safety of the public.⁷³

⁷⁰ *Id.*

⁷¹ 52 Pa. Code § 57.76.

⁷² PPL Electric Ex. 1 at 20 (Joint Application and Petition for Waiver ¶ 45); PPL Electric Ex. 1 at 87-93.

⁷³ See, e.g., Application of PPL Electric Utilities Corporation Filed Pursuant to 52 Pa. Code Chapter 57, Subchapter G, for Approval of the Siting and Construction of the Pennsylvania Portion of The Proposed Susquehanna-Roseland 500 kV Transmission Line, Docket No. A-2009-2082652, 2010 Pa. PUC LEXIS 434 (Opinion and Order entered Feb. 12, 2010); Application of PP&L for Approval to Locate and Construct a 138 kV Transmission Line Between West Allentown and Salisbury Substations, Docket No. A-00104160 (Order dated July 20, 1984); Application of PP&L for Authorization to Locate and Construct its Hamlin 138 kV Electric Transmission Line, Docket No. A-00101826 (Order dated Apr. 3, 1981); *Larken v. Phila. Elec. Co.*, 39 Pa.P.U.C. 777 (1961).

In addition to the safety features incorporated by designing the line in accordance with or in excess of the NESC, PPL Electric designs and constructs projects to follow or exceed all codes and requirements.⁷⁴ PPL Electric’s safety rules include: procedures to allow work to be performed on energized facilities in a safe manner, including specific tagging procedures; the use of temporary safety grounds on de-energized facilities for employee lineman safety during maintenance, construction, or reconstruction work; pre-grounding voltage tests to confirm a line is de-energized; pre-climbing inspection of pole and/or structure integrity; and the required use of appropriate safety gear.⁷⁵

The Commission has found that electric and magnetic fields (also referred to jointly as electromagnetic fields or “EMF”) from transmission lines do not pose a danger to the health and safety of the public.⁷⁶ Nevertheless, PPL Electric has taken EMF mitigation into account.⁷⁷

Ground clearances for the proposed Project will be increased between approximately 3.0 and 7.0 feet higher than those required by the NESC standard in order to reduce the magnetic field exposure.⁷⁸ The proposed rebuild of the Summit-Lackawanna #1 and #2 230 kV Transmission Lines will continue to allow for double-circuit operation, which will allow for reverse phasing.⁷⁹ A reduction in magnetic field exposure is anticipated due to the higher ground clearances and reverse phasing.⁸⁰

⁷⁴ PPL Electric Ex. 1 at 92.

⁷⁵ PPL Electric Ex. 1 at 92.

⁷⁶ *Application of Pennsylvania Power & Light Co.*, Docket No. A-110500F0196, 1994 Pa. PUC LEXIS 65, *67 (Order dated Oct. 21, 1994) (“Based on the extensive scientific evidence developed to date, which has been discussed in the preceding section, it is clear that EMF should not be regarded as a health hazard.”).

⁷⁷ PPL Electric St. 1 at 17; *see also* PPL Electric Ex. 1 at 93.

⁷⁸ PPL Electric St. 1 at 17; *see also* PPL Electric Ex. 1 at 93.

⁷⁹ PPL Electric St. 1 at 17; *see also* PPL Electric Ex. 1 at 93.

⁸⁰ PPL Electric St. 1 at 17; *see also* PPL Electric Ex. 1 at 93.

PPL's evidence showing that the Summit-Lackawanna Project will not create an unreasonable risk of danger to the health and safety of the public is sufficient and was not challenged by the Bakers. Therefore, PPL Electric presented sufficient evidence to satisfy the criteria set forth in Section 57.76(a)(2) of the Commission's regulations and demonstrated that the Summit-Lackawanna Project will not create an unreasonable risk of danger to the health and safety of the public.⁸¹

3. Compliance with Environmental Protection Statutes and Regulations

The third requirement under Section 57.76 of the Commission's regulations requires transmission line siting and construction to follow applicable statutes and regulations, providing for the protection of the natural resources of this Commonwealth.⁸²

As explained above, I have waived many of the regulations which require a detailed analysis of the environmental impact and cultural resources of the Project because the Project is simply a replacement of existing transmission facilities along the same route where the line has existed for 50 years.

Nevertheless, PPL Electric has provided information on regulatory permit requirements and agency coordination regarding cultural and environmental resources.⁸³ This information effectively addresses all the requirements of the Commission's siting regulations for which PPL Electric has not sought any waivers.

PPL Electric has also conducted environmental studies within the existing corridor to support construction permitting.⁸⁴ However, to undertake any further environmental

⁸¹ 52 Pa. Code § 57.76(a)(2).

⁸² 52 Pa. Code § 57.76(a)(3).

⁸³ PPL Electric Ex. 1 at 70-86; *see also* PPL Electric St. 2.

⁸⁴ PPL Electric Ex. 1 at 32 (Joint Application and Petition for Waiver ¶ 78).

studies for a Project of this nature that is expected to have very little environmental impact would be an unnecessary expenditure of resources.⁸⁵

Indeed, PPL Electric witness, Mr. Barry A. Baker, explained PPL’s analysis of environmental and land use impacts contained in Attachment 3 – Project Area Description.⁸⁶

Importantly:

- no national parks, state parks, local parks, recreational areas, or natural landmarks will be affected by the Project, because none are located in the Project Area;⁸⁷
- while two State Historic Preservation Office (“SHPO”) eligible properties were identified with respect to the Project (one located within the Project Area and one in close proximity to the Project Area), neither property is anticipated to be impacted by the project and permitting requirements for the Project do not require further coordination with the PHMC;⁸⁸
- no federal or state designated unique geological, scenic, or natural areas will be affected by the Project, because none are located within the Project Area;⁸⁹
- while the Project is located near three Pennsylvania Natural Heritage Program identified natural areas, all of the areas are located outside the ROW and no impacts from the Project are anticipated;⁹⁰ and
- PPL Electric completed a Pennsylvania Natural Diversity Inventory (“PNDI”) for the Project and while certain endangered or threatened animal and plant species were identified, the applicable and federal agencies have

⁸⁵ *Id.*

⁸⁶ *See generally* PPL Electric St. 2.

⁸⁷ PPL Electric St. 2 at 6.

⁸⁸ *Id.* at 7.

⁸⁹ *Id.* at 8.

⁹⁰ *Id.* at 11.

confirmed that they either have no concerns regarding impacts on endangered or threatened species, or that they will work with PPL Electric to ensure that the construction does not negatively impact such species.⁹¹

While all transmission lines will have some impact to the natural and/or human environment, the Summit-Lackawanna Project is limited to rebuilding existing transmission lines located entirely within the ROW, which is currently dedicated to utility use and occupied by transmission lines. No portion of the Project will be located outside of the existing ROW, nor will the Project substantially alter the existing ROW. There are negligible new impacts. Furthermore, the Project will also decrease the maximum height and average height of towers,⁹² and decrease the ground impacts of the structures comprising the Summit-Lackawanna #1 and #2 230 kV Transmission Lines.⁹³

PPL Electric has also committed to obtain all required permits prior to construction of the Project, and will comply with any and all conditions placed on such permits by those agencies that have appropriate jurisdiction over environmental matters.⁹⁴ As a general matter, the Commission has found compliance with the applicable environmental statutes and regulations where the applicant agrees to obtain any and all environmental permits necessary prior to construction and to comply with any conditions on those permits during construction.⁹⁵

⁹¹ PPL Electric St. 2 at 12-13 (identifying plant species of concern that PPL Electric has coordinated with the Pennsylvania Department of Conservation of Natural Resources to implement measures to protect. Also identifying animal species that the Project will not impact as reported to the United States Fish and Wildlife Service).

⁹² PPL Electric Ex. 1 at 21 (Joint Application and Petition for Waiver ¶ 49). The existing COR-TEN® lattice tower structures range in height from between approximately 120-170 feet with an average structure height of approximately 144 feet. The proposed double-circuit monopole structures to replace the COR-TEN® lattice towers will range in height between approximately 110 and 165 feet with an average structure height of approximately 140 feet.

⁹³ *Id.* The existing COR-TEN® lattice towers have a wider base than the proposed steel monopoles.

⁹⁴ PPL Electric St. 2 at 6; PPL Electric Ex. 1 at 70-86; *see also* Joint Stipulation ¶ 30.

⁹⁵ See, e.g., Application of Pennsylvania Electric Company For Approval to Locate and Construct the Bedford North-Osterburg East 115 kV HV Transmission Line Project Situated in Bedford and East St. Clair Townships, Bedford County, Pennsylvania, Docket No. A-2011-2247862, 2012 Pa. PUC LEXIS 298 (Initial Decision Feb. 9, 2012); Application of Trans-Allegheny Interstate Line Company for the Approval to locate, construct, operate and maintain certain high voltage electric transmission line facilities and to exercise the power of

4. Consideration of Adverse Environmental Impact

The fourth requirement under Section 57.76 of the Commission's regulations for approval of the siting and construction of transmission lines is that the project will have minimal adverse environmental impact, considering the electric power needs of the public, the state of the available technology and the available alternatives.⁹⁶ However, the Commission has also concluded that where a transmission line "will be constructed entirely on existing ROW and...the line is being rebuilt, consideration of an alternative route is unnecessary."⁹⁷

As explained above, this Project will not create a material change to the environment or any environmental impacts because the Project involves rebuilding an existing transmission line located entirely within existing ROW. The need for a siting study is further obviated by the fact that any alternative route would require the location of transmission lines where none presently exist; in this regard, the existing ROW would have fewer environmental impacts and constitute the preferred ROW in comparison to other reasonable alternatives.

F. Eminent Domain Application

PPL Electric maintains that it does not require any additional ROW for the construction of the Project.⁹⁸ However, PPL Electric is currently involved in a separate legal real

eminent domain to construct and to install the proposed aerial electric transmission line facilities along the proposed route, being a 138 kV transmission line and related facilities collectively, the Osage-Whiteley Line Facilities or Project, in portions of Dunkard Township, Perry Township, and Whiteley Township, Greene County in Southwestern Pennsylvania, Docket No. A-2010-2187540, 2011 Pa. PUC LEXIS 2028 (Recommended Decision March 28, 2011); Application of PPL Utilities Corporation Filed Pursuant to 52 Pa. Code Chapter 57, Subchapter G, for Approval of the Siting and Construction of the Pennsylvania Portion of The Proposed Susquehanna-Roseland 500 kV Transmission Line, Docket No. A-2009-2082652, 2010 Pa. PUC LEXIS 434 (Opinion and Order entered Feb. 12, 2010).

⁹⁶ 52 Pa. Code § 57.76(a)(4).

⁹⁷ Breinigsville-Alburtis Order at 6 (emphasis added).

⁹⁸ PPL Electric Ex. 1 at 21 (Joint Application and Petition for Waiver ¶ 51); PPL Electric St. 2 (Baker) at 4-7; PPL Electric St. 2-R (Baker) at 2, 4-5.

property dispute with the Bakers with respect to the existing easement that PPL Electric possesses regarding the existing transmission line ROW that traverses the Bakers property.⁹⁹ Therefore, PPL Electric filed the application for eminent domain to authorize PPL Electric to condemn the property in the event that it is unsuccessful in the litigation with the Bakers regarding the scope and validity of the easement. The Bakers concede that the Commission does not have jurisdiction to resolve the real property dispute regarding the validity of the easement. The Bakers further stipulate that PPL’s provision of electric service via the Project is “necessary and proper for the service, accommodation, convenience or safety of the public.”¹⁰⁰

Pennsylvania Appellate Courts have interpreted Section 1511 the Business Corporation Law of 1988, as requiring a condemning utility to show that the proposed transmission line is necessary and that it has not acted wantonly, capriciously, or arbitrarily in selecting the proposed right-of-way.¹⁰¹ Further, the selection of the right-of-way is a matter for the public utility in the first instance and, while the route selection must be reasonable, it need not be the “best alternative” in terms of reducing or eliminating inconvenience to particular landowners.¹⁰²

As explained in detail above, the Project does not involve the acquisition of a new right-of-way. Indeed, PPL Electric’s facilities have been located on the Baker’s property for many years. The Bakers do not argue that PPL Electric should choose an alternative route that avoids their property. Instead, PPL Electric’s undisputed evidence is that the Project is necessary to address asset health needs associated with the prevalence of pack-out rust in existing COR-TEN® lattice towers, as well as improve overall reliability, safety, and system resiliency. Any alternative route would require the location of transmission lines where none presently exist; in

⁹⁹ PPL Electric Ex. 1 at 21 (Joint Application and Petition for Waiver ¶ 52); *see also* Joint Stipulation ¶¶ 33-35.

¹⁰⁰ Joint Stipulation ¶¶ 43-44.

¹⁰¹ *Department of Environmental Resources v. Pa. Pub. Util. Comm’n*, 335 A.2d 860 (Pa. Cmwlth. 1975), *aff’d.*, 374 A.2d 693 (Pa. 1977); *Dickson v. Pa. Service Comm’n*, 89 Pa. Super. 126 (1926).

¹⁰² *Stone v. Pa. Pub. Util. Comm’n*, 162 A.2d 18 (Pa. Super. 1960).

this regard, the existing ROW would have fewer environmental impacts and constitute the preferred ROW in comparison to any other reasonable alternatives. PPL Electric further explained the ROW and easements over the property identified in the Eminent Domain Application do not interfere or require the condemnation of any place of public worship, burying ground, dwelling or its reasonable curtilage, consistent with 15 Pa.C.S. § 1511(b).¹⁰³ Therefore, I grant PPL's request to exercise eminent domain to acquire the necessary right-of-way.

G. Conclusion

I find that PPL Electric has satisfied the appropriate criteria for the grant of its application to rebuild the Summit-Lackawanna transmission line. The line serves a substantial number of customers. This project is the most cost-effective alternative to address the degradation of the existing lattice towers. As the line will be rebuilt within the same right-of-way and will replace the lattice towers with the same number of poles in approximately the same location, the environmental impact will be negligible, and at most result from the construction itself. This impact will be mitigated by PPL Electric's commitment to secure the necessary permits from state and local agencies. Moreover, the poles themselves involve a smaller ground footprint than the existing towers and do not need to be as tall in order to meet ground clearance and other requirements. In short, the Project is a benefit to PPL Electric's customers and in direct relation to PPL Electric's requirement to provide safe and reliable electricity service. Therefore, in the ordering paragraphs below, I grant PPL Electric's application.

CONCLUSIONS OF LAW

1. PPL Electric Utilities Corporation bears the burden of proof. 52 Pa. Code § 332.

¹⁰³ PPL Electric St. 2 (Baker) at 3.

2. PPL Electric Utilities Corporation has established by sufficient evidence that there is a need for the Summit-Lackawanna Project. 52 Pa. Code § 57.76(a)(1).

3. PPL Electric Utilities Corporation has established by sufficient evidence that the Summit-Lackawanna Project will not create an unreasonable risk of danger to the health and safety of the public. 52 Pa. Code § 57.76(a)(2).

4. PPL Electric Utilities Corporation has established by sufficient evidence that the Summit-Lackawanna Project follows applicable statutes and regulations providing for the protection of the natural resources of this Commonwealth. 52 Pa. Code § 57.76(a)(3).

5. PPL Electric Utilities Corporation has established by sufficient evidence that the Summit-Lackawanna Project will have minimum adverse environmental impact, considering the electric power needs of the public, the state of available technology and the available alternatives. 52 Pa. Code § 57.76(a)(4).

6. PPL Electric Utilities Corporation has established by sufficient evidence that the application for eminent domain to acquire a certain portion of the lands of August and Diana Baker in Dickson City Borough and Scott Township, Lackawanna County, in connection with the transmission line project, is necessary or proper for the service, accommodation, convenience, or safety of the public. 15 Pa.C.S. § 1511(c).

ORDER

THEREFORE,

IT IS ORDERED:

1. The Application of PPL Electric Utilities Corporation, Filed Pursuant To 52 Pa. Code Chapter 57 Subchapter G, For Approval to Rebuild the Existing Summit-Lackawanna #1 And #2 230 kV Transmission Lines Connecting the Summit 230-69 kV Substation and The Lackawanna 500-230-69 kV Substation in Lackawanna County, Pennsylvania, filed at Docket No. A-2022-3030969, is approved.

2. That the Petition for Waiver of 52 Pa. Code §§ 57.72(c)(7), (8), (10) and (11), 57.74(c), and 69.3101-69.3107 sought and explained in Application Of PPL Electric Utilities Corporation, Filed Pursuant To 52 Pa. Code Chapter 57 Subchapter G, For Approval To Rebuild The Existing Summit-Lackawanna #1 And #2 230 kV Transmission Lines Connecting The Summit 230-69 kV Substation And The Lackawanna 500-230-69 kV Substation In Lackawanna County, Pennsylvania, filed at Docket No. A-2022-3030969, is granted.

3. That the Application of PPL Electric Utilities Corporation Under 15 Pa.C.S. § 1511(c) For A Finding And Determination That The Service To Be Furnished By The Applicant Through Its Proposed Exercise Of The Power Of Eminent Domain To Acquire A Certain Portion Of The Lands of August and Diana Baker In Dickson City Borough and Scott Township, Lackawanna County, Pennsylvania For The Proposed Rebuilding Of The Summit-Lackawanna #1 And #2 230 kV Associated With The Proposed Summit-Lackawanna Project Is Necessary Or Proper For The Service, Accommodation, Convenience, Or Safety Of The Public, filed at Docket No. A-2022-3031013, is granted.

4. That PPL Electric Utilities Corporation shall comply with any and all permit requirements from any agency or entity from which a permit is required in order to site and construct the high-voltage transmission line referred to as Summit-Lackawanna Project.

5. That the Protest of August and Diana Baker is dismissed.

6. That the Dockets at A-2022-3030969 and A-2022-3031013 be marked closed.

Date: November 22, 2022

_____/s/
Mary D. Long
Administrative Law Judge