POST & SCHELL PC
ATTORNEYS AT LAW

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

Christopher T. Wright

cwright@postschell.com
717-612-6013 Direct
717-731-1985 Fax
File #: 2507/140066

August 11, 2010

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



**RE: 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 Effort Mountain #1 & #2 138 kV Taps In Chestnuthill And Polk Townships, Monroe County, Pennsylvania - Docket No. A-2010-2152104**

**Petition Of PPL Electric Utilities Corporation For A Finding That A Building To Shelter Control Equipment At The Effort Mountain Substation To Be Constructed In Chestnuthill Township, Monroe County, Pennsylvania Is Reasonably Necessary For The Convenience Or Welfare Of The Public - Docket No. A-2010-2153061**

**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 Right-Of-Way And Easement Over And Across The Lands Of Larue High For The Proposed Effort Mountain #1 & #2 138 kV Taps In Chestnuthill And Polk Townships, Monroe County, Pennsylvania Is Necessary Or Proper For The Service, Accommodation, Convenience Or Safety Of The Public - Docket No. A-2010-2163154**

**Albert Barney v. PPL Electric Utilities Corporation - Docket No. C-2009-2107073**

Dear Secretary Chiavetta:

Enclosed for filing is the original Initial Brief of PPL Electric Utilities Corporation in the above-referenced proceedings. As indicated on the certificate of service, copies have been provided to the parties in the manner indicated.

Respectfully Submitted,

Christopher T. Wright

CTW/skr
Enclosures
cc: Certificate of Service
Honorable Wayne L. Weismandel

## TABLE OF CONTENTS


**Page**

I. INTRODUCTION ..... 1

II. STATEMENT OF THE CASE ..... 2

III. STATEMENT OF THE QUESTIONS ..... 5

IV. SUMMARY OF ARGUMENT ..... 6

V. LEGAL STANDARDS ..... 8

A. BURDEN OF PROOF ..... 8

B. STANDARDS FOR APPROVAL OF THE SITING OF PUBLIC UTILITY FACILITIES ..... 9

C. STANDARDS FOR APPROVAL OF THE SITING OF SUBSTATION CONTROL EQUIPMENT BUILDINGS ..... 12

D. STANDARDS FOR APPROVAL TO EXERCISE THE POWER OF EMINENT DOMAIN ..... 14

VI. ARGUMENT ..... 16

A. NEED FOR THE PROPOSED FACILITIES ..... 16

1. Overloading in the Sun/Valley Jonas Area. ..... 16

2. Alternative Solutions to Reinforce the Distribution System. ..... 18

3. Response to Ms. Hart. ..... 21

B. SITING ..... 24

1. Route Selection ..... 24

2. Engineering and Safety ..... 29

a. Engineering. ..... 29

b. Electric and Magnetic Fields ..... 30

3. Response to Ms. High. ..... 32

4. Response to Ms. Hart. ..... 33

C. EXEMPTIONS FROM LOCAL ZONING ..... 35

D. EMINENT DOMAIN ..... 39

1. The Service to be Provided is Necessary for the Service, Accommodation, Convenience, and Safety of the Public ..... 39

2. Response to Ms. High. ..... 41

VII. CONCLUSION ..... 43

Appendix A –Proposed Findings of Fact

Appendix B – Proposed Conclusions of Law

## TABLE OF AUTHORITIES

**Page**

**Pennsylvania Court Decisions**

*Allied Mechanical and Electric, Inc. v. Pennsylvania Prevailing Wage Appeals Board*, 923 A.2d 1220 (Pa. Cmwlth. 2007) ..... 9

*Borough of E. McKeesport v. Special/Temporary Civil Service Commission*, 942 A.2d 274 (Pa. Cmwlth. 2008) ..... 8

*Brown v. Commonwealth*, 940 A.2d 610 (Pa. Cmwlth. 2008) ..... 8

*Commonwealth v. Delaware & Hudson Railway Co.*, 339 A.2d 155 (Pa. Cmwlth. 1975) ..... 12

*Commonwealth v. Williams*, 557 Pa. 207, 732 A.2d 1167 (1999) ..... 8

*County of Chester v. Philadelphia Electric Co.*, 420 Pa. 422, 218 A.2d 331 (1966) ..... 12

*Del-AWARE Unlimited, Inc. v. Pa.P.U.C.*, 513 A.2d 593 (Pa. Cmwlth. 1986) ..... 13

*Duquesne Light Co. v. Monroeville Borough*, 449 Pa. 573, 298 A.2d 252 (1972) ..... 12

*Duquesne Light Co. v. Upper St. Clair Township*, 377 Pa. 323, 105 A.2d 287 (1954) ..... 12

*Energy Conservation Council of Pennsylvania v. Pa.P.U.C.*, 995 A.2d 465 (Pa. Cmwlth. 2010) ..... 9, 10

*Kyu Son Yi v. State Board of Veterinary Medicine*, 960 A.2d 864 (Pa. Cmwlth. 2008) ..... 9

*Laird v. Pa.P.U.C.*, 133 A.2d 579 (Pa. Super. 1957) ..... 12

*Met-Ed Industrial Users Group v. Pa.P.U.C.*, 960 A.2d 189 (Pa. Cmwlth. 2008) ..... 8

*Morrissey v. Pennsylvania Department of Highways*, 424 Pa. 87, 225 A.2d 895 (1967) ..... 9

*O'Connor v. Pa.P.U.C.*, 582 A.2d 427 (Pa. Cmwlth. 1990) ..... 13

*Pa. Power & Light Co. v. Pa.P.U.C.*, 696 A.2d 248 (Pa. Cmwlth. 1997) ..... 11

*Paxtowne v. Pa.P.U.C.*, 398 A.2d 254 (Pa. Cmwlth. 1979) ..... 11, 15

*Payne v. Kassab*, 312 A.2d 86 (Pa. Cmwlth. 1973).....10

*Phillips v. Pa. P.U.C.*, 124 A.2d 625 (Pa. Super. 1956).....12

*Samuel J. Lansberry, Inc. v. Pa.P.U.C.*, 578 A.2d 600 (Pa. Cmwlth. 1990).....8

*Stone v. Pennsylvania Public Utility Commission*, 162 A.2d 18 (1960).....11

*West Penn Power Co. v. Pennsylvania Public Utility Commission*, 184 A.2d 143 (1962).....11

**Pennsylvania Administrative Agency Decisions**

*Application of Pennsylvania Power & Light Co.*, Doc. Nos. A-110500F0196, *et al.*, 1994 Pa. PUC LEXIS 65 (October 21, 1994).....9

*Application of PP&L for Approval to Locate and Construct a 138 kV Transmission Line Between West Allentown and Salisbury Substations*, Doc. No. A-00104160 (July 20, 1984).....30

*Application of PP&L for Authorization to Locate and Construct its Hamlin 138 kV Electric Transmission Line*, Doc. No. A-00101826 (April 3, 1981).....30

*Certification Application of Pennsylvania Power & Light Company Filed Pursuant to 52 Pa. Code Chapter 57*, 1994 Pa. PUC LEXIS 65 (Oct. 21, 1994).....31

*Investigation on Commission Motino of the Safety of the Cabett-Wylei Ridge 500 kV Transmission Line*, I.D. 236 (September 18, 1981).....30

*Larken v. Philadelphia Electric Co.*, 39 Pa. PUC 777 (1961).....30

*Re: Proposed Electric Regulation*, 1976 Pa. PUC LEXIS 114, 49 Pa. PUC 709 (March 2, 1976).....10

**Pennsylvania Statutes**

2 Pa.C.S. § 704.....8

15 Pa.C.S. § 1103.....1

15 Pa.C.S. § 1511.....14, 15, 34, 40

66 Pa.C.S. § 102 ..... 1, 12

66 Pa.C.S. § 332 ..... 8

66 Pa.C.S. § 1501 ..... 11

66 Pa.C.S. § 2803 ..... 1

66 Pa.C.S. § 2804 ..... 29

3 P.S. § 913 ..... 41, 42

53 P.S. § 10619 ..... 13, 35

**Regulations**

52 Pa. Code § 5.41 ..... 35

52 Pa. Code § 57.71 ..... 10

52 Pa. Code §§ 57.71-57.77 ..... 9

52 Pa. Code § 57.72 ..... 24

52 Pa. Code § 57.76 ..... 10, 11

52 Pa. Code § 69.1101 ..... 13, 14, 37

**MISCELLANEOUS**

31 Pa. Bull. 951 (Feb. 17, 2001) ..... 13

PA. CONST. art. I, § 27 ..... 10

## I. INTRODUCTION

PPL Electric Utilities Corporation ("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. PPL Electric is a "public utility corporation" as defined in Section 1103 of the Pennsylvania Business Corporation Law of 1988, P.L. 1444, No. 177, Section 103, *as amended*, 15 Pa.C.S. § 1103. 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 owns approximately 5,000 miles of transmission lines operating at 69 kV (kilovolts) or higher, approximately 330 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. (PPL Electric Ex. 3, p. 3)

In these consolidated proceedings, PPL Electric seeks approvals and findings necessary for the siting and construction of the proposed Effort Mountain #1 & #2 138 kV Taps ("Effort Mountain Taps") in Chestnuthill and Polk Townships, Monroe County, Pennsylvania. The Effort Mountain Taps include approximately 5.7 miles of new 138 kV transmission line that will extend from the existing Siegfried-Jackson #1 & #2 138 kV Transmission Line to the site of the new Effort Mountain 138-12 kV Substation ("Effort Mountain Substation"). The purpose of the Effort Mountain Project, which includes the Effort Mountain Taps, the proposed Effort Mountain Substation and additional distribution facilities, is to relieve existing and projected overloaded conditions on the distribution lines and transformers currently serving the Sun Valley/Jonas area and to improve the reliability of service in the area.

As explained below, in order to continue to provide safe, adequate, and reliable service in the Sun Valley/Jonas area, PPL Electric seeks approval for the siting and construction of the

Effort Mountain Taps, a finding that a building to shelter control equipment at the Effort Mountain Substation site is reasonably necessary for the convenience or welfare of the public, and findings that the service to be furnished through the exercise of the power of eminent domain to acquire a right-of-way across a tract of land is necessary or proper for the service, accommodation, convenience or safety of the public. For the reasons that follow, the Pennsylvania Public Utility ("Commission") should grant the approvals and findings sought in these consolidated proceedings.

## II. STATEMENT OF THE CASE

On January 8, 2010, PPL Electric filed with the Commission the "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 Effort Mountain #1 & #2 138 kV Taps In Chestnuthill And Polk Townships, Monroe County, Pennsylvania" (hereinafter the "Siting Application"). With the Siting Application, PPL Electric filed Exhibits A through G and Appendices 1 through 8, which provide additional detailed information regarding the Effort Mountain Taps. The Siting Application was docketed at Docket No. A-2010-2152104. (PPL Electric Ex. 1)

On January 15, 2010, PPL Electric filed the "Petition Of PPL Electric Utilities Corporation For A Finding That A Building To Shelter Control Equipment At The Effort Mountain Substation To Be Constructed In Chestnuthill Township, Monroe County, Pennsylvania Is Reasonably Necessary For The Convenience Or Welfare Of The Public" (hereinafter, the "Zoning Petition"). Included in the Zoning Petition was Exhibit A, an aerial photograph of the area where PPL Electric proposes to construct the Effort Mountain 138-12 kV Substation. The Zoning Petition was docketed at Docket No. A-2010-2153061. (PPL Electric Ex. 2)

On March 4, 2010, PPL Electric filed 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 Right-Of-Way And Easement Over And Across The Lands Of Larue High For The Proposed Effort Mountain #1 & #2 138 kV Taps In Chestnuthill And Polk Townships, Monroe County, Pennsylvania Is Necessary Or Proper For The Service, Accommodation, Convenience Or Safety Of The Public" (hereinafter, the "Condemnation Application"). With the Condemnation Application, PPL Electric filed Exhibits A through E. The Condemnation Application was docketed at Docket No. A-2010-2163154. (PPL Electric Ex. 3)

On March 10, 2010, PPL Electric filed a motion to consolidate the above-referenced proceedings. On March 11, 2010, Administrative Law Judge Wayne L. Weismandel issued an order consolidating the proceedings.

On May 13, 2009, prior to the filings by PPL Electric, Albert Barney filed a Formal Complaint that pertains to the proposed Effort Mountain Taps, which was docketed at Docket No. C-2009-2107073. On June 3, 2009, PPL Electric filed an Answer and New Matter Responding to the Formal Complaint. On February 23, 2010, PPL Electric served Mr. Barney with complete copies of the Siting Application and Zoning Petition, together with the accompanying Exhibits and Appendices.

On January 30, 2010, a Protest to the Siting Application was filed by Ms. Suzanne A. Hart.

Following a Prehearing Conference held on Mary 23, 2010, ALJ Weismandel issued a Scheduling and Briefing Order establishing the procedural schedule for the above-consolidated

matters. Pursuant thereto, written evidence was exchanged by certain of the Parties, and an evidentiary hearing was before ALJ Weismandel on July 13, 2010. At the evidentiary hearing, the Parties produced oral testimony and moved into the record their respective testimonies and exhibits. The Formal Complaint of Albert Barney, who did not submit any testimony or appear at the hearing, was dismissed for failure to prosecute. The record was closed on August 25, 2010.

A briefing schedule has been established by ALJ Weismandel. PPL Electric's requests for (1) approval for the siting and construction of the Effort Mountain Taps, (2) a finding that a building to shelter control equipment at the Effort Mountain Substation site is reasonably necessary for the convenience or welfare of the public, and (3) findings that the service to be furnished through the exercise of the power of eminent domain to acquire a right-of-way across a tract of land is necessary or proper for the service, accommodation, convenience or safety of the public are ripe for disposition.

## III. STATEMENT OF THE QUESTIONS

1. Has PPL Electric demonstrated that the Effort Mountain Project is reasonably necessary to provide safe and reliable service to its customers?

Suggested answer: *In the affirmative.*

2. Is the preferred Route B1 a reasonable and appropriate line route for the Effort Mountain Taps?

Suggested answer: *In the affirmative.*

3. Is the building to shelter control equipment at the Effort Mountain Substation reasonably necessary for the convenience or welfare of the public?

Suggested answer: *In the affirmative.*

4. Is the service to be furnished through the exercise of the power of eminent domain by PPL Electric to acquire a right-of-way and easement across the land of Larue High necessary or proper for the service, accommodation, convenience or safety of the public?

Suggested answer: *In the affirmative.*

## IV. SUMMARY OF ARGUMENT

The Effort Mountain project is necessary and proper for the accommodation, convenience, and safety of the customers in the Sun Valley/Jonas area. Several of the distribution lines and transformers serving the Sun Valley/Jonas area need reinforcement. Through a system planning process and application of PPL Electric's planning guidelines, PPL Electric identified several distribution lines and transformers in the Sun Valley/Jonas area that are overloaded, and others that will soon be overloaded, as a result of load growth due to housing development in the area. Specifically, in recent years, the number of customers served from the Meckesville 69-1 12 kV distribution line has increased by an average of 3 percent per year, and the number of customers served from the Meckesville 69-2 12 kV distribution line has increased by an average of 6 percent per year. Further, the transformers at the Meckesville 69-12 kV Substation are operating near capacity and soon will be overloaded. A failure of these facilities could lead to an extended outage for more than 3,000 customers until repairs are made. The Sun/Valley Jonas area is one of PPL Electric's poorest performing areas in the terms of the number of service outages, duration of outages, and number of customer affected. The distribution system serving the Sun Valley/Jonas area requires reinforcement to resolve these reliability problems.

After extensive analysis of various electrical solutions, PPL Electric concluded that the preferred functional configuration is to construct a new Effort Mountain 138-12 kV Substation, together with new 12 kV distribution lines in Chestnuthill and Polk Townships, Monroe County. The new Effort Mountain Substation will provide a source that is located centrally to the load it will serve, which will increase reliability and operating flexibility. The preferred functional configuration will assure that the distribution system serving the Sun Valley/Jonas area can supply load reliably during summer and winter peak conditions and provide service at an

acceptable voltage level through the daily load cycle. PPL Electric's selection of the preferred functional configuration is reasonable and properly considered the electric power needs of the public, the state of the available technology, and the available alternatives.

The Effort Mountain Taps are required to connect the Effort Mountain Substation to the transmission grid. The proposed Effort Mountain Taps will connect the existing Siegfried-Jackson 138 kV Transmission Lines to the proposed Effort Mountain Substation. The new Effort Mountain Substation, in turn, will supply new 12 kV distribution lines to serve the Sun Valley/Jonas area.

PPL Electric conducted an extensive quantitative and qualitative analysis to determine the preferred route for the Effort Mountain Taps. PPL Electric's analysis included a detailed environmental inventory to identify and locate environmental factors that need to be considered when evaluating and selecting transmission line routes. Based upon this analysis and comments from the public, PPL Electric ultimately selected a route for the proposed Effort Mountain Taps that appropriately balances functional requirements, environmental impacts, social factors, and cost considerations.

In order for the Effort Mountain Substation to function properly, a control equipment building is required to protect certain equipment from the elements. The control equipment building is reasonably necessary for the convenience or welfare of the public because it is a necessary component of PPL Electric's overall plan to relieve the existing and projected overloaded conditions on the distribution lines and transformers presently serving the Sun Valley/Jonas area.

The proposed Effort Mountain Taps will cross over a portion of land owned by Ms. Larue High. PPL Electric must be able to route the Effort Mountain Taps over and across Ms. High's

property in order to site, construct, and operate that line at the selected route. The service to be provided by PPL Electric through the proposed transmission line and related facilities is necessary to relieve existing and projected overloaded conditions on the distribution lines and transformers serving the Sun Valley/Jonas area. Accordingly, the Commission should permit PPL Electric to commence condemnation proceedings to acquire adequate right-of-way and easements across the land of Ms. High.

## V. LEGAL STANDARDS

### A. BURDEN OF PROOF

Section 332(a) of the Public Utility Code ("Code"), 66 Pa.C.S. § 332(a), provides that the party seeking a rule or order from the Commission has the burden of proof in that proceeding. It is well established that "[a] litigant's burden of proof before administrative tribunals as well as before most civil proceedings is satisfied by establishing a preponderance of evidence which is substantial and legally credible." *Samuel J. Lansberry, Inc. v. Pa.P.U.C.*, 578 A.2d 600, 602 (Pa. Cmwlth. 1990). The preponderance of evidence standard requires proof by a greater weight of the evidence. *Commonwealth v. Williams*, 557 Pa. 207, 732 A.2d 1167 (1999). This standard is satisfied by presenting evidence more convincing, by even the smallest amount, than that presented by another party. *Brown v. Commonwealth*, 940 A.2d 610, 614 n.14 (Pa. Cmwlth. 2008).

Additionally, any finding of fact necessary to support an adjudication of the Commission must be based upon substantial evidence. *Met-Ed Indus. Users Group v. Pa.P.U.C.*, 960 A.2d 189, 193 n.2 (Pa. Cmwlth. 2008) (citing 2 Pa.C.S. § 704). Substantial evidence is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. *Borough of E. McKeesport v. Special/Temporary Civil Service Commission*, 942 A.2d 274, 281 (Pa. Cmwlth. 2008). Although substantial evidence must be "more than a scintilla and must do more than

create a suspicion of the existence of the fact to be established," *Kyu Son Yi v. State Board of Veterinary Medicine*, 960 A.2d 864, 874 (Pa. Cmwlth. 2008) (citation omitted), the "presence of conflicting evidence in the record does not mean that substantial evidence is lacking." *Allied Mechanical and Elec., Inc. v. Pennsylvania Prevailing Wage Appeals Board*, 923 A.2d 1220, 1228 (Pa. Cmwlth. 2007) (citation omitted).

If the applicant sets forth a *prima facie* case, then the burden shifts to the opponent. *Energy Conservation Council of Pennsylvania v. Pa.P.U.C.*, 995 A.2d 465, 483 n.16. (Pa. Cmwlth. 2010). Establishing a *prima facie* case requires either evidence sufficient to make a finding of fact permissible or evidence to create a presumption against an opponent which, if not met, results in an obligatory decision for the proponent. Once a *prima facie* case on a point has been established, if contrary evidence is not presented, there is no requirement that the applicant produce additional evidence in order to sustain its burden of proof. *Morrissey v. Pennsylvania Department of Highways*, 424 Pa. 87, 92, 225 A.2d 895, 897-98 (1967); *see also Application of Pennsylvania Power & Light Co.*, Doc. Nos. A-110500F0196, *et al.*, 1994 Pa. PUC LEXIS 65 (October 21 1994) (holding that the company met its burden to prove that there was an immediate need for the reinforcement of the power supply where the need for the project was uncontested and no party presented any evidence challenging the need for the project).

As explained more fully below, PPL Electric has met its burden to introduce evidence sufficient to support and satisfy all of the legal standards for approval of its consolidated Applications.

### B. STANDARDS FOR APPROVAL OF THE SITING OF PUBLIC UTILITY FACILITIES

The Commission's regulations applicable to the siting and construction of high voltage transmission lines are found at 52 Pa. Code §§ 57.71-57.77 ("siting regulations"). These

regulations provide that a public utility is required to obtain Commission approval to locate and construct a high voltage transmission line. 52 Pa. Code § 57.71. The siting regulations set forth what the Commission must consider when deciding to approve or deny an application for the siting of a high voltage transmission line. 52 Pa. Code § 57.76. The Commission's siting regulations, and in particular 52 Pa. Code § 57.76, were promulgated, *inter alia*, to meet the requirement for a consideration of environmental impacts mandated by Article I, Section 27 of the Pennsylvania Constitution,[1] and to apply the three-part test enunciated in *Payne v. Kassab*, 312 A.2d 86 (Pa. Cmwlth. 1973),[2] which implements the Constitutional requirements. *Energy Conservation Council of Pennsylvania v. Pa.P.U.C.*, 995 A.2d 465, 477-78 (Pa. Cmwlth. 2010); *see also Re: Proposed Electric Regulation*, 1976 Pa. PUC LEXIS 114 at *6, 49 Pa. PUC 709 at 712 (March 2, 1976). The Commission uses this test to determine whether a proposed transmission line having environmental impacts should be approved.

Section 57.76 of the siting regulations provides, in pertinent part, as follows:

> The Commission will not grant the application, either as proposed or as modified, unless it finds and determines as to the proposed HV line:

---

[1] Article I, Section 27 of the Pennsylvania Constitution states:

> The people have a right to clean air, pure water and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

PA. CONST. art. I, § 27.

[2] The three-part test established in *Payne v. Kassab* requires the consideration of the following:

> 1. Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's environment?
>
> 2. Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum?
>
> 3. Does the environmental harm which would result from the challenged decision or action so clearly outweigh the benefits to be derived there from that to proceed further would be an abuse of discretion?

*Id.* at 94.

> (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 the 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.

52 Pa. Code § 57.76(a).

The Commonwealth Court has determined that a transmission line should not be approved unless the electric utility demonstrates that the line is "necessary or proper for the accommodation, convenience and safety of its patrons, employees and the public." *Pa. Power & Light Co. v. Pa.P.U.C.*, 696 A.2d 248, 250 (Pa. Cmwlth. 1997) (quoting 66 Pa.C.S. § 1501). In applying this standard, the Commonwealth Court held that the Commission should consider the "electric power needs of the public, the state of the available technology and the available alternatives." *Id.* (quoting 52 Pa. Code § 57.76).

Regarding route selection issues, the Commonwealth Court has explained as follows:

> The applicable legal standards for review of the selection of a route for utility lines are whether the powers conferred upon the public utility have been wantonly, capriciously or arbitrarily exercised. *West Penn Power Co. v. Pennsylvania Public Utility Commission*, 184 A.2d 143 (1962). The degree of inconvenience to a landowner, therefore, would not constitute grounds for withholding the exercise of the power to condemn the easement, s*ee Stone v. Pennsylvania Public Utility Commission*, 162 A.2d 18 (1960), where the record establishes that the utility's route selection was reasonable considering all of the factors involved in the selection of the line.

*Paxtowne v. Pa.P.U.C.*, 398 A.2d 254, 256 (1979). Similarly, the selection of a route for transmission lines was explained by the Superior Court as follows:

> Appellant's [affected landowner's] first two contentions are sufficiently answered by our opinion in *Phillips v. Pa. P.U.C.*, [124 A.2d 625 (Pa. Super. 1956)], wherein we restated the well-established proposition that the selection of routes for transmission lines is a matter for the utility in the first instance and, unless it is shown that it proposes to exercise the powers conferred upon it wantonly or capriciously, or that the rights of the landowner have been unreasonably disregarded, the Commission is not required to withhold its approval merely because another route might have been adopted.

*Laird v. Pa.P.U.C.*, 133 A.2d, 579, 581 (Pa. Super. 1957).

### C. STANDARDS FOR APPROVAL OF THE SITING OF SUBSTATION CONTROL EQUIPMENT BUILDINGS

The Pennsylvania Supreme Court has long held that municipalities have no power to zone with respect to utility facilities.[3] *Duquesne Light Co. v. Upper St. Clair Township*, 377 Pa. 323, 105 A.2d 287 (1954); *Duquesne Light Co. v. Monroeville Borough*, 449 Pa. 573, 580, 298 A.2d 252, 256 (1972) (the PUC has exclusive regulatory jurisdiction over the implementation of public utility facilities). *See also County of Chester v. Philadelphia Electric Co.*, 420 Pa. 422, 425-26, 218 A.2d 331, 333 (1966) (regulation by a multitude of jurisdictions would result in "twisted and knotted" public utilities with consequent harm to the general welfare of the public); *Commonwealth v. Delaware & Hudson Railway Co.*, 339 A.2d 155, 157 (Pa. Cmwlth. 1975) ("public utilities are to be regulated exclusively by an agency of the Commonwealth with state-wide jurisdiction rather than a myriad of local governments with different regulations").

---

[3] The Public Utility Code defines "facilities" as follows:

> "'Facilities.' All the plant and equipment of a public utility, including all tangible and intangible real and personal property without limitation, and any and all means and instrumentalities in any manner owned, operated, leased, licensed, used, controlled, furnished, or supplied for, by, or in connection with, the business of any public utility. Property owned by the Commonwealth or any municipal corporation prior to June 1, 1937, shall not be subject to the commission or to any of the terms of this part, except as elsewhere expressly provided in this part." 66 Pa.C.S. § 102.

Section 619 of the Municipalities Planning Code ("MPC"), Act of July 31, 1968, P.L. 805, *as amended*, 53 P.S. § 10619, provides a limited exception to this general rule. Section 619 of the MPC provides as follows:

> This article shall not apply to any existing or proposed building, or extension thereof, used or to be used by a public utility corporation, if, upon petition of the corporation, the Pennsylvania Public Utility Commission shall, after a public hearing, decide that the present or proposed situation of the building in question is reasonably necessary for the convenience or welfare of the public. It shall be the responsibility of the Pennsylvania Public Utility Commission to ensure that both the corporation and the municipality in which the building or proposed building is located have notice of the hearing and are granted an opportunity to appear, present witnesses, cross-examine witnesses presented by other parties and otherwise exercise the rights of a party to the proceedings.

53 P.S. § 10619. Thus, a municipality may zone a public utility building unless the Commission determines that the building is reasonably necessary for the convenience or welfare of the public. If the Commission finds that the building is reasonably necessary, the building is exempt from local zoning ordinance under the MPC. *Del-AWARE Unlimited, Inc. v. Pa.P.U.C.*, 513 A.2d 593, 596 (Pa. Cmwlth. 1986). Further, Section 619 of the MPC does not require a utility to prove that the site it has selected is absolutely necessary or that it is the best possible site, it need only show that the building is reasonably necessary. *O'Connor v. Pa.P.U.C.*, 582 A.2d 427 (Pa. Cmwlth. 1990).

On January 11, 2001, the Commission adopted a policy statement to further the Commonwealth's goal of making agency actions consistent with sound land use planning by considering the impact of its decision upon local comprehensive plans and zoning ordinances. *See* 31 Pa. Bull. 951 (Feb. 17, 2001). Section 69.1101 of the Commission's regulations provides, in pertinent part, as follows:

> To further the State's goal of making State agency actions consistent with sound land-use planning ... the Commission will consider the impact of its decisions upon local comprehensive plans and zoning ordinances. This will include reviewing applications for:
>
> (2) Siting electric transmission lines.
>
> (3) Siting a public utility "building" under section 619 of the Municipalities Planning code (53 P.S. § 10619)....

52 Pa. Code § 69.1101.

### D. STANDARDS FOR APPROVAL TO EXERCISE THE POWER OF EMINENT DOMAIN

Section 1511 of the Business Corporation Law of 1988 ("BCL"), under which PPL Electric has filed its Condemnation Application, grants a public utility the power or authority to condemn property to provide electricity to the public, stating, in pertinent part:

> (a) General Rule. -- A public utility corporation shall ... have the right to take, occupy and condemn property for one or more of the following principal purposes and ancillary purposes reasonably necessary or appropriate for the accomplishment of the principal purposes:
>
> * * * *
>
> (3) The ... transmission ... distribution or furnishing of ... electricity ... to or for the public.

15 Pa.C.S. § 1511(a)(3). Thus, the plain language of Section 1511 of the BCL grants a public utility, such as PPL Electric, the power and authority to take and condemn property for the purpose of providing electricity to the public.

Section 1511(b) of the BCL, however, restricts the authority of a public utility to take and condemn property for the purpose of providing electricity to the public, stating, in pertinent part, as follows:

> The powers conferred by subsection (a) shall not be exercised:

> (1) To condemn for the purpose of constructing ... aerial electric transmission ... lines:
>
> > (i) Any dwelling house or, except in the case of any condemnation for petroleum or petroleum products transportation lines, any part of the reasonable curtilage of a dwelling house within 100 meters therefrom and not within the limits of any street, highway, water or other public way or place.
> >
> > (ii) Any place of public worship or burying ground.

15 Pa.C.S. § 1511(b).

Before a public utility may exercise its statutorily granted authority to condemn property for the purposes of constructing aerial electric transmission facilities, it must obtain approval from the Commission. Section 1511(c) provides, in pertinent part:

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

15 Pa.C.S. § 1511(c). Accordingly, on an application for condemnation, the Commission must determine whether the service, *i.e.*, the transmission or distribution of electricity to or for the public that will be provided if the subject property is condemned, is necessary for the service, accommodation, convenience or safety of the public.

Where the record establishes that the public utility's route selection was reasonable, considering all the factors involved in the selection of a line, the degree of inconvenience to a landowner does not constitute grounds for withholding the exercise of the power to condemn the easement. *Paxtowne v. Pa.P.U.C.*, 398 A.2d 254, 256 (Pa. Cmwlth. 1979).

## VI. ARGUMENT

### A. NEED FOR THE PROPOSED FACILITIES

#### 1. Overloading in the Sun/Valley Jonas Area.

Through a detailed system planning process and application of PPL Electric's planning guidelines, PPL Electric identifies facilities that require reinforcement to enable it to continue to provide adequate and reliable service to the public and plan appropriate measures to assure reasonably continuous supply to the entire regional load, even during adverse conditions. In order to assure that PPL Electric's transmission and distribution systems can supply load reliably during summer and winter peak conditions and provide service at an acceptable voltage level through the daily load cycle, PPL Electric has adopted a set of defined planning standards, which are set forth in PPL Electric's Reliability Principles and Practices manual ("RP&P"). The RP&P recognizes the necessity of maintaining a proper balance between service reliability and the cost of service, and that large, long, and frequent interruptions are to be avoided. (PPL Electric St. No. 1, pp. 4-5)

In this case, PPL Electric identified several distribution lines and transformers in the Sun Valley/Jonas area that are, or soon will be, overloaded as a result of load growth due to housing development. The Sun Valley/Jonas area receives its distribution services from the Meckesville 69-12 kV Substation, and two 12 kV distribution lines. Presently, the Meckesville 69-1 12 kV distribution line extends south from the substation to serve more than 2,350 customers, and the Meckesville 69-2 12 kV distribution line extends east from the substation and serves more than 2,700 customers. (PPL Electric St. No. 1, p. 6)

In recent years, the number of customers served from the Meckesville 69-1 12 kV line has increased by an average of 3 percent per year, and the number of customers served from the Meckesville 69-2 12 kV line has increased by an average of 6 percent per year. The 2011 winter

load on the Meckesville 69-1 12 kV distribution line is projected to be 10.2 MVA, which exceeds the normal planning guideline of 10 MVA. The Meckesville 69-2 12 kV distribution line began to exceed its normal planning guidelines of 11 MVA in 2006, and it exceeded the emergency guideline of 13 MVA in 2008. More recently, in January, 2010, the load on the Meckesville 69-2 kV distribution line was 13.4 MVA. The 2011 winter load on the Meckesville 69-2 kV distribution line is projected to be 15.2 MVA, and the 2013 winter load is expected to exceed the thermal guideline of 17 MVA. (PPL Electric St. No. 1, pp. 7-8)

The thermal guideline is the load at which the facility is in danger of melting. Operating these distribution lines beyond their planning guidelines will overheat the lines and anneal the conductors, which could result in an outage of the facilities. A failure of the Meckesville 69-1 12 kV distribution lines would interrupt service to approximately 1,100 customers for extended periods of times until the lines could be repaired or replaced. A failure of the Meckesville 69-2 12 kV distribution lines would interrupt service to approximately 2,000 customers for extended periods of times until the lines could be repaired or replaced. Further, exceeding normal planning guidelines violates the planning standards in the RP&P. (PPL Electric St. No. 1, p. 8)

Normally, PPL Electric would temporarily resolve, or at least mitigate, interruptions of service by transferring load to neighboring circuits. However, load transfer capability in the Sun Valley/Jonas area is limited, especially at times of peak loads, because loads on neighboring circuits are also approaching their emergency planning guidelines. If additional load were transferred to these neighboring lines, these neighboring lines would exceed the emergency planning guidelines, which could result in their failure. (PPL Electric St. No. 1, pp. 8-9)

Like the distribution lines, the transformers at the Meckesville 69-12 kV Substation are projected to become overloaded in 2011. (PPL Electric Ex. 3, p. 8) This substation has two 69-

12 kV transformers: one with a rating of 11.2 MVA and the second with a rating of 15 MVA. (PPL Electric St. No. 1, pp. 6) Because there is limited capacity available to transfer load away from the transformers at the Meckesville 69-12 kV Substation to other transformers, a transformer failure at the Meckesville 69-12 kV Substation would lead to an extended outage for more than 3,000 customers until repairs could be made or a transformer could be replaced. (PPL Electric St. No. 1, p. 9)

In short, the Sun/Valley Jonas area is one of PPL Electric's poorest performing areas in the terms of the number of service outages, duration of outages, and number of customers affected. (PPL Electric St. No. 1, p. 3)

**2. Alternative Solutions to Reinforce the Distribution System.**

After identifying these reliability issues, PPL Electric developed a plan to reinforce the distribution system in the area. PPL Electric examined various electrical solutions, or functional configurations, to enable it to continue to provide adequate and reliable service to the public and plan appropriate measures to assure reasonably continuous supply to the Sun Valley/Jonas area. (PPL Electric St. No. 1, pp. 9-10, 12) After extensive analysis, PPL Electric narrowed the potential solutions to resolve the reliability problems to three functional alternatives. (PPL Electric Ex. 1, Ex. B, pp. 7-9) These alternative solutions are briefly described below.

The Preferred Option. The preferred functional configuration was to construct a new Effort Mountain 138-12 kV Substation, together with new 12 kV distribution lines in Chestnut and Polk Townships, Monroe County. One 12 kV distribution line from the Effort Mountain Substation will extend north and serve a portion of the Indian Mountain Lakes Development, thereby reducing the load on the Meckesville 69-2 12 kV distribution line. This new 12 kV line will serve approximately 1,400 customers. The second line from the Effort Mountain Substation will extend south and serve residential developments along Jonas Road and

State Route 534. This line will relieve the Meckesville 69-1 12 kV distribution line. This second 12 kV line will serve approximately 1,500 customers. (PPL Electric St. No. 1, p. 10; PPL Electric Ex. 1, Ex. B, p. 7)

The new Effort Mountain Substation will provide a source that is located centrally to the load it will serve. Locating the substation central to the load it will serve will increase reliability and operating flexibility. It will also reduce the length of the distribution lines, thereby reducing their exposure to damage. Further, reducing the number of customers served by any one distribution line will reduce the number of customers affected by a line outage and reduce restoration times. (PPL Electric St. No. 1, pp. 10-11; PPL Electric Ex. 1, Ex. B, p. 7)

The Effort Mountain Taps will supply the Effort Mountain Substation from the existing Siegfried-Jackson 138 kV Transmission Lines. These Taps will be designed for future 138 kV double circuit operation. Initially, only one 138 kV circuit will be installed on 4.6 miles of the line. The second 138 kV circuit will not be installed until needed to serve future load growth. Both 138 kV circuits will be installed on the remaining 1.1 miles of the line, but the second circuit initially will operate as a distribution line at 12 kV and will be increased to 138 kV operation in the future as appropriate to serve future load growth. (PPL Electric St. No. 1, pp. 11; PPL Electric Ex. 1, Ex. B, p. 7)

The estimated cost to site, design, and construct the Effort Mountain Taps is approximately $5,721,030. The total estimated cost of the Effort Mountain Project, including transmission, distribution, and substation, is $8,755,000. Construction of this project is scheduled to begin in October, 2010 to meet an in-service date of November, 2011. (PPL Electric St. No. 1, p. 3)

Alternative 1 – Enhance Existing Facilities. In Alternative 1, PPL Electric considered the possibility of enhancing the capabilities of the existing facilities in the Sun Valley/Jonas area, which would involve building two new lines from the Meckesville Substation to relieve the existing 69-1 and 69-2 12 kV distribution lines. Due to the limited availability of routes from the Substation, however, the new lines would have to be attached to existing poles for the 69-1 and 69-2 12 kV lines. (PPL Electric St. No. 1, p. 12; PPL Electric Ex. 1, Ex. B, p. 8)

PPL Electric rejected this alternative because the method of construction would be expensive and would not reduce outages because having two distribution circuits on the same poles would expose both circuits to the same hazards that cause outages. Further, because the loads on the transformers at the Meckesville Substation are approaching their capacities, the transformers at the Meckesville Substation would have to be replaced with larger units. Moreover, an additional substation to the east of the Meckesville Substation would be needed in the future. After the new substation is built, the two new lines from the Meckesville Substation would no longer be needed and would represent a wasted asset. This alternative was rejected because upgrading the existing facilities would not provide the same reliability benefits, load relief, or operating flexibility that a new substation would provide. (PPL Electric St. No. 1, p. 12; PPL Electric Ex. 1, Ex. B, p. 8)

Alternative 2 – Construction of Two Substations. In Alternative 2, PPL Electric considered building two substations. One substation would be built north of the existing Meckesville 69-2 12 kV line and an additional substation would be built approximately 1.5 miles south of the proposed Effort Mountain 138-12 kV Substation.

The first substation would relieve the Meckesville 69-2 12 kV line. New 12 kV lines from the substation would provide a tie with the Meckesville 69-2 12 kV line. The new

substation would be supplied by extending the existing Meckesville 69 kV tap, which is supplied from the East Palmerton-Wagners # 1 69 kV radial line. The second substation, to the south of the Meckesville 69-2 line, would relieve the heavily loaded Meckesville 69-1 12 kV line. This new substation would be supplied by tapping the Siegfried-Jackson #1 138 kV line. Load from the Meckesville 69-1 12 kV line would be transferred to new 12 kV lines at the new substation. This would reduce the number of customers fed from the Meckesville 69-1 12 kV line and create an additional tie for this line. (PPL Electric St. No. 1, pp. 13-14; PPL Electric Ex. 1, Ex. B, pp. 8-9)

PPL Electric rejected this alternative because the East Palmerton-Wagners # 1 69 kV line used to supply the first substation is already heavily loaded. Adding more load to an already heavily loaded transmission line is not good transmission system planning. In addition, voltage at the end of the East Palmerton-Wagners # 1 69 kV line is approaching PPL Electric's RP&P standard at 62 kV. (PPL Electric St. No. 1, p. 4; PPL Electric Ex. 1, Ex. B, pp. 8-9)

PPL Electric also rejected this "two substation" alternative because it would require over 7.7 miles of transmission facilities, two substations, and additional distribution facilities. The estimated total cost of this alternative is $12,000,000. Thus, the preferred alternative provides greater reliability, load relief, and operating flexibility, while building fewer facilities at a lower cost. (PPL Electric St. No. 1, p. 14; PPL Electric Ex. 1, Ex. B, pp. 8-9)

**3. Response to Ms. Hart.**

Ms. Hart raises several arguments in opposition to the need for the proposed facilities. However, Ms Hart does not challenge the results of PPL Electric's planning process and, further, disregards the fact that the distribution facilities serving the Sun Valley/Jonas area are, or soon will be, in excess of the planning guidelines.

Ms. Hart asserts that the Effort Mountain project is not needed because the national projected annual growth of electricity has declined, and because construction in the Sun Valley/Jonas area has decreased. (Hart Ex. A, p. 2, ¶ 1; Hart Ex. B, p. 3, ¶ 2) Although the national projected annual growth of electricity usage is 1.0% per year and construction permits in the Sun Valley/Jonas area presently are at lower levels, since 2004 the number of customers served from the Meckesville 69-1 line has increased by 300 customers, an average of 3% per year, and Meckesville 69-2 line has increased by 650 customers, an average of 6% per year. This high rate of growth has overloaded the distribution electrical facilities in the area. More importantly, the sources cited by Ms. Hart are not projecting declining load, only slower growth. As explained above, certain distribution lines in the Sun Valley/Jonas area are presently overloaded. Thus, even if no further load growth were to occur, the distribution system in the Sun Valley/Jonas area needs to be reinforced now. (PPL Electric St. No. 11, p. 2)

Ms. Hart asserts that the Effort Mountain Project is not needed due to energy efficiency programs, PPL Electric's Act 129 Plan, and carbon offset programs. (Hart Ex. A, p. 3, ¶ 2.a; Hart Ex. B, p. 3, ¶¶ 4-5) Although energy efficiency and alternative energy programs may reduce demand growth, the distribution facilities serving the Sun Valley/Jonas area are presently overloaded. The energy efficiency and alternative energy programs raised by Ms. Hart would not resolve the overloading that presently exists on these distribution facilities. (Tr. at 84-86)

Ms. Hart also suggests that the Pocono Raceway Solar Farm could be used to resolve the need for the Effort Mountain Project. (Hart Ex. A, p. 3, ¶ 2.b) Although the Pocono Raceway Solar Farm is an additional source of supply, it would not resolve the substation and distribution overloading conditions in the Sun Valley/Jonas area. A new source of supply to an overloaded distribution line or transformer would not resolve the overloaded condition. Further, the Pocono

Raceway Solar Farm is located on a different line and substation. Thus, the Pocono Raceway Solar Farm cannot supply the overloaded facilities in the Sun Valley/Jonas area unless new lines to connect them were constructed. (PPL Electric St. No. 11, p. 4)

Ms. Hart next suggests that fuel cells or microgrids could be used to resolve the need for the Effort Mountain Project. (Hart Ex. A, p. 3, ¶ 2.c; Hart Ex. B, p. 5, ¶ 7.e) However, both of these technologies are experimental and unproven. Further, such technologies are expensive compared to the traditional electrical distribution systems. (PPL Electric St. No. 11, pp. 4-5; Tr. at 89-90)

Ms. Hart also suggests that the use of smart grid technology could eliminate the need for the Effort Mountain Project. (Hart Ex. A, p. 3, ¶ 2.c; Hart Ex. B, p. 5, ¶ 7.e) Specifically, Ms. Hart references smart grid technology being developed by PPL Electric in the Harrisburg area. PPL Electric currently employs certain smart devices and remote operator control devises on its distribution system. PPL Electric plans to install these same devices on the proposed facilities. Such facilities, however, cannot resolve overloaded conditions on distribution lines or transformers. (Tr. at 90-91)

Finally, Ms. Hart raises a concern that the real purpose of the Effort Mountain Project is to construct facilities that will enable PPL Electric to transmit electricity to out-of-state markets. (Hart Ex. A, p. 5) However, the sole purpose of the Effort Mountain Taps is to transmit electricity approximately 5.7 miles from the existing Siegfried-Jackson #1 and #2 138 kV transmission line to the proposed Effort Mountain 138-12 kV Substation. From the proposed Substation, electricity will be delivered to retail customers in the vicinity through 12 kV facilities. Importantly, 12 kV distribution lines are designed to distribute electricity locally and are of insufficient size and capacity to transport power out of state. The line will connect the

Siegfried-Jackson #1 and #2 138 kV transmission line to the Effort Mountain Substation. It will have no other source of supply or destination. (PPL Electric St. No. 12, p. 2) The Effort Mountain Taps cannot be used to deliver bulk electric supplies to these destinations.

For these reasons, Ms. Hart's opposition to the need for the Effort Mountain Project is without merit and, moreover, disregards the fact that the loads on certain distribution facilities serving the Sun Valley/Jonas area are already in excess of the planning guidelines, and others soon will be.

## B. SITING

### 1. Route Selection

PPL Electric formed a Siting Team to analyze and determine the optimal route for the Effort Mountain Taps. The Siting Team included individuals with the numerous skills and specialties required to site the line. In accordance with the Commission's regulations at 52 Pa. Code § 57.72(c), the Siting Team conducted an extensive, multi-faceted analysis to determine the preferred route for the Effort Mountain Taps. This analysis included designation of a "Study Area," compilation of an environmental inventory, identification of alternative routes, analysis of the alternative routes, and selection of the proposed line route. (PPL Electric Ex. 1, Ex. D) This process enabled PPL Electric to select a route for the proposed Effort Mountain Taps that appropriately balances functional requirements, environmental impacts, social factors, and cost considerations. (PPL Electric St. No. 2, pp. 6-7)

The first step for determining the optimal route for the Effort Mountain Taps was to identify the Study Area. The Study Area for the Effort Mountain Taps was established based upon the Project's purpose, which is to connect the Siegfried-Jackson 138 kV Transmission Line with the Effort Mountain Substation to relieve overloading of facilities and improve service in the Sun Valley/Jonas area. The Study Area for the project is approximately 42.3 square miles

and is generally bordered by State Route 534 to the west, the existing PPL Electric Siegfried-Jackson 138/69 kV line to the south, a Williams Transco Gas pipeline to the east, and the Pohopoco Mountain to the north. (PPL Electric St. No. 2, p. 4; PPL Electric Ex. 1, Ex. C, Figure C-1) Once the Study Area was identified, PPL Electric conducted a detailed environmental inventory to identify and locate environmental factors that need to be considered when evaluating and selecting transmission line routes. (PPL Electric St. No. 2, p. 8)

To facilitate its analysis of the route selection, PPL Electric retained the services of URS Corporation. (PPL Electric St. No. 2, p. 6) URS Corporation provides engineering, construction and technical services for, among other things, transmission and gas pipeline siting. URS Corporation uses a siting methodology adapted from a protocol developed by the Electric Power Research Institute and the Georgia Transmission Corporation ("EPRI-GTC"). This "opportunity and constraint" methodology has been used by URS and other consultants for many years in transmission and other siting studies. The EPRI-GTC process offers an excellent framework for siting analysis when used with appropriate modifications. (PPL Electric St. No. 4, pp. 2-3)

The siting methodology used for determining the preferred route for the Effort Mountain Taps uses a series of grid cells on aerial photographs or maps, which are assigned a value indicating how suitable the area in the cell is for a transmission line. The features of each cell are identified and ranked from one (most suitable areas) to nine (constraint areas). Corridors with the cells having the lowest values have the highest overall suitability for a transmission line. This process is repeated several times with cells of decreasing size and progressively more detailed and precise data. To the extent practical, possible corridors were identified to avoid constraints. (PPL Electric St. No. 4, pp. 4-9; PPL Electric Ex. 1, Ex. D, pp. 4-10) Although complete avoidance of all constraints is not feasible, PPL Electric sought corridors that would

avoid or minimize impacts on social and natural environmental features while meeting the functional and economic goals of the Effort Mountain Project. (PPL Electric St. No. 2, pp. 6-9)

Using the above methodology, alternative routes were identified. Each route connected the Siegfried-Jackson 138 kV Transmission Lines to the proposed Effort Mountain Substation. (PPL Electric St. No. 2, p. 9) After identifying these alternative routes, PPL Electric modified these alternative routes based upon field surveys and to reduce their potential impacts. Further, the routes were adjusted to increase distances from residential properties and to remove them to the edges of forests in order to decrease the transmission line's visibility. PPL Electric also conducted an extensive public outreach program, which resulted in adjustments to the alternate routes. Based on the siting methodology and public input, PPL Electric modified the alternative routes to produce four alternative routes: Route A, Route A1, Route B, and Route B1. (PPL Electric Ex. No. 1, Ex. D, pp. 27-34)

PPL Electric utilized a quantitative and qualitative analysis to compare the alternative line routes. The comparison produce a preferred route, Route B1, based upon a detailed analysis of comments from the public, societal concerns, environmental impacts, engineering considerations, and cost. (PPL Electric Ex. No. 1, Ex. D, pp. 35-51) The quantitative and qualitative analysis of the four line route alternatives is summarized below:

Comparison of Route B1 with Route B:

- Route B1 impacts a greater number of residences within 300 feet of the proposed route.
- Route B would have a greater impact on the environment because it would cross a greater number of potential wetlands and floodplains.
- Route B would require more special permits and studies based on the greater number of potential wetlands and floodplains.
- The construction of Route B would also be more complex due to the presence of steep slopes and the number of proposed turns located along Route B.

- Route B would result in more schedule delays due to the permitting needs and construction complexity.

Comparison of Route B1 with Route A:

- Route A would cross a greater number of wetlands, streams, and floodplains.
- Route A would have more road crossings and require construction in steep slop areas.
- Route A would be longer in length.
- Route A would be located in a more densely populated area.
- Route A would be more visible.
- Route A would require more special permits and studies based on the greater number of potential wetlands, streams, and floodplains.
- The construction of Route A would also be more complex due to the presence of steep slopes and the need for intricate crossings of the Pohopoco Creek.
- Route A would result in more schedule delays due to the permitting needs and construction complexity.

Comparison of Route B1 with Route A1:

- Route A1 would cross a greater number of potential wetlands.
- Route A1 would require more clearing of forested areas.
- Route A1 would have more road crossings and require construction in steep slop areas.
- Route A1 would be longer in length.
- Route A1 would require more special permits and studies based on the number of potential wetlands, streams, and floodplains.
- The construction of Route A1 would also be more complex due to the presence of steep slopes and the need for intricate crossings of the Pohopoco Creek.
- Route A1 would result in more schedule delays due to the permitting needs and construction complexity.

(PPL Electric St. No. 2, pp. 11-15) Based on the quantitative and qualitative analyses explained in Exhibit D to PPL Electric Ex. 1, as well as the estimated costs of each alternative route (PPL

Electric St. No. 3, p. 7), the Siting Team concluded that Route B1 was superior to the alternative routes. Route B1 has the least overall adverse impact of all the routes giving consideration to the many factors that enter into selecting a transmission line route. (PPL Electric St. No. 2, p. 17)

In order to receive further comment on Route B1, an additional open house was held on May 28, 2009. PPL Electric continued to work with landowners and other interested persons to further reduce the impact of the project, which resulted in a modified alignment of Route B1. The realignment involved moving the line further into the Jonas Mountain Preserve. Although the alignment would increase forest fragmentation in the Jonas Mountain Preserve, PPL Electric also coordinated the purchase of an adjacent forested parcel of 123 acres through which the modified Route B1 also traverses, which PPL Electric donated to the Jonas Mountain Preserve thereby substantially expanding the reserve and protecting the additional land from future development. By these means, PPL Electric resolved the concerns of the residents of Birch Hallow Estates, the Pocono Heritage Land Trust, which owns and manages the Jonas Mountain Preserve, and the owners of the adjacent forested parcel of land, the Knappenberger tract, that will become part of the Jonas Mountain Preserve. (PPL Electric Ex. 1, Ex. D, pp. 32-34)

Based on the foregoing, the modified version of Route B1 will have the least impact on surrounding areas. (PPL Electric Ex. 1, Ex. D, pp. 53-55) In siting the Effort Mountain Taps, PPL Electric attempted to select the electrical solution and route for the Taps that best balanced all of the competing factors that must be considered in transmission line siting. Although the selected route does cross several wetlands, PPL Electric anticipates no disturbance to these identified wetlands, which can be easily spanned. (PPL Electric St. No. 2, p. 15) Further, PPL Electric is committed to obtaining all permits necessary prior to the construction of the Effort Mountain Taps, and will comply with all requirements for issuance of the permits. (PPL Electric

St. No. 2, pp. 15-16) The selected route was designed to avoid as many impacts as practical. Where such impacts are unavoidable, PPL Electric will employ mitigating measures to minimize such impacts. (PPL Electric St. No. 2, p. 16)

**2. Engineering and Safety**

**a. Engineering.**

The proposed Effort Mountain Taps will be approximately 5.7 miles long. The Taps will be built for double-circuit 138 kV operation, although initially only one circuit will be installed on 4.6 miles of the transmission line. This circuit will be operated at 138 kV. On the remaining 1.1 miles of the transmission line, a second circuit designed for 138 kV operation will be installed, but it will initially operate at 12 kV. The 12 kV distribution line will be a second distribution line extending from the proposed Effort Mountain Substation to relieve the existing Meckesville 69-1 12 kV line. The proposed line will be built in portions of Chestnuthill and Polk Townships, Monroe County. (PPL Electric St. No. 3, p. 3)

Tangent poles, that is poles with no line angle, will consist of steel mono-poles equipped with steel upswept conductor support arms. Most tangent steel poles will be direct embedded. Tangent poles supporting longer spans will require concrete foundations. Angle structures will be either steel mono-poles or two-pole steel structures depending upon the severity of the angle. All angle poles will be installed on concrete foundations. Some single pole steel angle structures may be guyed. Based on preliminary engineering, approximately 44 poles with an average height of 100 feet will be needed for the construction of the Effort Mountain Taps. (PPL Electric St. No. 3, pp. 3-4)

In Pennsylvania, electric utilities are required to install and maintain transmission facilities in conformity with the National Electrical Safety Code ("NESC"). 66 Pa.C.S. § 2804(1)(ii). The NESC establishes industry standards for safeguarding work crews and the

general public against electrical hazards during construction, installation, operation and maintenance of conductors and equipment in electric supply stations and overhead electric supply lines. It includes work rules for the construction, maintenance and operation of electric supply lines and equipment. (PPL Electric St. No. 3, p. 5) It is uncontested that the proposed Effort Mountain Taps will be designed and constructed according to, and will meet or exceed, all applicable NESC minimum standards. All of the clearance and thermal ratings meet, or exceed, the requirements of the NESC. (PPL Electric St. No. 3, p. 5)

The Commission has found in numerous cases that transmission lines that meet or exceed the NESC requirements do not create an unreasonable risk or danger to the health and safety of the public. *Investigation on Commission Motion of the Safety of the Cabett-Wylei Ridge 500 kV Transmission Line, I.D.* 236 (Sept. 18, 1981); *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 (July 20, 1984); *Application of PP&L for Authorization to Locate and Construct its Hamlin 138 kV Electric Transmission Line*, Docket No. A-00101826 (April 3, 1981); *Larken v. Philadelphia Electric Co.*, 39 Pa. PUC 777 (1961). The construction of the Effort Mountain Taps along Route B1 will not create any unreasonable risk to the health or safety of the public.

**b. Electric and Magnetic Fields**

In order to address issues related to electric and magnetic fields, PPL Electric has adopted a Plan for Magnetic Field Management. (PPL Electric Ex. 1, Ex. E, p. 3; PPL Electric Ex. 1, Appendix 4) Under this Plan, PPL Electric, as a matter of policy, designs and builds transmission lines to reduce magnetic fields when such steps can be implemented at low or no

cost and are consistent with functional requirements.[4] Consistent with its Plan, PPL Electric will reverse phase the proposed Effort Mountain Taps where there are two circuits and increase pole heights by 5 feet above the minimum height required by the NESC. (PPL Electric St. No. 3, p. 6)

In previous proceedings, the Commission has commented favorably upon PPL Electric's Magnetic Field Management Plan:

> 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. However, the Company believes that it makes sense, as a matter of policy, to deal with customer concerns about EMF by reducing electric and magnetic fields in new and rebuilt facilities where that can be done with no-cost or low-cost design changes. Consequently, with that goal in mind, PP&L initiated its Magnetic Field Management Program in March 1991....
>
> Magnetic fields from overhead power lines and human exposure to those fields can be reduced by a number of methods including increasing ground clearance; balancing phase currents and circuit loads; using low reactance (reverse) phasing; adopting line configurations that reduce the space between phase conductors; increasing right-of-way widths; and, in general, locating lines in less densely populated areas.... Based upon a detailed investigation of these factors, including their environmental impact, costs and benefits, PP&L developed the guidelines incorporated in its Magnetic Field Management Program

*Certification Application of Pennsylvania Power & Light Company Filed Pursuant to 52 Pa. Code Chapter 57*, 1994 Pa. PUC LEXIS 65, *67-*69 (Oct. 21, 1994).

[4] The Company does not believe that the current scientific evidence demonstrates that magnetic fields cause any adverse health effects or pose a health or safety danger to the public. Nevertheless, PPL Electric has instituted a magnetic field management program. As set forth in PPL Electric Ex. 1, Appendix 4, PPL Electric's Magnetic Field Management Program is applied to new and reconstructed transmission line projects. To reduce magnetic field exposures, the program generally prescribes the use of a line design that provides five feet high 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 will be considered, provided those modifications can be made at low or no cost. (PPL Electric Ex. 1, Ex. E, p. 3)

### 3. Response to Ms. High.

Ms. High, the sole condemnee in this proceeding, generally opposes the route selected for the proposed Effort Mountain Taps, which crosses a portion of the High property. In opposition to the selected route, Ms. High raised a concern regarding invasive species interfering with farming operations. (High Ex. A, p. 2) PPL Electric explained that the construction of a transmission line across farmland will not alter the environmental characteristics of the farmland, which is not immune from invasive species, and would not change the type of flora that would grow on farmland. (PPL Electric St. No. 12, p. 5)

Ms. High also raised concerns that the selected route would interfere with farming operations on her property. (High Ex. A, p. 2) Presently, the portion of Ms. High's property that would be crossed by the selected route does not appear to be actively farmed. As a result, crossing Ms. High's property would have a lesser impact on farming operations than crossing farms that currently are actively farmed. (PPL Electric St. No. 12, pp. 4-5) Further, PPL Electric has taken steps to minimize the impact of the Effort Mountain Taps on farming operations on the High property by designing the line to place only one steel mono-pole on the farmable land of Ms. High. Other steel poles will be located in existing woodlands or along edges of woodlands, which will have little impact on potential farming activities. (PPL Electric St. No. 12, p. 5)

Ms. High also raises the question of whether the Effort Mountain Taps could be undergrounded, as currently done in residential areas. (High Ex. A, p. 2) Under 52 Pa. Code Subchapter H, PPL Electric is required to install any distribution or service lines serving residential developments underground. However, these regulations do not apply to high voltage transmission lines, such as the Effort Mountain 138 kV Taps. High voltage transmission lines are not subject to any general requirement that they be installed underground. Further,

undergrounding high voltage 138kV lines would have a significantly higher cost than constructing the line overhead. Due to this cost increase, which would be passed on to all PPL Electric customers, it is not practical to construct the high voltage Effort Mountain Taps underground where overhead construction is feasible. (PPL Electric St. No. 12, p. 6)

**4. *Response to Ms. Hart.***

Ms. Hart raises several issues in opposition to the route selected for the Effort Mountain Taps. Ms. Hart appears to question whether PPL Electric properly considered the impact to streams and other bodies of water. (Hart Ex. A, p. 10) Ms. Hart is incorrect. In assessing the alternative routes for the Effort Mountain Taps, PPL Electric took into consideration the potential impact of crossing, or locating in close proximity to, all of the identified streams. Protective buffers will be created for many of the streams to limit the total number of streams crossed, and/or limit the proximity of the structures to these streams. (PPL Electric St. No. 14. pp. 4-5) Streams are not materially affected by transmission lines that merely span them. Importantly, the selected route does not cross the main stems of the named streams but, rather, only crosses smaller tributaries of the main stems that can be easily spanned. (PPL Electric St. No. 14, p. 5)

Ms. Hart also raised concerns regarding the removal of trees in the forested areas along the selected route. (Hart Ex. A, p. 3, ¶ 2.e) To mitigate the impact of vegetation clearing, PPL Electric will use selective tree clearing as set forth in PPL Electric's "Specification for Initial Clearing and Control and Maintenance of Vegetation on or Adjacent to Electric Line Right-of-Way through Use of Herbicides, Mechanical and Hand Clearing." (PPL Electric St. No. 2, p. 16) In short, PPL Electric will remove only those plants that have the potential to interfere with the operation of the transmission line, and PPL Electric will preserve as much vegetation as possible.

In addition, as explained above, PPL Electric has donated a substantial tract of forested land to the Jonas Mountain Preserve, which will protect the land from future development.

As an alternative to the selected route, Mr. Hart recommends the installation of three distribution lines along State Route 534, State Route 115, and the Toll Road. (Hart Ex. B, p. 6, ¶ 3.b) However, these alternatives are not practical. PPL Electric is unable to run distribution lines parallel to State Routes 534 and 115 because the right-of-way width along these roads is not wide enough to accommodate the structures needed to maintain proper clearances needed to comply with the NESC. (Tr. at 101) Further, there are many residential dwellings located along State Route 534, State Route 115, and the Toll Road, and the curtilage of many of these dwellings would be within 100 meters from the routes along these roads. Consequently, pursuant to Section 1511 of the Pennsylvania Business Corporation Law of 1988, 15 Pa.C.S. § 1511, PPL Electric would not be able to exercise the power of eminent domain to condemn the necessary right-of-way across the numerous residential properties along these roads that would be subject to the right-of-way. Therefore, to the extent that any property owner along these roads was unwilling to enter an agreement with PPL Electric for sufficient right-of-way, PPL Electric would be unable to construct the required lines along these roads. (Tr. at 101-02)

Ms. Hart also appears to question the motive for modifying the selected route to move it further into the Jonas Mountain Preserve. (Hart Ex. B, pp. 7-8) Ms. Hart erroneously asserts that the motive for the modification was to obtain tax benefits. As explained above, after additional public input, PPL Electric modified Route B1 to accommodate the concerns of the residents of Birch Hallow Estates, the Pocono Heritage Land Trust, which owns and manages the Jonas Mountain Preserve, and the owners of the Knappenberger tract. As part of the modification, PPL Electric purchased the Knappenberger tract and resold the land to the Pocono

Heritage Land Trust in exchange for a right-of-way through the Jonas Mountain Preserve, reserving for itself a right-of-way adequate for the Effort Mountain Taps. As required by the Department of Conservation of Natural Resources, PPL Electric provided replacement land for the Jonas Mountain Preserve before the Pocono Heritage Land Trust could grant PPL Electric the right-of-way needed for the modified Route B1. Although PPL Electric resold the Knapperberger tract to the Pocono Heritage Land Trust for less than it paid. The difference reflects the value of the right-of-way. The difference will not be a tax deduction. Instead, it will be a capital investment included in rate base. (Tr. at 94-96)

### C. EXEMPTIONS FROM LOCAL ZONING

On January 15, 2010, PPL Electric filed the Zoning Petition pursuant to 52 Pa. Code § 5.41 and Section 619 of the Pennsylvania Municipalities Planning Code (MPC), 53 P.S. § 10619, requesting a finding that a building to shelter control equipment at the proposed Effort Mountain Substation site in Chestnuthill Township, Monroe County, Pennsylvania ("Control Equipment Building") is reasonably necessary for the convenience or welfare of the public and, therefore, exempt from local zoning regulations. On March 11, 2010, PPL Electric's Zoning Petition was consolidated with the Siting and Condemnation Applications. For the reasons that follow, PPL Electric respectfully requests that ALJ Weismandel and the Commission find that the Effort Mountain Taps and the Control Equipment Building at the Effort Mountain Substation site in Chestnuthill Township, Monroe County, Pennsylvania are exempt from local zoning ordinances.

As explained above, the combination of the Effort Mountain Taps and the proposed Effort Mountain Substation are required to address and remedy the existing and projected overloaded conditions on distribution lines and transformers in the Sun Valley/Jonas area and permit PPL Electric to continue to provide adequate and reliable service in that area. (*See* Section VI.A, *supra*) The Effort Mountain Taps will supply the new Effort Mountain

Substation, which will transform the electricity to 12 kV distribution levels and feed local distribution lines. (PPL Electric St. No. 6, pp. 3-4)

The new Effort Mountain Substation will include a building. Substations must include certain control equipment, primarily switches, relays and other control equipment to control the flow of electricity into, within and from the substation as well as SCADA (Supervisory Control and Data Acquisition) equipment to monitor the operation of the substation. Much of this equipment, in order to function properly, must be protected from the elements. The purpose of the proposed building in the substation is to protect the control and SCADA equipment from the elements so that the equipment, and the entire substation, can function properly. (PPL Electric St. No. 6, p. 4)

The Control Equipment Building is reasonably necessary for the convenience or welfare of the public because it is a necessary component of PPL Electric's overall plan to relieve the existing and projected overloaded conditions on distribution lines and transformers presently serving the Sun Valley/Jonas area. The reinforcement of the distribution system is necessary to assure continued reliable service to the customers in the area. (PPL Electric St. No. 6, pp. 6-7)

The Control Equipment Building will be approximately 12 feet by 12 feet. It will be constructed on a concrete slab. The exterior walls will be constructed of corrugated steel siding. There will be minimal space heating and cooling equipment for the building. Such equipment will be installed for the purpose of keeping the temperature inside the building within limits tolerated by the control and SCADA equipment. The Control Equipment Building will not be intended for occupancy. There will be no supply of water and no sanitary facilities. (PPL Electric St. No. 6, pp. 4-5) The substation will be surrounded by a high fence to prevent entry by unauthorized persons. Access to the substation, including the Control Equipment Building, must

be limited because the high voltages at which the substation will operate present dangers to untrained persons. The Control Equipment Building will be contained within the fenced perimeter of the substation. (PPL Electric St. No. 6, p. 5)

The location of the Effort Mountain Substation is advantageous because it is central to the load that it will serve. Having a centrally located substation is advantageous because distribution lines fed from the substation will be shorter, which reduces costs and improves the reliability of service because the distribution lines will have less exposure to damage from hazards such as falling trees and motor vehicles. (PPL Electric St. No. 6, pp. 5-6)

Under 52 Pa. Code § 69.1101, the Commission considers the impact of certain decisions upon local comprehensive plans and zoning ordinances. PPL Electric's proposed Control Equipment Building will be located in a portion of Chestnuthill Township designated as R-1, Low Density Residential. Pursuant to Section 306.B.1 of Chestnuthill's Zoning Ordinance, construction of a Public Utility Facility is not permitted in an R-1, Low Density Residential area. The Chestnuthill Township Zoning Ordinance does not define "Public Utility Facility." Thus, the Chestnuthill Zoning Ordinance is subject to the interpretation that PPL Electric may not construct a Public Utility Facility in an area designated R-1, Low Density Residential area. Similar restrictions apply in areas designated CR, Conservation Residential, RR, Rural Residential and R-2, Medium Low Density Residential. (PPL Electric St. No. 7, pp. 4-5) Further, under the Chestnuthill Zoning Ordinance, it is unlawful to erect a building without a building permit. (PPL Electric St. No. 7, pp. 3-4)

As a practical matter, the Chestnuthill Zoning Ordinance may restrict construction of the Control Equipment Building to more densely populated areas where construction of a transmission line to supply the substation would be virtually impossible due to curtilage

restrictions on the exercise of the power of eminent domain.[5] If PPL Electric is unable to obtain from the Commission the findings necessary to exempt the Control Equipment Building, the Chestnuthill Zoning Ordinance could bar the construction of the Control Equipment Building in the proposed location. (PPL Electric St. No. 7, p. 5)

The required in-service date for the Effort Mountain Substation is the same as the Effort Mountain Taps, November 2011. (PPL Electric St. No. 1, p. 3) If PPL Electric were required to obtain a Zoning Permit prior to construction of the Control Equipment Building, the process, including possible appeals from adverse determinations, could consume substantial time, which could delay the construction of the Effort Mountain Substation, which, as explained above, is reasonably necessary for the convenience and welfare of the public. (PPL Electric St. No. 7, p. 4) It must also be emphasized that PPL Electric met with the officials from Chestnuthill Township and its Planning Commission, and Monroe County and its Planning Commission to explain the project to them. None of these entities expressed any objection to the project, nor did they participate in these proceedings even though they received notice of them. (PPL Electric St. No. 7, p. 6)

Based on the foregoing, PPL Electric respectfully requests that ALJ Weismandel and the Commission find that the Control Equipment Building at the proposed Effort Mountain Substation site in Chestnuthill Township, Monroe County, Pennsylvania is reasonably necessary for the convenience or welfare of the public and, therefore, exempt from local zoning regulations.

[5] The Chestnuthill Township Zoning Ordinance, however, does contain a limited exemption for public utilities. Section 114 of the Zoning Ordinance permits exemptions under the Pennsylvania Municipalities Planning Code. (PPL Electric Stmt. No. 7, p. 6)

## D. EMINENT DOMAIN

### 1. The Service to be Provided is Necessary for the Service, Accommodation, Convenience, and Safety of the Public.

On March 4, 2010, PPL Electric filed the Condemnation Application for a finding and determination by the Commission that the service to be furnished by PPL Electric through its proposed exercise of the power of eminent domain to acquire a right-of-way and easement over and across the land of Larue High for the construction, operation, and maintenance of the proposed Effort Mountain Taps is necessary or proper for the service, accommodation, convenience, or safety of the public. On March 11, 2010, PPL Electric's Condemnation Application was Consolidated with the Siting Application and Zoning Petition. For the reasons set forth below, PPL Electric requests that ALJ Weismandel and the Commission find that the acquisition of the right-of-way and easement for the aerial crossing of the aforementioned property is necessary and proper for the service, accommodation, convenience, or safety of the public, and grant PPL Electric's Condemnation Application.

PPL Electric's proposed exercise of the power of eminent domain to acquire a right-of-way and easement for the construction, operation, and maintenance of the proposed Effort Mountain Taps over the land of Larue High is necessary for the service, accommodation, convenience, or safety of the public. As explained above, the distribution facilities serving the Sun Valley/Jonas area are operating near or at their capacity during peak periods. The proposed Effort Mountain Project is required to relieve existing and projected overloaded conditions on distribution lines and transformers serving the Sun Valley/Jonas area, which is one of PPL Electric's poorest performing areas. (*See* Section VI.A., *supra*)

As explained above, the principal part of the proposed project requires construction of approximately 5.7 miles of new 138 kV transmission lines, the proposed Effort Mountain Taps,

that will connect the Siegfried-Jackson 138 kV Transmission Lines to the proposed Effort Mountain Substation. The new Effort Mountain Substation, in turn, will supply new 12 kV distribution lines. Initially, there will be two new distribution lines. More lines may be added in the future as appropriate to meet load growth. (PPL Electric St. No. 8, p. 4)

The proposed route for the Effort Mountain Taps was selected after extensive public input and a detailed analysis, which included a comprehensive environmental inventory, identification and analysis of alternative routes, and selection of the preferred route. Factors considered in the siting analysis included functional requirements, environmental impacts, social impacts, public input, cost, and other factors identified in the Commission's siting regulations. (*See* Section VI.B., *supra)*

The route of the proposed Effort Mountain Taps crosses three tracts of land that are owned by Ms. Larue High. The property is approximately 352 acres located in Chestnuthill and Polk Townships, Monroe County, Pennsylvania. The property is fallow agricultural land that is not currently used for farming purposes. PPL Electric attempted to purchase the right-of-way and easement over said tracts of land for the purposes described above but was unable to reach an agreement with Ms. High. (PPL Electric St. No. 8, p. 6)

PPL Electric seeks to exercise the power of eminent domain to acquire a right-of-way for the construction, operation, and maintenance of the Effort Mountain Taps over and across the property of Ms. High. The proposed right-of-way and easement over Ms. High's property will not cross any place of public worship, burying ground, dwelling or its reasonable curtilage. *See* 15 Pa.C.S. § 1511(b). Further, although a dwelling is located on the property, it is approximately 450 feet from the right-of-way at its nearest point. (PPL Electric St. No. 8, p. 7; Tr. at 106-07)

PPL Electric must be able to route the Effort Mountain Taps over and across the above-mentioned property in order to site, construct, and operate that line at the selected route. The service to be provided by PPL Electric through the proposed transmission line and related facilities is necessary or proper for the service, accommodation, convenience or safety of the public for the reasons set forth above. (*See* Section VI.A., *supra*) Accordingly, PPL Electric's proposed exercise of the power of eminent domain to acquire a right-of-way and easement for the proposed Effort Mountain Taps over the land of Ms. High is necessary and, therefore, should be approved.

**2. Response to Ms. High.**

Ms. High raises several objections to the proposed condemnation by PPL Electric. First, she asserts that her property cannot be condemned because it is enrolled in an Agricultural Security Program. (High Ex. A, p. 2) Ms. High is incorrect. Section 13 of the Agricultural Security Program provides, among other things, that an entity must obtain approval from the State Agricultural Lands Condemnation Approval Board, the Agricultural Security Area Advisory Committee, and the governing bodies of each municipality prior to condemning property located in an Agricultural Security Area. 3 P.S. § 913. However, Section 13 also recognizes that the Commission has exclusive jurisdiction over the siting and construction of high voltage transmission lines and exempts from the foregoing approval requirement the following:

> [F]or any public utility the necessity for and the propriety and environmental effects of which has been reviewed and ratified or approved by the PUC or the Federal Energy Regulatory Commission, regardless of whether the right to establish such ... public utility facility is obtained by condemnation or by agreement with the land owner.

3 P.S. § 913(b). Thus, contrary to Ms. High's contention, PPL Electric may condemn a property located in an Agricultural Security Area if it receives appropriate approval from this Commission.

Second, Ms. High also expressed dissatisfaction with the manner in which representatives from PPL Electric attempted to negotiate a right-of-way agreement. (High Exs. A and B) Ms. High asserted generally that PPL Electric's Real Estate Specialists repeatedly visited her and pressured her to enter into a right-of-way agreement. The Real Estate Specialists from PPL Electric met with Ms. High on several occasions in an attempt to negotiate an amicable agreement for a right-of-way over Ms. High's property. (PPL Electric St. No. 19, pp. 5-6) However, at no time did the Real Estate Specialists threaten Ms. High. (PPL Electric St. No. 19, p. 7) Rather, PPL Electric treated Ms. High in the same respectful and fair manner that it provides to all property owners. (PPL Electric St. No. 15, p. 4) Further, at all times PPL Electric's Real Estate Specialists followed the Commission's regulations regarding disclosure of the power of eminent domain. (PPL Electric St. No. 19, pp. 6-7)

In evaluating Ms. High's contentions, it must be observed that she complained about everyone that spoke with her about the right-of-way across her land. Ms. High characterized a meeting with State Representative Michael B. Carroll as threatening and that he demanded her to sign a right-of-way agreement. (High Ex. A, p. 2; High Ex. B, pp. 1-2) However, Representative Carroll denied Ms. High's characterization of the meeting and the allegation that he demanded her to sign an agreement. (PPL Electric Stmt. No. 12, Ex. 12-b) She also complained about a local attorney who attempted to help her regarding these matters. (Tr. at 27-28) In contrast, there have been no other complaints from affected landowners regarding the conduct of PPL Electric's Real Estate Specialists.

## VII. CONCLUSION

WHEREFORE, for all the foregoing reasons, PPL Electric respectfully requests that Administrative Law Judge Wayne L. Weismandel and the Pennsylvania Public Utility Commission: (1) approve the siting and construction of the Effort Mountain #1 & #2 138 kV Taps, (2) find that the building to shelter control equipment at the Effort Mountain 138-12 kV Substation site is reasonably necessary for the convenience or welfare of the public, and (3) approve the exercise of the power of eminent domain by PPL Electric to acquire a right-of-way and easement across the land of Larue High is necessary for the service, accommodation, convenience or safety of the public.

Respectfully submitted,


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

David B. MacGregor (I.D. #28804)
Post & Schell, P.C.
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2808
Voice: 215.587.1197
Fax: 215.320.4879
E-mail: dmacgregor@postschell.com

John H. Isom (I.D. # 16569)
Christopher T. Wright (I.D. #203412)
Post & Schell, P.C.
17 North Second Street, 12th Floor
Harrisburg, PA 17101-1601
Voice: 717.612.6032
Fax: 717.731.1985
E-mail: jisom@postschell.com
E-mail: cwright@postschell.com

Of Counsel:

Post & Schell, P.C.


Date: August 11, 2010

*Attorneys for PPL Electric Utilities Corporation*

## APPENDIX A
## PROPOSED FINDINGS OF FACT

PPL Electric proposes the following findings of fact:

### A. INTRODUCTION

1. PPL Electric Utilities Corporation ("PPL Electric") is a public utility and electric distribution company subject to the regulatory jurisdiction of the Pennsylvania Public Utility Commission ("Commission"). (PPL Electric Ex. 3. p. 3)

2. PPL Electric furnishes electric distribution, transmission and supplier of last resort services to approximately 1.4 million customers in a service area that includes approximately 10,000 square miles covering all or portions of twenty-nine counties in eastern and central Pennsylvania. (PPL Electric Ex. 3. p. 3)

3. PPL Electric seeks Commission approval for the siting and construction of the Effort Mountain #1 & #2 138 kV Taps ("Effort Mountain Taps"); a finding that a building to shelter control equipment at the Effort Mountain 138-12 kV Substation ("Effort Mountain Substation") site is reasonably necessary for the convenience or welfare of the public; and findings that the exercise of the power of eminent domain to acquire right-of-way and easement across the land of Larue High is necessary or proper for the service, accommodation, convenience, or safety of the public.

### B. NEED FOR THE PROPOSED FACILITIES

#### 1. Need for the Proposed Transmission Line

4. Transmission lines have a maximum rated thermal capacity, which is the maximum electrical current they can safely carry. When a transmission line overloads, the conductor, the hardware securing the conductor, and the line terminal equipment begin to

overheat. Overloading transmission lines may cause permanent damage to transmission infrastructure and catastrophic power outages. (PPL Electric St. No. 1, p. 8)

5. Through a detailed system planning process and application of PPL Electric's planning guidelines, PPL Electric identifies facilities that require reinforcement to enable it to continue to provide adequate and reliable service to the public and plan appropriate measures to assure reasonably continuous supply to the entire regional load, even during adverse conditions. In order to assure that PPL Electric's transmission and distribution systems can supply load reliably during summer and winter peak conditions and provide service at an acceptable voltage level through the daily load cycle, PPL Electric has adopted a set of defined planning standards, which are set forth in PPL Electric's Reliability Principles and Practices manual ("RP&P"). (PPL Electric St. No. 1, pp. 4-5)

6. Through its system planning process, PPL Electric identified several distribution lines and transformers in the Sun Valley/Jonas area that are overloaded as a result of load growth due to housing development. (PPL Electric St. No. 1, p. 6)

7. The Sun Valley/Jonas area presently receives its distribution services from the Meckesville 69-12 kV Substation and two 12 kV distribution lines: the Meckesville 69-1 12 kV distribution line and the Meckesville 69-2 kV distribution line. (PPL Electric St. No. 1, p. 6)

8. The number of customers served from the Meckesville 69-1 12 kV distribution line has increased by an average of 3 percent per year since 2004. The 2011 winter load on the Meckesville 69-1 12 kV distribution line is projected to be 10.2 MVA, which exceeds the normal planning guideline of 10 MVA. (PPL Electric St. No. 1, pp. 7-8)

9. The number of customers served from the Meckesville 69-2 12 kV distribution line has increased by an average of 6 percent per year since 2004. The Meckesville 69-2 12 kV

distribution line began to exceed its normal planning guidelines of 11 MVA in 2006, and it exceeded the emergency guideline of 13 MVA in 2008. In January, 2010, the load on the Meckesville 69-2 kV distribution line was 13.4 MVA. The 2011 winter load on the Meckesville 69-2 kV distribution line is projected to be 15.2 MVA, and the 2013 winter load is expected to exceed the thermal guideline of 17 MVA. (PPL Electric St. No. 1, pp. 7-8)

10. The transformers at the Meckesville 69-12 kV Substation are projected to become overloaded in 2011. (PPL Electric Ex. 3, p. 8)

11. Load transfer capability in the Sun Valley/Jonas area is limited, especially at times of peak loads, because loads on neighboring circuits are also approaching their emergency planning guidelines. (PPL Electric St. No. 1, pp. 8-9) Because there is limited capacity available to transfer load away from the transformers at the Meckesville 69-12 kV Substation to other transformers, a transformer failure at the Meckesville 69-12 kV Substation would lead to an extended outage for more than 3,000 customers until repairs could be made or a transformer could be replaced. (PPL Electric St. No. 1, p. 9)

12. The Sun/Valley Jonas area is one of PPL Electric's poorest performing areas in terms of the number of service outages, duration of outages, and number of customer affected. (PPL Electric St. No. 1, p. 3)

13. Even if no further load growth were to occur, the distribution system in the Sun Valley/Jonas area needs to be reinforced. (PPL Electric St. No. 11, p. 2)

14. Energy efficiency and alternative energy programs would not resolve the overloading that presently exists on these distribution facilities. (Tr. at 84-86)

15. A new source of supply to an overloaded distribution line or transformer would not resolve the overload condition. (PPL Electric St. No. 11, p. 4)

16. Fuel cells or microgrids are experimental, unproven, and expensive compared to the traditional electrical distribution systems. (PPL Electric St. No. 11, pp. 4-5; Tr. at 89-90)

17. PPL Electric currently employs certain smart devices and remote operator control devises on its distribution system, and plans to install these same devices on the proposed facilities. Such facilities cannot resolve overload conditions on the distribution lines and transformers serving the Sun Valley Jonas area. (Tr. at 90-91)

**2. Alternative Solutions to Reinforce the Distribution System.**

18. After identifying these reliability issues, PPL Electric examined various electrical solutions, or functional configurations, to enable it to continue to provide adequate and reliable service to the public and plan appropriate measures to assure reasonably continuous supply to the Sun Valley/Jonas area. (PPL Electric St. No. 1, pp. 9-10, 12).

a. Alternative 1 – Enhance Existing Facilities

19. PPL Electric considered the possibility of enhancing the capabilities of the existing facilities in the Sun Valley/Jonas area, which would involve building two new lines from the Meckesville Substation to relieve the existing 69-1 and 69-2 12 kV distribution lines. Due to the limited availability of routes from the Substation, however, the new lines would have to be attached to existing poles for the 69-1 and 69-2 12 kV lines. (PPL Electric St. No. 1, p. 12; PPL Electric Ex. 1, Ex. B, p. 8)

20. The method of construction for Alternative 1 would be expensive and would not reduce outages because having two distribution circuits on the same poles would expose both circuits to the same hazards that cause outages. (PPL Electric St. No. 1, p. 12; PPL Electric Ex. 1, Ex. B, p. 8)

21. Alternative 1 would require the transformers at the Meckesville Substation to be replaced with larger units because the loads on the existing transformers at the Meckesville

Substation are approaching their capacities. (PPL Electric St. No. 1, p. 12; PPL Electric Ex. 1, Ex. B, p. 8)

22. Under Alternative 1, an additional substation to the east of the Meckesville Substation would be needed in the future. After the new substation is built, the two new lines from the Meckesville Substation under Alternative 1 would no longer be needed and would represent a wasted asset. (PPL Electric St. No. 1, p. 12; PPL Electric Ex. 1, Ex. B, p. 8)

23. Alternative 1 is inferior to the Preferred Alternative because upgrading the existing facilities would not provide the same reliability benefits, load relief, or operating flexibility that a new substation would provide. (PPL Electric St. No. 1, p. 12; PPL Electric Ex. 1, Ex. B, p. 8)

b. Alternative 2 – Construction of Two Substations.

24. Alternative 2 requires the construction of two substations. One substation would be built north of the existing Meckesville 69-2 12 kV line and the second substation would be built approximately 1.5 miles south of the proposed Effort Mountain 138-12 kV Substation. (PPL Electric St. No. 1, pp. 13-14; PPL Electric Ex. 1, Ex. B, pp. 8-9)

25. The first substation would relieve the Meckesville 69-2 12 kV line. New 12 kV lines from the substation would provide a tie with the Meckesville 69-2 12 kV line. The new substation would be supplied by extending the existing Meckesville 69 kV tap, which is supplied from the East Palmerton-Wagners # 1 69 kV radial line. (PPL Electric St. No. 1, pp. 13-14; PPL Electric Ex. 1, Ex. B, pp. 8-9)

26. The second substation, to the south of the Meckesville 69-2 line, would relieve the heavily loaded Meckesville 69-1 12 kV line. This new substation would be supplied by tapping the Siegfried-Jackson #1 138 kV line. Load from the Meckesville 69-1 12 kV line would be transferred to new 12 kV lines at the new substation. This would reduce the number of

customers fed from the Meckesville 69-1 12 kV line and create an additional tie for this line. (PPL Electric St. No. 1, pp. 13-14; PPL Electric Ex. 1, Ex. B, pp. 8-9)

27. The East Palmerton-Wagners # 1 69 kV line used to supply the first substation is already heavily loaded, and the voltage at the end of the East Palmerton-Wagners # 1 69 kV line is approaching PPL Electric's RP&P standard at 62 kV. Adding more load to an already heavily loaded transmission line is not good transmission system planning. (PPL Electric St. No. 1, pp. 13-14; PPL Electric Ex. 1, Ex. B, pp. 8-9)

28. Alternative 2 would require over 7.7 miles of transmission facilities, two substations, and additional distribution facilities at an estimated cost of $12 million. The Preferred Alternative provides greater reliability, load relief, and operating flexibility, while building fewer facilities at a lower cost. (PPL Electric St. No. 1, p. 14; PPL Electric Ex. 1, Ex. B, pp. 8-9)

c. The Preferred Alternative

29. PPL Electric's preferred functional configuration was to construct a new Effort Mountain 138-12 kV Substation, together with new 12 kV distribution lines in Chestnuthill and Polk Townships, Monroe County. (PPL Electric St. No. 1, p. 10; PPL Electric Ex. 1, Ex. B, p. 7)

30. One 12 kV distribution line from the Effort Mountain Substation will extend north and serve a portion of the Indian Mountain Lakes Development, thereby reducing the load on the Meckesville 69-2 12 kV distribution line. This new 12 kV line will serve approximately 1,400 customers. The second line from the Effort Mountain Substation will extend south and serve residential developments along Jonas Road and State Route 534. This line will relieve the Meckesville 69-1 12 kV distribution line. This second 12 kV line will serve approximately 1,500 customers. (PPL Electric St. No. 1, p. 10; PPL Electric Ex. 1, Ex. B, p. 7)

31. The new Effort Mountain Substation will provide a source that is located centrally to the load it will serve. Locating the substation central to the load it will serve will increase reliability and operating flexibility. It will also reduce the length of the distribution lines, thereby reducing their exposure to damage. Further, reducing the number of customers served by any one distribution line will reduce the number of customers affected by a line outage and reduce restoration times. (PPL Electric St. No. 1, pp. 10-11; PPL Electric Ex. 1, Ex. B, p. 7)

32. The Effort Mountain Taps will supply the Effort Mountain Substation from the existing Siegfried-Jackson 138 kV Transmission Lines to the new Effort Mountain Substation. These Taps will be designed for future 138 kV double circuit operation. Initially, only one 138 kV circuit will be installed on 4.6 miles of the line. The second 138 kV circuit will not be installed until needed to serve future load growth. Both 138 kV circuits will be installed on the remaining 1.1 miles of the line, but the second circuit initially will operate as a distribution line at 12 kV and will be increased to 138 kV operation in the future as appropriate to serve future load growth. (PPL Electric St. No. 1, pp. 11; PPL Electric Ex. 1, Ex. B, p. 7)

33. The estimated cost to site, design and construct this Effort Mountain Taps is approximately $5,721,030. The total estimated cost of the Effort Mountain Project, including transmission, distribution, and substation, is $8,755,000. Construction of this project is scheduled to begin in October, 2010 to meet an in-service date of November, 2011. (PPL Electric St. No. 1, p. 3)

## C. TRANSMISSION LINE SITING AND ROUTE SELECTION

### 1. Route Selection

34. PPL Electric retained the services of URS Corporation to facilitate its analysis of the route selection. (PPL Electric St. No. 2, p. 6) URS Corporation provides engineering, construction and technical services for, among other things, transmission and gas pipeline siting.

URS Corporation uses a siting methodology adapted from a protocol developed by the Electric Power Research Institute and the Georgia Transmission Corporation ("EPRI-GTC"). This "opportunity and constraint" methodology has been used by URS and other consultants for many years in transmission and other siting studies. The EPRI-GTC process offers an excellent framework for siting analysis when used with appropriate modifications. (PPL Electric St. No. 4, pp. 2-3)

35. PPL Electric's Siting Team, in conjunction with URS Corporation, conducted multi-faceted analysis to determine the preferred route for the Effort Mountain Taps in accordance with the Commission's regulations at 52 Pa. Code § 57.72(c). This analysis included designation of a "Study Area," compilation of an environmental inventory, identification of alternative routes, analysis of the alternative routes, and selection of the proposed line route. (PPL Electric Ex. 1, Ex. D; PPL Electric St. No. 2, p. 6)

36. The Study Area for the project is approximately 42.3 square miles and is generally bordered by State Route 534 to the west, the existing PPL Electric Siegfried-Jackson 138/69 kV line to the south, a Williams Transco Gas pipeline to the east, and the Pohopoco Mountain to the north. (PPL Electric St. No. 2, p. 4; PPL Electric Ex. 1, Ex. C, Figure C-1)

37. PPL Electric conducted a detailed environmental inventory to identify and locate environmental factors that need to be considered when evaluating and selecting transmission line routes. (PPL Electric St. No. 2, p. 8)

38. PPL Electric sought route corridors that would avoid or minimize impacts on social and natural environmental features while meeting the functional and economic goals of the Effort Mountain Project. (PPL Electric St. No. 2, pp. 6-9)

39. PPL Electric identified alternative routes for the Effort Mountain Taps that connected the Siegfried-Jackson 138 kV Transmission Lines to the proposed Effort Mountain Substation. (PPL Electric St. No. 2, p. 9)

40. Based on the siting methodology, field surveys, and public input, PPL Electric modified the alternative routes to reduce impacts, increase distances from residential properties, and move them to the edges of forests in order to decrease the transmission line's visibility. The modifications resulted in four alternative routes: Route A, Route A1, Route B, and Route B1. (PPL Electric Ex. No. 1, Ex. D, pp. 27-34)

41. PPL Electric utilized a quantitative and qualitative analysis to compare the alternative line routes. The comparison produce a preferred route, Route B1, based upon a detailed analysis of comments from the public, societal concerns, environmental impacts, engineering considerations, and cost. (PPL Electric Ex. No. 1, Ex. D, pp. 35-51) The analysis of the four alternative routes is summarized as below:

a. Comparison of Route B1 with Route B:

- Route B1 impacts a greater number of residences within 300 feet of the proposed route. Route B would have a greater impact on the environment because it would cross a greater number of potential wetlands and floodplains. Route B would require more special permits and studies based on the greater number of potential wetlands and floodplains. The construction of Route B would also be more complex due to the presence of steep slopes and the number of proposed turns located along Route B. Route B would result in more schedule delays due to the permitting needs and construction complexity.

b. Comparison of Route B1 with Route A:

- Route A would cross a greater number of wetlands, streams, and floodplains. Route A would have more road crossings and require construction in steep slop areas. Route A would be longer in length. Route A would be located in a more densely populated area. Route A would be more visible. Route A would require more special permits and studies based on the greater number of potential wetlands, streams, and floodplains. The construction of Route A would also be more complex due to the presence of steep slopes and the need for intricate crossings of the Pohopoco Creek. Route A would result in more schedule delays due to the permitting needs and construction complexity.

c. Comparison of Route B1 with Route A1:

- Route A1 would cross a greater number of potential wetlands. Route A1 would require more clearing of forested areas. Route A1 would have more road crossings and require construction in steep slop areas. Route A1 would be longer in length. Route A1 would require more special permits and studies based on the number of potential wetlands, streams, and floodplains. The construction of Route A1 would also be more complex due to the presence of steep slopes and the need for intricate crossings of the Pohopoco Creek. Route A1 would result in more schedule delays due to the permitting needs and construction complexity.

(PPL Electric St. No. 2, pp. 11-15)

42. Route B1 was superior to the alternative routes because it has the least overall adverse impact of all the routes giving consideration to the many factors that enter into selecting a transmission line route. (PPL Electric St. No. 2, p. 17; PPL Electric St. No. 3, p. 7)

43. PPL Electric sought additional public input, which resulted in a modified alignment of Route B1. The realignment involved moving the line further into the Jonas Mountain Preserve. As part of the realignment, PPL Electric coordinated the purchase of an adjacent forested parcel of land, which PPL Electric donated to the Jonas Mountain Preserve thereby substantially expanding the reserve and protecting the additional land from future development. By these means, PPL Electric resolved the concerns of the residents of Birch Hallow Estates, the Pocono Heritage Land Trust, which owns and manages the Jonas Mountain Preserve, and the owners of the adjacent forested parcel of land, the Knappenberger tract, that will become part of the Jonas Mountain Preserve. (PPL Electric Ex. 1, Ex. D, pp. 32-34)

44. The modified version of Route B1 will have the least impact on surrounding areas. (PPL Electric Ex. 1, Ex. D, pp. 53-55) PPL Electric anticipates no disturbance to these identified wetlands, which can be easily spanned. (PPL Electric St. No. 2, p. 15) PPL Electric is committed to obtaining all permits necessary prior to the construction of the Effort Mountain Taps, and will comply with all requirements for issuance of the permits. (PPL Electric St. No. 2, pp. 15-16)

45. The selected route was designed to avoid as many impacts as practical. Where such impacts are unavoidable, PPL Electric will employ mitigating measures to minimize such impacts. (PPL Electric St. No. 2, p. 16)

46. Streams are not materially affected by transmission lines that merely span them. Importantly, the selected route does not cross the main stems of the named streams but, rather, only crosses smaller tributaries of the main stems that can be easily spanned. (PPL Electric St. No. 14, p. 5)

47. PPL Electric is unable to run distribution lines parallel to State Routes 534 and 115 because the right-of-way width along these roads is not wide enough to accommodate the structures needed to maintain proper clearances needed to comply with the National Electrical Safety Code ("NESC"). (Tr. at 101) Further, there are many residential dwellings located along State Route 534, State Route 115, and the Toll Road, and the curtilage of many of these dwellings would be within 100 meters from the routes along these roads. (Tr. at 101-02)

48. To mitigate the impact of vegetation clearing, PPL Electric will use selective tree clearing as set forth in PPL Electric's "Specification for Initial Clearing and Control and Maintenance of Vegetation on or Adjacent to Electric Line Right-of-Way through Use of Herbicides, Mechanical and Hand Clearing." (PPL Electric St. No. 2, p. 16)

49. The construction of the Effort Mountain Taps across farmland will not alter the environmental characteristics of the farmland, which is not immune from invasive species, and would not change the type of flora that would grow on farmland. (PPL Electric St. No. 12, p. 5)

50. The portion of Ms. High's property that would be crossed by the selected route is not actively farmed. (PPL Electric St. No. 12, pp. 4-5) PPL Electric will take steps to minimize the impact of the Effort Mountain Taps on farming operations on the High property by designing the line to place only one steel mono-pole on the farmable land of Ms. High, and other steel poles will be located in existing woodlands or along edges of woodlands, which will have little impact to potential farming activities. (PPL Electric St. No. 12, p. 5)

51. Undergrounding high voltage 138kV lines would have a significantly higher cost than constructing the line overhead. Due to this cost increase, which would be passed on to all PPL Electric customers, it is not practical to construct the high voltage Effort Mountain Taps underground where overhead construction is feasible. (PPL Electric St. No. 12, p. 6)

### 2. Engineering and Safety

52. The Effort Mountain Taps will be designed and constructed according to, and will meet or exceed, all applicable NESC minimum standards. All of the clearance and thermal ratings meet, or exceed, the requirements of the NESC. (PPL Electric St. No. 3, p. 5)

53. PPL Electric has adopted a Plan for Magnetic Field Management. (PPL Electric Ex. 1, Ex. E, p. 3; PPL Electric Ex. 1, Appendix 4) Consistent with its Plan, PPL Electric will reverse phase the proposed Effort Mountain Taps where there are two circuits and increase pole heights by 5 feet above the minimum height required by the NESC. (PPL Electric St. No. 3, p. 6)

## D. EXEMPTIONS FROM LOCAL ZONING

54. PPL Electric filed at Docket No. A-2010-2153061 the a Zoning Petition pursuant to 52 Pa. Code § 5.41 and Section 619 of the Pennsylvania Municipalities Planning Code (MPC), 53 Pa. C.S. § 10619, requesting a finding that a building to shelter control equipment at the proposed Effort Mountain Substation Site in Chestnuthill Township, Monroe County ("Control Equipment Building") is reasonably necessary for the convenience or welfare of the public and, therefore, exempt from local zoning regulations.

55. The combination of the Effort Mountain Taps and the proposed Effort Mountain Substation are required to address and remedy the existing and projected overloaded conditions on distribution lines and transformers in the Sun Valley/Jonas area and permit PPL Electric to continue to provide adequate and reliable service in that area. The Effort Mountain Taps will supply the new Effort Mountain Substation, which will transform the electricity to 12 kV distribution levels and feed local distribution lines. (PPL Electric St. No. 6, pp. 3-4)

56. The location of the Effort Mountain Substation is advantageous because it is central to the load that it will serve. Having a centrally located substation is advantageous

because distribution lines fed from the substation will be shorter, which reduces costs and improves the reliability of service because the distribution will have less exposure to damage from hazards such as falling trees and motor vehicles. (PPL Electric St. No. 6, pp. 5-6)

57. The substation will not operate without the equipment contained inside the Control Equipment Building. (PPL Electric St. No. 6, p. 4)

58. Consistent with the Commission's policy statement, it is PPL Electric's policy to adopt all reasonable suggestions from local governments, including the Chestnuthill Township, to the extent that they can be implemented at a reasonable cost and that they would not interfere with the construction or effective operation of the proposed facilities. (PPL Electric St. No. 7, p. 6)

59. PPL Electric reviewed the Zoning Ordinance of the Chestnuthill Township. (PPL Electric St. No. 7, pp. 4-5)

60. The Chestnuthill Township Zoning Ordinance classifies the substation site as R-1, Low Density Residential. Pursuant to Section 306.B.1 of Chestnuthill's Zoning Ordinance, construction of a Public Utility Facility is not permitted in an R-1, Low Density Residential area. Also, it is unlawful under the Chestnuthill Zoning Ordinance to erect a building without a building permit. (PPL Electric St. No. 7, pp. 3-4)

61. The required in-service date for the Effort Mountain Substation is the same as the Effort Mountain Taps, November 2011. (PPL Electric St. No. 1, p. 3) If PPL Electric were required to obtain a Zoning Permit prior to construction of the Control Equipment Building, the process, including appeals from adverse determinations, could consume substantial time, which could delay the construction of the Lackawanna 500 – 230 kV Substation. (PPL Electric St. No. 7, p. 4)

62. The Chestnuthill Township and its Planning Commission, and the Monroe County and its Planning Commission have not opposed PPL Electric's Zoning Petition.

**E. EMINENT DOMAIN**

63. PPL Electric seeks a finding and determination by the Commission that the service to be furnished by PPL Electric through its proposed exercise of the power of eminent domain to acquire a right-of-way and easement over and across the land of Larue High for the construction, operation, and maintenance of the proposed Effort Mountain Taps is necessary or proper for the service, accommodation, convenience, or safety of the public.

64. The route of the proposed Effort Mountain Taps crosses three tracts of land that are owned by Ms. Larue High. The property is approximately 352 acres located in Chestnuthill and Polk Townships, Monroe County, Pennsylvania. The property is fallow agricultural land that is not currently used for farming purposes. (PPL Electric St. No. 8, p. 6)

65. PPL Electric attempted to purchase the rights-of-way and easements but was unable to reach an agreement with Ms. High. (PPL Electric St. No. 8, p. 6). The Real Estate Specialists from PPL Electric met with Ms. High on several occasions in an attempt to negotiate an amicable agreement for a right-of-way over Ms. High's property. (PPL Electric St. No. 19, pp. 5-6) The Real Estate Specialists did not threaten Ms. High. (PPL Electric St. No. 19, p. 7) The Real Estate Specialists treated Ms. High in the same respectful and fair manner that it provides to all property owners. (PPL Electric St. No. 15, p. 4) PPL Electric's Real Estate Specialists followed the Commission's regulations regarding disclosure of the power of eminent domain. (PPL Electric St. No. 19, pp. 6-7)

66. PPL Electric must be able to route the Effort Mountain Taps over and across the property of Ms High in order to site, construct, and operate that line at the selected route. (PPL Electric St. No. 8, p. 6).

67. The proposed right-of-way and easement over Ms. High's property will not cross any place of public worship, burying ground, dwelling or its reasonable cartilage. Although a dwelling is located on the property, it is approximately 450 feet from the right-of-way at its nearest point. (PPL Electric St. No. 8, p. 7; Tr. at 106-107)

## APPENDIX B
## PROPOSED CONCLUSIONS OF LAW

1. Pursuant to Chapter 11 of the Public Utility Code, 66 Pa.C.S. §§ 1101, *et seq.*, and 15 Pa.C.S. § 1511(c) and Section 619 of the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, *as amended*, 53 P.S. § 10619, the Commission has jurisdiction over the subject matter of this proceeding.

2. PPL Electric has met its burden to prove that the Application requesting approval of the siting and construction of the proposed Effort Mountain #1 & #2 138 kV Taps ("Effort Mountain Taps") in Chestnuthill and Polk Townships, Monroe County, Pennsylvania, Docket No. A-2010-2152104, is necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public.

3. PPL Electric has met its burden to prove that the siting and construction of the Effort Mountain Taps in the modified Route B1 would not create an unreasonable risk of danger to the health and safety of the public.

4. PPL Electric has met its burden to prove that the siting and construction of the Effort Mountain Taps in the modified Route B1 is in compliance with applicable statutes and regulations providing for the protection of the natural resources of this Commonwealth.

5. PPL Electric has met its burden to prove that the siting and construction of the Effort Mountain Taps in the modified Route B1 would have a minimum adverse environmental impact, considering the electric power needs of the public and the available alternatives.

6. PPL Electric has met its burden to prove that the selection of the modified Route B1 for the Effort Mountain Taps was reasonable and not selected wantonly, capriciously, or arbitrarily.

7. PPL Electric has demonstrated that the modified Route B1 is superior to the alternative Route A, Route A1, and Route B.

8. The siting of PPL Electric's aerial transmission and substation facilities, other than the Control Equipment Building, are exempt from local zoning ordinances because such ordinances are preempted as to public utility facilities by statewide utility regulation by the Commission. *Duquesne Light Co. v. Upper St. Clair Township*, 377 Pa. 323, 105 A.2d 287 (1954); *Duquesne Light Co. v. Monroeville Borough*, 449 Pa. 573, 580, 298 A.2d 252, 256 (1972); *County of Chester v. Philadelphia Electric Co.*, 420 Pa. 422, 425-26, 218 A.2d 331, 333 (1966); *Commonwealth v. Delaware & Hudson Railway Co.*, 339 A.2d 155, 157 (Pa. Cmwlth. 1975).

9. PPL Electric has met its burden to prove that the building to shelter control equipment at the proposed substation at the Effort Mountain 138-12 kV Substation site, Monroe County, is reasonably necessary for the convenience or welfare of the public and, therefore, exempt from any local zoning ordinance pursuant to Section 619 of the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, *as amended*, 53 P.S. § 10619.

10. PPL Electric has met its burden to prove that the Application for approval to exercise the power of eminent domain, pursuant to 15 Pa.C.S. § 1511, to acquire rights-of-way and easements necessary for the construction, operation, maintenance, and aerial crossing by the Effort Mountain Taps over the property of Larue High, Docket No. A-2010-2163154, is necessary and proper for the service, accommodation, convenience or safety of the public.

## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

### VIA FIRST CLASS MAIL

Larue High
RD 1 Box 259
Effort, PA 18330

Suzanne A. Hart
RR 1 Box 279
Effort, PA 18330

Albert Barney
40 Rodeo Drive
Kunkletown, PA 18058

### VIA E-MAIL & FIRST CLASS MAIL

Joseph P. Hanyon, Esquire
Merwine, Hanyon & Kaspszyk, LLP
HC 89, Box 105, Rt. 940
Pocono Summit, PA 18346

Date: August 11, 2010

Christopher T. Wright