

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Letter of Notification of PPL Electric :  
Utilities Corporation, Filed Pursuant to :  
52 Pa. Code Chapter 57 Subchapter G, : Docket No. A-2015-\_\_\_\_\_  
for Approval to Site and Relocate :  
Approximately 0.15 Miles of Single- :  
Circuit 138 kV Transmission Line in :  
the City of Hazleton, Luzerne County, :  
Pennsylvania. :

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**LETTER OF NOTIFICATION**

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TO THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:

PPL Electric Utilities Corporation (“PPL Electric”), hereby files, pursuant to 52 Pa. Code § 57.72(d), this Letter of Notification to request approval from the Pennsylvania Public Utility Commission (“Commission”) to relocate approximately 0.15 miles of existing single-circuit 138 kV (“kilovolt) transmission line in the City of Hazleton, Luzerne County, Pennsylvania (the “Project”). PPL Electric has provided information regarding this Project to the City of Hazleton and Luzerne County, which have not objected to the Project.

The proposed Project is needed to accommodate the construction of a planned new pharmacy in the City of Hazelton by relocating the existing transmission line to the perimeter of the site for the new pharmacy. Importantly, construction of the planned new pharmacy cannot be completed until after the existing transmission line has been relocated. Subject to the Commission’s approval, construction of this Project is scheduled to begin in February 2016, to support an in-service date of March 2016. In support thereof, PPL Electric states as follows:

**I. INTRODUCTION**

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

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

3. PPL Electric’s attorneys are:

Paul E. Russell (I.D. # 21643)  
Associate General Counsel  
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Two North Ninth Street  
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PPL Electric’s attorneys are authorized to receive all notices and communications regarding this Letter of Notification.

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

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

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

- Attachment 1 Aerial Map of Existing Facilities
- Attachment 2 Aerial Map of Proposed Relocated Facilities
- Attachment 3 Depiction of the type of monopoles used for this Project
- Attachment 4 PPL Electric Design Criteria and Safety Practices

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

## **II. THE PROJECT**

### **A. NEED FOR THE PROJECT**

8. CVS Pharmacy (“CVS”), a potential new commercial customer, currently is evaluating the feasibility of constructing a new pharmacy in PPL Electric’s service territory in the City of Hazleton, Luzerne County, Pennsylvania. The site proposed for the new pharmacy is located at the northeast intersection of West 28th and North Church Streets in the City of Hazleton.

9. The site proposed for CVS’ new pharmacy currently is traversed by a segment of PPL Electric’s existing Harleigh Tap 138 kV transmission line (“Harleigh Tap”). PPL Electric’s Harleigh Tap is a single-circuit 138 kV transmission line that extends approximately two miles within the City of Hazelton in a northwest to southeast orientation. Currently, the Harleigh Tap extends through the middle of the site proposed by CVS for the new pharmacy. An aerial map depicting the current location of the existing facilities is provided in Attachment 1.

10. CVS has requested that PPL Electric’s existing Harleigh Tap, which currently traverses the site proposed for the new pharmacy, be relocated to the southwest perimeter of the

site to accommodate the construction of the new pharmacy. Importantly, CVS' proposed pharmacy cannot be completed until the existing transmission facilities are relocated.

11. CVS is still assessing the economic viability of the planned new pharmacy and has not made a final investment decision at this time. In the event that CVS declines to build the new pharmacy, PPL Electric will not relocate the existing Harleigh Tap.

**B. THE PROPOSED PROJECT**

12. To accommodate the construction of CVS' proposed new pharmacy, PPL Electric herein proposes to relocate an approximately 0.15 mile (800 linear feet) segment of the existing Harleigh Tap to the southwest perimeter of the site proposed for the pharmacy.

13. The proposed route for the relocated facilities will be located on the property to be owned by CVS for the new pharmacy. A small portion of the right-of-way for the relocated facilities may extend into an existing public right-of-way associated with West 28<sup>th</sup> (Route 309) and North Church Streets (Route 940). An aerial map depicting the proposed route is provided in Attachment 2.

14. To relocate the Harleigh Tap, PPL Electric proposes to remove two existing tower structures that currently are located on the site for the proposed pharmacy, and install three new custom steel monopole angle structures. Each new angle structure will be installed on concrete caisson foundations and will have an average height of approximately 90 feet. A depiction of the type of monopoles used for this Project is provided in Attachment 3.

15. Approximately 510 feet of existing single-circuit 138 kV transmission line that currently traverses the site for the proposed pharmacy will be removed. To relocate the Harleigh Tap, approximately 0.15 miles (800 linear feet) of new single-circuit 138 kV transmission line will be installed on the southwest perimeter of the site proposed for the new pharmacy.

16. The relocated single-circuit 138 kV design will utilize three power conductors and one overhead ground wire. The power conductors will be 556 kcmil<sup>1</sup> 24/7 ACSR conductors.<sup>2</sup> The overhead ground wire will be 48 count, 0.752-inch diameter fiber optical ground wires and will provide lightning protection and communication between circuit breakers that remove the line from service should a fault on the line be detected.

17. The total estimated cost of the proposed Project is approximately \$957,000.<sup>3</sup> The entire cost of the proposed relocation will be paid by CVS if the construction of the planned pharmacy goes forward and the Project is required to accommodate the construction of the new pharmacy.<sup>4</sup>

18. Upon Commission approval, the Project has a scheduled construction start date of February 2016, to support an in-service date of March 2016.

### **III. HEALTH AND SAFETY**

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

20. The Project will be designed, constructed, operated, and maintained in a manner that meets or surpasses all applicable National Electric Safety Code minimum standards and all applicable legal requirements.

21. The Project will conform to PPL Electric's design criteria, construction standards, and safety practices, which are provided in Attachment 4.

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

<sup>2</sup> ACSR stands for aluminum conductor steel reinforced.

<sup>3</sup> The estimated cost for the proposed Project was developed using averages of recent costs for similar projects and without an in-depth analysis of field investigation. The estimated cost is subject to change as the constructability of the Project, sequence of construction, and other factors that may affect cost are identified and analyzed as the Project progresses.

<sup>4</sup> PPL Electric will not relocate the existing Harleigh Tap if CVS does not proceed with its plans to construct the new pharmacy.

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

23. The airport nearest to the proposed construction of the relocated segment of the Harleigh Tap is the Hazelton Municipal Airport, which is a public airport located approximately 0.5 miles northwest of the Project area. PPL Electric does not anticipate any interference with airport operations because of the distance from the Project area, the presence of existing electrical facilities in the Project area, the existing development surrounding the site, and the similar height of the new and existing structures. However, PPL Electric will file any required documentation with both the Federal Aviation Administration and the Pennsylvania Department of Transportation Bureau of Aviation.

24. The relocated Harleigh Tap will have higher ground clearance than the existing line, which will reduce the potential for exposure to electromagnetic fields.

#### **IV. DESCRIPTION OF RIGHT-OF-WAY**

25. The Project will require approximately 0.15 miles of existing 138 kV transmission line to be relocated. As explained above, the Project will be located within a right-of-way across the property to be owned by CVS if it builds the new pharmacy, and possibly within a portion of a public right-of-way.

26. The right-of-way for the relocated segment of the Harleigh Tap will be approximately 60 feet in width. The right-of-way will consist of a combination of asphalt and mowed grass, and possibly ornamental or native shrubs/trees located adjacent to the street.

27. Vegetation management practices are based on maintenance rights acquired, voltage of the line involved, proximity of trees to the facilities, and the species and condition of trees involved. The site for the proposed pharmacy is either devoid of vegetation (occupied by asphalt parking lot and a building that will be demolished) or currently consists of mowed grass

and planted shrubs/small trees. As a result, limited vegetation management will be required for the construction of this Project. In areas where vegetation management is required to complete the transmission line relocation, PPL Electric will apply its “Specifications for Initial Clearing and Control of Vegetation On or Adjacent to Electric Line Right-of-Way Through Use of Herbicides, Mechanical and Hand Clearing Techniques” to mitigate any impacts.

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

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

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

31. In conjunction with CVS, PPL Electric will review the proposed Project with the Pennsylvania Historical and Museum Commission (“PHMC”) to determine whether the project will have any impacts to cultural and archaeological resources. PPL Electric will coordinate with CVS to comply with any surveys or conditions required by the PHMC.

32. In conjunction with CVS, PPL Electric will obtain all necessary environmental permits. PPL Electric will comply with all of the terms and conditions placed on those permits.

33. In conjunction with CVS, PPL Electric will acquire any required soil and sedimentation control permits and will comply with any conditions placed on those permits. If needed, PPL Electric also will develop an Erosion and Sedimentation Control Plan and obtain a Post Construction Stormwater Management/Site Restoration (PCSM) Plan.

34. In conjunction with CVS, PPL Electric has reviewed the Pennsylvania Natural Diversity Inventory (PNDI) records under the jurisdiction of the Pennsylvania Department of Conservation and Natural Resources, the Pennsylvania Fish and Boat Commission, the Pennsylvania Game Commission, and the U.S. Fish and Wildlife Service. Based on this review,

there are no threatened and endangered species and/or special concern species and resources located within the project site. Notwithstanding, PPL Electric will, to the extent required, coordinate with these jurisdictional agencies, acquire any required permits, and comply with any conditions placed on those permits.

**V. NOTICE**

35. PPL Electric has provided information regarding the Project to representatives of the City of Hazleton and Luzerne County. These entities have not objected to the proposed Project.

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

37. All landowners that may be affected by the transmission line work associated with the Project will be served with a copy of this Letter of Notification in accordance with 52 Pa. Code § 57.72(d)(3).

**VI. LETTER OF NOTIFICATION**

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

39. Section 57.72(d)(1)(vi) permits a Letter of Notification for an overhead high voltage transmission line having a proposed route of 2 miles or less. As explained above, the overhead segment of the proposed route for the relocated Harleigh Tap is approximately 0.15 miles.

40. This Letter of Notification is filed on the date set forth below. As provided in 52 Pa. Code § 57.72(d)(5), the Commission will review and, by order, approve or disapprove this Letter of Notification. If the Commission approves this Letter of Notification, the proposed

Project will be constructed as proposed herein without the formal application process set forth at 52 Pa. Code §§ 57.71, *et seq.*

**VII. CONCLUSION**

WHEREFORE, PPL Electric Utilities Corporation respectfully requests that the Pennsylvania Public Utility Commission approve the siting and relocation of an approximately 0.15 mile segment of the Harleigh 138 kV Tap in City of Hazleton, Luzerne County, Pennsylvania to accommodate the construction of a new pharmacy, as explained above and in the Attachments hereto.

Respectfully submitted,

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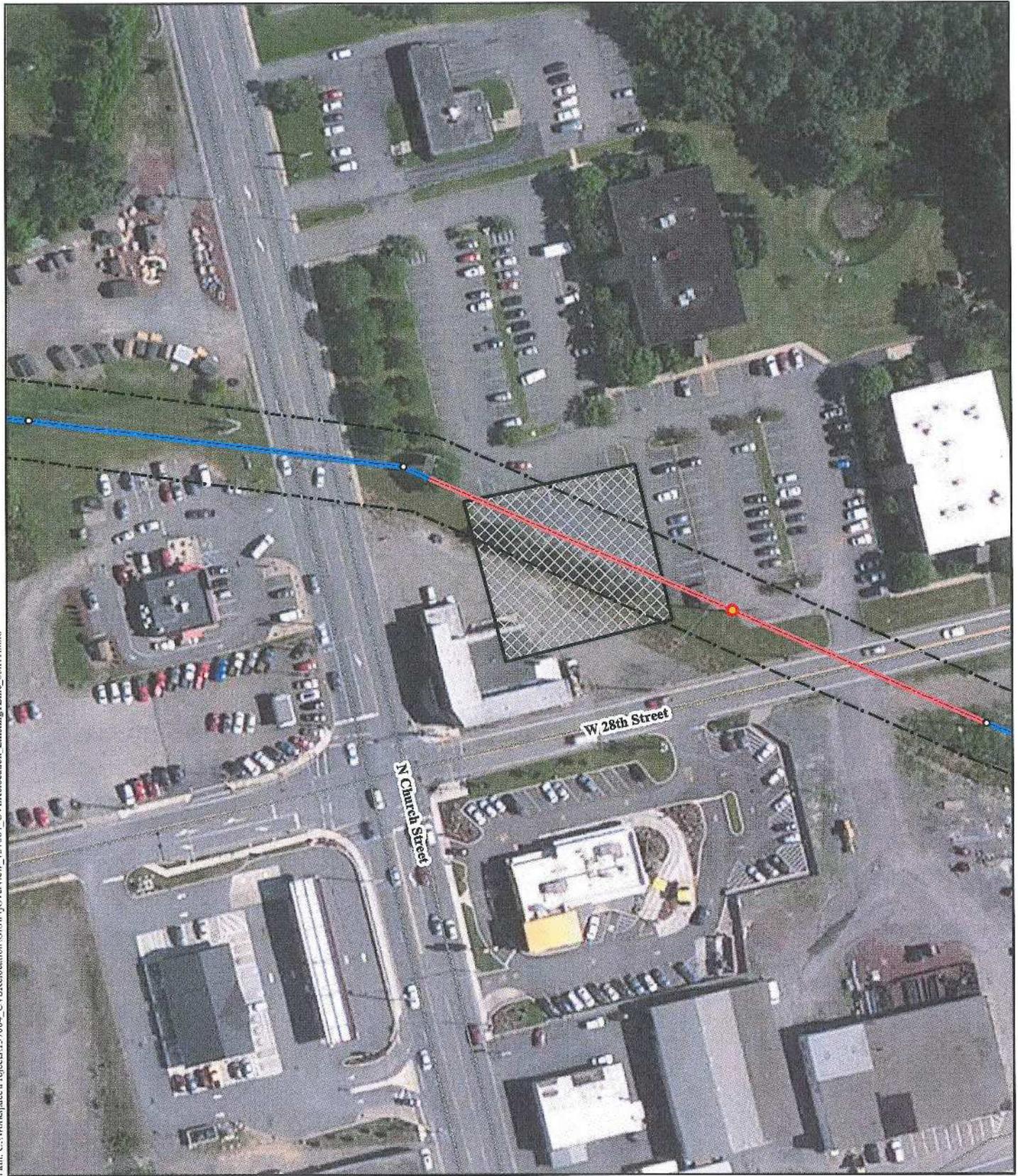
  
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Date: April 29, 2015

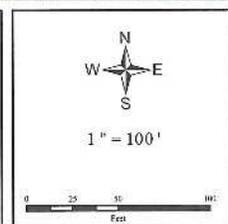
Counsel for PPL Electric Utilities Corporation

# **ATTACHMENT 1**

Path: C:\Workspace\Projects\137084\_CVSRelocation\GIS\ProjOverview\_137084\_CVSRelocation\_Existing\Line\_85x11.mxd



- Existing Structure
- Structure to be Removed
- Existing Alignment to be Removed
- Existing Alignment
- State Road
- Existing 60' Corridor
- Proposed Alignment
- CVS Footprint



The State of Pennsylvania  
Luzerne County

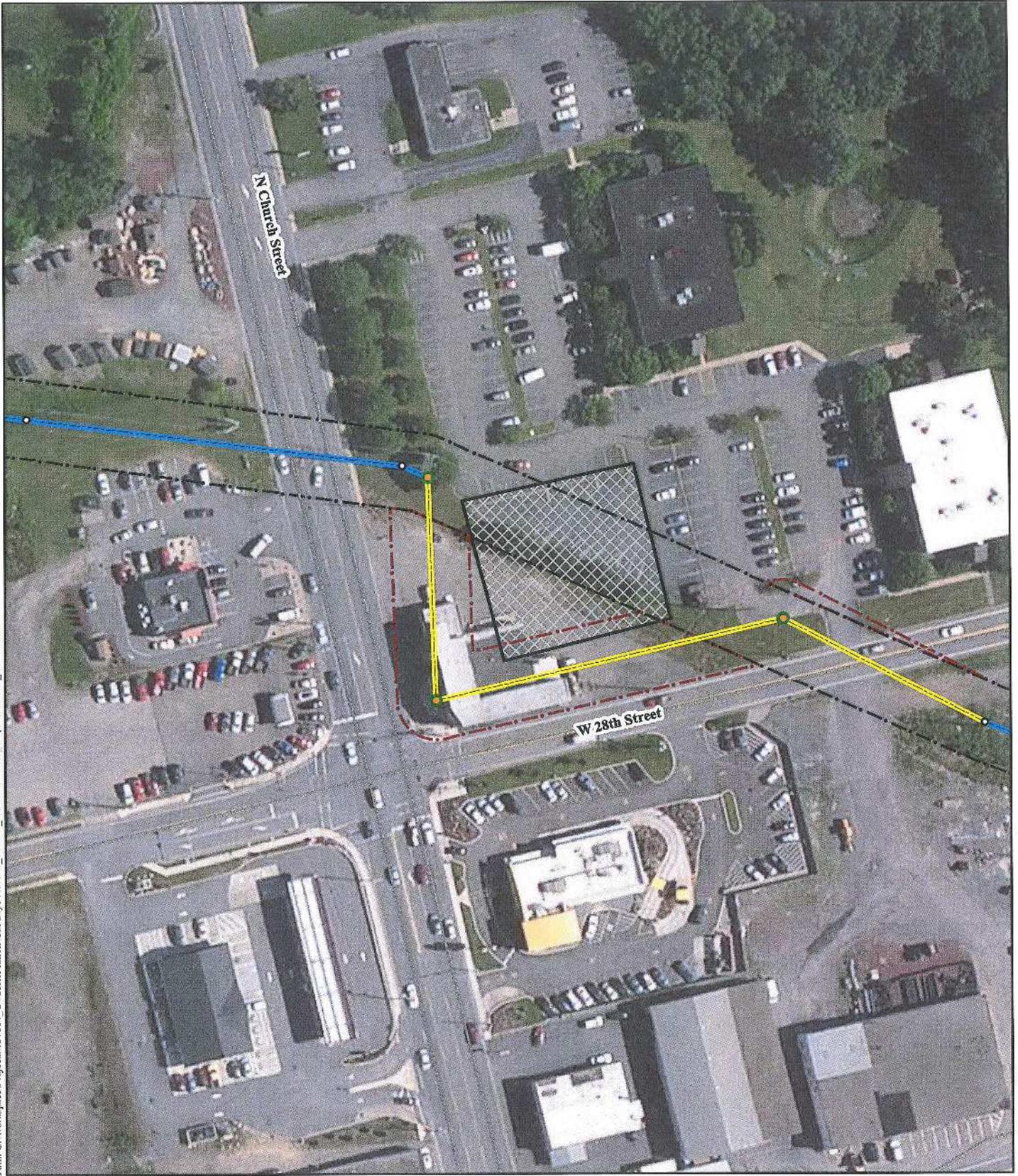
NAD 1983 StatePlane Pennsylvania North FIPS 3701 Foot  
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Date: 3/24/2015  
Author: KK  
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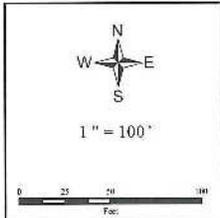
**CVS Relocation Project**  
Project Overview  
Existing Transmission Line  
**DRAFT**

# **ATTACHMENT 2**

Path: C:\Workspace\Projects\137084\_CVSR relocation\GIS\ProjOverview\_137084\_CVSR relocation\_ProposedTLine\_35x11.mxd



- Existing Structure
- Proposal Structure
- Existing Alignment
- Proposed Alignment
- Slate Road
- Existing 60' Corridor
- Proposed 60' Corridor
- CVS Footprint



The State of Pennsylvania  
Luzerne County

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NAD 1983 StatePlane Pennsylvania North FIPS 3701 Feet  
Foot US  
Lambert Conformal Conic  
North American 1983

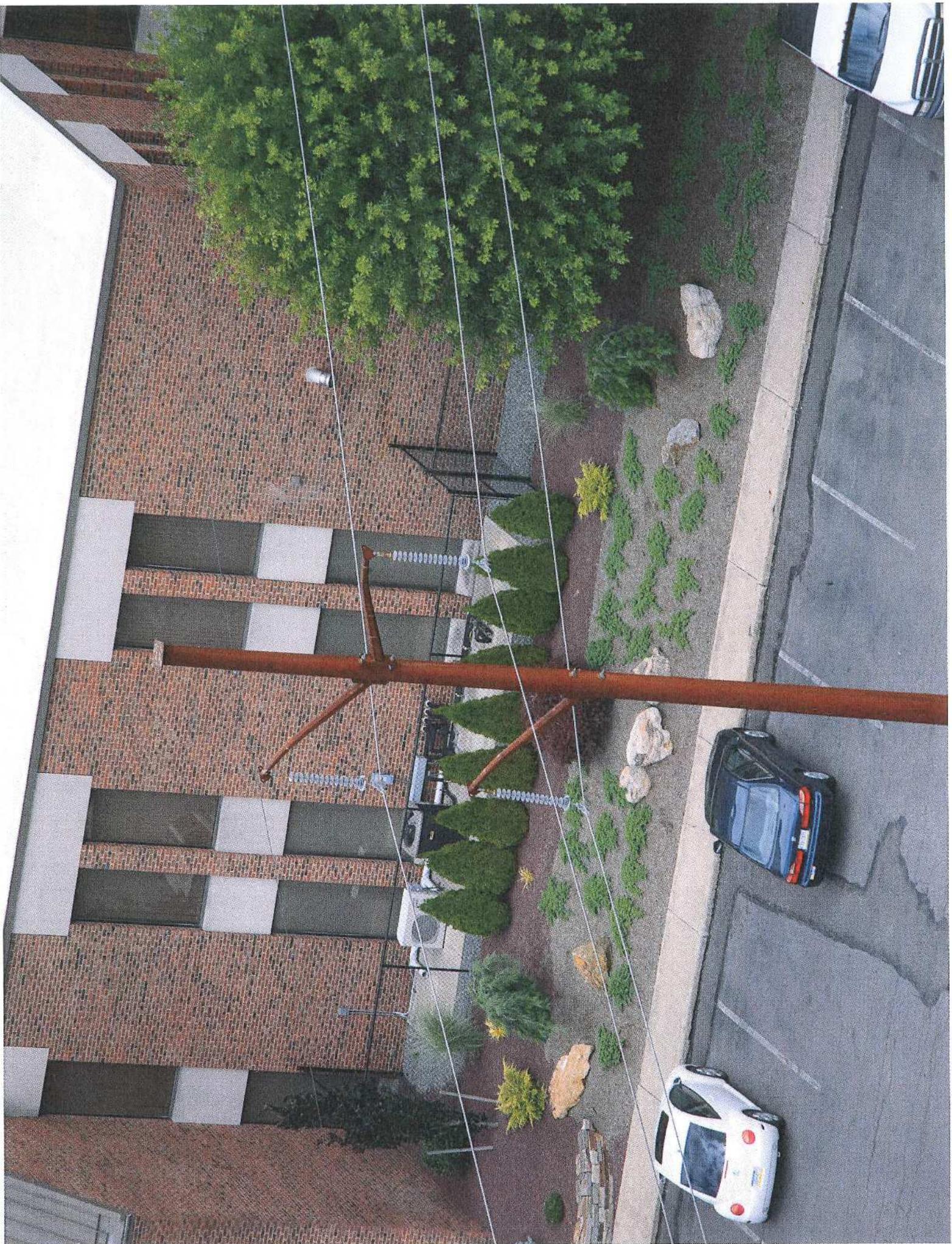
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Date: 3/24/2015  
Author: KK  
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**CVS Relocation Project**  
Project Overview  
Proposed Transmission Line  
**DRAFT**

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# **ATTACHMENT 3**



# **ATTACHMENT 4**

**ATTACHMENT 4**  
**Harleigh 138 kV Tap RELOCATION**  
**PPL DESIGN CRITERIA AND SAFETY PRACTICES**

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**A. DESIGN CRITERIA AND SAFETY PRACTICES**

The National Electrical Safety Code (NESC) is a set of rules to safeguard people during the installation, operation, and maintenance of electric power lines. The NESC contains the basic provisions considered necessary for the safety of employees and the public. Although it is not intended as a design specification, its provisions establish minimum design requirements. PPL Electric Utilities Corp. (PPL) has developed design specifications and safety rules which meet or surpass all requirements specified by the NESC.

Engineering Design Criteria and Parameters

The NESC includes loading requirements and clearances for the design, construction, and operation of power lines. The "loads" on conductors and supporting structures are the mechanical forces that develop from the weight of the conductors, the weight of ice on the conductors, plus wind pressure on the conductors and supporting structures. Loading requirements are the loads on the conductors and structures that are anticipated assuming certain ice and wind conditions. Loading requirements always contain "safety factors" to allow for unknown or unanticipated contingencies. The clearances and loading requirements contained in the NESC were developed to ensure public safety and welfare.

PPL transmission line design standards meet or surpass the NESC standards. For example, the relative order of grades of construction for conductors and supporting structures is B, C, and N; Grade B being the highest. According to the NESC standards, construction Grades B, C, or N may be used for transmission lines (except at crossings of railroad tracks and limited access highways where Grade B construction is specified). However, PPL designs all of its transmission lines for Grade B construction. The use of Grade B design and construction specifies

enhancements such as larger-minimum crossarm dimensions, larger-minimum conductor size, and increased safety factors.

Another example is the design parameters utilized to account for ice and wind loadings on the overhead ground wire (OHGW) and power conductors. The NESC standard ice and wind design magnitudes for the PPL territory are 0.5 inch thickness of radial ice combined with four pounds per square foot horizontal wind pressure (equivalent to 40-mile per hour wind velocity). The conductor sags and tensions used in line designs are the result of various ice and wind combinations, depending on the elevation at the line location and line design voltage. The conductor sags and tensions used in the design of all PPL transmission lines are at least 0.5-inch ice combined with eight pounds wind pressure (equivalent to 57 miles per hour wind velocity). This means that PPL lines are designed to operate safely and reliably during inclement weather even more severe than assumed by the NESC. In addition, PPL transmission lines are designed with more clearance to the ground than required by the NESC. The tables below compare PPL and NESC ground clearances for lines of various voltages.

**138 kV**

<u>Surface Underneath Conductors</u>	<u>Vertical Clearance to Ground</u>	
	<u>NESC Standard</u>	<u>PPL Design</u>
Roads, streets, alleys	21 Ft.	30 Ft.
Other land traversed by vehicles (such as cultivated field, forest, etc.)	21 Ft.	30 Ft.
Spaces accessible to pedestrians only	17 Ft.	30 Ft.
Railroad tracks	31 Ft.	35 Ft.

**230 kV**

<u>Surface Underneath Conductors</u>	<u>Vertical Clearance to Ground</u>	
	<u>NESC Standard</u>	<u>PPL Design</u>
Roads, streets, alleys	23 Ft.	32 Ft.
Other land traversed by vehicles (such as cultivated field, forest, etc.)	23 Ft.	32 Ft.
Spaces accessible to pedestrians only	19 Ft.	32 Ft.
Railroad tracks	31 Ft.	36 Ft.

## 500 kV

<u>Surface Underneath Conductors</u>	<u>Vertical Clearance to Ground</u>	
	<u>NESC Standard</u>	<u>PPL Design</u>
Roads, streets, alleys	28 Ft.	53 Ft.
Other land traversed by vehicles (such as cultivated field, forest, etc.)	28 Ft.	53 Ft.
Spaces accessible to pedestrians only	24 Ft.	53 Ft.
Railroad tracks	38 Ft.	53 Ft.

A relay protection system is used to protect the public safety and welfare as well as equipment and the transmission system. Relay protection is installed for all transmission lines to automatically de-energize the line in the unlikely event that the line or supporting structure fails and the line contacts the ground.

### Periodic Maintenance Program on All Transmission Lines

To ensure continued public safety and integrity of service, a periodic maintenance and inspection program is implemented for every transmission line. The program is administered through the use of helicopter patrols, with supplemental foot and structure climbing patrols. A number of helicopter patrols are performed on all lines annually. The two-man helicopter crew flies parallel, to the left, and above the line so that the observer can look for signs of line damage or deterioration and observe clearances between vegetation and conductors. The observations are included in a report that is forwarded to the appropriate department for corrective action. Foot and structure climbing patrol programs for a transmission line begin approximately three to five years after the line is energized, unless a helicopter patrol reports a need for earlier action. The frequency of foot patrols varies from once every year to once every several years depending on line type and age.

An assigned foot patroller checks right-of-way conditions, including access roads, bridges, pole washouts, tower footers, vegetation height and clearance to conductors, pole and tower deterioration and, with the use of binoculars, insulators, and condition of hardware. Identified problems are included in a report that is forwarded to the appropriate department for corrective action.

A scheduled line outage is required to perform an overhead patrol because of "hands-on" inspection of hardware. Overhead patrols are conducted on a schedule determined by line age, operating record, and observed general condition. The necessary repairs are also done during the inspection outage.

### Personnel Safety Rules

The following are a few of the PPL safety rules that demonstrate the Company's concern for employee safety:

- Work procedures have been developed to allow work to be performed on energized facilities in a safe manner. When lines or apparatus are removed from service to be worked on, the Energy Control Process system is applied. This system provides that a red tag must be physically placed on the control handle of the de-energized equipment. The red tag may be removed only after proper authorization to energize the equipment. Various other tags are used for limited operations and informational purposes. Employees will not apply or remove a tag or change the status of tagged equipment unless authorized.
- Temporary safety grounds are used on de-energized facilities for employee safety during maintenance, construction, or reconstruction work. Safety grounds are wires connecting the de-energized facility to an electrical ground. If the facility should be energized, the safety grounds will divert the current directly to ground and reduce the likelihood of personal injury. The conductor size and attachment clamps of temporary safety grounds must be capable of conducting anticipated fault currents. Rubber gloves, rubber sleeves, and additional rubber protective equipment are used as required when applying or removing temporary safety grounds to or from the lines or apparatus to be grounded. An approved nonconductive working stick of sufficient length to allow workers to maintain the following required minimum clearances is used to test that the line has been de-energized and to apply temporary safety grounds:

<u>Voltage-kV</u>	<u>Minimum Clearance</u>
138	3' – 7"
230	5' – 3"
500	11' – 3"

Before applying grounds, a test is done to confirm that the line is de-energized. The voltage test device is checked before and after use to assure reliability. When ground pins are used to establish proper ground points, they are driven to a depth of not less than four feet as near vertical as possible.

- Poles or structures are inspected and examined for structural integrity before climbing. If there is any reason to believe that a pole is unsafe, it is stabilized before work is performed. Appropriate safety gear in the form of body belts, safety straps, hard hats, gloves, etc., is worn by linemen during line work activity.

**VERIFICATION**

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

Date: 4/27/15

Stephanie R. Raymond