



5404 Evans Road
Erie, PA 16509

February 15, 2017

Kathleen H. Burgess, Secretary to the Commission
State of New York Public Service Commission
3 Empire State Plaza, 14th Floor
Albany, NY 12223

RE: Certification of Stray Voltage Testing and Inspection

Dear Ms. Burgess,

In accordance with Section 7(b) of the New York Electric Safety Standards (Case 04-M-0159) ("Standards"), this letter is to certify that Pennsylvania Electric Company ("Penelec") exercised due diligence in carrying out a plan designed to meet the Standards' stray voltage testing requirements, including quality assurance and, to the best of my knowledge, has tested all of its publicly accessible electric facilities and streetlights.

In accordance with Section 7(c) of the Standards, this letter is to certify further that the utility has exercised due diligence in carrying out a plan designed to meet the Standards' inspection requirements, including quality assurance and, to the best of my knowledge, the utility has inspected the requisite number of electric facilities as explained in the February 15, 2017 report.

Copies of this certification, the attached report and inspection data are available for public review at the Penelec offices located at:

88 Plaza Drive
Towanda, PA 18848

Should you have any questions regarding this certification or the attached report, please feel free to contact my office at 814-868-8812.

Sincerely,

A handwritten signature in black ink that reads "Scott R. Wyman". The signature is written in a cursive, flowing style.

Scott R. Wyman
Regional President, Penelec
5404 Evans Road
Erie, Pennsylvania 16509

Cc: Tori L. Giesler



Pennsylvania Electric Company

Stray Voltage Testing and Inspection

**Report on the results of stray voltage testing and inspection for the
12-month period ending on December 31, 2016**

February 15, 2017

New York Stray Voltage Testing & Inspection Report

1. Introduction

Pennsylvania Electric Company (“Penelec”), using facilities it leases from its subsidiary, Waverly Electric Light and Power Company, provides electric utility service to approximately 3,900 customers in New York State. Pursuant to the requirements of Section 9 of Appendix A of the New York Public Service Commission’s (“NYPSC”) December 15, 2008 *Order Adopting Changes to Electric Safety Standards* in Case 04-M-0159 (“Standards”),¹ Penelec provides this report detailing its Stray Voltage Testing and Inspection program conducted over the twelve-month period ending December 31, 2016.

2. Performance Mechanism

As described below, personnel from Penelec performed stray voltage testing on 100% of Penelec’s publicly accessible transmission and distribution facilities and streetlights in 2016. Therefore, no rate adjustment pursuant to Section 10 of the Standards is required or appropriate.

3. Certifications

The certifications required under Section 7 of the Standards accompany this report.

4. Stray Voltage Testing

In accordance with the requirements of Section 3 of the Standards, stray voltage testing is performed annually on 100% of Penelec’s electric facilities and streetlights used to render service in the State of New York pursuant to the criteria set out in the NYPSC’s procedures entitled *Distribution Inspection & Maintenance Practice – NY Electrical Safety Standards Appendix A - Stray Voltage Testing Practice* (“Stray Voltage Testing Program”). Under the Stray Voltage Testing Program, stray voltage testing is performed on all Penelec electric facilities that are conductive and are publicly accessible. Testing is not performed on customer-owned facilities, except for government-owned streetlights and traffic control devices in or along the public thoroughfare.

If stray voltage is found to be present using the initial testing probe, a specific voltage reading is then taken with more precise measuring equipment. All findings greater than one volt as well as any supplemental findings testing greater than one volt are identified, recorded, tracked, and mitigated.

¹ As updated by the NYPSC’s January 8, 2015 *Order Granting in Part Petition to Modify Electric Safety Standards* in Case 04-M-0159.

Attachment 1 to this report contains a breakdown of the voltage findings in a tabular format for all findings that resulted in a reading of one volt or more. Because no locations were identified in this cycle, no corrective measures were required.

5. Shock Reports

In accordance with Section 9(a)(5) of the Standards, Attachment 2 to this report contains a breakdown of shock reports received from the public. This attachment shows no shock reports were received in 2016.

6. Analysis of Results – Stray Voltage Testing

The annual stray voltage testing results have been analyzed and reviewed for the purpose of assessing the adequacy and effectiveness of this testing program. In addition, the stray voltage readings obtained during the testing period have been reviewed by the appropriate personnel to determine if any systemic conditions were present. A review of the 2016 test results did not suggest that any system-wide corrective measures were required.

7. Priority Levels

See Section 8 of this report, “Facilities Inspection.”

8. Facilities Inspection

Section 4 of the Standards requires that Penelec facilities be inspected on a five-year cycle, beginning in 2005. The last complete inspection of all facilities was completed by December 31, 2015. The next complete inspection of all facilities will be performed during calendar year 2020 pursuant to the criteria set out in Penelec’s procedures entitled *Distribution Inspection & Maintenance Practice – NY Electrical Safety Standards, Appendix B – Inspection Practice*.²

² As agreed to in October 2005 between Penelec and the staff of the New York Public Service Commission, Penelec will inspect all facilities subject to inspection within a single year’s period due to the small size of Penelec’s New York service territory and the low number of structures subject to inspection. The results of that inspection in will be included in Penelec’s report applicable to that annual period.

9. Deficiencies Identified

In accordance with Section 9(a)(9) of the Standards, Attachment 3 contains two tables. The “Detail of Deficiencies by Facilities” table is a breakdown of the deficiencies found during the 2010 and the 2015 inspection years. The deficiencies are categorized by repaired in time frame, repaired-overdue, not repaired-not due and not repaired-overdue. This information is provided by priority level and by equipment groupings.

The second table in Attachment 3 is a summary of all deficiencies found in the 2010 and 2015 facilities inspection. The table tracks by priority level the number of deficiencies found, repaired in time frame, repaired-overdue, repaired-not due and not repaired-overdue in the five year period of 2012 through 2016. Attachment 3 reflects that all deficiencies identified during the 2010 and 2015 facilities inspections have since been remediated.

10. Analysis of Results – Facilities Inspection

See Section 8 of this report, “Facilities Inspections.”

11. Quality Assurance

Quality assurance measures are undertaken to insure that all recorded data and testing results are accurate, thorough and complete.

Personnel from FirstEnergy Service Company³ performed quality assurance audits on over 2% of the service facilities located in New York previously tested for stray voltage in 2016. Quality assurance audits were completed on December 6, 2016, at 158 randomly selected sites. The audits showed no material differences between the testing data obtained at the time of initial testing and the data obtained at the time of the quality assurance audit.

³ Penelec is one of ten electric utility companies in the FirstEnergy Corp. hold company system. In addition to electric service that is rendered to customers in the Waverly territory, Penelec, together with these other electric distribution utility affiliates, provides electric utility service to six million customers in Ohio, Pennsylvania, New Jersey, West Virginia and Maryland. FirstEnergy Service Company is another affiliate (wholly-owned by FirstEnergy Corp.), which provides support services to all these distribution utilities (which includes, for example, accounting, human resources, legal and, pertinent here, technical engineering support).

**Attachment 1
Summary of Voltage Findings**

Pole Site Number	Location	Stray Voltage Initial Finding				Action / Corrective Measure	Stray Voltage Readings After Mitigation			
		Ground (volts)	Riser (volts)	Guy (volts)	Other (volts)		Ground (volts)	Riser (volts)	Guy (volts)	Other (volts)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Attachment 2
Summary of Shock Reports from the Public**

	Quarterly Update	Yearly Total
I. Total Shock Calls Received:	0	0
Unsubstantiated		
Normally Energized Equipment		
Stray Voltage:		
Person		
Animal		
II. Injuries Sustained / Medical Attention Received:		
Person		
Animal		
III. Stray Voltage Source:		
Utility Responsibility (Total)		
Overhead Distribution System		
Underground Distribution System		
Transmission System		
Other Utility / Gov't Agency (Total)		
Streetlight		
Other (Total)		
Customer Responsibility (Total)		
IV. Voltage Range:		
1.0 V to 4.4 V		
4.5 V to 24.9 V		
25 V and above		
Unknown		

Attachment 3

Detail of Deficiencies by Facilities	2010			2015		
	I	II	III	I	II	III
	Within 1 week	Within 1 year	Within 3 years	Within 1 week	Within 1 year	Within 3 years
Overhead Facilities						
Repaired in Time Frame	1	22	902	N/A	95	26
Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Not Due	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Total Overhead Facilities	1	22	902	N/A	95	26
Underground Facilities						
Repaired in Time Frame	N/A	23	N/A	N/A	3	N/A
Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Not Due	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Total Overhead Facilities	N/A	23	N/A	N/A	3	N/A
Pad-mounted Facilities						
Repaired in Time Frame	N/A	13	N/A	N/A	15	N/A
Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Not Due	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Total Overhead Facilities	N/A	13	N/A	N/A	15	N/A
Streelight Facilities						
Repaired in Time Frame	N/A	N/A	N/A	N/A	2	N/A
Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Not Due	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Total Overhead Facilities	N/A	N/A	N/A	N/A	2	N/A
Transmission Facilities						
Repaired in Time Frame	N/A	N/A	N/A	N/A	N/A	N/A
Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Not Due	N/A	N/A	N/A	N/A	N/A	N/A
Not Repaired - Overdue	N/A	N/A	N/A	N/A	N/A	N/A
Total Overhead Facilities	N/A	N/A	N/A	N/A	N/A	N/A

Attachment 3

Summary of Deficiencies and Repair Activity Resulting from the Inspection Process							
Year	Priority Level / Repair Expected	Deficiencies Found (Total)	Repaired in Time Frame	Repaired - Overdue	Not Repaired - Not Due	Not Repaired - Overdue	
2012	I	Within 1 week	N/A	N/A	N/A	N/A	N/A
	II	Within 1 year	N/A	N/A	N/A	N/A	N/A
	III	Within 3 years	N/A	168	N/A	734	N/A
	IV	N/A	N/A	N/A	N/A	1	N/A
2013	I	Within 1 week	N/A	N/A	N/A	N/A	N/A
	II	Within 1 year	N/A	N/A	N/A	N/A	N/A
	III	Within 3 years	N/A	734	N/A	N/A	N/A
	IV	N/A	N/A	N/A	N/A	1	N/A
2014	I	Within 1 week	N/A	N/A	N/A	N/A	N/A
	II	Within 1 year	N/A	N/A	N/A	N/A	N/A
	III	Within 3 years	N/A	N/A	N/A	N/A	N/A
	IV	N/A	N/A	N/A	N/A	1	N/A
2015	I	Within 1 week	N/A	N/A	N/A	N/A	N/A
	II	Within 1 year	115	32	N/A	83	N/A
	III	Within 3 years	26	21*	N/A	5	N/A
	IV	N/A	N/A	N/A	N/A	N/A	N/A
2016	I	Within 1 week	N/A	N/A	N/A	N/A	N/A
	II	Within 1 year	N/A	83	N/A	N/A	N/A
	III	Within 3 years	N/A	5	N/A	N/A	N/A
	IV	N/A	N/A	N/A	N/A	N/A	N/A

*The 2015 Attachment 3 report previously reported 20 Priority III deficiencies completed in 2015. That number should have been 21 completed deficiencies. Therefore, Attachment 3 in the 2016 report has been updated to reflect this change.