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September 27, 2018

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SEP 27 2018

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Re: PUC Docket No. M-2009-2094773
Rulemaking Re: Inspection, Maintenance, Repair, and Replacement Standards for
Electric Distribution Companies, Pursuant to 52 Pa.Code § 57.198(a)

Dear Secretary Chiavetta:

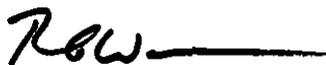
In accordance with the Electric Service Reliability Standards at 52 Pa. Code Chapter 57.198, enclosed is PECO's Biennial Inspection, Maintenance, Repair and Replacement Plan for the period of January 1, 2020 through December 31, 2021.

PECO specifically requests continuation of a waiver from pole loading calculations under 52 Pa. Code §57.198(n)(2)(vi), approved by the Commission in prior years. This exemption does not include the additional directive to perform subsequent assessments of pole strength prior to attachment of non-company facilities, required per Secretarial Letter dated 12/22/2014.

PECO also requests a new waiver from the five-year inspection cycle for above-ground pad-mounted distribution transformer inspections under 52 Pa. Code §57.198(n)(6). Specifically, PECO is requesting to move from a five-year inspection cycle to an eight-year inspection cycle for these transformers.

Please acknowledge receipt of this Plan on the enclosed copy of this letter. Thank you for your assistance in this matter.

Sincerely,



cc: Office of Consumer Advocate
Office of Small Business Advocate
Darren Gill, Bureau of Technical Utility Services
David Washko, Bureau of Technical Utility Services

Enclosure
JAB/mec



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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

**Biennial Inspection, Maintenance, Repair and Replacement Plan of
PECO Energy Company Pursuant to 52 Pa. Code § 57.198(a)**

For the period of January 1, 2020 – December 31, 2021

**Submitted by:
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SVP and COO
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Dated: October 1, 2018

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List of Changes from 2018-2019 I&M Plan (by section)

***NOTE:** All page numbers referenced below refer to locations within the 2020-2021 Plan herein. Page numbers vary between this Plan and the prior 2018-2019 Plan.*

General

- Updated data tables in all sections to reflect 2020-2021 targets (various).
- Updated inspection plans in all sections to reflect 2017 performance as well as 2020-2021 targets (various).

Vegetation Management

- Removed reference to 34kV Overhang from program description (Page 5). The program still includes 34kV, but the specific callout initially referenced in the 2018-2019 plan is no longer necessary.
- Removed reference to increased vegetation management approved as part of PECO's 2015 electric rate case proceeding, Docket No. R-2015-2468981; Replaced with statement acknowledging PECO's current inspection plan (Page 5).
- Added that PECO will report separately on its proposed supplementary vegetation management related to Emerald Ash Borer (EAB) infestation if that work is approved as part of its 2018 electric distribution rate case proceeding, Docket No. R-2018-3000164 (Page 5).

Distribution Wood Pole Inspections

- Removed sentence from "Pole Loading Calculations" section identifying PECO compliance start year (Page 7).

Distribution Overhead Line Inspections

- Added broken cut-outs and broken crossarms to list of visual inspections identifying defective equipment. Noted that list includes but is not limited to these components (Page 9).
- Added confirmation that PECO inspects automatic splices per the recommendations of the EDC Splice Best Practices Working Group (Page 9).

Distribution Transformer Inspections

- Requested exemption from Section 57.198(n)(6) that, if approved, would permit PECO to visually inspect above-ground pad-mounted transformers as often as every 8 years, rather than as often as every 5 years per the current regulation (Page 11-12).

Introduction

Pursuant to 52 Pa. Code § 57.98, PECO Energy Company (“PECO” or the “Company”) prepared this Biennial Inspection, Maintenance, Repair and Replacement Plan (the “Plan”) for the periodic inspection, maintenance, repair and replacement of facilities and with a purpose of meeting the Company’s reliability performance benchmarks and standards. The Plan documents the measures that the Company will take to comply with the relevant parts of Section 57.98 between January 1, 2020 and December 31, 2021.

Plan Consistency

Section 57.198 (b). Plan Consistency. The plan must be consistent with the National Electrical Safety Code, Codes and Practices of the Institute of Electrical and Electronics Engineers, Federal Energy Regulatory Commission Regulations and the provisions of the American National Standards Institute, Inc.

All of PECO’s planned inspection, maintenance, repair, and replacement activities are consistent with the National Electrical Safety Code (NESC), Codes and Practices of the Institute of Electrical and Electronics Engineers (IEEE), Federal Energy Regulatory Commission (FERC) regulations, and the provisions of the American National Standards Institute, Inc. (ANSI) as applicable to the work performed.

Recordkeeping

Section 57.198 (m). Recordkeeping. An EDC shall maintain records of its inspection and maintenance activities sufficient to demonstrate compliance with its distribution facilities inspection, maintenance, repair, and replacement programs as required by subsection (n). The records shall be made available to the Commission upon request within 30 days. Examples of sufficient records include:

- (1) Date-stamped records signed by EDC staff who performed the tasks related to inspection.*
- (2) Maintenance, repair and replacement receipts from independent contractors showing when and what type of inspection, maintenance, repair or replacement work was done.*

PECO maintains records of its inspection, maintenance, repair, and replacement biennial plan activities in the form of date-stamped paper or electronic records with the name of the PECO staff member or approved contractor who performed the work.

Vegetation Management

Section 57.198(n)(1). Vegetation Management. *The statewide minimum inspection and treatment cycle for vegetation management is between 4-8 years for distribution facilities. An EDC shall submit a condition-based plan for vegetation management for its distribution system facilities explaining its treatment cycle.*

Program Description

The intent of PECO's Vegetation Management program is to ensure the safe and reliable delivery and operation of the electric distribution system. PECO's Vegetation Management program is primarily composed of a Distribution Preventive Maintenance Routine Pruning program in which all circuits on the PECO system are trimmed to specification once every five years. This core program is complemented by the following programs that are intended to further improve reliability:

- Hazard/Strategic Tree Removal Program – Primarily executed in conjunction with the Distribution Preventive Maintenance Routine Program. Intended to remove dead or declining trees along the conductor path and remove non-compatible fast-growing trees that are below or beside the line.
- Mid Cycle Program – Targets circuit segments which have experienced higher than average vegetation related interruptions and are in the third year of the five-year cycle. Focuses on trimming these circuits back to specification and removing any dead wood or declining trees along the conductor paths.
- Distribution Herbicide Program – Distribution circuits are treated to keep brush down and remove new growth below the conductors.

PECO employs a third-party utility line clearance contractor for all of its vegetation work. The non-herbicide work is executed through a combination of manual control methods including both hand tools and mechanical means such as mowers, equipment mounted saws and other devices. PECO's herbicide program uses selective basal herbicide applications, foliage applications and cut stump applications.

PECO intends to complete inspections and routine trimming on all planned miles as outlined below within the required timeframe.

The vegetation management activities identified in this Plan represent PECO's currently planned work. The Settlement Agreement pending approval as part of PECO's current electric distribution rate case proceeding (Docket No. R-2018-3000164) includes terms that would require PECO to separately report on the status of proposed vegetation management related to removal of ash trees vulnerable to Emerald Ash Borer (EAB) infestation. PECO therefore has not included the proposed activities within that scope as part of this Plan.

Inspection Plan

1. PECO inspected and treated 3,384 miles of circuits of 2017, exceeding PECO’s approved I&M plan for 2,636 miles.
2. By the end of 2018, PECO will have met or exceeded its planned five-year inspection goals.
3. PECO proposes to perform 2,119 inspections in 2020 and 2,304 in 2021.

	Area	Inspections and Treatments Planned	
		(Total Line Miles – 12,947)	
		2020	2021
PECO Total Miles – 12,947	Bucks/Montgomery Co.	574	784
	Delaware/Chester/York Co.	922	895
	Philadelphia	623	625
	Total	2,119	2,304

Section 57.198(c). Time frames. The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC’s unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.

Justification

Vegetation management activities are performed in accordance with the following:

- Generally accepted industry practices
- Compliant with ANSI Z133.1 and A-300 Standards

Distribution Wood Pole Inspections

Section 57.198(n)(2). Pole Inspections. *Distribution poles shall be inspected at least as often as every 10 – 12 years except for the new southern yellow pine creosoted utility poles which shall be initially inspected within 25 years, then within 12 years annually after the initial inspection.*

Pole inspections must include:

- i. Drill tests at and below ground level*
- ii. A shell test*
- iii. Visual inspection for holes or evidence of insect infestation*
- iv. Visual inspection for evidence of unauthorized backfilling or excavation near the pole*
- v. Visual inspection for signs of lightning strikes*
- vi. A load calculation*

Program Description

PECO visually inspects all distribution wood poles at least as often as every 10 – 12 years. This program is designed to extend the life of the wood pole infrastructure and to identify those poles that require replacement or reinforcement.

A full inspection will be performed on poles older than 12 years and includes:

- i. Drill tests at and below ground level
- ii. A shell test
- iii. Visual inspection for holes or evidence of insect infestation
- iv. Visual inspection for evidence of unauthorized backfilling or excavation near the pole
- v. Visual inspection for signs of lightning strikes

Pole Loading Calculations

The Pennsylvania Public Utility Commission (the “Commission”) previously exempted PECO from conducting pole loading calculations as part of these inspections, originally effective with the approval of PECO’s 2012-2013 Biennial I&M Plan. *PECO requests a continuation of this exemption for the 2020-2021 period.*

When approving PECO’s 2016-2017 Plan, the Commission required PECO to assess pole strength prior to attaching non-Company facilities to its poles, per Secretarial Letter dated December 22, 2014, Docket No. M-2009-2094773. Such assessments require PECO to perform pole loading calculations.

Inspection Plan

1. PECO completed 39,279 inspections in 2017, exceeding PECO’s approved I&M plan for 32,764 inspections.
2. PECO is on track to meet the 2018 planned inspections.
3. PECO proposes to perform 34,695 inspections in 2020 as well as in 2021.
4. PECO will continue to assess pole strength prior to attachment of non-Company facilities.



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Distribution Wood Pole Inspections

	Area	Distribution Wood Pole Inspections (Total poles 416,340)	
		2020	2021
PECO (416,340 total distribution wood poles)	PECO Service Area 416,340 total distribution wood poles	34,695	34,695

Section 57.198(n)(3). Inspection Failure. If a pole fails the groundline inspection and shows dangerous conditions that is an immediate risk to public or employee safety or conditions affecting the integrity of the circuit; then the pole shall be replaced within 30 days of the date of inspection.

Corrective Maintenance

If an inspector has reason to believe that any pole presents an imminent hazard to the public, the inspector immediately reports this condition to the PECO contract administrator and project manager. PECO ensures that such conditions are mitigated within 30 days. All remaining deficiencies are scheduled and prioritized based on criticality.

Section 57.198(c). Time frames. The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.

Justification

The program cycle was determined based on industry practice. PECO is located in decay severity zone 3 per the U.S. Department of Agriculture's RUS Bulletin 1730B-121, 2013. Such industry data indicates that pole life extension is achieved if a pole requiring treatment is treated every 10 - 12 years. An effective treatment program will extend the life of a typical pole from 45 to 65 years.



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Distribution Overhead Line Inspections

Section 57.198(n)(4). Distribution overhead line inspections. *Distribution lines shall be inspected by ground patrol a minimum of once every 1 – 2 years. A visual inspection must include checking for:*

- i. Broken insulators*
- ii. Conditions that may adversely affect operation of the overhead distribution line*
- iii. Other conditions that may adversely affect operation of the overhead distribution line*

Program Description

PECO inspects primary distribution overhead lines and equipment up to fused rear property portions a minimum of once every 1 – 2 years. The purpose of this program is to identify and repair conditions that may adversely affect reliability, safety and/or environment. To support various analyses, additional data is gathered on an as-needed basis. As referenced in Sections 57.198(n)(6) and 57.198(n)(7), overhead transformers and single-phase reclosers are inspected as a part of this program.

The program consists of visual inspections that identify defective equipment including but not limited to:

- i. Broken insulators
- ii. Broken cut-outs
- iii. Broken crossarms
- iv. Automatic splices¹
- v. Other conditions that may adversely affect operation of the overhead distribution line

Inspection Plan

1. PECO completed 1,950 circuit patrols in 2017, exceeding PECO's approved I&M plan for 966 inspections.
2. PECO is on track to meet the 2018 planned inspections.
3. PECO proposes to perform 975 inspections in 2020 and 976 inspections in 2021.

¹ PECO has reviewed and implemented the recommendations outlined by the EDC Splice Best Practices Working Group in its Final Report, dated November 1, 2016 (Docket # M-2015-2511794).



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Distribution Overhead Line Inspections

	Area	Overhead Line Inspections (1,951 total circuits)	
		2020	2021
PECO (1,951 total circuits)	Bucks/Montgomery Co. 689 total circuits	344	345
	Delaware/Chester/York Co. 597 total circuits	298	298
	Philadelphia 665 total circuits	333	333
	Total	975	976

Section 57.198(n)(5). Inspection Failure. If critical maintenance problems are found that affect the integrity of the circuits, they shall be repaired or replaced no later than 30 days from discovery.

Corrective Maintenance

Maintenance problems vary in nature and criticality. Safety hazards and environmental issues are reported immediately to the Operations Center for emergent repair. An emergent repair is defined as Priority 10 or 20 work which shall be repaired or mitigated in a brief amount of time, less than 30 days.

Section 57.198(c). Time frames. The plan must comply with the inspection and maintenance standards in subsection (N). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (N). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.

Justification

Section 12.121 (A) of the NESC states that "Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary." PECO's distribution system consists of many aerial and distribution cable facilities, which are exposed to physical, electrical and environmental stresses. To ensure the safe and reliable operation of the system, it must be periodically maintained and inspected. Effectiveness reviews have shown that the established 1-2 year inspection program has successfully lowered customer outages caused by aerial equipment failures, therefore improving customer reliability.



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Distribution Transformer Inspections

Section 57.198(n)(6). Distribution transformer inspections. *Overhead distribution transformers shall be visually inspected as part of the distribution line inspection every 1 – 2 years. Above-ground pad-mounted transformers shall be inspected at least as often as every 5 years and below-ground transformers shall be inspected at least as often as every 8 years. An inspection must include checking for:*

- i. Rust, dents or other evidence of contact*
- ii. Leaking oil*
- iii. Installation of fences or shrubbery that could adversely affect access to and operation of the transformer*
- iv. Unauthorized excavation or changes in grade near the transformer*

Program Description

PECO visually inspects overhead distribution transformers as part of the overhead line inspections, per Section 57.198(n)(4). Pad-mount transformers are visually inspected at least as often as every 5 years and below-ground transformers are visually inspected at least as often as every 8 years. These inspections are designed to identify defective equipment and structures that could affect system reliability.

Visual inspections are intended to identify abnormal conditions including:

- i. Rust, dents or other evidence of contact
- ii. Leaking oil
- iii. Installation of fences or shrubbery that could adversely affect access to and operation of the transformer
- iv. Unauthorized excavation or changes in grade near the transformer

Exemption Request – Above-Ground Padmount Transformer Inspection Cycle

PECO is requesting a waiver to move from a 5-year inspection cycle to an 8-year inspection cycle for above-ground padmount transformer inspections. This would coincide with both the PUC's required eight-year cycle for below-ground transformers and align more closely with Exelon Utilities' best practices for transformer inspections. PECO notes that other EDCs in Pennsylvania have requested and received similar exemptions and justifies its own request as follows:

1. **Low Defect Find Rates.** PECO currently has 53,730 above-ground padmount transformers that are inspected on the 5-year inspection cycle. Historically, PECO has found the defect find rate from these visual inspections to be low, and the type of defects identified (i.e. rust, signage, alignment on pad, etc.) would not result in transformer failure or customer outages. In 2017, PECO visually inspected 9,816 padmount transformers and identified 12 (less than 0.01%) as leaking oil, a defect that could possibly result in eventual transformer failure.



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Distribution Transformer Inspections

2. **Small Yearly Contribution to SAIFI Index.** Over the last five years (2013 – 2017), padmount transformer failure have accounted for 0.3% of PECO’s yearly overall SAIFI. Most of the failure types identified were internal to the transformer and cannot be identified or predicted based on external visual inspection. PECO therefore expects that moving from a 5-year to an 8-year inspection cycle will have negligible (if any) impact on SAIFI.

3. **Operational Efficiency.** The added cost of inspecting at a five-year frequency may not justify the reliability gained. PECO estimates that changing from a 5-year to an 8-year inspection cycle would provide additional manpower that could be applied to programs having more cost-effective impacts on reliability.

Inspection Plan

1. PECO completed 9,816 above-ground pad-mounted transformer inspections in 2017, exceeding PECO’s approved I&M plan for 9,733 inspections.
2. PECO completed 3,478 below-ground transformer inspections in 2017, exceeding PECO’s approved I&M plan for 1,738 inspections.
3. PECO is on track to meet the 2018 planned inspections.
4. PECO proposes to perform 8,281 inspections in 2020 as well as in 2021.
5. The planned inspection volumes for above-ground “pad-mounted transformers” are based on an 8-year inspection cycle per the above exemption request.

	Area	Type	Transformer Inspections Planned	
			66,264 total transformers	
			2020	2021
PECO 66,264 total transformers	Bucks/Montgomery Co. (30,662 total transformers)	Pad-mounted Trans. (25,579 total transformers)	3,197	3,197
		Below-ground Trans. (5,083 total transformers)	635	635
	Delaware/Chester/York Co. (28,096 total transformers)	Pad-mounted Trans. (22,368 total transformers)	2,796	2,796
		Below-ground Trans. (5,728 total transformers)	716	716
	Philadelphia (7,506 total transformers)	Pad-mounted Trans. (5,802 total transformers)	725	725
		Below-ground Trans. (1,704 total transformers)	212	212
Total			8,281	8,281



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Distribution Transformer Inspections

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

Section 12.121 (A) of the NESC states that "Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary." The practice of performing the established cycles is based on effectiveness reviews and industry practice. Such reviews have confirmed that the transformer inspection program has a positive impact in customer reliability.

Recloser Inspections

Section 57.198(n)(7). Recloser Inspections. *Three-phase reclosers shall be inspected on a cycle of 8 years or less. Single-phase reclosers shall be inspected as part of the EDC's individual distribution line inspection plan.*

Program Description

PECO visually inspects single phase reclosers through the Distribution Overhead Line Inspection Program, per Section 57.198(n)(4).

PECO visually inspects and tests three-phase reclosers on a cycle of eight years or less. Duty cycle readings, settings and circuit print accuracy are also verified.

Inspection Plan

1. PECO inspected 518 three-phase reclosers in 2017, exceeding PECO's approved I&M plan for 200 inspections.
2. PECO is on track to meet the 2018 planned inspections.
3. PECO proposes to perform 246 inspections in 2020 as well as in 2021.

	Area	Three-Phase Recloser Inspections	
		1,964 total reclosers	
		2020	2021
PECO 1,964 total reclosers	Bucks/Montgomery Co. (672 total reclosers)	84	84
	Delaware/Chester/York Co (871 total reclosers)	109	109
	Philadelphia (421 total reclosers)	53	53
	Total	246	246

Section 57.198(c). Time frames. *The plan must comply with the inspection and maintenance standards in subsection (n). A justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However, an EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provided that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support an alternative approach that will support the level of reliability required by law.*

Justification

Section 12.121 (A) of the NESC states that "Electric equipment shall be inspected and maintained at such intervals as experience has shown to be necessary." The practice of performing the established cycles is based on PECO's experience on recloser performance. Inspecting three-phase reclosers per the established cycles can prevent misoperations and will save customer interruptions during events, thus improving reliability to the customers.

Substation Inspections

Section 57.198(n)(8). Substation inspections. Substation equipment, structures and hardware shall be inspected on a cycle of 5 weeks or less.

Program Description

PECO inspects its substations every 5 weeks with an allowable grace period of 25% of the task interval, which for this periodicity is 8 days. The grace period is provided to allow for scheduling efficiency and emergency response to equipment failures and storms. The purpose of these inspections is to capture and trend readings and perform visual inspections of the substation yard and equipment. These inspections help to ensure that any developing substation problems are identified and addressed in a timely manner to support system reliability and electrical safety. The data from these inspections is captured and trended in an equipment database.

Each inspection is customized to the equipment installed in the substation/switchyard and, based on the equipment, includes the following types of readings and inspections:

- Read and record currents, voltages, watts, vars, MVAs, temperatures, pressures, operations counters, run-hours, levels, and specific gravity readings.
- Substation control house inspection (security breaches, general housekeeping).
- Substation yard and perimeter (gate, locks, fence, signage)
- Substation equipment
- Batteries and chargers
- Relays
- Station service power equipment

Inspection Plan

Inspections are divided into two basic categories for tracking purposes since they are completed by different work groups. Substations which represent PECO's transmission and distribution substations are typically larger and contain DC systems. Unit Substations represent smaller distribution substations (from 33 or 13 kV to 2.4, 4 or 13 kV), and do not contain DC systems.

1. PECO completed 1,394 substation inspections in 2017, exceeding PECO's approved I&M plan for 1,320 inspections.
2. PECO completed 3,183 unit substation inspections in 2017, exceeding PECO's approved I&M plan for 3,060 inspections.
3. PECO is on track to meet the 2018 planned inspections.
4. PECO proposes to perform 2,970 inspections in 2020 and 2,960 inspections in 2021.



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Substation Inspections

PECO	Area	Substation Inspections Planned	
		2020	2021
	<i>Total Substations</i>	434	432
Substations (137 in 2020, 136 in 2021)	Bucks/Montgomery Co (37 substations)	370	370
	Delaware/Chester/York / Hartford Co (MD) (47 substations)	470	470
	Philadelphia (53/52 substations)	530	520
	Total	1370	1360
Unit Substations (297 in 2020, 296 in 2021)	Bucks/Montgomery Co (131/130 unit substations)	1310	1300
	Delaware/Chester/York / Hartford Co (MD) (134 unit substations)	1340	1340
	Philadelphia (32 unit substations)	320	320
	Total Inspections	2970	2960

Section 57.198(c) Time Frames. The plan must comply with the inspection and maintenance standards in subsection (n). A Justification for the inspection and maintenance time frames selected shall be provided, even if the time frame falls within the intervals prescribed in subsection (n). However and EDC may propose a plan that, for a given standard, uses intervals outside the Commission standard, provide that the deviation can be justified by the EDC's unique circumstances or a cost/benefit analysis to support and alternative approach that will support the level of reliability required by law.

Justification

The practice of performing 5-week substation inspections with an allowed grace period of 25% is based on accepted utility practices and the basis for the various inspection tasks are captured and documented on the individual Preventative Maintenance templates associated with each substation component. Historically, a period of 5 to 6 weeks between substation inspections has been utilized and has proven to be effective at identifying and addressing developing substation or equipment issues in a timely manner in support of system reliability and electrical safety. The effectiveness of the inspections is periodically reviewed at a component level and as part of event investigations. Adjustments are made to the program as warranted to improve system reliability and safety as a result of the reviews. In addition, there are many opportunities for other PECO personnel or approved PECO vendors to view substation facilities in the course of their day to day work in and around the substations such as facilities maintenance inspections and switching and blocking being performed for scheduled and emergent work.

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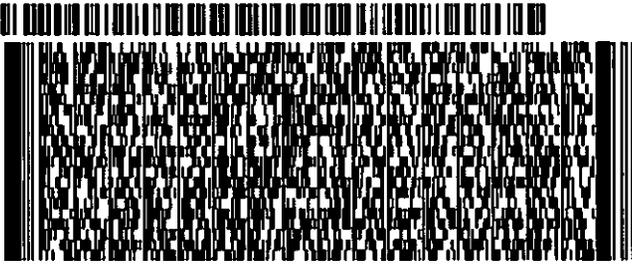
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TO ROSEMARY CHIAVETTA
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REF: BIENNIAL INSPECTION REPORT.

INV. PO. DEPT.

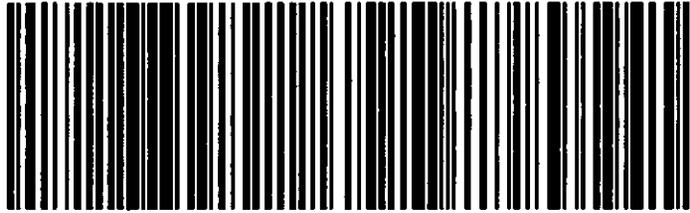


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