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November 1, 2017

VIA UNITED PARCEL SERVICE

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Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

**Re: Joint 3rd Quarter 2017 Reliability Report – Metropolitan Edison Company,
Pennsylvania Electric Company, Pennsylvania Power Company and West Penn
Power Company – Public Version**

M-2016-2522508

Dear Secretary Chiavetta:

Pursuant to 52 Pa. Code § 57.195(d) and (e), enclosed for filing on behalf of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company (collectively, the “Companies”) are two copies of the Joint 3rd Quarter 2017 Reliability Report – Public Version (“Joint Report”). Please date stamp the additional copy and return it in the postage-prepaid envelope provided.

On December 22, 2004, the Companies filed an Application for Protective Order at Docket No. L-00030161. The Application was granted, allowing the Companies to file proprietary versions of the quarterly reliability reports. The Proprietary Version of this Joint Report is being filed under separate cover.

Please feel free to contact me if you have any questions or need additional information regarding this matter.

Sincerely,

Tori L. Giesler

Enclosures

- c: As Per Certificate of Service
D. Gill – Bureau of Technical Utility Services (via email and first class mail)
D. Searfoorce - Bureau of Technical Utility Services (via email and first class mail)
D. Washko – Bureau of Technical Utility Services (via email and first class mail)

Met-Ed
A FirstEnergy Company

Penelec
A FirstEnergy Company

PennPower
A FirstEnergy Company

**WestPenn
Power**
A FirstEnergy Company



Joint 2017 3rd Quarter Reliability Report

Metropolitan Edison Company,
Pennsylvania Electric Company,
Pennsylvania Power Company, and
West Penn Power Company

Pursuant to 52 Pa. Code § 57.195(d) and (e)

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

**Joint 3rd Quarter 2017 Reliability Report –
 Metropolitan Edison Company (“Met-Ed”),
 Pennsylvania Electric Company (“Penelec”),
 Pennsylvania Power Company (“Penn Power”), and
 West Penn Power Company (“West Penn”)**

Section 57.195(e)(1): A description of each major event that occurred during the preceding quarter, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted in order to avoid or minimize the impact of similar events in the future.¹

Major Event(s)

FirstEnergy Company	Customers Affected	Time and Duration of the Event		Cause of the Event	Commission Approval Status
West Penn	3,748	Duration	42 hours, 16 minutes	Flooding	Approved October 3, 2017
		Start Date/Time	July 28, 2017 18:29		
		End Date/Time	July 30, 2017 12:45		
Penelec	1,111	Duration	40 hours, 11 minutes	Flooding	Approved October 3, 2017
		Start Date/Time	July 23, 2017 22:21		
		End Date/Time	July 25, 2017 14:32		

¹ For purposes of this Joint Report, all reliability reporting is based upon the Pennsylvania Public Utility Commission’s definitions for momentary outages and major events pursuant to 52 Pa. Code § 57.192.

Section 57.195(e)(2): Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available MAIFI) for the EDC's service territory for the preceding quarter. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customer interruptions, the number of customers affected, and the customer minutes of interruption. If MAIFI values are provided, the report shall also include the number of customer momentary interruptions.

Reliability Index Values

3Q 2017 (12-Mo Rolling)	Met-Ed			Penelec			Penn Power			West Penn		
	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual
SAIFI	1.15	1.38	1.48	1.26	1.52	1.69	1.12	1.34	1.19	1.05	1.26	1.28
CAIDI	117	140	138	117	141	137	101	121	135	170	204	165
SAIDI	135	194	205	148	213	232	113	162	161	179	257	211
MAIFI²			1.18			4.58			0.22			
Customers Served³	560,364			580,601			162,470			714,568		
Number of Sustained Interruptions	10,169			12,370			3,257			11,864		
Customers Affected	828,911			981,962			193,198			914,917		
Customer Minutes	114,627,987			134,695,322			26,086,435			150,950,147		
Number of Customer Momentary Interruptions	661,775			2,658,082			36,110					

² MAIFI values are not available for West Penn.

³ Represents the average number of customers served during the reporting period.

Unique Events Occurring in 3Q 2017:

Met-Ed

- On September 5, 2017, Met-Ed experienced outages from thunderstorms and high winds that impacted a total of 47,610 customers (8.5 percent of Met-Ed's total customers). Although the entire service territory was impacted by this event, the York area sustained the heaviest amount of damage. This event accounted for 22 minutes of SAIDI, 261 minutes of CAIDI and a 0.09 SAIFI impact.

Section 57.195(e)(3): Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) and other pertinent information such as customers served, number of interruptions, customer minutes interrupted, number of lockouts, and so forth, for the worst performing 5% of the circuits in the system. An explanation of how the EDC defines its worst performing circuits shall be included.

Worst Performing Circuits – Reliability Indices

The methodology used to identify worst performing circuits is based on both System Average Interruption Frequency Index (“SAIFI”) and System Average Interruption Duration Index (“SAIDI”). The methodology consists of the following steps:

1. For each circuit calculate a circuit SAIFI using only distribution-caused outages.
2. Select the worst 20% of circuits based on the highest circuit SAIFI.
3. Rank the selected circuits based on SAIDI using only distribution-caused customer minutes.
4. Select 5% of the circuits based on the highest customer minutes. These circuits are then identified as the worst performing circuits.

Met-Ed, Penelec, Penn Power, and West Penn’s rankings of the 5% Worst Performing Circuits are provided in Attachment A to this report.

Section 57.195(e)(4): Specific remedial efforts taken and planned for the worst performing 5% of the circuits identified in paragraph (3).

Worst Performing Circuits – Remedial Actions

Met-Ed, Penelec, Penn Power, and West Penn’s Remedial Actions for Worst Performing Circuits are provided in Attachment B to this report.

Section 57.195(e)(5): A rolling 12-month breakdown and analysis of outage causes during the preceding quarter, including the number and percentage of service outages, the number of customers interrupted, and customer interruption minutes categorized by outage cause such as equipment failure, animal contact, tree related, and so forth. Proposed solutions to identified service problems shall be reported.

Outages by Cause

Outages by Cause – Met-Ed

Outage by Cause				
3rd Quarter 2017 12-Month Rolling	Met-Ed			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
Equipment failure	22,297,706	2,220	200,710	21.83%
Trees off ROW - tree	41,519,775	1,720	205,555	16.91%
Unknown	7,414,453	1,249	74,757	12.28%
Animal	2,234,559	1,227	28,970	12.07%
Line failure	10,278,612	673	75,872	6.62%
Bird	291,869	493	2,951	4.85%
Trees off ROW - limb	5,374,559	443	48,190	4.36%
Forced outage	3,135,177	437	50,991	4.30%
Trees on ROW	4,709,158	427	15,023	4.20%
Trees - sec/service	767,929	373	1,419	3.67%
Lightning	2,366,300	309	14,073	3.04%
Vehicle	10,557,864	300	66,889	2.95%
Human error - non-company	711,637	69	10,786	0.68%
Object contact with line	977,524	42	5,406	0.41%
Overload	183,370	36	3,297	0.35%
Previous lightning	29,033	28	135	0.28%
Human error - company	142,624	27	8,157	0.27%
UG dig-up	95,818	25	1,182	0.25%
Wind	1,022,277	17	3,694	0.17%
Customer equipment	10,189	17	46	0.17%
Other electric utility	211,481	16	8,388	0.16%
Fire	56,204	9	227	0.09%
Vandalism	39,017	8	445	0.08%
Other utility - non-electric	200,852	4	1,748	0.04%
Total	114,627,987	10,169	828,911	100.00%

Proposed Solutions – Met-Ed

Met-Ed analyzes its outage data to develop solutions for improving reliability. The following paragraphs identify the top outage causes for the rolling twelve-month period ending September 30, 2017, and associated actions designed to address these outage causes.

To reduce the likelihood of equipment-caused outages, Met-Ed follows Inspection and Maintenance (“I&M”) programs⁴ that set forth schedules for regular inspections of distribution and substation facilities. These programs are geared towards specific components such as capacitors, poles, circuits, transformers, radio-controlled switches, substations, and reclosers. Equipment identified is repaired or replaced as appropriate.

To address outages caused by trees, Met-Ed performs cycle-based tree trimming and enhanced tree trimming in select locations. Enhanced trimming removes overhanging limbs in Zones 1 and 2,⁵ controlling incompatible brush and clearing cross country rights-of-way with mowing in Zones 1 and 2. Trees identified as a potential cause of a future outage are removed to prevent an interruption of electrical service to Met-Ed’s customers.

Outages caused by unknown factors are patrolled by a troubleman and recorded as having an unknown cause. For certain unknown outages, engineering may conduct a post-outage circuit inspection as needed to determine if additional actions are necessary.

Generally speaking, there are a number of other reliability projects that have been identified to help reduce the number of, and limit the duration and impact of, interruptions to customers. These include:

- **Protective devices** – To ensure the adequate protection of circuits and ultimately minimize outage frequency and duration by reducing the scope of large outages, Met-Ed installs fuses on unprotected segments of distribution circuits.

⁴ Pursuant to 52 Pa. Code § 57.198, every two years an electric distribution company shall file, and receive approval from the Commission of, a biennial plan for the periodic inspection, maintenance, repair and replacement of its facilities. On December 30, 2013, Paul Diskin, Director, Technical Utility Services, issued a letter approving the Company’s biennial inspection, maintenance, repair, and replacement plan effective January 1, 2015 through December 31, 2016. Further, on March 4, 2016 an additional letter was issued approving the plans effective January 1, 2017 – December 31, 2018.

⁵ Zone 1 is defined as the portion of the circuit from the substation breaker to the first protective device. Zone 2 is defined as the three-phase conductor and devices after the first protective device.

- **Circuit ties and loops** – To address customers served by radial circuits, Met-Ed continues to build distribution ties and loops between radial sections of its circuits. This allows for circuit switching during outages and enables faster service restoration for customers.
- **Circuit rehabilitation** – Met-Ed continues to perform circuit rehabilitation on select circuits. Specifically, Met-Ed performs inspections to identify equipment replacement needs and then schedules and completes the work.
- **Installation of supervisory control and data acquisition (“SCADA”) devices** – Met-Ed continues to install SCADA to provide communication with circuit breakers, line switches, and reclosers. SCADA enables these devices to be operated remotely which reduces restoration time and ultimately reduces SAIDI, SAIFI, and CAIDI indices.
- **Underground Residential Distribution (“URD”) Cable Replacement** - Met-Ed’s URD Cable Replacement program targets the replacement of bare concentric neutral cable which was manufactured without an insulating jacket around the concentric neutral wires. This design often caused the cable to fail prematurely.
- **Porcelain cutout replacement** – Met-Ed continues to proactively replace porcelain cutouts with polymer cutouts. Failed porcelain cutouts ultimately cause lockouts of reclosers and circuit breakers, as well as other equipment damage.
- **Clusters of customers** – Met-Ed focuses on clusters of customers that experience frequent operations of line protection devices. In addition to enhancing system performance, this focus reduces the frequency of outages at the customer level.

Outages by Cause – Penelec

Outage by Cause				
3rd Quarter 2017 12-Month Rolling	Penelec			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
Equipment failure	26,963,098	2,823	271,418	22.82%
Trees off ROW - tree	50,118,754	1,821	218,762	14.72%
Unknown	7,028,899	1,765	87,514	14.27%
Animal	2,603,381	1,228	25,741	9.93%
Line failure	15,861,387	1,032	126,090	8.34%
Forced outage	5,297,631	925	62,138	7.48%
Lightning	3,944,612	510	37,642	4.12%
Trees - sec/service	431,736	510	1,551	4.12%
Bird	1,068,901	440	17,119	3.56%
Trees off ROW - limb	3,538,647	375	23,245	3.03%
Vehicle	6,247,597	267	40,543	2.16%
Trees on ROW	743,074	142	3,643	1.15%
Human error - non-company	2,681,448	111	18,192	0.90%
Other electric utility	5,976,309	95	14,189	0.77%
UG dig-up	59,527	54	406	0.44%
Overload	355,937	46	7,112	0.37%
Human error - company	367,365	46	17,411	0.37%
Previous lightning	48,338	44	289	0.36%
Object contact with line	858,271	35	6,115	0.28%
Ice	234,207	26	890	0.21%
Customer equipment	18,429	25	176	0.20%
Wind	146,493	17	1,218	0.14%
Vandalism	4,547	13	17	0.11%
Fire	10,930	9	91	0.07%
Contamination	3,832	6	17	0.05%
Other utility - non-electric	81,972	5	433	0.04%
Total	134,695,322	12,370	981,962	100%

Proposed Solutions – Penelec

Penelec analyzes its outage data to develop solutions for improving reliability. The following paragraphs identify the top outage causes for the rolling twelve-month period ending September 30, 2017 and the associated actions designed to address these outage causes.

To reduce the likelihood of equipment-caused outages, Penelec follows I&M programs that set forth schedules for regular inspections of distribution and substation facilities. These programs are geared towards specific components such as capacitors, poles, circuits, transformers, radio-controlled switches, substations, and reclosers. Equipment identified is repaired or replaced as appropriate.

To target outages caused by trees, Penelec performs cycle-based tree trimming, which includes the proactive removal of Ash trees that have been deemed a threat due to the Emerald Ash Borer, as well as additional tree trimming techniques.

Outages caused by unknown factors are patrolled by a troubleman and recorded as having an unknown cause. For certain unknown outages, engineering may conduct a post-outage circuit inspection as needed to determine if additional actions are necessary.

Generally speaking, there are a number of other reliability projects that have been identified to help reduce the number of, and limit the duration and impact of, interruptions to customers. These include:

- **Protective devices** - Penelec continues to proactively install additional protective devices on its 34.5 kV circuits. Planning and protection engineers perform a full circuit coordination study to construct and implement fuse protection and coordination recommendations. By reviewing coordination and installing additional protective devices fewer customers will be affected during an outage, and ultimately reduces Penelec's SAIFI performance. The selected circuits are based on overall performance and protection needs.
- **Circuit ties and loops** – To address interruptions experienced by customers served by radial circuits, Penelec continues its plans to build distribution ties and loops between radial sections of its circuits. This allows for circuit switching during outages and enables faster service restoration for customers.

- **Circuit rehabilitation** – Penelec continues to perform circuit rehabilitation on select circuits. Specifically, Penelec performs inspections to identify equipment replacement needs and then schedules and completes the work.
- **Installation of SCADA devices** – Penelec continues to install SCADA to provide communication with circuit breakers and line switches. SCADA enables these devices to be operated remotely, reducing restoration time, and ultimately SAIDI, SAIFI, and CAIDI indices.
- **Porcelain cutout replacement** – Penelec continues to proactively replace porcelain cutouts with polymer cutouts. Failed porcelain cutouts ultimately cause lockouts of reclosers and circuit breakers, as well as other equipment damage.
- **Customer Service Improvement (“CSI”) program** – Penelec’s CSI program provides a means to reduce the frequency of outages at the customer level that might not be otherwise addressed when targeting overall system metrics. The CSI program continues to focus on customer complaints as a starting point to analyze clusters of customers that experience frequent or repeated outages. A thorough review and analysis of equipment on a customer’s line is performed by Company engineers to determine whether action is required.
- **Cap and Pin Insulator Replacement program** - Penelec’s Cap and Pin Insulator Replacement program replaces older, brown porcelain cap and pin style substation insulators that are prone to failure. Replacing older insulators improves reliability by reducing the number of outages caused by insulator failure and reduces damage to adjacent equipment when insulators fail.

Outages by Cause – Penn Power

Outage by Cause				
3 rd Quarter 2017 12-Month Rolling	Penn Power			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
Trees off ROW - tree	15,234,766	856	52,411	26.28%
Animal	1,174,524	411	12,656	12.62%
Equipment failure	2,515,297	324	44,763	9.95%
Bird	255,910	305	3,002	9.36%
Line failure	1,679,764	293	13,804	9.00%
Lightning	823,843	269	7,028	8.26%
Trees off ROW - limb	1,051,194	171	4,141	5.25%
Trees - sec/service	162,939	142	585	4.36%
Unknown	739,218	142	18,353	4.36%
Forced outage	390,418	101	8,761	3.10%
Vehicle	1,443,502	86	11,049	2.64%
Previous lightning	30,977	44	286	1.35%
Overload	125,576	24	925	0.74%
Human error - company	258,372	21	13,602	0.64%
Human error - non-company	85,275	19	1,048	0.58%
Trees on ROW	32,656	16	290	0.49%
UG dig-up	11,613	9	213	0.28%
Object contact with line	9,468	8	90	0.25%
Fire	39,443	4	131	0.12%
Customer equipment	12,043	3	12	0.09%
Other utility - non-electric	2,134	3	14	0.09%
Ice	676	2	7	0.06%
Vandalism	198	2	2	0.06%
Other electric utility	77	1	1	0.03%
Wind	6,552	1	24	0.03%
Total	26,086,435	3,257	193,198	100%

Proposed Solutions – Penn Power

Penn Power analyzes its outage data to develop solutions for improving reliability. The following paragraphs identify the top outage causes for the rolling twelve-month period ending September 30, 2017 and the associated actions designed to address these outage causes.

To address outages caused by trees, Penn Power performs cycle-based tree trimming and enhanced tree trimming that includes the removal of a large number of trees (healthy or not) located outside of the right-of-way.

To address outages caused by animals and birds, Penn Power installs animal guards on equipment that experiences a high frequency of animal and bird related outages. When possible, animal guards are installed at the time service is restored to prevent future outages caused by animals and birds.

To reduce the likelihood of equipment-caused outages, Penn Power follows Inspection and Maintenance (“I&M”) programs that set forth schedules for regular inspections of distribution facilities. These programs are geared towards specific components such as capacitors, poles, circuits, transformers, and reclosers. Equipment identified is repaired or replaced as appropriate.

Generally speaking, there are several other reliability projects that have been identified to help reduce the number of, and limit the duration and impact of, interruptions to customers. These include:

- **Circuit ties, loops and sources** – To improve reliability by reducing long duration outages, Penn Power continues to install new distribution circuit ties and loops and add new sources which create an alternate path from which power is provided to customers affected by an outage.
- **Circuit rehabilitation** - Penn Power continues the rehabilitation of its 69 kV transmission lines which includes the replacement of equipment such as poles, switches, crossarms, insulators and braces. This program targets the reduction of CAIDI and SAIDI.
- **Installation of SCADA devices** – SCADA provides communication with circuit breakers and line switches, and enables these devices to be operated remotely, reducing restoration time and ultimately reducing SAIDI, SAIFI, and CAIDI indices.

- **URD Cable Replacement** – Penn Power’s URD Cable Replacement program targets the replacement of bare concentric neutral cable which was manufactured without an insulating jacket around the concentric neutral wires. This design often caused the cable to fail prematurely.
- **Clusters of customers** – Penn Power focuses on clusters of customers that experience frequent operations of line protection devices. In addition to enhancing system performance, it also provides a means to reduce the frequency of outages at the customer level that might not be otherwise addressed when targeting overall system metrics.

Outages by Cause – West Penn

Outage by Cause				
3 rd Quarter 2017 12-Month Rolling	West Penn			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
Trees off ROW - tree	73,383,391	3,208	296,848	27.04%
Equipment failure	22,504,245	2,235	177,218	18.84%
Unknown	10,055,901	1,833	89,536	15.45%
Animal	2,329,637	1,091	24,664	9.20%
Line failure	15,305,642	1,087	92,700	9.16%
Forced outage	3,022,378	546	55,920	4.60%
Trees on ROW	8,551,103	431	39,132	3.63%
Vehicle	8,085,707	352	64,948	2.97%
Bird	643,535	314	8,593	2.65%
Trees - sec/service	317,115	286	1,903	2.41%
Trees off ROW - limb	3,275,290	220	21,842	1.85%
Human error - non-company	825,692	65	8,312	0.55%
UG dig-up	177,036	43	1,077	0.36%
Lightning	937,679	42	6,558	0.35%
Human error - company	191,805	38	8,746	0.32%
Object contact with line	368,984	27	3,934	0.23%
Overload	252,239	10	5,488	0.08%
Customer equipment	9,549	8	45	0.07%
Fire	83,614	8	694	0.07%
Switching error	185,916	5	3,672	0.04%
Vandalism	109,716	5	434	0.04%
Other electric utility	208,916	5	998	0.04%
Other utility - non-electric	105,053	2	1,626	0.02%
Previous Lightning	6,049	2	24	0.02%
Wind	13,955	1	5	0.01%
Total	150,950,147	11,864	914,917	100%

Proposed Solutions – West Penn

West Penn analyzes its outage data to develop solutions for improving reliability. The following paragraphs identify the top outage causes for the rolling twelve-month period ending September 30, 2017, and the associated actions designed to address these outage causes.

To reduce outages caused by trees, West Penn performs cycle-based tree trimming and continues its program to accelerate the mitigation of trees subject to damage by the Emerald Ash Borer.

To reduce the likelihood of equipment-caused outages, West Penn follows I&M programs that set forth schedules for regular inspections of distribution and substation facilities. These programs are geared towards specific components such as capacitors, poles, circuits, transformers, substations, and reclosers. Equipment identified is repaired or replaced as appropriate.

Outages caused by unknown factors are patrolled by a troubleman and recorded as having an unknown cause. For certain unknown outages, engineering may conduct a post-outage circuit inspection as needed to determine if additional actions are necessary.

Generally speaking, there are a number of other reliability projects that have been identified to help reduce the number of, and limit the duration and impact of, interruptions to customers. These include:

- **Protective devices** – To ensure the adequate protection of circuits and ultimately minimize outage frequency and duration by reducing the scope of large outages, West Penn installs new fused cutouts on unprotected circuits.
- **Circuit rehabilitation** - West Penn continues to perform circuit rehabilitation on select circuits. Specifically, West Penn performs inspections to identify equipment replacement needs and then schedules and completes the work. This program focuses on strengthening Zones 1 and 2 by identifying equipment for replacement such as poles, switches, crossarms, insulators, braces, and cutouts.
- **Enhanced rehabilitation** - West Penn targets select Worst Performing Circuits for enhanced rehabilitation, which can include hardware rehabilitation, coordination review, installation of additional protective devices, or recloser installation.

- **Enhanced overcurrent protection and SCADA control** – The enhanced overcurrent protection program installs new electronic reclosers with SCADA control at targeted substations which limits the number of customers affected and allows for remote switching to restore customers more quickly. Adding SCADA control to electronic reclosers in select substations with existing SCADA capabilities provides additional monitoring and also allows for remote switching to restore customers at the circuit level more quickly.
- **Sub-transmission modernization and automation** – The sub-transmission modernization and automation program oversees the installation of SCADA controlled reclosers and switches on the sub-transmission system and also includes automatic air switch modernization. To provide enhanced sectionalizing for larger blocks of customers at the substation source level, West Penn installs electronic reclosers at the substation. This enables West Penn to restore large sections of customers more quickly.
- **URD Cable Replacement** - West Penn's URD Cable Replacement program targets the replacement of bare concentric neutral cable, which was manufactured without an insulating jacket around the concentric neutral wires. This design often caused the cable to fail prematurely.
- **Underground getaway replacement** – The underground getaway replacement program replaces select underground substation exits, also referred to as underground getaways. A getaway is a cable that leads out of the substation to the overhead lines. Specifically, this program targets underground getaways that were installed prior to 1988 and are known to be prone to failure. By replacing these getaways, West Penn will reduce the interruptions to a circuit associated with the cable as well as the long interruption times associated with the replacement.
- **Clusters of customers** - West Penn focuses on clusters of customers that experience frequent operations of line protection devices. This not only aims to enhance system performance, but it also provides a means to reduce frequency of outages at the customer level that might not be otherwise addressed when targeting overall system metrics.

Section 57.195(e)(6): Quarterly and year-to-date information on progress toward meeting transmission and distribution inspection and maintenance goals/objectives (for first, second and third quarter reports only).

Inspection and Maintenance 2017		Met-Ed			Penelec			Penn Power			West Penn		
		Planned	Completed		Planned	Completed		Planned	Completed		Planned	Completed	
		Annual	3Q	YTD	Annual	3Q	YTD	Annual	3Q	YTD	Annual	3Q	YTD
Forestry	Transmission (Miles)	288.28 ⁶	50.23	191.82	435.17	65.77	280.60	61.67	16.86	51.45	301.88	63.36	149.08
	Distribution (Miles)	2,895	524	1,384	3,792	935	2,300	1,187	369	910	4,589	1,075	2,965
Transmission	Aerial Patrols	2	1	2	2	1	2	2	0	1	2	1	2
	Groundline	0	0	0	1,863	1,691	1,691	680	0	855	1,076	930	1,352
Substation	Substation Inspections Class A	422	210	422	800	400	800	146	73	146	970	482	970
	Substation Inspections Class B	422	0	212	800	0	400	146	0	73	970	3	486
	Substation Inspections Class C	1,688	420	1,268	3,200	800	2,400	584	146	438	3,880	975	2,920
	Transformers	246	75	194	553	117	493	107	82	104	517	156	481
	Breakers	110	15	83	272	40	229	25	12	13	402	116	243
	Relay Schemes	270	60	241	300	69	283	45	29	32	160	58	134
Distribution	Capacitors	4,754	0	4,760	8,766	0	8,766	991	0	991	1,308	0	1,308
	Poles	29,514	15,222	16,063	41,591	0	41,920	10,600	0	10,833	32,856	3,341	33,241
	Reclosers	1,098 ⁷	223	1,090	2,568 ⁸	2,568	2,568	814	0	815	3,798	0	3,798
	Radio-Controlled Switches	506 ⁹	37	215	2,578	386	1,688	Penn Power has no radio-controlled switches			West Penn has no radio-controlled switches		

General Note: Unless specified otherwise, all inspections are reported on a unit basis rather than on a location basis.

⁶ Met-Ed transmission miles were revised from 288.34 to 288.28 to account for a mapping update.

⁷ Two reclosers were removed from the field.

⁸ One recloser was removed from the field.

⁹ Met-Ed radio-controlled device inspection updated from 446 to 506 as 30 devices (60 inspections) were not accounted for in the table.

Section 57.195(e)(7): Quarterly and year-to-date information on budgeted versus actual transmission and distribution operation and maintenance expenditures in total and detailed by the EDC's own functional account code as available. (For first, second and third quarter reports only).

Budgeted vs. Actual T&D Operation & Maintenance Expenditures¹⁰

Met-Ed						
T&D O&M – 3Q / YTD September 2017 (\$)						
Transmission						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	0	0	1,866	0	0
561	Load Dispatching	(293)	161,765	52,977	485,294	647,058
562	Station Expenses	34,939	0	373,030	0	0
563	Overhead Lines Expenses	(5,237)	2,750	59,427	33,112	33,112
565	Transmission of Electricity by Others	3,294,332	2,323,312	9,811,479	6,869,936	9,193,248
566	Miscellaneous Transmission Expenses	(1,533)	(1,234)	2,102	(3,811)	(5,372)
567	Rents	17,601	0	131,861	0	0
568	Maintenance Supervision and Engineering	1,571	0	88,996	0	0
569	Maintenance of Structures	50,194	62,474	167,738	202,081	294,556
570	Maintenance of Station Equipment	62,348	1,021	583,217	3,063	4,085
571	Maintenance of Overhead Lines	(60,237)	0	199,542	(62,822)	(62,822)
572	Maintenance of Underground Lines	40	0	133	0	0
573	Maintenance of Miscellaneous Transmission Plant	4,419	0	32,936	0	0
575	Market Administration, Monitoring & Compliance Services	0	0	0	0	0
Transmission Total		3,398,144	2,550,088	11,505,301	7,526,853	10,103,865
Distribution						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	84,404	(10,457)	224,624	(33,999)	(46,673)
581	Load Dispatching	61,862	68,774	193,676	208,070	284,556
582	Station Expenses	211,686	172,939	582,027	497,110	673,558
583	Overhead Line Expenses	42,146	14,317	184,255	54,252	60,277
584	Underground Line Expenses	0	144,119	0	432,358	576,477
585	Distribution-Street Lighting & Signal System Expenses	0	0	0	0	0
586	Meter Expenses	151,984	158,346	459,372	445,348	610,230
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	1,687,963	1,777,469	5,248,274	5,558,551	7,536,853
589	Rents	126,878	135,218	359,316	405,655	540,873
590	Maintenance Supervision and Engineering	100,235	52,196	266,832	165,523	229,486
591	Maintenance of Structures	1,515	2,251	4,432	6,814	9,197
592	Maintenance of Station Equipment	681,292	1,266,214	2,478,150	3,547,185	4,721,647
593	Maintenance of Overhead Lines	8,958,482	5,915,969	21,385,950	17,914,136	23,963,410
594	Maintenance of Underground Lines	621,035	319,106	1,654,638	949,909	1,269,502
595	Maintenance Line Transformer	38,137	67,368	155,504	202,105	269,474
596	Maintenance of Street Lighting and Signal Systems	113,773	64,811	443,356	192,964	257,830
597	Maintenance of Meters	618,216	591,140	1,675,951	1,628,469	2,214,148
598	Maintenance of Miscellaneous Distribution Plant	456,556	180,654	1,327,240	442,697	721,416
Distribution Total		13,956,165	10,920,435	36,643,597	32,617,147	43,892,259
Met-Ed Total		17,354,309	13,470,522	48,148,898	40,144,000	53,996,125

¹⁰ Budgets are subject to change.

Penelec						
T&D O&M – 3Q / YTD September 2017 (\$)						
Transmission						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	0	0	2,595	0	0
561	Load Dispatching	(16,463)	115,255	(25,080)	345,764	461,019
562	Station Expenses	140,280	0	403,500	0	0
563	Overhead Lines Expenses	49,203	10,414	392,907	289,677	355,969
565	Transmission of Electricity by Others	8,955,021	5,529,739	21,846,672	16,389,217	21,918,956
566	Miscellaneous Transmission Expenses	972	(0)	(5,188)	(0)	(0)
567	Rents	34,816	19,893	506,776	92,115	167,963
568	Maintenance Supervision and Engineering	10,281	(0)	156,661	0	0
569	Maintenance of Structures	20,248	67,650	215,339	218,688	319,134
570	Maintenance of Station Equipment	93,125	14,999	646,271	44,998	60,000
571	Maintenance of Overhead Lines	(164,773)	41,395	479,690	(125,789)	(140,573)
572	Maintenance of Underground Lines	0	0	0	0	0
573	Maintenance of Miscellaneous Transmission Plant	(1,940)	0	34,504	0	0
575	Market Administration, Monitoring & Compliance Services	0	0	0	0	0
Transmission Total		9,120,772	5,799,346	24,654,648	17,254,671	23,142,469
Distribution						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	124,700	107,180	301,707	320,506	427,025
581	Load Dispatching	102,359	52,713	301,590	161,875	219,806
582	Station Expenses	142,928	0	363,866	0	0
583	Overhead Line Expenses	25,774	15,790	55,563	42,115	52,827
584	Underground Line Expenses	296,314	252,600	722,955	604,794	779,118
585	Distribution-Street Lighting & Signal System Expenses	0	0	0	0	0
586	Meter Expenses	173,065	148,881	492,306	449,028	616,163
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	2,514,406	2,747,045	7,638,380	8,305,066	11,351,893
589	Rents	415,900	282,929	1,146,747	848,788	1,131,717
590	Maintenance Supervision and Engineering	104,978	60,286	275,162	191,030	264,742
591	Maintenance of Structures	0	0	0	0	0
592	Maintenance of Station Equipment	1,641,992	1,311,985	4,197,870	3,930,657	5,306,478
593	Maintenance of Overhead Lines	8,775,973	6,077,713	28,660,119	16,946,743	23,361,832
594	Maintenance of Underground Lines	289,187	35,973	914,866	63,285	69,502
595	Maintenance Line Transformer	33,321	58,860	135,872	176,581	235,441
596	Maintenance of Street Lighting and Signal Systems	206,342	518,638	679,613	1,597,817	2,200,704
597	Maintenance of Meters	785,132	647,109	2,118,749	1,937,865	2,569,856
598	Maintenance of Miscellaneous Distribution Plant	84,068	15,302	994,771	43,489	141,458
Distribution Total		15,716,439	12,333,005	49,000,136	35,619,637	48,728,562
Penelec Total		24,837,211	18,132,351	73,654,784	52,874,309	71,871,031

Penn Power						
T&D O&M – 3Q / YTD September 2017 (S)						
Transmission						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	392	516	1,198	1,562	2,131
561	Load Dispatching	329	32,300	3,919	96,961	129,496
562	Station Expenses	0	(46)	0	(126)	(188)
563	Overhead Lines Expenses	859	(80)	859	(220)	(327)
565	Transmission of Electricity by Others	1,293,674	1,257,415	3,934,895	3,717,245	4,974,660
566	Miscellaneous Transmission Expenses	768	836	3,033	2,576	3,312
567	Rents	0	0	0	0	0
568	Maintenance Supervision and Engineering	3,072	3,787	9,513	11,608	15,945
569	Maintenance of Structures	5,285	6,473	18,113	20,782	31,967
570	Maintenance of Station Equipment	1,019	762	3,883	2,286	3,047
571	Maintenance of Overhead Lines	19,614	(36,105)	17,586	(81,942)	(113,596)
572	Maintenance of Underground Lines	0	0	0	0	0
573	Maintenance of Miscellaneous Transmission Plant	605	0	327	0	0
575	Market Administration, Monitoring & Compliance Services	0	0	0	0	0
Transmission Total		1,325,616	1,265,858	3,993,326	3,770,732	5,046,448
Distribution						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	0	0	667	0	0
581	Load Dispatching	0	0	0	0	0
582	Station Expenses	16,674	0	40,024	0	0
583	Overhead Line Expenses	1,478	0	100,938	0	0
584	Underground Line Expenses	70,913	131,812	160,938	395,556	527,329
586	Meter Expenses	15,638	15,914	50,527	48,208	65,503
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	405,736	446,419	1,337,707	1,234,041	1,675,198
589	Rents	85,199	79,747	256,513	239,240	318,986
590	Maintenance Supervision and Engineering	27,980	11,888	72,175	37,190	51,223
591	Maintenance of Structures	0	0	0	0	0
592	Maintenance of Station Equipment	213,061	109,694	646,466	308,683	422,770
593	Maintenance of Overhead Lines	3,321,510	2,772,062	8,785,050	7,820,747	10,587,759
594	Maintenance of Underground Lines	73,215	12,071	176,621	31,166	39,446
595	Maintenance Line Transformer	4,007	12,251	18,188	36,754	49,005
596	Maintenance of Street Lighting and Signal Systems	20,915	0	50,463	0	0
597	Maintenance of Meters	181,384	143,911	532,566	424,180	569,682
598	Maintenance of Miscellaneous Distribution Plant	76,889	91,268	236,027	295,025	429,707
Distribution Total		4,514,596	3,827,037	12,464,869	10,870,790	14,736,609
Penn Power Total		5,840,212	5,092,896	16,458,195	14,641,522	19,783,057

West Penn						
T&D O&M – 3Q / YTD September, 2017 (\$)						
Transmission:						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	10,128	6,423	28,067	20,549	28,019
561	Load Dispatching	178,069	462,744	563,926	1,413,724	1,909,320
562	Station Expenses	27,415	144,659	144,899	428,198	564,078
563	Overhead Lines Expenses	43,775	57,015	171,427	171,170	232,165
565	Transmission of Electricity by Others	14,414,965	14,173,583	41,118,609	42,236,927	56,410,511
566	Miscellaneous Transmission Expenses	59,292	61,826	173,364	162,281	263,677
567	Rents	6,297	6,810	42,299	20,431	27,242
568	Maintenance Supervision and Engineering	178,626	95,618	477,526	312,707	433,877
569	Maintenance of Structures	5,394	3,629	21,223	10,929	25,424
570	Maintenance of Station Equipment	635,583	323,533	1,858,068	1,010,700	1,368,824
571	Maintenance of Overhead Lines	3,461,042	3,171,739	7,851,970	5,936,884	8,314,564
572	Maintenance of Underground Lines	161	0	444	0	0
573	Maintenance of Miscellaneous Transmission Plant	0	0	0	0	0
575	Market Administration, Monitoring & Compliance Services	(59)	0	(20)	0	0
Transmission Total		19,020,689	18,507,580	52,451,802	51,724,499	69,577,701
Distribution:						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	45,951	19,706	159,937	61,063	91,738
581	Load Dispatching	444,667	331,927	1,389,814	1,170,042	1,570,708
582	Station Expenses	314,018	320,694	995,970	1,038,031	1,321,663
583	Overhead Line Expenses	40,087	188,461	697,537	885,669	938,409
584	Underground Line Expenses	382,981	330,000	1,005,009	875,000	1,125,000
586	Meter Expenses	268,457	398,454	793,356	1,224,112	1,679,034
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	3,540,574	3,466,817	10,540,527	10,801,845	14,532,066
589	Rents	0	0	0	0	0
590	Maintenance Supervision and Engineering	146,211	92,326	362,376	291,784	403,423
591	Maintenance of Structures	0	0	0	0	0
592	Maintenance of Station Equipment	1,883,773	1,573,127	5,782,099	4,786,047	6,416,604
593	Maintenance of Overhead Lines	10,532,242	7,687,405	29,351,489	20,667,366	27,322,843
594	Maintenance of Underground Lines	241,291	80,250	781,221	597,972	679,004
595	Maintenance Line Transformer	4,123	63,028	66,079	189,083	252,110
596	Maintenance of Street Lighting and Signal Systems	233,310	203,233	799,070	621,567	841,835
597	Maintenance of Meters	400,870	299,869	1,120,904	917,587	1,243,835
598	Maintenance of Miscellaneous Distribution Plant	32,945	55,868	129,765	167,101	285,821
Distribution Total		18,511,500	15,111,165	53,975,153	44,294,268	58,704,092
West Penn Total		37,532,188	33,618,745	106,426,955	96,018,768	128,281,793

Section 57.195(e)(8): Quarterly and year-to-date information on budgeted versus actual transmission and distribution capital expenditures in total and detailed by the EDC's own functional account code or FERC account code as available. (For first, second and third quarter reports only).

Budgeted vs. Actual T&D Capital Expenditures^{11, 12}

Met-Ed					
T&D Capital – 3Q/YTD September 2017 (\$)					
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity	831,926	4,012,141	4,573,154	8,929,235	12,234,579
Condition	2,359,313	3,257,419	7,868,711	10,312,373	13,651,818
Facilities	1,453,960	1,014,054	2,755,995	1,847,535	2,234,386
Forced	11,672,409	8,350,590	28,420,663	24,435,585	31,979,369
Meter Related	448,139	724,920	1,816,439	2,199,869	2,915,732
New Business	3,747,624	3,361,464	11,182,886	10,200,741	13,631,743
Other	7,017,256	9,864,221	28,453,868	28,703,827	38,413,081
Reliability	1,581,502	1,985,725	5,441,958	6,804,236	8,844,156
Street Light	294,892	908,592	855,737	2,718,604	3,657,218
Tools & Equipment	157,591	68,259	617,726	204,686	368,064
Vegetation Management	1,267,879	1,734,432	3,361,688	5,216,259	6,963,021
Met-Ed Total	30,832,492	35,281,817	95,348,825	101,572,950	134,893,168

Penelec					
T&D Capital – 3Q/YTD September 2017 (\$)					
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity ¹³	364,213	2,193,496	(1,111,142)	6,472,350	8,849,826
Condition	1,955,148	1,986,687	5,733,487	6,387,923	9,099,508
Facilities	2,783,386	1,926,506	4,388,301	3,652,830	3,996,302
Forced	13,446,592	15,282,408	39,701,841	38,261,063	54,075,329
Meter Related	327,975	1,088,195	1,203,599	3,230,388	4,328,578
New Business	2,852,113	2,511,869	8,267,880	7,334,768	9,706,256
Other	11,460,939	13,591,593	35,881,474	38,028,084	45,849,832
Reliability	4,378,914	2,344,146	12,130,909	6,427,590	8,682,198
Street Light	314,574	403,888	1,193,759	1,228,286	1,677,133
Tools & Equipment	100,652	112,876	441,450	336,306	531,684
Vegetation Management	3,844,788	5,348,552	12,507,184	16,194,053	22,031,962
Penelec Total	41,829,294	46,790,216	120,338,743	127,553,640	168,828,609

¹¹ Budgets are subject to change.

¹² General note: Capital reported on Generally Accepted Accounting Principles (GAAP) basis.

¹³ YTD actuals reflect a credit that was recorded to reimburse Penelec for costs incurred in 2016.

Penn Power					
T&D Capital – 3Q/YTD September 2017 (\$)					
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity	(37,806)	407,623	(17,129)	3,236,734	3,344,902
Condition	236,258	1,481,231	716,313	3,949,819	5,130,764
Facilities	8,651	0	457,464	319,077	319,077
Forced	4,271,360	2,668,041	13,612,348	7,429,272	10,123,480
Meter Related	93,807	86,378	261,743	256,279	344,211
New Business	1,304,295	348,523	3,145,321	1,111,581	1,460,104
Other	1,575,801	2,475,827	6,699,543	9,529,344	12,007,035
Reliability	4,231,321	4,182,811	9,613,380	8,732,472	11,326,433
Street Light	108,469	357,596	503,708	1,090,187	1,361,986
Tools & Equipment	18,372	3,634	74,690	10,809	25,275
Vegetation Management	1,320,692	892,801	3,065,237	2,683,041	3,581,290
Penn Power Total	13,131,222	12,904,465	38,132,618	38,348,617	49,024,556

West Penn					
T&D Capital – 3Q/YTD September 2017 (\$)					
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity	5,620,231	2,366,925	7,754,033	9,124,898	10,423,339
Condition	3,197,939	3,301,025	10,450,797	9,710,985	12,595,548
Facilities	1,792,314	2,327,498	4,355,415	3,578,387	4,040,053
Forced	10,372,722	6,178,220	29,728,983	18,778,316	25,147,542
Meter Related	534,049	716,956	1,877,040	2,167,184	2,902,668
New Business	4,500,229	6,562,226	14,524,055	19,995,123	25,816,980
Other	7,003,977	14,389,912	20,271,313	30,820,822	50,392,586
Reliability	7,484,806	12,286,928	16,442,302	20,555,745	31,804,963
Street Light	1,645,767	3,140,973	6,822,573	8,881,863	11,119,986
Tools & Equipment	563,515	580,055	1,809,664	1,347,018	1,956,383
Vegetation Management	6,205,782	8,054,331	20,524,730	22,180,866	29,255,825
West Penn Total	48,921,330	59,905,049	134,560,903	147,141,207	205,455,873

Section 57.195(e)(9): Dedicated staffing levels for transmission and distribution operation and maintenance at the end of the quarter, in total and by specific category (for example, linemen, technician, and electrician).¹⁴

Staffing Levels

Met-Ed 2017												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2018 ¹⁷
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other ¹⁵	Retirement	Voluntary Separation	Other ¹⁶	
Distribution	Line Leader	53	50	52				5	2		1	
	Line Troubleshooter	30	36	40				7	1		2	
	Lineman	115	126	123		5		2			10	
Substation	Substation Leader	16	14	15				1				
	Substation Employee	49	58	58				5		1	4	
Transmission	Line Leader	1	2	2								
	Lineman	6	5	3						1	1	
	Total	270	291	293		5		20	3	2	18	

¹⁴ As ordered on March 30, 2015 at Docket Nos. D-2014-2365991, D-2014-2365992, D-2014-2365993, and D-2014-2365994, *Implementation Plan of the Focused Management Audit of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company* (Appendix A) (5): FirstEnergy is directed to provide additional detail as described below in the staff reporting section in the Quarterly Reliability Reports. For each staff member added, provide information on whether they were a new hire, if they are already at the journeyman, or other experienced level of training. For each staff member lost, provide the reason for the loss (retirement, voluntary separation, etc.). The number of staff in each category that the Company is planning to hire in the next calendar year.

¹⁵ Includes transfers, promotions, and promotions within a position.

¹⁶ Includes transfers, involuntary separations, promotions, and promotions within a position.

¹⁷ Hiring plan to be provided annually in the 4Q report.

Penelec 2017												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2018 ²⁰
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other ¹⁸	Retirement	Voluntary Separation	Other ¹⁹	
Distribution	Line Leader	77	70	70				5	2		3	
	Line Troubleshooter	63	61	62				7	3	1	2	
	Lineman	94	119	114		4		2	2	1	8	
Substation	Substation Leader	30	30	31				1				
	Substation Employee	35	40	38							2	
Transmission	Line Leader	2	3	3								
	Lineman	4	11	11								
	Total	305	334	329		4		15	7	2	15	

¹⁸ Includes transfers, promotions, and promotions within a position.

¹⁹ Includes transfers, involuntary separations, promotions, and promotions within a position.

²⁰ Hiring plan to be provided annually in the 4Q report.

Penn Power 2017												
		Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2018 ²³
Department	Position	1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other ²¹	Retirement	Voluntary Separation	Other ²²	
Distribution	Line Leader	23	23	25				3			1	
	Line Troubleshooter	8	7	9				3			1	
	Lineman	40	50	46				1			5	
Substation	Substation Leader	4	5	5				1			1	
	Substation Employee	14	16	15				1			2	
Transmission	Line Leader	1	1	1								
	Lineman	4	4	4								
	Total	94	106	105				9			10	

²¹ Includes transfers, promotions, and promotions within a position.

²² Includes transfers, involuntary separations, promotions, and promotions within a position.

²³ Hiring plan to be provided annually in the 4Q report.

West Penn 2017												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2018 ²⁶
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other ²⁴	Retirement	Voluntary Separation	Other ²⁵	
Distribution	Line Leader	62	65	65				3	1		2	
	Line Troubleshooter	68	67 ²⁷	64				1			4	
	Lineman	85	99	100		1		1		1		
Substation	Substation Leader	14	13	18				7	2			
	Substation Employee	64	70	63							7	
Transmission	Line Leader	0	0	0								
	Lineman	2	2	2		1				1		
	Total	295	316	312		2		12	3	2	13	

²⁴ Includes transfers, promotions, and promotions within a position.

²⁵ Includes transfers, involuntary separations, promotions, and promotions within a position.

²⁶ Hiring plan to be provided annually in the 4Q report.

²⁷ In 2Q 2017 a lineman transferred to a troubleshooter. As such, the troubleshooter category 2Q 2017 number was increased by 1 and the lineman category was decreased by 1.

Section 57.195(e)(10): Quarterly and year-to-date information on contractor hours and dollars for transmission and distribution operation and maintenance.

Contractor Expenditures

Contractor expenses are billed on a lump sum basis and as such, hourly information is not available.

This portion of the report is confidential.

Section 57.195(e)(11): Monthly call-out acceptance rate for transmission and distribution maintenance workers presented in terms of both the percentage of accepted calls-out and the amount of time it takes the EDC to obtain the necessary personnel. A brief description of the EDC's call-out procedure should be included when appropriate.

Call-out Acceptance Rate

Call-out percentage is defined as the number of workers accepting to total call outs.

This portion of the report is confidential.

Call-out Response

This portion of the report is confidential.

Call-Out Procedure:

When an event occurs, Met-Ed, Penelec, Penn Power and West Penn²⁹ dispatch a troubleman to find and assess the cause of the outage. If the troubleman is unable to repair the damage and a crew is required, the troubleman will inform the Distribution Control Center (“DCC”). The DCC and/or the Customer Operations Center’s (“COC”) person on duty will then initiate the call-out process until desired staffing levels required to complete the restoration have been achieved.

The number of unique workers called for an outage event is recorded and represents the total calls, or opportunities, for an outage event. The number of unique workers who accept the opportunity is recorded and represents the workers accepting. The elapsed time is calculated by taking the date and time of the first employee called for an event minus the date and time of the last accepting employee for that event. The call-out results from all outages experienced during a particular month are added together to derive a total value for each field.

²⁹ West Penn utilizes its automated calling system to complete its call out process.

ATTACHMENT A

Worst Performing Circuits - Reliability Indices

Confidential and Proprietary Report
 Submitted Pursuant to 52 Pa. Code § 57.195(d) and (e)

Met-Ed													
Circuit	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
1	Bath	00873-3	Easton	2,122	58	1	2,759,156	10,901	4.92	1,300.26	5.14	253.11	1.00
2	S. Nazareth	00809-3	Easton	3,214	58	2	2,686,017	10,716	4.79	835.72	3.33	250.65	4.13
3	Mountain	00744-4	Dillsburg	1,821	73	0	1,960,870	6,620	3.50	1,076.81	3.64	296.2	1.01
4	Yorkana	00715-4	York	1,800	68	0	1,929,380	3,192	3.44	1,071.88	1.77	604.44	0.65
5	Orrtanna	00764-4	Gettysburg	1,704	58	1	1,227,007	2,728	2.19	720.07	1.6	449.78	10.87
6	Lynnville	00735-1	Hamburg	1,240	38	4	1,209,110	6,215	2.16	975.09	5.01	194.55	0.00
7	East Prospect	00765-4	York	1,841	60	4	1,196,624	6,363	2.14	649.99	3.46	188.06	0.74
8	Friedensburg	00769-1	Reading	2,050	66	3	1,152,046	10,216	2.06	561.97	4.98	112.77	1.00
9	Birdsboro	00757-1	Reading	1,931	67	0	1,128,044	3,799	2.01	584.18	1.97	296.93	0.41
10	Allen	00501-4	Dillsburg	1,986	47	4	1,125,717	9,045	2.01	566.83	4.55	124.46	1.00
11	Shawnee	00899-3	Stroudsburg	1,674	51	3	1,108,606	10,760	1.98	662.25	6.43	103.03	1.78
12	Flying Hills	00776-1	Reading	1,478	27	2	1,086,478	3,687	1.94	735.1	2.49	294.68	1.00
13	Birchwood	00623-3	Stroudsburg	1,330	36	3	1,046,548	5,812	1.87	786.88	4.37	180.07	1.00
14	Dillsburg	00748-4	Dillsburg	1,786	68	0	1,038,536	5,468	1.85	581.49	3.06	189.93	0.00
15	Moselem	00779-1	Reading	1,779	25	3	980,514	5,987	1.75	551.16	3.37	163.77	0.00
16	Clearfieldst	00631-3	Easton	1,887	26	2	966,228	6,319	1.72	512.04	3.35	152.91	0.00
17	Swatara Hill	00764-2	Lebanon	1,437	36	2	906,016	5,019	1.62	630.49	3.49	180.52	6.58
18	Birchwood	00624-3	Stroudsburg	2,020	30	3	876,944	9,120	1.56	434.13	4.51	96.16	5.37
19	Lynnville	00748-1	Hamburg	1,207	34	1	831,471	3,042	1.48	688.87	2.52	273.33	0.00
20	Hokes	00587-4	York	884	22	2	814,848	3,041	1.45	921.77	3.44	267.95	0.00
21	Shawnee	00860-3	Stroudsburg	3,252	42	1	801,382	7,811	1.43	246.43	2.4	102.6	7.34
22	Lickdale	00625-2	Lebanon	1,000	72	0	787,608	2,057	1.41	787.61	2.06	382.89	18.96
23	Belfast	00849-3	Easton	2,065	12	2	756,492	10,625	1.35	366.34	5.15	71.2	1.01
24	Taxville	00575-4	York	2,182	27	3	725,542	6,795	1.29	332.51	3.11	106.78	1.00
25	Dillsburg	00749-4	Dillsburg	1,812	60	1	725,206	4,521	1.29	400.22	2.5	160.41	1.00
26	Bernville	00786-1	Hamburg	1,837	70	0	719,801	4,152	1.28	391.84	2.26	173.36	0.00
27	Wind Gap	00600-3	Easton	1,713	39	1	686,784	2,904	1.23	400.92	1.7	236.5	1.00
28	Glendon	00819-3	Easton	1,265	13	3	675,988	5,310	1.21	534.38	4.2	127.3	6.99
29	Birdsboro	00756-1	Reading	1,521	76	1	636,600	2,644	1.14	418.54	1.74	240.77	5.50
30	East Prospect	00766-4	York	709	24	1	630,648	2,286	1.13	889.49	3.22	275.87	0.00

Met-Ed													
Circuit	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
31	Frystown	00701-2	Lebanon	1,167	53	1	624,424	3,776	1.11	535.07	3.24	165.37	1.22
32	Windsor	00795-4	York	1,025	92	0	610,935	2,508	1.09	596.03	2.45	243.59	1.59
33	Glenside	00535-1	Reading	1,123	19	4	604,328	4,754	1.08	538.14	4.23	127.12	0.00
34	S. Hamburg	00801-1	Hamburg	2,077	54	1	600,134	3,937	1.07	288.94	1.9	152.43	0.00
35	Lynnville	00737-1	Hamburg	1,062	53	1	573,649	2,462	1.02	540.16	2.32	233	0.00
36	Lorane	00560-1	Reading	1,125	21	2	562,486	3,534	1.00	499.99	3.14	159.16	4.97
37	Shawnee	00895-3	Stroudsburg	3,740	63	2	535,695	7,499	0.96	143.23	2.01	71.44	6.47
38	Germantown	00757-4	Hanover	1,466	19	1	532,384	2,499	0.95	363.15	1.7	213.04	0.00
39	Birchwood	00622-3	Stroudsburg	1,857	21	3	512,334	7,756	0.91	275.89	4.18	66.06	1.00

Confidential and Proprietary Report
 Submitted Pursuant to 52 Pa. Code § 57.195(d) and (e)

Penelec													
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
1	Warren South	00220-41	Warren	2,895	90	0	2,117,279	10,235	3.65	731.36	3.54	206.87	6.77
2	Brookville	00125-23	DuBois	751	35	0	1,534,465	4,518	2.64	2,043.23	6.02	339.63	2.21
3	Logan	00700-81	Lewistown	1,054	46	0	1,529,234	5,735	2.63	1,450.89	5.44	266.65	4.54
4	Madera	00166-22	Philipsburg	2,143	64	0	1,307,895	6,550	2.25	610.31	3.06	199.68	4.88
5	DuBois	00137-23	DuBois	2,818	100	0	1,187,789	10,861	2.05	421.50	3.85	109.36	0.00
6	Mansfield	00699-63	Mansfield	760	38	2	1,119,668	4,345	1.93	1,473.25	5.72	257.69	0.00
7	Tyrone North	00643-22	Philipsburg	1,481	16	0	1,117,704	4,274	1.93	754.70	2.89	261.51	20.87
8	Tunkhannock	00533-65	Montrose	1,230	60	2	1,035,983	6,889	1.78	842.26	5.60	150.38	28.42
9	Philipsburg	00162-22	Philipsburg	3,401	77	0	953,301	6,180	1.64	280.30	1.82	154.26	6.21
10	Osceola	00318-63	Mansfield	576	16	0	928,856	1,492	1.60	1,612.60	2.59	622.56	4.00
11	National Forge Sw Sta	00577-41	Warren	1,209	55	0	902,507	5,679	1.55	746.49	4.70	158.92	3.42
12	Springboro	00237-52	Meadville	2,793	73	1	885,227	10,291	1.52	316.94	3.68	86.02	1.92
13	Philipsburg	00164-22	Philipsburg	2,127	40	0	852,385	6,703	1.47	400.75	3.15	127.16	10.03
14	Two Mile	00127-42	Bradford	1,327	46	0	843,717	4,199	1.45	635.81	3.16	200.93	8.16
15	Thompson	00436-65	Montrose	1,185	55	0	834,310	1,944	1.44	704.06	1.64	429.17	9.67
16	Tiffany	00440-65	Montrose	1,548	33	2	822,239	8,082	1.42	531.16	5.22	101.74	28.11
17	Marienville	00328-51	Oil City	1,197	52	0	799,744	2,250	1.38	668.12	1.88	355.44	8.36
18	Curryville	00644-71	Altoona	1,810	49	1	794,025	3,412	1.37	438.69	1.89	232.72	7.31
19	Lawrenceville	00632-63	Mansfield	641	21	1	771,935	1,450	1.33	1,204.27	2.26	532.37	15.56
20	Union City	00208-43	Erie	1,759	79	1	770,233	4,799	1.33	437.88	2.73	160.50	20.35
21	Lawrenceville	00326-63	Mansfield	38	5	1	756,018	417	1.30	19,895.21	10.97	1,812.99	0.00
22	Timblin	00103-23	DuBois	718	39	1	705,834	4,831	1.22	983.06	6.73	146.11	21.51
23	Erie East	00234-31	Erie	1,263	65	0	691,344	3,475	1.19	547.38	2.75	198.95	6.75
24	Bradford South	00106-42	Bradford	1,184	33	0	691,024	3,233	1.19	583.64	2.73	213.74	0.00
25	Logan	00701-81	Lewistown	1,414	24	0	687,138	3,096	1.18	485.95	2.19	221.94	5.01
26	Mount Union	00154-82	Lewistown	1,145	22	4	681,964	4,924	1.17	595.60	4.30	138.50	21.83
27	East Hickory	00201-41	Warren	332	25	4	681,316	1,843	1.17	2,052.16	5.55	369.68	16.07
28	Erie South	00259-31	Erie	2,342	56	0	650,657	4,207	1.12	277.82	1.80	154.66	12.39
29	Mansfield	00559-63	Mansfield	485	29	2	640,862	3,663	1.10	1,321.36	7.55	174.96	40.21
30	Brookville West	00121-23	DuBois	768	38	1	622,556	2,364	1.07	810.62	3.08	263.35	3.11

Penelec													
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
31	Utica Junction	00318-51	Oil City	837	40	0	615,897	1,463	1.06	735.84	1.75	420.98	2.78
32	Edgewood	00089-13	Indiana	876	35	0	596,767	2,871	1.03	681.24	3.28	207.86	9.10
33	East Pike	00096-13	Indiana	2,584	28	0	589,166	5,633	1.01	228.01	2.18	104.59	3.39
34	Mansfield	00558-63	Mansfield	786	31	3	577,384	2,950	0.99	734.59	3.75	195.72	18.54
35	Blairsville East	00081-13	Indiana	1,462	22	3	575,532	5,228	0.99	393.66	3.58	110.09	4.79
36	Union City	00206-43	Erie	2,698	86	0	568,273	4,430	0.98	210.63	1.64	128.28	10.80
37	Athens	00514-61	Towanda	786	32	0	529,490	3,798	0.91	673.65	4.83	139.41	9.69
38	Lake Como	00787-65	Montrose	875	42	1	526,133	2,113	0.91	601.29	2.41	249.00	6.06
39	Hooversville	00019-12	Somerset	1,476	36	0	507,787	4,466	0.87	344.03	3.03	113.70	4.02
40	Pemberton	00096-82	Altoona	414	26	0	504,682	912	0.87	1,219.04	2.20	553.38	12.14
41	Emlenton	00121-51	Oil City	541	23	1	494,265	2,648	0.85	913.61	4.89	186.66	2.28
42	North Warren	00207-41	Warren	1,367	52	1	493,293	3,678	0.85	360.86	2.69	134.12	6.90
43	Tionesta Junction Sw Sta	00498-51	Oil City	383	46	1	488,601	1,495	0.84	1,275.72	3.90	326.82	10.71
44	Sykesville	00726-23	DuBois	698	24	1	475,147	1,650	0.82	680.73	2.36	287.97	0.38
45	Summit Hall	00500-31	Erie	498	18	2	469,828	2,031	0.81	943.43	4.08	231.33	10.99
46	Knox	00323-51	Oil City	1,325	50	1	457,137	3,362	0.79	345.01	2.54	135.97	5.06
47	Somerset	00030-12	Somerset	2,391	25	0	440,175	7,272	0.76	184.10	3.04	60.53	7.92
48	North Meshoppen	00437-65	Montrose	738	26	0	426,139	2,131	0.73	577.42	2.89	199.97	5.72
49	DuBois Central	00119-23	DuBois	1,338	40	0	413,700	2,223	0.71	309.19	1.66	186.10	1.66
50	Lake Como	00788-65	Montrose	632	32	0	410,881	1,050	0.71	650.13	1.66	391.32	32.45
51	Somerset	00017-12	Somerset	1,374	37	0	406,593	2,906	0.70	295.92	2.11	139.92	0.23
52	Brockway	00127-23	DuBois	1,361	22	0	386,889	2,327	0.67	284.27	1.71	166.26	2.74
53	Saxton	00631-73	Altoona	1,249	24	1	385,113	2,481	0.66	308.34	1.99	155.22	4.82
54	Brookville	00155-23	DuBois	305	13	0	378,360	994	0.65	1,240.52	3.26	380.64	0.18
55	DuBois	00131-23	DuBois	788	24	1	374,799	1,204	0.65	475.63	1.53	311.29	1.14
56	Boyer	00583-31	Erie	1,692	20	1	374,600	4,572	0.65	221.39	2.70	81.93	8.27
57	Susquehanna	00280-65	Montrose	526	8	0	373,756	1,143	0.64	710.56	2.17	327.00	6.00
58	Hilltop	00040-11	Johnstown	1,333	25	1	366,450	2,710	0.63	274.91	2.03	135.22	0.42
59	PPL West	PL097-62	Towanda	105	9	0	363,045	735	0.63	3,457.57	7.00	493.94	0.00
60	Crown	00320-51	Oil City	461	29	2	360,362	1,774	0.62	781.70	3.85	203.14	7.63

Penelec													
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
61	Emlenton	00322-51	Oil City	484	31	1	359,078	1,389	0.62	741.90	2.87	258.52	5.62
62	Punxsutawney	00118-23	DuBois	1,226	20	0	350,735	2,218	0.60	286.08	1.81	158.13	1.69
63	Cochranton	00496-52	Meadville	921	36	0	348,046	2,224	0.60	377.90	2.41	156.50	1.80

Penn Power													
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
1	Camp Reynolds	W-134	Clark	1,740	91	1	1,386,588	3,332	8.53	796.89	1.915	416.1	0.0
2	Canal	W-101	Clark	1,482	47	0	1,075,017	2,351	6.62	725.38	1.586	457.3	0.0
3	Hadley	W-195	Clark	893	44	0	1,015,754	1,350	6.25	1,137.46	1.512	752.4	0.0
4	Leesburg	D-452	Clark	701	31	1	955,046	857	5.88	1,362.41	1.223	1,114.4	0.0
5	Stoneboro	W-132	Clark	1,069	48	0	605,469	2,196	3.73	566.39	2.054	275.7	0.0
6	Perry	W-156	Clark	1,058	55	0	573,501	1,936	3.53	542.06	1.830	296.2	0.0
7	Seneca	W701	Zelienople	2,009	49	1	539,812	2,732	3.32	268.70	1.360	197.6	0.0
8	Silver Street	W-268	Clark	2,076	16	1	527,348	3,791	3.25	254.02	1.826	139.1	0.0
9	McDowell	W-121	Clark	701	27	1	486,892	1,571	3.00	694.57	2.241	309.9	0.0

West Penn Power ²⁹												
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI
1	Rutan	Bristoria	Jefferson	1,186	95	1	2,234,779	6,633	3.13	1,884	5.59	337
2	North Fayette	Beechcliff	McDonald	2,164	31	1	1,537,155	7,991	2.15	710	3.69	192
3	White Valley	Congruity	Jeannette	1,747	41	0	1,526,713	4,657	2.14	874	2.67	328
4	Piney Fork	Stoltz	Charleroi	2,157	35	3	1,410,544	8,017	1.97	654	3.72	176
5	Bethel Park	Dashwood	Boyce	2,155	22	3	1,136,285	7,374	1.59	527	3.42	154
6	White Valley	Borlands Rd	Jeannette	1,352	40	1	1,124,992	3,791	1.57	832	2.80	297
7	Donegal	Donegal	Pleasant Valley	931	39	1	1,059,373	2,007	1.48	1,138	2.16	528
8	White Valley	Export	Jeannette	2,103	22	1	1,039,037	3,646	1.45	494	1.73	285
9	Avella	W Middletown	Washington Pa	1,145	54	0	1,022,003	4,155	1.43	893	3.63	246
10	Franklin	Rogersville	Jefferson	839	43	1	960,121	2,582	1.34	1,144	3.08	372
11	Mateer	Dime Rd	Arnold	1,199	54	0	917,837	3,487	1.28	766	2.91	263
12	Henry Clay	Markleysburg	Uniontown	1,104	35	0	842,580	2,137	1.18	763	1.94	394
13	Hickory	Fort Cherry	McDonald	1,019	48	1	832,853	2,583	1.17	817	2.53	322
14	Smith	Florence	McDonald	804	42	2	823,109	3,889	1.15	1,024	4.84	212
15	Cooperstown	Twin Willows	Butler	1,480	29	1	822,314	3,549	1.15	556	2.40	232
16	Harwick	Harmar	Arnold	955	20	2	808,060	4,284	1.13	846	4.49	189
17	Westraver	Pittsburgh Coal	Charleroi	1,910	26	1	803,990	5,225	1.13	421	2.74	154
18	Houston	McGovern	Washington Pa	1,712	57	0	800,207	4,666	1.12	467	2.73	171
19	Cecil	Bishop	Boyce	1,581	33	1	784,330	6,038	1.10	496	3.82	130
20	Fort Palmer	West Fairfield	Latrobe	973	76	0	782,849	4,510	1.10	805	4.64	174
21	Huntingdon	Shawtown	Jeannette	1,757	16	3	773,817	5,480	1.08	440	3.12	141
22	Gobain	Pittsburgh Street	Arnold	1,045	31	2	767,426	3,901	1.07	734	3.73	197
23	Peters	Venetia	Boyce	2,088	17	2	752,717	6,416	1.05	360	3.07	117
24	Murrycrest	Sardis Road	Jeannette	1,589	30	3	738,387	6,015	1.03	465	3.79	123
25	Donegal	Buchanan	Pleasant Valley	1,067	39	1	737,884	3,027	1.03	692	2.84	244
26	Houston	Weavertown	Washington Pa	2,092	36	2	730,907	4,550	1.02	349	2.17	161
27	Dutch Fork	W Alexander	Washington Pa	1,175	59	0	696,517	1,936	0.97	593	1.65	360
28	Kiski Valley	Kittanning Rd	Arnold	1,795	30	1	695,681	3,197	0.97	388	1.78	218

²⁹ MAIFI values not available for West Penn.

West Penn Power ²⁹												
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI
29	Vanceville	Vanceville	Charleroi	1,401	70	0	685,164	2,353	0.96	489	1.68	291
30	Smithton	Smithton	Charleroi	981	35	0	682,326	2,507	0.96	696	2.56	272
31	Krendale	Unionville	Butler	1,279	35	1	673,402	2,410	0.94	527	1.88	279
32	Rowes Run	Grindstone	Uniontown	731	24	0	672,587	1,438	0.94	920	1.97	468
33	Butler	Center Ave	Butler	1,665	24	1	672,100	3,524	0.94	404	2.12	191
34	Emporium	Emporium Jct	St Marys	563	30	0	671,288	1,984	0.94	1,192	3.52	338
35	Normalville	Mill Run	Pleasant Valley	578	13	3	670,859	2,418	0.94	1,161	4.18	277
36	Lantz	Meadow	Jefferson	1,156	26	1	669,239	2,447	0.94	579	2.12	273
37	Driftwood	Driftwood	St Marys	993	26	0	657,709	2,079	0.92	662	2.09	316
38	North Union	Phillips	Uniontown	1,469	35	4	650,322	6,523	0.91	443	4.44	100
39	New Bethlehem	Clarion Rd	Clarion	1,404	32	2	637,506	4,291	0.89	454	3.06	149
40	Hempfield	Cool Valley	Jeannette	1,010	30	0	627,987	3,210	0.88	622	3.18	196

ATTACHMENT B

Worst Performing Circuits – Remedial Actions

As ordered on March 30, 2015 at Docket Nos. D-2014-2365991, D-2014-2365992, D-2014-2365993, and D-2014-2365994, *Implementation Plan of the Focused Management Audit of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company* (Appendix A)(1): FirstEnergy is directed to provide additional detail in its reporting of the 5% of worst performing circuits in its Commission Quarterly Reliability Reports to highlight those circuits that appear multiple times on Quarterly Reliability Reports, but not necessarily in four quarters in a calendar year. For each Quarterly Reliability Report filed pursuant to 52 Pa. Code § 57.195, this additional detail shall include highlighting those worst performing circuits that have appeared in two or more Quarterly Reliability Reports in the past four quarters.

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
1	Bath	00873-3	<i>Performance was driven by an unknown cause (46%), equipment failure (23%) and vehicle accident (14%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Install Supervisory Control and Data Acquisition (SCADA) reclosers	Complete	Oct-16	
			Install Supervisory Control and Data Acquisition (SCADA) switch	Complete	Oct-16	
			Perform accelerated backbone and three phase circuit assessment	Complete	Dec-16	
			Targeted overhead inspection	To be completed 2017	99%	
Replace crossarms from inspection	To be completed 2017	99%				
2	S. Nazareth	00809-3	<i>Performance was driven by line failure (54%) and trees off ROW (28%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Replace switch	Complete	Apr-17	
			Replace/repair high priority items identified during circuit assessment	Complete	Apr-17	
			Overhead circuit inspection	Complete	Jul-17	
			Replace polymer insulators identified on circuit	To be completed 2017	75%	
Replace/repair high priority items identified during circuit assessment	To be completed 2017	50%				
3	Mountain	00744-4	<i>Performance was driven by trees off ROW (84%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Replace/repair high priority items identified during circuit patrol	Complete	Feb-17	
			Mid-cycle forestry inspection	Complete	Mar-17	
			Remove trees identified during mid-cycle forestry inspection	Complete	Apr-17	
			Replace poles and repair damage caused by trees	Complete	Jul-17	
			Remove trees identified during forestry inspection	Complete	Jun-17	
			Install Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2018	0%	
On cycle tree trimming	To be completed 2018	0%				

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
4	Yorkana	00715-4	<i>Performance was driven by trees off ROW (90%) and trees on ROW (4%).</i>			
			On cycle tree trimming	Complete	Jan-17	
			Overhead circuit inspection	Complete	Jun-17	
			Replace/repair high priority items identified during overhead circuit patrol	To be completed 2018	0%	
			Replace pole identified during wood pole inspection	To be completed 2018	0%	
5	Orrtanna	00764-4	<i>Performance was driven by trees off ROW (68%) and trees on ROW (21%).</i>			
			Post-storm circuit patrol	Complete	Jul-17	
			Targeted mainline circuit rehabilitation	To be completed 2018	0%	
6	Lynnville	00735-1	<i>Performance was driven by three outages during storms caused by a broken ridge pin, a broken insulator and a broken pole (78%).</i>			1Q 2017 2Q 2017 3Q 2017
			Circuit coordination improvements	Complete	Nov-16	
			Mainline recloser replacement	Complete	Nov-16	
			Replace tap recloser	Complete	Feb-17	
			Replace crossarms from inspection	Complete	Jun-17	
			Engineering Supervisory Control and Data Acquisition (SCADA) review	Complete	Sep-17	
			Overhead circuit inspection	Complete	Jun-17	
			Replace crossarms from inspection	To be completed 2017	50%	
			Replace pole identified during wood pole inspection	To be completed 2018	25%	
On cycle tree trimming	To be completed 2018	0%				
7	East Prospect	00765-4	<i>Performance was driven by trees off ROW (55%), equipment failure (20%) and wind (13%).</i>			2Q 2017 3Q 2017
			Repair equipment failure during storm	Complete	Feb-17	
			Post-storm patrol	Complete	Jun-17	
			Overhead circuit inspection	Complete	Jul-17	
			Post-storm patrol	Complete	Sep-17	
			On cycle tree trimming	To be completed 2017	0%	
			Replace/repair high priority items identified during overhead circuit patrol	To be completed 2018	20%	

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
8	Friedensburg	00769-1	<i>Performance was driven by trees off ROW (42%) and vehicle accident (35%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair or replace pole top from inspection	Complete	Jan-17	
			Replace crossarms from inspection	Complete	Jan-17	
			Replace crossarms from inspection	Complete	Mar-17	
			Targeted forestry inspection	Complete	Mar-17	
			Upgrade mainline recloser	Complete	Mar-17	
			Targeted forestry inspection	Complete	Jul-17	
			Engineering Supervisory Control and Data Acquisition (SCADA) review	Complete	Sep-17	
			Install Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2018	25%	
			Install Supervisory Control and Data Acquisition (SCADA) reclosers	To be completed 2018	25%	
9	Birdsboro	00757-1	<i>Performance was driven by trees off ROW (89%).</i>			1Q 2017 2Q 2017 3Q 2017
			Targeted tree trimming to improve reliability	Complete	Oct-16	
			Replace porcelain cutouts on circuit three phase with polymer cutouts	Complete	Nov-16	
			Tap recloser replacement	Complete	Mar-17	
			Targeted overhead circuit inspection	Complete	Mar-17	
			Replace additional porcelain cutouts on circuit three phase with polymer cutouts	Complete	Jun-17	
			Enhanced three phase tree trimming	To be completed 2017	99%	
			Targeted mainline circuit rehabilitation	To be completed 2017	50%	
			Install additional Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2018	25%	
On cycle tree trimming	To be completed 2018	0%				
10	Allen	00501-4	<i>Performance was driven by equipment failure (63%), trees off ROW (16%) and vehicle accident (14%).</i>			1Q 2017 2Q 2017 3Q 2017
			Overhead circuit inspection	Complete	Oct-16	
			Pole was replaced and equipment repaired	Complete	Mar-17	
			Replace/repair high priority items identified during underground circuit patrol	Complete	Mar-17	
			Replace/repair high priority items identified during overhead circuit patrol	To be completed 2017	83%	
Replace porcelain cutouts with polymer cutouts in lockout zone	To be completed 2018	0%				

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
11	Shawnee	00899-3	<i>Performance was driven by trees off ROW (88%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Overhead circuit inspection	Complete	Apr-17	
			On cycle tree trimming	To be completed 2017	99%	
			Install Supervisory Control and Data Acquisition (SCADA) switches #1	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) switches #2	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) switches #3	To be completed 2018	0%	
12	Flying Hills	00776-1	<i>Performance was driven by trees off ROW (62%) and vehicle accident (16%).</i>			2Q 2017 3Q 2017
			On cycle tree trimming	Complete	Nov-16	
			Upgrade mainline recloser	Complete	Nov-16	
			Replace mainline arrester from overhead inspection	Complete	Mar-17	
			Repair/replace pole from inspection	Complete	Jun-17	
			Engineering Supervisory Control and Data Acquisition (SCADA) review	Complete	Sep-17	
			Targeted forestry inspection	To be completed 2017	0%	
			Install Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2017	50%	
			Construct circuit tie	To be completed 2017	50%	
Repair/replace poles from inspection	To be completed 2017	50%				
13	Birchwood	00623-3	<i>Performance was driven by line failure (47%), and trees off ROW (26%).</i>			2Q 2017 3Q 2017
			Perform accelerated backbone and three phase circuit assessment	Complete	Dec-16	
			Install Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) reclosers #1	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) reclosers #2	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) reclosers #3	To be completed 2018	0%	
14	Dillsburg	00748-4	<i>Performance was driven by trees off ROW (75%).</i>			2Q 2017 3Q 2017
			Overhead circuit inspection	Complete	Oct-16	
			Perform tree work identified during post-storm forestry inspection	Complete	Jun-17	
			Post-storm three-phase forestry inspection	Complete	Jun-17	
			Post-storm circuit patrol	Complete	Sep-17	
			Replace/repair high priority items identified during overhead circuit patrol	To be completed 2017	50%	
			Install Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2018	0%	
			On cycle tree trimming	To be completed 2018	0%	

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
15	Moselem	00779-1	<i>Performance was driven by wind (52%) and substation equipment failure (21%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair mainline conductor	Complete	Dec-16	
			Resag mainline conductor	Complete	Jan-17	
			Replace mainline poles	Complete	Feb-17	
			Replace substation equipment	Complete	Jun-17	
16	Clearfield	00631-3	<i>Performance was driven by trees off ROW (61%) and vehicle accident (36%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			On cycle tree trimming	To be completed 2017	74%	
			Construct circuit tie	To be completed 2018	0%	
17	Swatara Hill	00764-2	<i>Performance was driven by equipment failure (22%), line failure (16%) and trees off ROW (8%).</i>			1Q 2017 2Q 2017 3Q 2017
			Overhead circuit inspection	Complete	Feb-17	
			Tree trimming	Complete	Sep-17	
			Enhanced three phase tree trimming	Complete	Sep-17	
			Install Supervisory Control and Data Acquisition (SCADA) devices	To be completed 2017	63%	
			Replace porcelain cutouts with polymer cutouts	To be completed 2017	22%	
			Construct circuit tie	To be completed 2017	0%	
			Mainline rehabilitation	To be completed 2017	0%	
On cycle tree trimming	To be completed 2018	0%				
18	Birchwood	00624-3	<i>Performance was driven by vehicle accident (57%), and trees off ROW (29%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Perform accelerated backbone and three phase circuit assessment	Complete	Dec-16	
			Replace/repair high priority items identified during circuit assessment	Complete	Feb-17	
			Install additional Supervisory Control and Data Acquisition (SCADA) switches	Complete	Sep-17	
			Install additional Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2017	0%	
19	Lynnville	00748-1	<i>Performance was driven by trees off ROW (84%).</i>			
			Overhead circuit inspection	To be completed 2017	99%	
			On cycle tree trimming	To be completed 2018	0%	
20	Hokes	00587-4	<i>Performance was driven by trees off ROW (80%).</i>			
			Post-storm patrol	Complete	Sep-17	

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
21	Shawnee	00860-3	<i>Performance was driven by trees off ROW (79%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Install Supervisory Control and Data Acquisition (SCADA) on reclosers	Complete	Nov-16	
			Perform accelerated backbone and three phase circuit assessment	Complete	Dec-16	
			Overhead circuit inspection	Complete	Mar-17	
			Enhanced three phase tree trimming	Complete	Sep-17	
			Replace porcelain cutouts on circuit three phase with polymer cutouts	To be completed 2018	0%	
			Replace porcelain cutouts with polymer cutouts	To be completed 2018	0%	
			Targeted mainline circuit rehabilitation	To be completed 2018	0%	
22	Lickdale	00625-2	<i>Performance was driven by trees off ROW (37%), equipment failure (9%) and line failure (9%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Spot tree trimming	Complete	Oct-16	
			On cycle tree trimming	To be completed 2018	0%	
23	Belfast	00849-3	<i>Performance was driven by vehicle accident (61%) and line failure (36%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			On cycle tree trimming	Complete	Jan-17	
			Install Supervisory Control and Data Acquisition (SCADA) reclosers	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) switches #1	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) switches #2	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) switches #3	To be completed 2018	0%	
Install Supervisory Control and Data Acquisition (SCADA) switches #4	To be completed 2018	0%				
24	Taxville	00575-4	<i>Performance was driven by vehicle accident (60%) and trees off ROW (34%).</i>			2Q 2017 3Q 2017
			Perform circuit protection review	To be completed 2017	15%	
			Mainline rehabilitation patrol	To be completed 2017	40%	
			Mainline rehabilitation improvements	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) switches #1	To be completed 2018	5%	
			Install Supervisory Control and Data Acquisition (SCADA) switches #2	To be completed 2018	5%	
			Install Supervisory Control and Data Acquisition (SCADA) switches #3	To be completed 2018	5%	
Install Supervisory Control and Data Acquisition (SCADA) switches #4	To be completed 2018	5%				

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
25	Dillsburg	00749-4	<i>Performance driven by equipment failure (47%), and off ROW trees (43%).</i>			
			Post-storm circuit patrol	Complete	Jun-17	
			Replace/repair high priority items identified during overhead circuit patrol	Complete	Aug-17	
			On cycle tree trimming	To be completed 2018	0%	
26	Bernville	00786-1	<i>Performance was driven by vehicle accident (43%) and trees off ROW (24%).</i>			
			Engineering Supervisory Control and Data Acquisition (SCADA) review	To be completed 2017	99%	
			Overhead circuit inspection	To be completed 2017	99%	
			On cycle tree trimming	To be completed 2017	55%	
			Replace arrester on mainline switch from inspection	To be completed 2018	25%	
			Replace crossarms from inspection	To be completed 2018	25%	
27	Wind Gap	00600-3	<i>Performance was driven by vehicle accident (66%) and animal contact (14%).</i>			2Q 2017 3Q 2017
			Replace recloser	Complete	Mar-17	
			On cycle tree trimming	To be completed 2017	0%	
28	Glendon	00819-3	<i>Performance was driven by equipment failure (87%).</i>			2Q 2017 3Q 2017
			Forestry Zone 1 aerial patrol	Complete	Jul-17	
			Replace crossarms	To be completed 2017	99%	
			On cycle tree trimming	To be completed 2017	0%	
29	Birdsboro	00756-1	<i>Performance was driven by trees off ROW (69%) and a broken crossarm (24%).</i>			
			Enhanced three phase tree trimming	To be completed 2017	67%	
			Install additional Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2017	50%	
			Targeted mainline circuit rehabilitation	To be completed 2017	50%	
			Construct circuit tie	To be completed 2017	50%	
On cycle tree trimming	To be completed 2018	0%				
30	East Prospect	00766-4	<i>Performance was driven by trees off ROW (37%), unknown (21%), and trees on ROW (19%).</i>			
			Overhead circuit inspection	Complete	Jul-17	
			Post-storm patrol	Complete	Sep-17	
			On cycle tree trimming	To be completed 2017	0%	
			Replace/repair high priority items identified during overhead circuit patrol	To be completed 2018	0%	

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
31	Frystown	00701-2	<i>Performance was driven by animal contact (25%), equipment failure (20%) and unknown cause (20%).</i>			1Q 2017 2Q 2017 3Q 2017
			Corrected recloser operation	Complete	Mar-17	
			Install fault indicators	Complete	Mar-17	
			Replace a misoperating sectionalizer by a recloser	Complete	Jun-17	
32	Windsor	00795-4	<i>Performance was driven by human error-non company {Tree} (35%), and trees off ROW (23%).</i>			2Q 2017 3Q 2017
			Repair damage due to human error (customer brought down tree)	Complete	Jun-17	
			Install additional Supervisory Control and Data Acquisition (SCADA) switches #1	To be completed 2018	25%	
			Install additional Supervisory Control and Data Acquisition (SCADA) switches #2	To be completed 2018	25%	
			Install additional Supervisory Control and Data Acquisition (SCADA) switches #3	To be completed 2018	25%	
			On cycle tree trimming	To be completed 2017	29%	
			Overhead circuit inspection	To be completed 2018	0%	
Upgrade mainline recloser with Supervisory Control and Data Acquisition (SCADA)	To be completed 2018	5%				
33	Glenside	00535-1	<i>Performance was driven by broken guy wire resulting from high winds (44%), line failure (18%) and underground equipment failure caused by sinkhole (13%).</i>			1Q 2017 2Q 2017 3Q 2017
			Upgrade mainline underground distribution cable and equipment	Complete	Jan-17	
			Repair mainline guy wire	Complete	Feb-17	
			Replace spacers in mainline spacer cable section	To be completed 2017	50%	
34	South Hamburg	00801-1	<i>Performance was driven by trees off ROW (58%) and equipment failure (36%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Engineering circuit coordination review	Complete	Dec-16	
			Replace crossarms from inspection	Complete	Dec-16	
			Circuit coordination improvements	Complete	Jan-17	
			Targeted forestry inspection	Complete	Jun-17	
			Engineering Supervisory Control and Data Acquisition (SCADA) review	Complete	Sep-17	
			Install Supervisory Control and Data Acquisition (SCADA) switches and reclosers	To be completed 2018	25%	
Overhead circuit inspection	To be completed 2018	0%				

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
35	Lynnville	00737-1	<i>Performance was driven by outages caused by trees off ROW (60%) and vehicle accident (26%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Overhead circuit inspection	Complete	Mar-17	
			Replace crossarm from inspection (location #1)	Complete	Jun-17	
			Engineering Supervisory Control and Data Acquisition (SCADA) review	To be completed 2017	99%	
			Replace crossarms from inspection (location #2)	To be completed 2017	50%	
			Replace insulator from inspection	To be completed 2017	50%	
			On cycle tree trimming	To be completed 2018	0%	
36	Lorane	00560-1	<i>Performance driven by substation equipment failure (62%), trees off ROW (17%) and vehicle accident (14%).</i>			
			Replace substation circuit breaker	Complete	Sep-17	
			On cycle tree trimming	To be completed 2017	0%	
			Overhead circuit inspection	To be completed 2018	0%	
37	Shawnee	00895-3	<i>Performance was driven by trees off ROW (60%) and line failure (21%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			On cycle tree trimming	Complete	Oct-16	
			Perform accelerated backbone and three phase circuit assessment	Complete	Dec-16	
			Overhead circuit inspection	Complete	May-17	
			Enhanced three phase tree trimming	Complete	Jul-17	
			Replace porcelain cutouts on circuit three phase with polymer cutouts	To be completed 2017	50%	
			Targeted mainline circuit rehabilitation	To be completed 2017	50%	
			Install additional Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2017	50%	
Construct circuit tie	To be completed 2017	50%				
38	Germantown	00757-4	<i>Performance was driven by vehicle accident (88%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Overhead circuit inspection	Complete	Oct-16	
			On cycle tree trimming	Complete	Dec-16	
			Replace the vehicle contact pole and make associated repairs at the time of restoration	Complete	Dec-16	
			Replace/repair high priority items identified during circuit patrol	Complete	Mar-17	
Relocate underground exit	Complete	Jul-17				

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
39	Birchwood	00622-3	<i>Performance was driven by trees off ROW (42%), unknown cause (36%) and equipment failure (21%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			On cycle tree trimming	Complete	Oct-16	
			Perform accelerated backbone and three phase circuit assessment	Complete	Dec-16	
			Replace switch	Complete	Jul-17	
			Install Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2018	0%	
			Install Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2018	0%	

Met-Ed					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	4Q 2016	1Q 2017	2Q 2017	3Q 2017
Baldy	00736-1	X	X	X	
Baldy	00738-1		X	X	
Belfast	00817-3	X	X		
Bernville	00787-1	X	X	X	
Carsonia	00764-1	X	X		
Crossroads	00728-4	X	X		
Glendon	00805-3	X	X		
Leesport	00812-1	X	X		
Menges Mills	00543-4	X		X	
Newberry	00576-4	X	X	X	
North Bangor	00814-3	X	X		
North Cornwall	00610-2	X	X		
Northwood	00821-3	X	X	X	
South Hamburg	00741-1	X	X	X	
Shawnee	00837-3	X	X		
South Lebanon	00780-2	X	X	X	
Windsor	00797-4	X	X	X	

Met-Ed				
Unranked circuits with remedial actions scheduled to be or recently completed				
Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed
Annville	00743-2	Targeted mainline circuit rehabilitation	To be completed 2017	15%
Baldy	00736-1	On cycle tree trimming	To be completed 2017	98%
		Insulator repair from inspection	To be completed 2017	50%
Baldy	00738-1	On cycle tree trimming	Complete	Sep-17
		Replace arresters from inspection	Complete	Jun-17
Barto	00705-1	Replace porcelain cutouts on circuit three phase with polymer cutouts	Complete	Mar-17
		Install Supervisory Control and Data Acquisition (SCADA) switches and reclosers	To be completed 2017	50%
Belfast	00817-3	Install fault indicators	Complete	Jul-17
		Install Supervisory Control and Data Acquisition (SCADA) reclosers	To be completed 2017	90%
		Install Supervisory Control and Data Acquisition (SCADA) switches	To be completed 2017	90%
Bern Church	00789-1	Enhanced three phase tree trimming	Complete	Jul-17
		Targeted mainline circuit rehabilitation	To be completed 2017	50%
		Eliminate two off-road line sections	To be completed 2017	50%
Bernville	00787-1	Overhead circuit inspection	Complete	Sep-17
		On cycle tree trimming	To be completed 2017	0%
Collins	00761-2	Install fault indicators	Complete	Jul-17
		Replace fuse with recloser	To be completed 2017	50%
		Install animal guarding	To be completed 2017	5%
Fox Hill	00816-3	Install Supervisory Control and Data Acquisition (SCADA) switches and reclosers	To be completed 2017	0%
		Construct circuit ties and loops ³⁰	To be completed 2019	0%
Leesport	00811-1	Enhanced three phase tree trimming	Complete	Aug-17
		Replace porcelain cutouts on circuit three phase with polymer cutouts	To be completed 2017	50%
		Targeted mainline circuit rehabilitation	To be completed 2017	50%
Menges Mills	00543-4	On cycle tree trimming	To be completed 2017	99%
Newberry	00576-4	Targeted mainline circuit rehabilitation	To be completed 2017	40%
		Enhanced three phase tree trimming	To be completed 2017	81%

³⁰ Project was listed with a 2016 completion date but deferred to 2019.

Met-Ed				
Unranked circuits with remedial actions scheduled to be or recently completed				
Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed
North Bangor	00813-3	Enhanced three phase tree trimming	Complete	Aug-17
		Targeted mainline circuit rehabilitation	To be completed 2017	50%
North Bangor	00826-3	Enhanced three phase tree trimming	To be completed 2017	93%
		Targeted mainline circuit rehabilitation	To be completed 2017	0%
North Cornwall	00610-2	Install fuses	To be completed 2017	5%
		Spot tree trimming	To be completed 2017	0%
		Repair equipment failure	To be completed 2017	0%
North Lebanon	00712-2	On cycle tree trimming	Complete	May-17
Northwood	00821-3	Replace crossarms	To be completed 2017	50%
Shawnee	00822-3	Enhanced three phase tree trimming	Complete	Jul-17
		Targeted mainline circuit rehabilitation	To be completed 2017	50%
Shawnee	00837-3	Install Supervisory Control and Data Acquisition (SCADA) switches	Complete	Sep-17
Snydersville	00621-3	Enhanced three phase tree trimming	Complete	Sep-17
		Targeted mainline circuit rehabilitation	To be completed 2017	50%
South Hamburg	00741-1	Overhead circuit inspection	To be completed 2017	99%
		Install additional mainline recloser	To be completed 2017	50%
		Replace porcelain cutouts on circuit backbone with polymer cutouts	To be completed 2017	50%
South Lebanon	00772-2	Inspection repairs	To be completed 2017	0%
South Lebanon	00780-2	Circuit reconfiguration	To be completed 2017	50%
Swatara Hill	00763-2	Overhead circuit inspection	To be completed 2017	95%
		Construct circuit ties	To be completed 2017	0%
		Repair items found during inspection	To be completed 2018 ³¹	0%
Weisenberg	00602-1	Replace broken tap recloser	To be completed 2017	50%
		Install additional tap fuses	To be completed 2017	50%
		On cycle tree trimming	To be completed 2017	39%

³¹ Incorrectly reported with a 2017 projected completion date in the 2nd quarter of 2017.

Met-Ed				
Unranked circuits with remedial actions scheduled to be or recently completed				
Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed
West Boyertown	00714-1	On cycle tree trimming	Complete	May-17
Windsor	00797-4	On cycle tree trimming	To be completed 2017	96%
Yorkana	00708-4	Replace porcelain cutouts on circuit three phase with polymer cutouts	Complete	Jan-17
		Mainline rehabilitation patrol	Complete	Aug-17
		Enhanced three phase tree trimming	To be completed 2017	30%

Penelec							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters	
1	Warren South	00220-41	<i>Performance was driven by trees off ROW (48%), equipment failure (23%) and vehicle accident (13%).</i>				4Q 2016 1Q 2017 2Q 2017 3Q 2017
			On cycle tree trimming	Complete	Nov-16		
			Repair damage caused by vehicle	Complete	Jan-17		
			Repair damage caused by trees	Complete	Apr-17		
			Repair equipment failure	Complete	Jun-17		
2	Brookville	00125-23	<i>Performance was driven by trees off ROW (77%) and equipment failure (14%).</i>				4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair equipment failure	Complete	Jan-17		
			Repair damage caused by trees during a storm	Complete	Feb-17		
			Repair damage caused by trees during a storm	Complete	Mar-17		
			Repair damage caused by trees during a storm	Complete	Aug-17		
3	Logan	00700-81	<i>Performance was driven by trees off ROW (88%).</i>				4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Nov-16		
			Repair damage caused by trees during a storm	Complete	Nov-16		
			Repair damage caused by trees	Complete	Dec-16		
			Repair damage caused by trees	Complete	Mar-17		
			Repair damage caused by trees	Complete	Sep-17		
4	Madera	00166-22	<i>Performance was driven by trees off ROW (60%), equipment failure (14%) and lightning (8%).</i>				4Q 2016 2Q 2017 3Q 2017
			Repair line failure	Complete	Apr-17		
			Repair damage caused by lightning	Complete	Jun-17		
			Repair damage caused by trees during a storm	Complete	Jun-17		
			Repair damage caused by trees during a storm	Complete	Aug-17		
5	DuBois	00137-23	<i>Performance was driven by vehicle accident (38%), trees off ROW (33%) and equipment failure (14%).</i>				4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Nov-16		
			Repair damage caused by trees during a storm	Complete	Mar-17		
			Restore recloser operation of unknown cause	Complete	Jun-17		
			Repair damage caused by trees	Complete	Jun-17		
			Repair damage caused by vehicle accident	Complete	Jul-17		
			Repair damage caused by trees	Complete	Aug-17		
Repair equipment failure	Complete	Aug-17					

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
6	Mansfield	00699-63	<i>Performance was driven by trees off ROW (41%) and line failure (40%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair line failure	Complete	Nov-16	
			Repair equipment failure	Complete	Jan-17	
			Repair line failure	Complete	Apr-17	
			Repair line failure	Complete	Jul-17	
			Repair damage caused by trees during a storm	Complete	Jul-17	
7	Tyrone North	00643-22	<i>Performance was driven by trees off ROW (76%) and non-company human error (13%).</i>			
			Repair damage caused by non-company human error	Complete	Feb-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	
8	Tunkhannock	00533-65	<i>Performance was driven by non-company human error (49%), equipment failure (13%), trees off ROW (10%) and lightning (10%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees	Complete	Oct-16	
			Repair damage caused by non-company human error	Complete	Jan-17	
			Repair damage caused by non-company human error	Complete	Feb-17	
			Install new radio controlled recloser	Complete	Apr-17	
			Circuit inspection	Complete	May-17	
			Targeted circuit rehabilitation	Complete	Jun-17	
			Repair damage caused by lightning	Complete	Aug-17	
			Repair equipment failure	Complete	Sep-17	
9	Philipsburg	00162-22	<i>Performance was driven by trees off ROW (64%), vehicle accident (10%) and equipment failure (9%).</i>			4Q 2016 3Q 2017
			Repair damage caused by trees during a storm	Complete	Nov-16	
			Repair equipment failure	Complete	Aug-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	
			Repair damage caused by a vehicle	Complete	Sep-17	
			Upgrade recloser controls	Complete	Sep-17	
			Targeted circuit rehabilitation	To be completed 2017	0%	
On cycle tree trimming	To be completed 2017	56%				

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
10	Osceola	00318-63	<i>Performance was driven by trees off ROW (91%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Oct-16	
			Repair damage caused by trees during a storm	Complete	Jul-17	
11	Natl Forge Sw Sta	00577-41	<i>Performance was driven by trees off ROW (86%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees	Complete	Feb-17	
			Repair damage caused by trees during a storm	Complete	Jun-17	
			Repair damage caused by trees during a storm	Complete	Jun-17	
12	Springboro	00237-52	<i>Performance was driven by trees off ROW (49%), animal contact (33%) and equipment failure (13%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by animal contact	Complete	Oct-16	
			Repair damage caused by trees	Complete	Dec-16	
			Repair equipment failure	Complete	Mar-17	
			Targeted circuit rehabilitation	Complete	Apr-17	
13	Philipsburg	00164-22	<i>Performance was driven by equipment failure (52%), line failure (23%) and trees off ROW (7%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair equipment failure	Complete	Mar-17	
			Repair line failure	Complete	Mar-17	
			Repair equipment failure	Complete	Jun-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	
14	Two Mile	00127-42	<i>Performance was driven by lightning (38%), trees off ROW (23%), line failure (20%) and equipment failure (15%).</i>			
			Repair damage caused by trees during a storm	Complete	Feb-17	
			Repair damage caused by lightning	Complete	Apr-17	
			Repair line failure	Complete	Jul-17	
			Repair equipment failure	Complete	Jul-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
15	Thompson	00436-65	<i>Performance was driven by trees off ROW (82%) and equipment failure (13%).</i>			4Q 2016 1Q 2017 3Q 2017
			Repair damage caused by trees	Complete	Oct-16	
			Repair damage caused by trees during a storm	Complete	Oct-16	
			Repair damage caused by trees during a storm	Complete	Nov-16	
			Repair equipment failure	Complete	Feb-17	
			Repair damage caused by trees during a storm	Complete	Mar-17	
16	Tiffany	00440-65	<i>Performance was driven by equipment failure (80%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair equipment failure	Complete	Jan-17	
			Repair equipment failure	Complete	Feb-17	
			Repair equipment failure	Complete	Mar-17	
17	Marienville	00328-51	<i>Performance was driven by trees off ROW (85%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair damage caused by trees during a storm	Complete	May-17	
			Repair damage caused by trees	Complete	Jun-17	
			Install new radio-controlled switch	Complete	Sep-17	
18	Curryville	00644-71	<i>Performance was driven by vehicle accident (43%), line failure (36%) and lightning (10%).</i>			2Q 2017 3Q 2017
			Repair line failure	Complete	Oct-16	
			Repair equipment failure	Complete	Nov-16	
			Repair line failure	Complete	Feb-17	
			Repair damage caused by lightning	Complete	Jun-17	
			Repair damage caused by a vehicle	Complete	Sep-17	
19	Lawrenceville	00632-63	<i>Performance was driven by trees off ROW (92%).</i>			
			Repair damage caused by trees	Complete	Mar-17	
			Repair damage caused by trees during a storm	Complete	Jul-17	
20	Union City	00208-43	<i>Performance was driven by trees off ROW (67%) and fuse operation of unknown cause (13%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Circuit inspection	Complete	Oct-16	
			Porcelain cutout replacement	Complete	Jan-17	
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Restore fuse operation of unknown cause	Complete	Aug-17	
			Repair damage caused by trees	Complete	Sep-17	

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
21	Lawrenceville	00326-63	<i>Performance was driven by trees off ROW (100%).</i>			
			Repair damage caused by trees during a storm	Complete	Jul-17	
22	Timblin	00103-23	<i>Performance was driven by trees off ROW (51%) and equipment failure (31%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Feb-17	
			Repair damage caused by trees during a storm	Complete	Feb-17	
			Repair damage caused by trees	Complete	Feb-17	
			Repair equipment failure	Complete	Jun-17	
			Targeted circuit rehabilitation	To be completed 2017	0%	
23	Erie East	00234-31	<i>Performance was driven by trees off ROW (68%), line failure (10%) and equipment failure (8%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair equipment failure	Complete	Nov-16	
			Repair line failure	Complete	Jan-17	
			Repair damage caused by trees	Complete	Mar-17	
			Repair damage caused by trees during a storm	Complete	Jun-17	
			Circuit inspection	Complete	Sep-17	
			On cycle tree trimming	Complete	Sep-17	
24	Bradford South	00106-42	<i>Performance was driven by trees off ROW (52%) and equipment failure (41%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair equipment failure	Complete	Dec-16	
			Repair equipment failure	Complete	Jan-17	
			Repair equipment failure	Complete	Jan-17	
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair damage caused by trees during a storm	Complete	Sep-17	
25	Logan	00701-81	<i>Performance was driven by trees off ROW (88%).</i>			4Q 2016 1Q 2017 3Q 2017
			Circuit inspection	Complete	Oct-16	
			Repair damage caused by trees during a storm	Complete	Jul-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	
			Repair damage caused by trees	Complete	Sep-17	

Penelec							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters	
26	Mount Union	00154-82	<i>Performance was driven by vehicle accident (50%), line failure (35%) and trees off ROW (14%).</i>				4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a vehicle	Complete	Oct-16		
			Repair line failure	Complete	Nov-16		
			Repair damage caused by trees during a storm	Complete	Nov-16		
			Repair damage caused by a vehicle	Complete	Mar-17		
27	East Hickory	00201-41	<i>Performance was driven by trees off ROW (87%).</i>				1Q 2017 2Q 2017 3Q 2017
			Repair line failure	Complete	Feb-17		
			Repair damage caused by trees during a storm	Complete	Mar-17		
			Repair damage caused by trees	Complete	May-17		
			Repair damage caused by trees during a storm	Complete	Jun-17		
28	Erie South	00259-31	<i>Performance was driven by trees off ROW (40%), equipment failure (20%), line failure (14%) and fuse operation of unknown cause (10%).</i>				2Q 2017 3Q 2017
			Restore fuse operation of unknown cause	Complete	Mar-17		
			Repair damage caused by trees during a storm	Complete	Mar-17		
			Repair line failure	Complete	Apr-17		
			Repair damage caused by trees	Complete	Apr-17		
			Repair equipment failure	Complete	Apr-17		
29	Mansfield	00559-63	<i>Performance was driven by equipment failure (54%) and trees off ROW (32%).</i>				1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Jan-17		
			Repair equipment failure	Complete	Mar-17		
			Repair equipment failure	Complete	Mar-17		
			Repair equipment failure	Complete	May-17		
			Repair damage caused by trees during a storm	Complete	Jul-17		
			Repair equipment failure	Complete	Aug-17		
30	Brookville West	00121-23	<i>Performance was driven by equipment failure (50%), trees off ROW (27%) and vehicle accident (19%).</i>				4Q 2016 3Q 2017
			Repair damage caused by a vehicle	Complete	Dec-16		
			Repair equipment failure	Complete	Aug-17		
			Repair damage caused by trees	Complete	Aug-17		

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
31	Utica Junction	00318-51	<i>Performance was driven by trees off ROW (89%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair damage caused by trees	Complete	Jun-17	
32	Edgewood	00089-13	<i>Performance was driven by trees off ROW (81%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Feb-17	
			Repair line failure	Complete	Feb-17	
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair line failure during a storm	Complete	Jun-17	
33	East Pike	00096-13	<i>Performance was driven by equipment failure (93%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair equipment failure	Complete	Nov-16	
			Repair equipment failure	Complete	Mar-17	
34	Mansfield	00558-63	<i>Performance was driven by line failure (53%) and trees off ROW (28%).</i>			2Q 2017 3Q 2017
			Repair damage caused by trees	Complete	Dec-16	
			Repair line failure	Complete	Jan-17	
			Repair line failure	Complete	Apr-17	
			Circuit inspection	Complete	Jun-17	
			Repair line failure	Complete	Jul-17	
35	Blairsville East	00081-13	<i>Performance was driven by trees off ROW (47%), line failure (19%) and animal contact (17%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by animal contact	Complete	Oct-16	
			Repair line failure	Complete	Feb-17	
			Circuit inspection	Complete	May-17	
			Repair damage caused by trees	Complete	May-17	
			Repair damage caused by trees	Complete	Jul-17	
36	Union City	00206-43	<i>Performance was driven by trees off ROW (70%), equipment failure (9%) and lightning (6%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			On cycle tree trimming	Complete	Dec-16	
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair equipment failure	Complete	Jun-17	

Penelec							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters	
37	Athens	00514-61	<i>Performance was driven by line failure (34%), vehicle accident (34%) and fuse operation of unknown cause (14%).</i>				4Q 2016 2Q 2017 3Q 2017
			Repair line failure	Complete	Jun-17		
			Restore fuse operation of unknown cause	Complete	Jun-17		
			Repair damage caused by a vehicle	Complete	Jul-17		
			Targeted circuit rehabilitation	Complete	Sep-17		
38	Lake Como	00787-65	<i>Performance was driven by trees off ROW (46%) and line failure (42%).</i>				4Q 2016 3Q 2017
			Install new radio-controlled switch	To be completed 2017	90%		
			Repair damage caused by trees during a storm	Complete	Nov-16		
			Porcelain cutout replacement	Complete	Apr-17		
			Repair damage caused by trees during a storm	Complete	Jun-17		
			Repair line failure	Complete	Aug-17		
			Repair damage caused by trees	Complete	Sep-17		
39	Hooversville	00019-12	<i>Performance was driven by trees off ROW (84%).</i>				
			Repair damage caused by trees during a storm	Complete	Mar-17		
			Repair damage caused by trees during a storm	Complete	Jul-17		
			Repair damage caused by trees during a storm	Complete	Aug-17		
40	Pemberton	00096-82	<i>Performance was driven by trees off ROW (96%).</i>				1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees	Complete	Jan-17		
			Repair damage caused by trees during a storm	Complete	Mar-17		
			Repair damage caused by trees during a storm	Complete	Aug-17		
41	Emlenton	00121-51	<i>Performance was driven by trees off ROW (74%) and breaker operation of unknown cause (14%).</i>				2Q 2017 3Q 2017
			Restore breaker operation of unknown cause	Complete	Jan-17		
			Repair damage caused by trees during a storm	Complete	Mar-17		
			Repair damage caused by trees during a storm	Complete	Jun-17		
42	North Warren	00207-41	<i>Performance was driven by trees off ROW (59%) and line failure (28%).</i>				1Q 2017 2Q 2017 3Q 2017
			Repair line failure	Complete	Feb-17		
			Repair damage caused by trees during a storm	Complete	Mar-17		
			Repair damage caused by trees during a storm	Complete	Jun-17		

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
43	Tionesta Jct Sw Sta	00498-51	<i>Performance was driven by trees off ROW (88%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Nov-16	
			Repair damage caused by trees during a storm	Complete	Jun-17	
			Repair damage caused by trees during a storm	Complete	Jun-17	
			Repair damage caused by trees	Complete	Sep-17	
			Targeted circuit rehabilitation	To be completed 2017	0%	
			Circuit inspection	To be completed 2017	30%	
44	Sykesville	00726-23	<i>Performance was driven by vehicle accident (54%) and trees off ROW (25%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a vehicle	Complete	Dec-16	
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair damage caused by trees during a storm	Complete	Mar-17	
45	Summit Hall	00500-31	<i>Performance was driven by line failure (47%) and trees off ROW (44%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair line failure	Complete	Mar-17	
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	
46	Knox	00323-51	<i>Performance was driven by trees off ROW (60%) and line failure (24%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair line failure	Complete	Nov-16	
			Repair damage caused by trees during a storm	Complete	Feb-17	
			Repair damage caused by trees during a storm	Complete	Mar-17	
47	Somerset	00030-12	<i>Performance was driven by trees off ROW (44%), equipment failure (31%) and line failure (20%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair line failure	Complete	Nov-16	
			Repair damage caused by trees during a storm	Complete	Feb-17	
			Repair damage caused by trees during a storm	Complete	Feb-17	
			Repair equipment failure	Complete	Apr-17	
			Repair line failure	Complete	Jun-17	
On cycle tree trimming	To be completed 2017	30%				

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
48	N Meshoppen Tran	00437-65	<i>Performance was driven by vehicle accident (68%) and line failure (26%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair line failure	Complete	Jan-17	
			Repair damage caused by a vehicle	Complete	Feb-17	
			Repair damage caused by a vehicle	Complete	Jun-17	
49	Dubois Central	00119-23	<i>Performance was driven by vehicle accident (45%), equipment failure (32%) and fuse operation of unknown cause (11%).</i>			
			Repair equipment failure	Complete	Jun-17	
			Repair equipment failure	Complete	Jul-17	
			Repair damage caused by a vehicle	Complete	Aug-17	
50	Lake Como	00788-65	<i>Performance was driven by trees off ROW (57%) and line failure (23%).</i>			
			Repair damage caused by trees during a storm	Complete	Jun-17	
			Repair damage caused by trees during a storm	Complete	Jul-17	
			Repair line failure	Complete	Aug-17	
51	Somerset	00017-12	<i>Performance was driven by equipment failure (56%), trees off ROW (22%) and vehicle accident (8%).</i>			4Q 2016 1Q 2017 3Q 2017
			Repair equipment failure	Complete	Oct-16	
			Restore fuse operation of unknown cause	Complete	Oct-16	
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair damage caused by a vehicle	Complete	Mar-17	
			On cycle tree trimming	Complete	Jun-17	
			Repair equipment failure	Complete	Jul-17	
52	Brockway	00127-23	<i>Performance was driven by trees off ROW (70%), equipment failure (12%) and line failure (11%).</i>			
			On cycle tree trimming	Complete	Nov-16	
			Repair equipment failure	Complete	Feb-17	
			Repair line failure	Complete	Apr-17	
53	Saxton	00631-73	<i>Performance was driven by trees off ROW (60%) and equipment failure (29%).</i>			
			Repair damage caused by trees	Complete	Aug-17	
			Repair damage caused by trees	Complete	Aug-17	
			Repair equipment failure	Complete	Aug-17	

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
54	Brookville	00155-23	<i>Performance was driven by trees off ROW (86%).</i>			
			Repair damage caused by trees during a storm	Complete	Nov-16	
			Repair damage caused by trees	Complete	Apr-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	
55	Dubois	00131-23	<i>Performance was driven by trees off ROW (89%).</i>			
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair damage caused by trees during a storm	Complete	Jul-17	
			Porcelain cutout replacement	To be completed 2017	26%	
56	Boyer	00583-31	<i>Performance was driven by trees off ROW (52%), line failure (31%) and trees on ROW (12%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	Nov-16	
			Repair damage caused by trees on ROW during a storm	Complete	Jan-17	
			Repair line failure	Complete	Feb-17	
57	Susquehanna	00280-65	<i>Performance was driven by line failure (69%) and fuse operation of unknown cause (27%).</i>			
			Repair line failure	Complete	Jun-17	
			Restore fuse operation of unknown cause	Complete	Aug-17	
			Repair line failure	Complete	Aug-17	
58	Hilltop	00040-11	<i>Performance was driven by trees off ROW (89%).</i>			
			Repair damage caused by trees	Complete	Aug-17	
59	PPL West	PL097-62	<i>Performance was driven by trees off ROW (69%) and other electric utility supply</i>			
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Restore supply from other electric utility	Complete	Jul-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	
			Circuit inspection	Complete	Aug-17	
60	Crown	00320-51	<i>Performance was driven by trees off ROW (59%) and equipment failure (21%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by trees	Complete	Oct-16	
			Repair equipment failure	Complete	Jan-17	
			Repair damage caused by trees during a storm	Complete	Mar-17	
			Repair damage caused by trees	Complete	Aug-17	

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
61	Emlenton	00322-51	<i>Performance was driven by trees off ROW (64%) and animal contact (17%).</i>			
			Repair damage caused by animal contact	Complete	Jun-17	
			Repair damage caused by trees during a storm	Complete	Jun-17	
			Repair damage caused by trees during a storm	Complete	Aug-17	
62	Punxsutawney	00118-23	<i>Performance was driven by line failure (88%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair line failure	Complete	Feb-17	
			Repair line failure	Complete	Mar-17	
			Repair line failure	Complete	Mar-17	
63	Cochranton	00496-52	<i>Performance was driven by line failure (62%) and trees off ROW (31%).</i>			2Q 2017 3Q 2017
			Repair line failure	Complete	Nov-16	
			Repair damage caused by trees during a storm	Complete	Feb-17	
			Repair line failure	Complete	Mar-17	
			Repair line failure	Complete	Jun-17	
			Repair damage caused by trees	Complete	Jul-17	

Penelec					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	4Q 2016	1Q 2017	2Q 2017	3Q 2017
Birmingham	00168-22	X	X	X	
Brooklyn	00749-65	X	X		
Cambridge Springs	00462-52		X	X	
Dubois	00124-23	X	X	X	
Dubois	00134-23		X	X	
East Hickory	00200-41	X	X	X	
Edinboro	00420-34	X	X		
Fairview East	00216-34	X	X	X	
Falls	00297-65		X	X	
Grandview	00354-51	X	X	X	
Lake Como	00786-65	X	X		
Monroeton	00716-62		X	X	
Morgan Street	00240-52	X	X		
North Towanda	00521-62	X	X	X	
North Warren	00596-41	X	X		
Page Road	00445-43	X	X		
Punxsutawney	00625-23	X	X		
Russell Hill	00282-65	X	X	X	
South Mansfield	00617-63	X	X		
Starrucca	00744-65	X	X		
Tyrone North	00944-22	X	X		
Warren 5th Avenue	00250-41	X	X		
West Tunkhannock	00231-65	X	X		
Wyalusing	00532-62		X	X	

Penelec				
Unranked circuits with remedial actions scheduled to be or recently completed				
Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed
Abex	00493-52	Circuit inspection	To be completed 2017	99%
Crown	00319-51	Install new radio-controlled switch	Complete	Aug-17
		On cycle tree trimming	To be completed 2017	95%
Edinboro	00420-34	Circuit inspection	Complete	Jul-17
Fairview East	00218-34	Circuit inspection	Complete	Jul-17
Greenwood	00041-71	On cycle tree trimming	Complete	Aug-17
Mercer Pike	00473-52	Circuit inspection	To be completed 2017	0%
North Warren	00596-41	Circuit inspection	Complete	Sep-17
Powell Ave	00237-31	Targeted circuit rehabilitation	Complete	Jul-17
Powell Ave	00513-31	Install new radio-controlled switch	Complete	Aug-17
Punxsutawney	00625-23	On cycle tree trimming	To be completed 2017	44%
Rolling Meadows	00310-31	Targeted circuit rehabilitation	Complete	Jul-17
Titusville	00514-51	Circuit inspection	To be completed 2017	0%
		Targeted circuit rehabilitation	To be completed 2017	0%
Utica Junction	00331-51	Circuit inspection	To be completed 2017	99%
Wyalusing	00532-62	Circuit inspection	Complete	Jul-17
		Targeted circuit rehabilitation	Complete	Jul-17

Penn Power						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
1	Camp Reynolds	W-134	<i>Performance was driven by trees off ROW (90%).</i>			2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	May-17	
2	Canal	W-101	<i>Performance was driven by trees off ROW (89%).</i>			
			Repair damage caused by trees during a storm	Complete	May-17	
3	Hadley	W-195	<i>Performance was driven by trees off ROW (91%).</i>			2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	May-17	
4	Leesburg	D-452	<i>Performance was driven by trees off ROW (98%).</i>			2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	May-17	
5	Stoneboro	W-132	<i>Performance was driven by trees off ROW (80%), line failure (13%) and vehicle accident (3%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by vehicle	Complete	Oct-16	
			Enhanced tree trimming	Complete	Dec-16	
			Repair line failure	Complete	Mar-17	
6	Perry	W-156	<i>Performance was driven by trees off ROW (69%), line failure (10%) and bird (7%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by tree	Complete	Oct-16	
			Reliability job to install fuses	Complete	Jan-17	
			Repair damage caused by trees during a storm	Complete	May-17	
7	Seneca	W701	<i>Performance was driven by damage caused by vehicle accident (84%) and trees off ROW (9%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by tree	Complete	Mar-17	
			Repair damage caused by vehicle	Complete	Mar-17	
			Repair damage caused by tree	Complete	Aug-17	
8	Silver Street	W-268	<i>Performance was driven by trees off ROW (64%) and line failure (28%).</i>			
			Repair damage caused by trees during a storm	Complete	Jun-17	
			Repair damage caused by line failure	Complete	Aug-17	
9	McDowell	W-121	<i>Performance was driven by trees off ROW (80%) and human error (10%).</i>			2Q 2017 3Q 2017
			Repair damage caused by trees during a storm	Complete	May-17	
			Repair damage due to human error (jumpers were cut)	Complete	Sep-17	

Penn Power					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	4Q 2016	1Q 2017	2Q 2017	3Q 2017
Hermitage	W-260	X	X	X	
Ingomar	D-619	X	X		
McDowell	W-120		X	X	
Mercer	W-128	X	X		
Mercer	W-129	X	X		
Stoneboro	W-131	X	X		

Penn Power				
Unranked circuits with remedial actions scheduled to be or recently completed				
Substation	Circuit	Remedial Action Planned	Status of Remedial Work	Progress of Remedial Work
Penn Power has no unranked circuits with remedial actions scheduled to be or recently completed.				

West Penn						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
1	Rutan	Bristoria	<i>Performance was driven by trees off ROW (76%), equipment failure (6%) and line failure (6%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Reliability job to install fuses	Complete	Oct-16	
			Repair damage caused by a vehicle accident	Complete	Dec-16	
			Repair damage caused by a tree during a storm	Complete	Feb-17	
			Repair damage caused by a tree during a storm	Complete	Mar-17	
			Repair damage caused by a tree during a storm	Complete	May-17	
			Repair equipment failure during a storm	Complete	Jun-17	
			Repair equipment failure during a storm	Complete	Jun-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
	On cycle tree trimming	To be completed 2017	61%			
2	North Fayette	Beechcliff	<i>Performance was driven by equipment failure (44%), vehicle accident (23%) trees off ROW (11%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a vehicle accident	Complete	Nov-16	
			On cycle tree trimming	Complete	Dec-16	
			Repair damage caused by a tree during a storm	Complete	Mar-17	
			Repair equipment failure during a storm	Complete	Mar-17	
			Repair equipment failure	Complete	Apr-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
	Repair line failure	Complete	Aug-17			
3	White Valley	Congruity	<i>Performance was driven by trees off ROW (87%).</i>			
			Repair damage caused by a tree during a storm	Complete	Aug-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
			Repair line failure	Complete	Sep-17	
	Reliability job to install fuses	To be completed 2017	0%			

West Penn						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
4	Piney Fork	Stoltz	<i>Performance was driven by trees off ROW (74%) and animal contact (13%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Dec-16	
			Repair damage caused by a tree during a storm	Complete	Dec-16	
			Targeted circuit rehabilitation	Complete	Oct-16	
			Restore unknown outage	Complete	Mar-17	
			Repair damage caused by a tree during a storm	Complete	Mar-17	
			Repair damage caused by a tree during a storm	Complete	Jun-17	
			Repair line failure	Complete	Jul-17	
On cycle	Complete	Sep-17				
5	Bethel Park	Dashwood	<i>Performance was driven by trees off ROW (68%) and line failure (20%).</i>			2Q 2017 3Q 2017
			On cycle tree trimming	Complete	Dec-16	
			Repair damage caused by a tree	Complete	May-17	
			Repair line failure	Complete	Jun-17	
			Repair line failure	Complete	Jul-17	
6	White Valley	Borlands Rd	<i>Performance was driven by trees off ROW (85%).</i>			1Q 2017 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Feb-17	
			Repair line failure during a storm	Complete	Mar-17	
			Reliability job to install fuses	Complete	Mar-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
7	Donegal	Donegal	<i>Performance was driven by trees off ROW (90%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Restore unknown outage during a storm	Complete	Oct-16	
			Repair damage caused by a tree during a storm	Complete	Oct-16	
			Repair damage caused by a vehicle accident	Complete	Nov-16	
			Repair damage caused by a tree during a storm	Complete	Jan-17	
			Zone 2 Ash removal	Complete	Apr-17	
			Repair damage caused by a tree	Complete	May-17	
			Repair equipment failure	Complete	Jun-17	
Repair damage caused by a tree during a storm	Complete	Jul-17				

West Penn						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
8	White Valley	Export	<i>Performance was driven by trees on ROW (84%).</i>			
			Repair line failure	Complete	Aug-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
			Reliability job to install fuses	Complete	Mar-17	
9	Avella	W Middletown	<i>Performance was driven by trees off ROW (59%), trees on ROW (23%) and equipment failure (9%).</i>			2Q 2017 3Q 2017
			Forced outage to replace a crossarm	Complete	Apr-17	
			Repair damage caused by a tree	Complete	Jun-17	
			Repair damage caused by a tree during a storm	Complete	Jun-17	
			Repair damage caused by a tree	Complete	Jul-17	
			Reliability job to install fuses	To be completed 2017	0%	
10	Franklin	Rogersville	<i>Performance was driven by trees off ROW (58%), unknown cause (17%) and line failure (16%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Oct-16	
			Repair damage caused by a tree during a storm	Complete	Dec-16	
			Restore unknown outage during a storm	Complete	Feb-17	
			Repair damage caused by a tree during a storm	Complete	Feb-17	
			Line rehabilitation	Complete	Mar-17	
			Overhead circuit inspection	Complete	Apr-17	
			Repair damage caused by a tree during a storm	Complete	Jun-17	
			Restore unknown outage during a storm	Complete	Jun-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
			Repair line failure	Complete	Aug-17	

West Penn						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
11	Mateer	Dime Rd	<i>Performance was driven by equipment failure (62%) and trees off ROW (26%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair equipment failure	Complete	Jan-17	
			Repair damage caused by a tree during a storm	Complete	Feb-17	
			Repair damage caused by a tree	Complete	Mar-17	
			Repair damage caused by a tree during a storm	Complete	Mar-17	
			Repair damage caused by a tree	Complete	Apr-17	
			Repair damage caused by a tree during a storm	Complete	Jun-17	
			Repair equipment failure	Complete	Jul-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
			Repair equipment failure	Complete	Sep-17	
	Zone 2 Ash removal	To be completed 2017	0%			
12	Henry Clay	Markleysburg	<i>Performance was driven by trees off ROW (92%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair line failure	Complete	Nov-16	
			Repair damage caused by a tree during a storm	Complete	Dec-16	
			On cycle tree trimming	Complete	Dec-16	
			Repair damage caused by a tree during a storm	Complete	Feb-17	
			Repair damage caused by a tree during a storm	Complete	May-17	
			Repair damage caused by a tree during a storm	Complete	Jun-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
				Zone 2 Ash removal	To be completed 2017	
13	Hickory	Fort Cherry	<i>Performance was driven by trees off ROW (75%) and unknown cause (8%).</i>			4Q 2016 1Q 2017 3Q 2017
			Repair damage caused by a tree	Complete	Dec-16	
			Repair damage caused by a tree during a storm	Complete	Dec-16	
			Forced outage to repair conductor	Complete	Mar-17	
			Perform CEMI review	Complete	Apr-17	
			Overhead circuit inspection	Complete	Apr-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
			Restore unknown outage during a storm	Complete	Aug-17	

West Penn						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
14	Smith	Florence	<i>Performance was driven by trees off ROW (55%) and trees on ROW (30%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair line failure during a storm	Complete	Dec-16	
			Repair damage caused by a tree	Complete	Jan-17	
			Repair damage caused by a tree during a storm	Complete	Mar-17	
			Repair damage caused by a tree	Complete	May-17	
			Repair damage caused by a tree	Complete	May-17	
			Repair line failure	Complete	Jun-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
		Zone 2 Ash removal	To be completed 2017	0%		
15	Cooperstown	Twin Willows	<i>Performance was driven by trees off ROW (92%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Nov-16	
			Reliability job to install fuses	Complete	Oct-16	
			Restore unknown outage during a storm	Complete	Mar-17	
			Repair damage caused by a tree	Complete	Apr-17	
			Repair damage caused by a tree during a storm	Complete	May-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
			Repair damage caused by a tree	Complete	Sep-17	
		On cycle tree trimming	To be completed 2017	99%		
16	Harwick	Harmar	<i>Performance was driven by trees off ROW (76%) and equipment failure (16%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Dec-16	
			Repair damage caused by a tree during a storm	Complete	Feb-17	
			Overhead circuit inspection	Complete	Apr-17	
			Repair damage caused by a tree	Complete	Jul-17	
			Repair equipment failure during a storm	Complete	Jul-17	
		Repair damage caused by a tree during a storm	Complete	Aug-17		

West Penn							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters	
17	Westraver	Pittsburgh Coal	<i>Performance was driven by line failure (54%) and trees off ROW (39%).</i>				1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Jan-17		
			Forced outage to repair regulator during a storm	Complete	Feb-17		
			Repair line failure	Complete	Mar-17		
			Repair line failure	Complete	Jun-17		
			Repair line failure	Complete	Jun-17		
			Line rehabilitation	Complete	Jun-17		
			Repair damage caused by a tree during a storm	Complete	Aug-17		
			Repair damage caused by a tree	Complete	Sep-17		
18	Houston	McGovern	<i>Performance was driven by trees off ROW (46%) and line failure (38%).</i>				
			Repair line failure	Complete	Jul-17		
			Repair damage caused by a tree	Complete	Jul-17		
			Repair line failure during a storm	Complete	Aug-17		
19	Cecil	Bishop	<i>Performance was driven by trees off ROW (49%) and line failure (40%).</i>				2Q 2017 3Q 2017
			Replace underground substation exit	Complete	Dec-16		
			Repair line failure	Complete	May-17		
			Repair damage caused by a vehicle accident during a storm	Complete	Jun-17		
			Repair damage caused by a tree during a storm	Complete	Jul-17		
			Repair damage caused by a tree	Complete	Aug-17		
20	Fort Palmer	West Fairfield	<i>Performance was driven by trees off ROW (64%), human error non-company (14%) and trees on ROW (8%).</i>				1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Mar-17		
			Repair damage caused by a tree during a storm	Complete	Mar-17		
			Repair damage caused by a tree during a storm	Complete	Mar-17		
			Repair damage caused by a tree	Complete	Apr-17		
			Repair equipment failure during a storm	Complete	Jun-17		
			Repair damage caused by a tree during a storm	Complete	Jul-17		
			On cycle tree trimming	To be completed 2017	40%		

West Penn						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
21	Huntingdon	Shawtown	<i>Performance was driven by trees off ROW (69%) and trees on ROW (27%).</i>			2Q 2017 3Q 2017
			On cycle tree trimming	Complete	Dec-16	
			Repair damage caused by a tree during a storm	Complete	Apr-17	
			Repair damage caused by a tree during a storm	Complete	Jun-17	
			Repair equipment failure	Complete	Aug-17	
22	Gobain	Pittsburgh Street	<i>Performance was driven by trees of ROW (72%) and equipment failure (13%).</i>			
			Repair damage caused by a tree during a storm	Complete	Jul-17	
			Repair equipment failure	Complete	Aug-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
			On cycle tree trimming	Complete	Apr-17	
23	Peters	Venetia	<i>Performance was driven by equipment failure (65%) and unknown cause (22%).</i>			
			Repair equipment failure during a storm	Complete	Jul-17	
			Repair equipment failure during a storm	Complete	Jul-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
			Overhead circuit inspection	Complete	Sep-17	
24	Murrycrest	Sardis Road	<i>Performance was driven by trees off ROW (65%) and line failure (22%).</i>			
			Repair line failure	Complete	Aug-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
			Repair damage caused by a tree	Complete	Aug-17	
			On cycle tree trimming	Complete	Apr-17	
25	Donegal	Buchanan	<i>Performance was driven by trees on ROW (59%) and trees off ROW (27%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Oct-16	
			Repair damage caused by a vehicle accident	Complete	Nov-16	
			Repair damage caused by a tree during a storm	Complete	Jan-17	
			Zone 2 Ash removal	Complete	Apr-17	
			Repair damage caused by a tree during a storm	Complete	Jun-17	
			Repair damage caused by a tree	Complete	Aug-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	

West Penn						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
26	Houston	Weavertown	<i>Performance was driven by trees off ROW (41%), equipment failure (39%) and switching error (15%).</i>			
			Repair equipment failure during a storm	Complete	Jul-17	
			Repair equipment failure during a storm	Complete	Aug-17	
			Repair damage caused by a tree	Complete	Sep-17	
27	Dutch Fork	W Alexander	<i>Performance was driven by trees off ROW (66%) and unknown cause (14%).</i>			
			Repair damage caused by a tree during a storm	Complete	Jul-17	
			Restore unknown outage during a storm	Complete	Jul-17	
			Repair damage caused by a tree	Complete	Aug-17	
			Install Tollgrade monitors	To be completed 2017	0%	
28	Kiski Valley	Kittanning	<i>Performance was driven by trees off ROW (73%) and line failure (24%).</i>			
			Repair line failure during a storm	Complete	Jul-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
			Repair damage caused by a tree	Complete	Aug-17	
			On cycle tree trimming	To be completed 2017	96%	
29	Vanceville	Vanceville	<i>Performance was driven by trees off ROW (57%), line failure (17%) and forced outage (11%).</i>			
			Repair damage caused by a tree	Complete	Aug-17	
			Repair line failure during a storm	Complete	Aug-17	
			Repair damage caused by a tree during a storm	Complete	Aug-17	
30	Smithton	Smithton	<i>Performance was driven by trees off ROW (83%).</i>			4Q 2016 1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a tree	Complete	Dec-16	
			Repair damage caused by a tree during a storm	Complete	Dec-16	
			Repair damage caused by a tree during a storm	Complete	Feb-17	
			Repair damage caused by a tree	Complete	Feb-17	
			Restore unknown outage during a storm	Complete	Mar-17	
			Repair damage caused by a vehicle accident	Complete	Apr-17	
			Repair damage caused by a tree during a storm	Complete	Jun-17	
			Repair damage caused by a tree during a storm	Complete	Jul-17	
On cycle tree trimming	To be completed 2017	36%				

West Penn							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters	
31	Krendale	Unionville	<i>Performance was driven by trees off ROW (80%) and unknown cause (14%).</i>				1Q 2017 2Q 2017 3Q 2017
			On cycle tree trimming	Complete	Dec-16		
			Restore unknown outage during a storm	Complete	Feb-17		
			Repair damage caused by a tree during a storm	Complete	Feb-17		
			Restore unknown outage during a storm	Complete	Mar-17		
			Repair damage caused by a tree during a storm	Complete	Mar-17		
			Repair damage caused by a tree during a storm	Complete	Apr-17		
32	Rowes Run	Grindstone	<i>Performance was driven by trees off ROW (86%).</i>				4Q 2016 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Oct-16		
			Repair equipment failure during a storm	Complete	Oct-16		
			Overhead circuit inspection	Complete	Apr-17		
			Repair damage caused by a tree during a storm	Complete	Jul-17		
33	Butler	Center Ave	<i>Performance was driven by vehicle accident (50%) and trees off ROW (46%).</i>				2Q2017 3Q2017
			Zone 2 Ash removal	Complete	Feb-17		
			Repair damage caused by a tree during a storm	Complete	May-17		
			Repair damage caused by a tree during a storm	Complete	May-17		
			Repair damage caused by a tree during a storm	Complete	Jul-17		
34	Emporium	Emporium Jct	<i>Performance was driven by trees off ROW (88%).</i>				1Q 2017 2Q 2017 3Q 2017
			Repair damage caused by a tree	Complete	Jan-17		
			Repair damage caused by a tree during a storm	Complete	Mar-17		
			Repair damage caused by a tree	Complete	Jun-17		
			Repair damage caused by a tree during a storm	Complete	Jun-17		
			Repair damage caused by a vehicle accident	Complete	Aug-17		
			On cycle tree trimming	To be completed 2017	80%		
35	Normalville	Mill Run	<i>Performance was driven by trees off ROW (92%).</i>				
			Repair damage caused by a tree during a storm	Complete	Aug-17		
			On cycle tree trimming	To be completed 2017	87%		

West Penn							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters	
36	Lantz	Meadow	<i>Performance was driven by equipment failure (43%), trees off ROW (27%) and line failure (15%).</i>				1Q 2017 3Q 2017
			Repair line failure during a storm	Complete	Feb-17		
			Repair damage caused by a tree during a storm	Complete	Feb-17		
			Repair equipment failure during a storm	Complete	Feb-17		
			Repair damage caused by a tree	Complete	Feb-17		
			Zone 2 Ash removal	Complete	Apr-17		
			Repair line failure	Complete	Jul-17		
			Repair equipment failure during a storm	Complete	Aug-17		
37	Driftwood	Driftwood	<i>Performance was driven by trees off ROW (47%) and line failure (37%).</i>				1Q 2017 2Q 2017 3Q 2017
			Repair equipment failure	Complete	Jan-17		
			Repair line failure during a storm	Complete	Feb-17		
			Repair damage caused by a tree	Complete	Mar-17		
			Repair damage caused by a tree during a storm	Complete	Mar-17		
			Forced outage to repair a pole	Complete	May-17		
			Repair damage caused by a tree during a storm	Complete	Aug-17		
38	North Union	Phillips	<i>Performance was driven by trees off ROW (53%) and equipment failure (36%).</i>				4Q 2016 3Q 2017
			Repair equipment failure during a storm	Complete	Dec-16		
			Targeted circuit rehabilitation	Complete	Oct-16		
			Reliability job to install fuses	Complete	Jun-17		
			Repair equipment failure	Complete	Jul-17		
			Repair damage caused by a tree during a storm	Complete	Aug-17		
			Repair damage caused by a tree	Complete	Sep-17		
39	New Bethlehem	Clarion Rd	<i>Performance was driven by trees off ROW (93%).</i>				4Q 2016 3Q 2017
			Repair damage caused by a tree during a storm	Complete	Nov-16		
			Repair damage caused by a tree	Complete	Nov-16		
			Overhead circuit inspection	Complete	Apr-17		
			Repair damage caused by a tree during a storm	Complete	Aug-17		
			Restore unknown outage	Complete	Sep-17		

West Penn						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
40	Hempfield	Cool Valley	<i>Performance was driven by line failure (47%), equipment failure (29%) and unknown cause (13%).</i>			1Q 2017 2Q 2017 3Q 2017
			Repair line failure during a storm	Complete	Jan-17	
			Restore unknown outage during a storm	Complete	Mar-17	
			Repair equipment failure	Complete	Mar-17	
			Repair equipment failure	Complete	Apr-17	
			Repair equipment failure	Complete	Apr-17	
			CEMI Review	Complete	May-17	
			Repair line failure during a storm	Complete	Aug-17	
			Reliability job to install fuses	To be completed 2017	0%	

West Penn					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	4Q 2016	1Q 2017	2Q 2017	3Q 2017
Amity	Amity	X	X		
Amity	Banetown	X	X	X	
Avella	Penowa	X	X	X	
Bethel Park	Hillcrest	X	X		
Bethlen	Laughlintown	X	X	X	
Bethlen	Laurel Valley		X	X	
Cecil	Murray Hill	X	X	X	
Crossgates	Robinhood	X	X		
Frazier	Perry	X	X	X	
Lake Lynn-Union	Fancy Hill	X	X	X	
Luxor	Forbes Road	X	X		
Murrysville	Wallace Lane		X	X	
North Union	Gallatin	X	X		
Piney Fork	Gillhall	X	X		
Saltsburg	Saltsburg	X	X	X	
Smithton	Yukon		X	X	
Thompson Farm	Oakwood	X	X	X	
Vandergrift	Grifflo Park	X	X		

West Penn				
Unranked circuits with remedial actions scheduled to be or recently completed				
Substation	Circuit	Remedial Action Planned	Status of Remedial Work	Progress of Remedial Work
Amity	Amity	Zone 2 Ash removal	To be completed 2017	0%
Amity	Banetown	On cycle tree trimming	To be completed 2017	12%
Bethel Park	Coverdale	Zone 2 Ash removal	To be completed 2017	0%
Bethel Park	Hillcrest	On cycle tree trimming	To be completed 2017	74%
Bethlen	Laurel Valley	Overhead circuit inspection	To be completed 2017	13%
Charleroi	Speers	On cycle tree trimming	Complete	Aug-17
Crossgates	Robinhood	On cycle tree trimming	To be completed 2017	16%
Donegal	Bear Rocks	On cycle tree trimming	Complete	Aug-17
Dutch Fork	Claysville	Overhead circuit inspection	To be completed 2017	99%
Fawn	Bull Creek	Overhead circuit inspection	Complete	May-17
Frazier	Perry	Zone 2 Ash removal	Complete	May-17
Lake Lynn	Fancy Hill	Zone 2 Ash removal	To be completed 2017	0%
North Union	Gallatin	On cycle tree trimming	Complete	Apr-17
Parker	Parker	On cycle tree trimming	To be completed 2017	21%
Saltsburg	Saltsburg	On cycle tree trimming	To be completed 2017	98%
Westraver	West Newton	Line rehabilitation	To be completed 2017	0%

ATTACHMENT C

FirstEnergy's Compliance with Terms of the March 30, 2015 Management Audit Order

Pursuant to Docket Nos. D-2014-2365991 and D-2014-2365992, (Appendix A)(2): Met-Ed and Penelec are directed to provide a quarterly report that shall consist of a chart documenting the Open Priority 3 repairs and the Overdue Priority 3 (P3) Repairs for each company each quarter.

	Met-Ed		Penelec	
	Open P3 Conditions	Overdue P3 Conditions	Open P3 Conditions	Overdue P3 Conditions
1Q	1,459	1,201	2,143	1,956
2Q	1,308	1,039	1,463	1,254
3Q	1,159	1,037	1,291	1,060
4Q				

Pursuant to Docket Nos. D-2014-2365991, D-2014-2365992, D-2014-2365993, and D-2014-2365994, (Appendix A)(3): FirstEnergy is directed to track and measure line hit incidents, causes of line hits, and damage recovery amounts for all third-party line hit incidents for each company.

Met-Ed – Third Party Line Hit Incidents 3rd Quarter 2017 12-Month Rolling ³²			
Cause of Line Hit	Number of Incidents	Invoice Amount (\$)	Recovery Amount (\$)
Dig In - Other	18	12,011	8,997
Excavated in Tolerance	46	148,899	29,516
Excavation Inconsistent with Ticket Scope	17	31,433	8,528
Excavation Prior to Lawful Start Date	2	3,238	3,239
Expired Ticket	4	5,771	4,788
Hand Digging	0	0	0
Marked Improperly	4	8,594	8,594
No Ticket	31	56,503	41,713
Total	122	266,449	105,375

Penelec – Third Party Line Hit Incidents 3rd Quarter 2017 12-Month Rolling ³³			
Cause of Line Hit	Number of Incidents	Invoice Amount (\$)	Recovery Amount (\$)
Dig In - Other	8	0	0
Excavated in Tolerance	59	121,115	89,131
Excavation Inconsistent with Ticket Scope	3	1,071	836
Excavation Prior to Lawful Start Date	3	1,913	456
Expired Ticket	13	16,055	10,285
Hand Digging	9	5,295	2,720
Marked Improperly	46	57,548	46,128
No Ticket	54	59,480	34,654
Total	195	262,477	184,210

³² Data includes line hits closed during the rolling twelve-month reporting period as well as line hits that are still open as of September 30, 2017.

³³ Data includes line hits closed during the rolling twelve-month reporting period as well as line hits that are still open as of September 30, 2017.

Penn Power – Third Party Line Hit Incidents 3rd Quarter 2017 12-Month Rolling ³⁴			
Cause of Line Hit	Number of Incidents	Invoice Amount (\$)	Recovery Amount (\$)
Dig In - Other	10	6,965	4,976
Excavated in Tolerance	6	7,149	4,797
Excavation Inconsistent with Ticket Scope	1	1,436	1,436
Excavation Prior to Lawful Start Date	0	0	0
Expired Ticket	4	8,801	7,638
Hand Digging	0	0	0
Marked Improperly	3	13,423	12,520
No Ticket	17	33,414	20,132
Total	41	71,188	51,499

West Penn – Third Party Line Hit Incidents 3rd Quarter 2017 12-Month Rolling ³⁵			
Cause of Line Hit	Number of Incidents	Invoice Amount (\$)	Recovery Amount (\$)
Dig In - Other	36	11,132	11,132
Excavated in Tolerance	3	9,434	500
Excavation Inconsistent with Ticket Scope	15	61,614	44,224
Excavation Prior to Lawful Start Date	0	0	0
Expired Ticket	4	21,506	14,400
Hand Digging	2	4,050	2,575
Marked Improperly	11	18,311	16,754
No Ticket	31	103,928	43,461
Total	102	229,975	133,046

Cause of Line Hit	Definition
Dig In - Other	Still under investigation
Excavated in Tolerance	Excavator didn't use prudent digging techniques within the Tolerance Zone
Excavation Inconsistent with Ticket Scope	Excavation outside dig box and/or scope of ticket
Excavation Prior to Lawful Start Date	Three business days prior to start of excavation from when the ticket was called in to mark
Expired Ticket	After ten business days have passed, the ticket is considered expired
Hand Digging	Excavator was hand digging within the Tolerance Zone, however the facility was still hit
Marked Improperly	Ticket called in, facility and/or equipment was not marked properly
No Ticket	No contact was made to create a dig-request ticket

³⁴ Data includes line hits closed during the rolling twelve-month reporting period as well as line hits that are still open as of September 30, 2017.

³⁵ Data includes line hits closed during the rolling twelve-month reporting period as well as line hits that are still open as of September 30, 2017.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Joint 3rd Quarter 2017 Reliability Report – :
Metropolitan Edison Company, :
Pennsylvania Electric Company :
Pennsylvania Power Company and West :
Penn Power Company – Public Version :**

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PA PUBLIC UTILITY COMMISSION
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CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true and correct copy of the foregoing document upon the individuals listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

Service by first class mail, as follows:

John R. Evans
Office of Small Business Advocate
Suite 1102, Commerce Building
300 North Second Street
Harrisburg, PA 17101

Tanya McCloskey
Office of Consumer Advocate
555 Walnut Street – 5th Floor
Harrisburg, PA 17101-1923

Richard A. Kanaskie
Bureau of Investigation & Enforcement
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

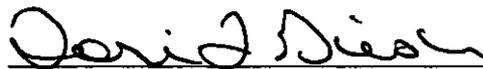
Scott Rubin
Utility Workers Union of America
333 Oak Lane
Bloomsburg, PA 17815-2036

Service by electronic mail, as follows:

David Dulick, General Counsel
David Dulick@ccsenergy.com

Rich Geosits, Manager, Power Delivery
Rich Geosits@ccsenergy.com

Dated: November 1, 2017



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Pennsylvania Electric Company,
Pennsylvania Power Company and
West Penn Power Company

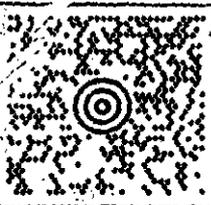
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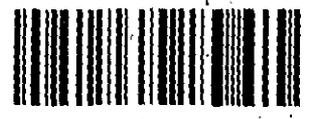
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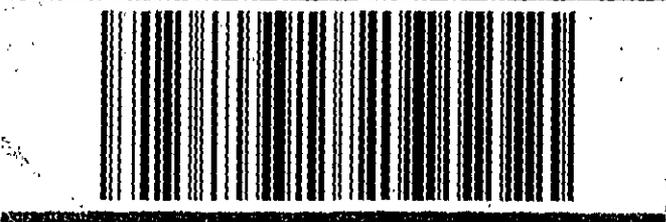
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