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M-2016-2522508

November 1, 2019

**VIA UNITED PARCEL SERVICE**

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

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PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU

**Re: Joint 3<sup>rd</sup> Quarter 2019 Reliability Report – Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company – Public Version**

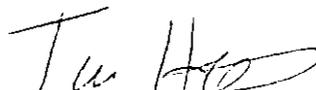
Dear Secretary Chiavetta:

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 3<sup>rd</sup> Quarter 2019 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,



Teresa K. Harrold

Enclosures

- c: As Per Certificate of Service  
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)  
J. Van Zant – 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



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PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU

## Joint 2019 3<sup>rd</sup> 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)

**Joint 3<sup>rd</sup> Quarter 2019 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.<sup>1</sup>*

*Major Event(s)*

None of the Companies experienced a major event during the reporting period ending September 30, 2019.

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<sup>1</sup> 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 2019 (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
<b>SAIFI</b>	1.15	1.38	1.40	1.26	1.52	1.77	1.12	1.34	1.25	1.05	1.26	1.09
<b>CAIDI</b>	117	140	151	117	141	136	101	121	131	170	204	155
<b>SAIDI</b>	135	194	211	148	213	241	113	162	163	179	257	169
<b>MAIFI<sup>2</sup></b>			0.818			0.699			0.141			
<b>Customers Served<sup>3</sup></b>	566.283			580.071			164.196			717.174		
<b>Number of Sustained Interruptions</b>	11.575			13.586			3.308			12.289		
<b>Customers Affected</b>	791.678			1,027.851			205.077			781.468		
<b>Customer Minutes</b>	119,610,129			139,540,416			26,773,132			120,997,470		
<b>Number of Customer Momentary Interruptions</b>	468,280			408.626			23.113					

<sup>2</sup> Momentary Average Interruption Frequency Index ("MAIFI") values are not available for West Penn.

<sup>3</sup> Represents the average number of customers served during the reporting period.

**Unique Events Occurring in 3Q 2019:**

Penelec

- Beginning the evening of Friday, July 19, 2019, thunderstorms moved through Pennsylvania, including the Penelec service territory. Conditions included wind gusts over 30 mph, rains, and lightning, which caused downed trees and power lines and broken poles. The reliability impact of the storm was 6.8 minutes of System Average Interruption Duration Index (“SAIDI”), 0.02 of System Average Interruption Frequency Index (“SAIFI”), and an overall storm Customer Average Interruption Duration Index (“CAIDI”) of 287.9 minutes.
- Beginning the afternoon of Saturday, August 17, 2019 and continuing into Sunday, August 18, 2019, thunderstorms moved throughout Pennsylvania, including the Penelec service territory. Conditions included wind gusts over 50 miles per hour, rain, and lightning. Damage included downed trees and power lines and broken poles. The reliability impact of the storm was 23.2 minutes of SAIDI, 0.08 of SAIFI, and an overall storm CAIDI of 277.6 minutes.

West Penn

- Beginning the afternoon of Saturday, June 29, 2019 and continuing through the afternoon of Sunday, June 30, 2019, a cold front pushed through producing a line of severe thunderstorms that moved west to east across Pennsylvania, including the West Penn service territory impacting 14,909 customers. The storm produced heavy rain, lightning, and straight-line winds with recorded wind gusts reaching fifty miles per hour. The reliability impact of the storm was 5.0 minutes of SAIDI, 0.02 of SAIFI, and an overall storm CAIDI of 242.2 minutes.

*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 SAIFI and 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.

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

*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 2019 12-Month Rolling	Met-Ed			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Customer Minutes
Trees off ROW - tree	48,739,596	2,141	207,971	40.75%
Equipment failure	23,995,995	2,486	210,236	20.06%
Vehicle	12,052,864	307	58,923	10.08%
Unknown	6,957,682	1,321	66,927	5.82%
Line failure	6,925,579	1,019	47,297	5.79%
Trees off ROW - limb	4,058,228	550	29,504	3.39%
Forced outage	3,748,308	405	57,082	3.13%
Lightning	3,428,720	404	24,311	2.87%
Trees on ROW	2,602,245	313	8,890	2.18%
Animal	2,067,056	1,222	21,162	1.73%
Wind	1,165,993	102	6,288	0.97%
Overload	893,868	76	10,754	0.75%
Object contact with line	690,397	63	6,563	0.58%
Trees - sec/service	568,626	487	1,314	0.48%
Human error - non-company	476,083	83	6,332	0.40%
UG dig-up	394,888	38	2,658	0.33%
Human error - company	295,449	53	15,600	0.25%
Bird	273,942	411	3,023	0.23%
Ice	94,998	13	318	0.08%
Customer equipment	94,089	32	5,665	0.08%
Previous lightning	25,451	21	66	0.02%
Other utility - non-electric	20,360	6	521	0.02%
Fire	19,526	5	114	0.02%
Contamination	13,863	3	122	0.01%
Other electric utility	4,260	7	27	0.00%
Vandalism	2,063	7	10	0.00%
<b>Total</b>	<b>119,610,129</b>	<b>11,575</b>	<b>791,678</b>	<b>100%</b>

### 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, 2019, and associated actions designed to address these outage causes.

To address outages caused by trees, Met-Ed performs cycle-based tree trimming and enhanced tree trimming in select locations. Enhanced tree trimming removes healthy limbs overhanging primary conductors. While Met-Ed's options are limited when it comes to management of off-right-of-way ("ROW") trees, it is permitted to and actively identifies priority off-ROW trees that are dead, dying, diseased, leaning, and significantly encroaching the corridor for removal. Trees identified as a potential cause of a future outage are removed to prevent an interruption of electrical service to Met-Ed's customers. Met-Ed has increased its focus on off-ROW tree removals in the third and fourth quarter of 2019. Met-Ed has also implemented the mitigation of trees subject to damage from the Emerald Ash Borer in its normal cycle program.

To reduce the likelihood of equipment-caused outages, Met-Ed follows inspection and maintenance ("I&M") programs<sup>4</sup> 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.

Met-Ed reviews vehicle caused outages to determine if it is a repeat location warranting remedial action, which could include modifying attachment height for communications, installing a taller pole, relocating the pole or installing sectionalizing equipment to minimize customer impact.

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<sup>4</sup> 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. The Companies submitted their Biennial Inspection, Maintenance, Repair and Replacement Plan for the period January 1, 2019 through December 31, 2020 on September 29, 2017, which was deemed approved pursuant to 52 Pa. Code § 57.198(i).

Outages by Cause – Penelec

Outage by Cause				
3rd Quarter 2019 12-Month Rolling	Penelec			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Customer Minutes
Trees off ROW - tree	50,427,860	1,943	244,283	36.14%
Equipment failure	25,232,082	2,828	257,768	18.08%
Line failure	19,442,502	1,775	161,625	13.93%
Lightning	8,849,794	775	67,598	6.34%
Vehicle	6,492,612	321	36,733	4.65%
Forced outage	5,621,898	1,045	64,093	4.03%
Unknown	5,581,259	1,505	58,156	4.00%
Wind	4,018,298	42	7,900	2.88%
Animal	3,185,663	1,218	26,466	2.28%
Trees off ROW - limb	2,429,583	348	18,072	1.74%
Human error - company	1,500,805	114	40,896	1.08%
Human error - non-company	1,431,848	87	8,588	1.03%
Object contact with line	1,127,081	37	5,354	0.81%
Bird	1,083,265	355	11,538	0.78%
Trees - sec/service	982,502	800	3,114	0.70%
Other electric utility	515,104	87	1,878	0.37%
Trees on ROW	445,969	103	3,891	0.32%
Overload	254,333	34	2,334	0.18%
Ice	232,793	13	1,926	0.17%
Other utility - non-electric	223,224	5	725	0.16%
Previous lightning	144,265	43	296	0.10%
UG dig-up	138,353	58	1,478	0.10%
Fire	71,028	10	365	0.05%
Contamination	48,326	6	118	0.03%
Customer equipment	27,575	17	1,691	0.02%
Switching Error	20,000	3	707	0.01%
Vandalism	12,394	14	258	0.01%
Call error	0	0	0	0.00%
<b>Total</b>	<b>139,540,416</b>	<b>13,586</b>	<b>1,027,851</b>	<b>100%</b>

### 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, 2019 and the associated actions designed to address these outage causes.

To reduce outages caused by trees, Penelec performs cycle-based tree trimming which removes selected incompatible trees within the clearing zone corridor, removes certain defective limbs that are overhanging primary conductors, controls selected incompatible brush, and removes off-ROW priority trees. While Penelec's options are limited when it comes to management of off-ROW trees, it is permitted to and actively identifies priority off-ROW trees that are dead, dying, diseased, leaning, and significantly encroaching the corridor for removal. Penelec has increased its focus on off-ROW tree removals in the third and fourth quarter of 2019. Penelec continues the mitigation of trees subject to damage from the Emerald Ash Borer through its normal cycle program.

To reduce the likelihood of outages caused by equipment and line failure, 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.

Outages by Cause – Penn Power

<b>Outage by Cause</b>				
<b>3rd Quarter 2019 12-Month Rolling</b>	<b>Penn Power</b>			
<b>Cause</b>	<b>Customer Minutes</b>	<b>Number of Sustained Interruptions</b>	<b>Customers Affected</b>	<b>% Based on Customer Minutes</b>
Trees off ROW - tree	12,909,177	835	75,814	48.22%
Equipment failure	3,174,074	356	37,851	11.86%
Vehicle	2,059,231	98	14,971	7.69%
Animal	1,893,808	422	17,417	7.07%
Line failure	1,752,006	298	12,346	6.54%
Lightning	1,266,215	282	7,043	4.73%
Trees off ROW - limb	1,001,071	143	5,481	3.74%
Unknown	928,096	150	15,339	3.47%
Bird	469,699	322	4,744	1.75%
Human error - non-company	458,452	24	3,844	1.71%
Forced outage	341,308	81	5,358	1.27%
Trees - sec/service	194,034	158	592	0.72%
Overload	78,187	28	1,838	0.29%
Wind	50,035	3	109	0.19%
Trees on ROW	47,393	8	249	0.18%
Human error - company	41,749	11	345	0.16%
Previous lightning	40,170	45	287	0.15%
Object contact with line	29,144	8	1,064	0.11%
UG dig-up	25,368	17	327	0.09%
Ice	7,936	1	16	0.03%
Customer equipment	3,031	13	13	0.01%
Vandalism	2,672	3	25	0.01%
Fire	276	2	4	0.00%
<b>Total</b>	<b>26,773,132</b>	<b>3,308</b>	<b>205,077</b>	<b>100%</b>

### 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, 2019 and the associated actions designed to address these outage causes.

To address outages caused by trees, Penn Power performs tree trimming which removes selected incompatible trees within the clearing zone corridor, removes certain defective limbs that are overhanging primary conductors, controls selected incompatible brush, and removes off-ROW priority trees. While Penn Power's options are limited when it comes to management of off-ROW trees, it is permitted to and actively identifies priority off-ROW trees that are dead, dying, diseased, leaning, and significantly encroaching the corridor for removal. In addition, Penn Power performs enhanced trimming, which removes limbs overhanging primary conductors.

To reduce the likelihood of outages caused by equipment failure, Penn Power follows 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.

Penn Power reviews vehicle caused outages to determine if it is a repeat location warranting remedial action, which could include modifying attachment height for communications, installing a taller pole, relocating the pole or installing sectionalizing equipment to minimize customer impact.

Outages by Cause – West Penn

Outage by Cause				
3rd Quarter 2019 12-Month Rolling	West Penn			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Customer Minutes
Trees off ROW - tree	51,754,421	3,045	226,045	42.77%
Equipment failure	19,554,547	2,225	140,545	16.16%
Line failure	12,777,865	1,309	83,987	10.56%
Vehicle	9,378,186	362	73,241	7.75%
Unknown	7,549,939	1,730	65,043	6.24%
Trees on ROW	3,977,176	493	18,714	3.29%
Trees off ROW - limb	3,847,741	199	29,150	3.18%
Forced outage	3,594,321	652	65,873	2.97%
Animal	1,713,782	1,120	16,322	1.42%
Lightning	1,667,378	188	13,418	1.38%
Human error - non-company	1,587,769	84	12,936	1.31%
Other electric utility	904,270	14	1,689	0.75%
Human error - company	742,172	54	20,703	0.61%
Wind	359,984	24	2,763	0.30%
Bird	356,709	314	3,484	0.29%
Vandalism	215,879	6	559	0.18%
Trees - sec/service	214,952	353	816	0.18%
Customer equipment	209,109	11	1,879	0.17%
Overload	149,889	20	2,255	0.12%
Fire	121,130	5	360	0.10%
Ice	107,721	2	60	0.09%
Object contact with line	97,983	23	545	0.08%
UG dig-up	83,748	44	570	0.07%
Switching error	20,693	3	409	0.02%
Other utility - non-electric	8,935	6	85	0.01%
Previous Lightning	1,156	2	16	0.00%
Contamination	15	1	1	0.00%
<b>Total</b>	<b>120,997,470</b>	<b>12,289</b>	<b>781,468</b>	<b>100%</b>

### 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, 2019, and the associated actions designed to address these outage causes.

To reduce outages caused by trees, West Penn performs cycle-based tree trimming which removes selected incompatible trees within the clearing zone corridor, removes certain defective limbs that are overhanging primary conductors, controls selected incompatible brush, and removes off-ROW priority trees. While West Penn's options are limited when it comes to management of off-ROW trees, it is permitted to and actively identifies priority off-ROW trees that are dead, dying, diseased, leaning, and significantly encroaching the corridor for removal. West Penn has increased its focus on off-ROW tree removals in the third and fourth quarter of 2019. West Penn continues its program to accelerate the mitigation of trees subject to damage from the Emerald Ash Borer.

To reduce the likelihood of equipment and line failures, 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.

*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 2019		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
<b>Forestry</b>	Transmission (Miles)	282.22	43.32	236.41	384.88	84.74	299.47	171.22	85.56	126.42	208.34	16.43	164.28
	Distribution (Miles)	2.845	721	1,910	3,953	1,031	2,714	1,141	246	846	4,480	1,076	3,062
<b>Transmission</b>	Aerial Patrols	2	0	1	2	0	1	2	1	2	2	0	1
	Groundline	890	1,109	1,109	981	161	1,089	122	0	151	1,547	384	384
<b>Substation</b>	Substation Inspections Class A	422	210	422	788	393	788	148	74	148	714	357	714
	Substation Inspections Class B	422	0	212	788	1	396	148	0	74	714	2	359
	Substation Inspections Class C	1,688	421	1,266	3,152	784	2,364	592	148	444	2,856	716	2,144
	Transformers	395	109	355	696	141	645	125	86	87	688	48	615
	Breakers	87	22	70	437	164	408	8	0	8	379	114	346
	Relay Schemes	114	29	114	146	27	141	18	0	18	185	45	154
<b>Distribution</b>	Capacitors	4,761	0	4,761	8,702	0	8,702	978	0	978	1,305	0	1,305
	Poles	28,000	12,320	26,983	41,584	9,673	35,288	10,657	0	10,667	45,074	9,117	45,138
	Reclosers	1,115	153	1,040	2,581	2,585	2,585	864	0	864	3,911	866	3,911
	Radio-Controlled Switches	760	96	483	2,706	345	1,617	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.

*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 Expenditures<sup>5</sup>*

Met-Ed T&D O&M—3Q / YTD September 2019 (\$)						
		Transmission				
Category		3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget
560	Operation Supervision and Engineering	0	0	0	0	0
561	Load Dispatching	5,819	(38,413)	(27,856)	(113,157)	(150,250)
562	Station Expenses	2,528	0	9,068	0	0
563	Overhead Lines Expenses	272	2,750	42,952	56,800	56,800
565	Transmission of Electricity by Others	2,218,721	2,109,000	6,682,349	6,327,000	8,436,000
566	Miscellaneous Transmission Expenses	(1,796)	(4,777)	(58,657)	(13,580)	(18,298)
567	Rents	16,063	0	48,188	0	0
568	Maintenance Supervision and Engineering	100	0	3,571	0	0
569	Maintenance of Structures	51,204	6,011	155,759	21,266	29,209
570	Maintenance of Station Equipment	72,611	1,125	623,528	3,375	4,500
571	Maintenance of Overhead Lines	49,655	0	99,195	0	0
572	Maintenance of Underground Lines	0	0	2,976	0	0
573	Maintenance of Miscellaneous Transmission Plant	(865)	(1,197)	129	(3,592)	(4,790)
575	Market Administration, Monitoring & Compliance Services	0	0	0	0	0
<b>Transmission Total</b>		<b>2,414,311</b>	<b>2,074,500</b>	<b>7,581,202</b>	<b>6,278,112</b>	<b>8,353,172</b>
		Distribution				
Category		3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget
580	Operation Supervision and Engineering	99,065	52,985	265,602	166,242	228,234
581	Load Dispatching	52,711	52,904	161,223	160,141	231,996
582	Station Expenses	206,248	228,910	464,450	683,802	912,328
583	Overhead Line Expenses	62,465	29,860	220,458	100,882	122,451
584	Underground Line Expenses	0	0	652	0	0
585	Distribution-Street Lighting & Signal System Expenses	0	0	0	0	0
586	Meter Expenses	167,540	172,115	468,595	461,571	640,356
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	1,290,480	1,604,579	5,244,515	4,658,882	6,404,140
589	Rents	124,855	130,867	384,019	392,602	523,469
590	Maintenance Supervision and Engineering	152,378	100,020	399,714	311,162	426,857
591	Maintenance of Structures	285	671	6,819	2,068	2,790
592	Maintenance of Station Equipment	1,303,288	1,874,202	4,368,961	5,412,392	7,292,017
593	Maintenance of Overhead Lines	9,715,418	8,544,438	37,590,525	25,790,589	34,016,659
594	Maintenance of Underground Lines	697,790	575,837	1,573,851	1,685,360	2,229,571
595	Maintenance Line Transformer	62,738	281,648	194,263	844,945	1,126,594
596	Maintenance of Street Lighting and Signal Systems	152,248	91,634	469,159	307,853	400,145
597	Maintenance of Meters	408,845	550,790	1,225,060	1,750,816	2,348,044
598	Maintenance of Miscellaneous Distribution Plant	284,896	574,897	767,789	1,814,640	2,381,957
<b>Distribution Total</b>		<b>14,781,251</b>	<b>14,866,357</b>	<b>53,805,655</b>	<b>44,543,948</b>	<b>59,287,607</b>
<b>Met-Ed Total</b>		<b>17,195,562</b>	<b>16,940,856</b>	<b>61,386,857</b>	<b>50,822,059</b>	<b>67,640,780</b>

<sup>5</sup> Budgets are subject to change.

Penelec						
T&D O&M –3Q /YTD September 2019 (\$)						
Transmission						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	0	0	0	0	0
561	Load Dispatching	1,316	(58,352)	1,774	(169,039)	(224,895)
562	Station Expenses	54,858	35,183	164,730	113,219	157,082
563	Overhead Lines Expenses	68,161	45,597	420,529	420,896	531,051
565	Transmission of Electricity by Others	8,620,047	6,905,679	24,190,723	20,717,037	27,622,716
566	Miscellaneous Transmission Expenses	6,914	0	(30,850)	0	0
567	Rents	50,106	32,571	267,551	150,817	275,000
568	Maintenance Supervision and Engineering	32,099	0	102,426	0	0
569	Maintenance of Structures	67,409	6,480	217,228	22,923	31,485
570	Maintenance of Station Equipment	109,504	72,139	316,382	216,418	288,560
571	Maintenance of Overhead Lines	61,250	0	233,386	0	0
572	Maintenance of Underground Lines	532	0	639	0	0
573	Maintenance of Miscellaneous Transmission Plant	(2,604)	0	746	0	0
575	Market Administration, Monitoring & Compliance Services	0	0	0	0	0
<b>Transmission Total</b>		<b>9,069,594</b>	<b>7,039,298</b>	<b>25,885,264</b>	<b>21,472,271</b>	<b>28,681,000</b>
Distribution						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	102,297	82,723	355,684	245,357	325,625
581	Load Dispatching	104,452	72,399	297,814	225,211	311,134
582	Station Expenses	108,831	0	410,576	0	0
583	Overhead Line Expenses	33,095	15,790	88,256	81,115	91,827
584	Underground Line Expenses	262,120	290,068	810,597	768,052	970,299
585	Distribution-Street Lighting & Signal System Expenses	0	0	0	0	0
586	Meiter Expenses	186,396	194,025	513,202	580,372	778,690
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	1,601,381	2,781,179	6,910,996	7,868,700	10,818,822
589	Rents	774,061	306,851	1,607,513	920,554	1,227,405
590	Maintenance Supervision and Engineering	127,763	107,281	371,672	333,737	457,831
591	Maintenance of Structures	0	0	0	0	0
592	Maintenance of Station Equipment	1,457,195	1,436,651	5,035,662	4,319,831	5,911,064
593	Maintenance of Overhead Lines	8,612,462	9,049,715	30,446,382	26,066,072	35,394,672
594	Maintenance of Underground Lines	449,413	56,154	1,138,466	122,209	146,475
595	Maintenance Line Transformer	54,815	60,415	169,729	181,246	241,662
596	Maintenance of Street Lighting and Signal Systems	249,627	673,832	774,152	2,101,393	2,912,376
597	Maintenance of Meters	700,368	1,037,224	2,053,727	3,141,551	4,200,560
598	Maintenance of Miscellaneous Distribution Plant	286,099	0	926,355	0	32,545
<b>Distribution Total</b>		<b>15,110,373</b>	<b>16,164,307</b>	<b>51,910,782</b>	<b>46,955,400</b>	<b>63,820,986</b>
<b>Penelec Total</b>		<b>24,179,967</b>	<b>23,203,606</b>	<b>77,796,046</b>	<b>68,427,670</b>	<b>92,501,987</b>

Penn Power						
T&D O&M –3Q/ YTD September 2019 (\$)						
Transmission						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	418	287	1,176	933	1,325
561	Load Dispatching	(6,393)	31,278	(10,198)	94,161	125,907
562	Station Expenses	64	(86)	64	(236)	(347)
563	Overhead Lines Expenses	0	(150)	0	(411)	(603)
565	Transmission of Electricity by Others	1,118,942	1,037,223	3,330,762	3,111,669	4,148,892
566	Miscellaneous Transmission Expenses	822	1,244	2,685	2,927	4,216
567	Rents	0	0	0	0	0
568	Maintenance Supervision and Engineering	3,272	2,835	9,423	9,421	13,054
569	Maintenance of Structures	5,930	1,856	19,579	6,450	9,575
570	Maintenance of Station Equipment	2,890	762	8,245	2,286	3,047
571	Maintenance of Overhead Lines	4,576	21,257	14,735	66,446	89,459
572	Maintenance of Underground Lines	0	0	0	0	0
573	Maintenance of Miscellaneous Transmission Plant	(301)	0	577	0	0
575	Market Administration, Monitoring & Compliance Services	0	0	0	0	0
<b>Transmission Total</b>		<b>1,130,219</b>	<b>1,096,506</b>	<b>3,377,048</b>	<b>3,293,646</b>	<b>4,394,526</b>
Distribution						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	0	0	0	0	0
581	Load Dispatching	0	0	0	0	0
582	Station Expenses	25,588	0	53,099	0	0
583	Overhead Line Expenses	6,326	0	116,930	0	0
584	Underground Line Expenses	114,927	131,877	239,305	395,298	526,031
585	Distribution-Street Lighting & Signal System Expenses	0	0	0	0	0
586	Meter Expenses	15,441	20,079	48,649	60,948	82,500
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	33,406	202,657	411,545	572,819	782,612
589	Rents	45,340	82,609	335,987	247,828	330,437
590	Maintenance Supervision and Engineering	35,825	26,902	105,371	83,668	114,777
591	Maintenance of Structures	0	0	0	0	0
592	Maintenance of Station Equipment	227,228	74,756	779,157	228,940	308,743
593	Maintenance of Overhead Lines	2,903,272	3,538,135	10,621,538	10,493,976	13,683,588
594	Maintenance of Underground Lines	85,605	14,384	187,293	38,570	49,513
595	Maintenance Line Transformer	7,370	12,735	25,271	38,204	50,939
596	Maintenance of Street Lighting and Signal Systems	15,544	5,239	43,689	15,718	20,957
597	Maintenance of Meters	122,782	129,355	316,999	385,708	520,239
598	Maintenance of Miscellaneous Distribution Plant	69,169	9,840	229,349	32,971	56,497
<b>Distribution Total</b>		<b>3,707,822</b>	<b>4,248,566</b>	<b>13,514,183</b>	<b>12,594,646</b>	<b>16,526,833</b>
<b>Penn Power Total</b>		<b>4,838,041</b>	<b>5,345,072</b>	<b>16,891,231</b>	<b>15,888,292</b>	<b>20,921,358</b>

West Penn						
T&D O&M –3Q / YTD September 2019 (S)						
Transmission						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	14,751	11,165	37,955	35,018	47,984
561	Load Dispatching	212,332	225,302	700,465	714,976	987,631
562	Station Expenses	114,608	29,463	543,448	89,312	119,757
563	Overhead Lines Expenses	37,483	15,805	14,273	22,127	22,127
565	Transmission of Electricity by Others	14,735,221	15,284,934	42,014,740	45,854,802	61,139,736
566	Miscellaneous Transmission Expenses	166,468	95,394	584,762	275,625	388,389
567	Rents	5,990	5,990	17,970	17,970	23,960
568	Maintenance Supervision and Engineering	211,341	160,568	600,581	433,768	617,028
569	Maintenance of Structures	10,222	7,182	35,682	25,409	34,899
570	Maintenance of Station Equipment	806,205	466,759	2,739,853	1,439,447	1,976,768
571	Maintenance of Overhead Lines	1,584,921	3,011,119	6,124,356	6,517,680	8,948,508
572	Maintenance of Underground Lines	6,377	0	6,824	0	0
573	Maintenance of Miscellaneous Transmission Plant	11,697	0	11,697	0	0
575	Market Administration, Monitoring & Compliance Services	(34)	0	47	0	0
<b>Transmission Total</b>		<b>17,917,582</b>	<b>19,313,680</b>	<b>53,432,653</b>	<b>55,426,134</b>	<b>74,306,787</b>
Distribution						
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	33,974	9,183	118,192	27,398	40,721
581	Load Dispatching	428,696	476,817	1,314,267	1,502,135	2,032,520
582	Station Expenses	176,478	363,986	529,340	902,830	1,063,203
583	Overhead Line Expenses	128,236	195,679	1,034,404	957,613	1,001,275
584	Underground Line Expenses	411,794	324,963	1,155,337	975,038	1,300,000
585	Distribution-Street Lighting & Signal System Expenses	0	0	0	0	0
586	Meter Expenses	368,957	401,682	1,109,629	1,226,330	1,699,416
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	3,747,958	3,559,600	12,270,953	11,019,967	15,053,815
589	Rents	0	0	0	0	0
590	Maintenance Supervision and Engineering	214,006	185,636	587,981	563,374	775,543
591	Maintenance of Structures	0	0	0	0	0
592	Maintenance of Station Equipment	2,054,166	2,354,776	5,790,532	6,147,480	8,738,340
593	Maintenance of Overhead Lines	8,694,761	9,664,822	40,774,991	27,336,592	35,705,974
594	Maintenance of Underground Lines	212,480	266,504	864,226	923,511	1,105,759
595	Maintenance Line Transformer	37,371	75,799	105,407	227,398	303,198
596	Maintenance of Street Lighting and Signal Systems	142,360	154,460	543,139	485,477	663,079
597	Maintenance of Meters	358,834	305,395	964,642	972,118	1,336,071
598	Maintenance of Miscellaneous Distribution Plant	76,310	38,434	232,019	132,642	174,905
<b>Distribution Total</b>		<b>17,086,381</b>	<b>18,377,738</b>	<b>67,395,059</b>	<b>53,399,904</b>	<b>70,993,818</b>
<b>West Penn Power Total</b>		<b>35,003,963</b>	<b>37,691,419</b>	<b>120,827,713</b>	<b>108,826,038</b>	<b>145,300,605</b>

*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<sup>6, 7</sup>*

Met-Ed					
T&D Capital – 3Q/YTD September 2019 (\$)					
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity	1,670,943	4,867,090	5,163,414	14,375,269	18,816,849
Condition	5,904,245	4,823,643	14,744,115	16,321,136	20,865,773
Facilities	365,445	79,882	1,403,095	241,719	401,995
Forced	15,289,449	12,036,151	37,539,475	35,877,081	47,374,775
Meter Related	352,780	777,325	1,228,058	2,408,784	3,184,048
New Business	4,800,946	4,051,147	14,133,447	13,215,260	17,430,231
Other	5,559,186	2,716,748	24,749,263	16,218,550	18,497,289
Reliability	6,682,443	9,118,386	15,404,000	29,542,119	35,689,750
Street Light	171,841	327,275	563,931	1,060,098	1,355,698
Tools & Equipment	339,117	315,973	1,157,062	944,457	1,367,255
Vegetation Management	5,880,064	3,321,082	12,161,364	9,044,213	11,676,319
<b>Met-Ed Total</b>	<b>47,016,458</b>	<b>42,434,702</b>	<b>128,247,225</b>	<b>139,248,686</b>	<b>176,659,981</b>

Penelec					
T&D Capital – 3Q/YTD September 2019 (\$)					
Category	3Q Actuals	3Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity	489,974	2,481	9,192	8,000	9,232
Condition	3,696,541	1,893,021	9,973,157	6,055,190	8,025,004
Facilities	95,306	134,252	1,083,267	399,462	612,343
Forced	12,825,852	10,799,800	38,812,134	30,923,618	41,673,023
Meter Related	351,962	297,364	1,338,644	898,787	1,199,288
New Business	3,804,264	3,072,280	9,823,267	9,123,479	12,077,113
Other	7,374,004	5,983,690	18,704,540	22,042,630	28,512,226
Reliability	4,257,341	8,011,567	19,459,201	19,313,188	24,395,291
Street Light	516,441	1,046,149	1,751,079	3,096,850	4,152,570
Tools & Equipment	258,640	3,203,165	1,276,435	3,878,964	4,733,828
Vegetation Management	10,314,187	4,781,527	22,288,273	15,856,518	21,136,461
<b>Penelec Total</b>	<b>43,984,514</b>	<b>39,225,297</b>	<b>124,519,189</b>	<b>111,596,685</b>	<b>146,526,379</b>

<sup>6</sup> Budgets are subject to change.

<sup>7</sup> General note: Capital reported on Generally Accepted Accounting Principles (“GAAP”) basis.

<b>Penn Power</b>					
<b>T&amp;D Capital – 3Q/YTD September 2019 (\$)</b>					
<b>Category</b>	<b>3Q Actuals</b>	<b>3Q Budget</b>	<b>YTD Actuals</b>	<b>YTD Budget</b>	<b>Annual Budget</b>
Capacity	305,670	435	702,844	233,064	233,499
Condition	-32,268	1,576,554	271,919	3,203,737	5,028,802
Facilities	3,897	0	10,277	0	23,425
Forced	3,124,908	1,500,305	9,859,500	5,102,503	6,794,376
Meter Related	121,095	175,635	477,451	485,712	656,288
New Business	1,141,416	1,376,735	4,544,871	4,601,079	5,984,260
Other	1,976,686	(915,761)	4,156,918	(2,318,017)	(3,181,698)
Reliability	6,187,542	8,183,814	13,397,732	23,681,867	29,697,638
Street Light	27,361	142,682	242,295	427,898	570,580
Tools & Equipment	36,394	11,299	149,272	140,001	161,646
Vegetation Management	668,108	795,073	1,936,100	2,315,163	2,971,030
<b>Penn Power Total</b>	<b>13,560,808</b>	<b>12,846,771</b>	<b>35,749,178</b>	<b>37,873,007</b>	<b>48,939,848</b>

<b>West Penn</b>					
<b>T&amp;D Capital – 3Q/YTD September 2019 (\$)</b>					
<b>Category</b>	<b>3Q Actuals</b>	<b>3Q Budget</b>	<b>YTD Actuals</b>	<b>YTD Budget</b>	<b>Annual Budget</b>
Capacity	3,278,783	4,492,351	6,907,385	10,316,414	(2,769,181)
Condition	5,839,003	6,680,620	17,877,495	17,825,779	21,879,413
Facilities	783,641	63,511	1,313,571	190,438	352,465
Forced	13,304,527	11,993,332	43,626,376	37,075,979	48,992,024
Meter Related	309,914	366,348	1,069,082	1,099,437	1,510,550
New Business	5,323,152	5,315,081	17,561,586	21,445,673	28,682,457
Other	12,367,253	3,265,565	39,829,686	36,515,724	44,082,329
Reliability	12,127,244	24,559,043	35,171,290	46,756,385	59,905,144
Street Light	362,191	446,517	1,327,763	1,365,410	1,839,136
Tools & Equipment	629,017	623,192	1,916,520	1,906,011	2,981,970
Vegetation Management	11,792,020	7,024,432	23,896,953	20,032,652	26,926,912
<b>West Penn Total</b>	<b>66,116,745</b>	<b>64,829,992</b>	<b>190,497,707</b>	<b>194,529,901</b>	<b>234,383,219</b>

*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).<sup>8</sup>*

*Staffing Levels*

Met-Ed 2019												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2020 <sup>11</sup>
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other <sup>9</sup>	Retirement	Voluntary Separation	Other <sup>10</sup>	
Distribution	Line Leader	48	49	51				3	1			
	Line Troubleshooter	35	35	35								
	Lineman	128	136	132				30			34	
Substation	Substation Leader	15	15	15								
	Substation Employee	66	70	75				22			17	
Transmission	Line Leader	1	1	2				1				
	Lineman	10	10	14				5			1	
	<b>Total</b>	<b>303</b>	<b>316</b>	<b>324</b>				<b>61</b>	<b>1</b>		<b>52</b>	

<sup>8</sup> 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.

<sup>9</sup> This column includes transfers and promotions.

<sup>10</sup> This Column includes transfers, involuntary separations, and promotions.

<sup>11</sup> The hiring plan is provided annually in the 4Q report.

Penelee 2019												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2020 <sup>14</sup>
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other <sup>12</sup>	Retirement	Voluntary Separation	Other <sup>13</sup>	
Distribution	Line Leader	70	68	69				1				
	Line Troubleshooter	67	65	65								
	Lineman	122	148	146		1					3	
Substation	Substation Leader	34	35	35				1			1	
	Substation Employee	27	38	33				1			6	
Transmission	Line Leader	5	5	6				1				
	Lineman	21	21	20		1				1	1	
	<b>Total</b>	<b>346</b>	<b>380</b>	<b>374</b>		<b>2</b>		<b>4</b>		<b>1</b>	<b>11</b>	

<sup>12</sup> This column includes transfers and promotions.

<sup>13</sup> This column includes transfers, involuntary separations, and promotions.

<sup>14</sup> The hiring plan is provided annually in the 4Q report.

Penn Power 2019												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2020 <sup>17</sup>
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other <sup>15</sup>	Retirement	Voluntary Separation	Other <sup>16</sup>	
Distribution	Line Leader	23	22	22								
	Line Troubleshooter	9	9	9								
	Lineman	44	48	53			5					
Substation	Substation Leader	5	5	5								
	Substation Employee	19	23	21				3			5	
Transmission	Line Leader	1	1	1								
	Lineman	3	3	7			4					
	<b>Total</b>	<b>104</b>	<b>111</b>	<b>118</b>			<b>9</b>	<b>3</b>			<b>5</b>	

<sup>15</sup> This column includes transfers and promotions.

<sup>16</sup> This column includes transfers, involuntary separations, and promotions.

<sup>17</sup> The hiring plan is provided annually in the 4Q report.

West Penn 2019												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2020 <sup>20</sup>
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other <sup>18</sup>	Retirement	Voluntary Separation	Other <sup>19</sup>	
Distribution	Line Leader	54	55	56				6	1		4	
	Line Troubleshooter	67	61	63				3			1	
	Lineman	103	133	129				4			8	
Substation	Substation Leader	16	21	22				1				
	Substation Employee	72	75	74							1	
Transmission	Line Leader	0	0	1				1				
	Lineman	1	5	4							1	
	<b>Total</b>	<b>313</b>	<b>350</b>	<b>349</b>				<b>15</b>	<b>1</b>		<b>15</b>	

<sup>18</sup> This column includes transfers and promotions.

<sup>19</sup> This column includes transfers, involuntary separations, and promotions.

<sup>20</sup> The hiring plan is provided annually in the 4Q report.

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

*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 call-outs 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.

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

*Call-out Response*

This portion of the report is confidential.

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PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU

**Call-Out Procedure:**

When an event occurs, Met-Ed, Penelec, Penn Power and West Penn<sup>22</sup> 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 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.

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<sup>22</sup> Penelec, Penn Power and West Penn utilize ARCOS.

ATTACHMENT A

Worst Performing Circuits - Reliability Indices

NOV 1 2019

NOV - 1 2019

PA PUBLIC UTILITIES COMMISSION  
SECRETARY'S BUREAU

Met-Ed													
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
1	No Bangor	00826-3	Easton	3,192	99	1	3,011,215	11,587	5.32	943.36	3.630	259.9	1.0
2	Mountain	00744-4	Dillsburg	1,821	98	1	2,970,162	7,298	5.25	1,631.06	4.008	407.0	0.4
3	North Cornwall	00610-2	Lebanon	2,134	66	2	1,915,570	11,213	3.38	897.64	5.254	170.8	3.0
4	Carsonia	00764-1	Reading	2,887	51	2	1,668,782	8,651	2.95	578.03	2.997	192.9	0.0
5	Huffs Church	00600-1	Boyertown	1,246	93	0	1,327,566	2,889	2.34	1,065.46	2.319	459.5	0.0
6	Lynnville	00735-1	Hamburg	1,373	36	1	1,189,998	3,553	2.10	866.71	2.588	334.9	1.0
7	Crossroads	00728-4	York	1,151	69	1	1,134,668	4,279	2.00	985.81	3.718	265.2	0.3
8	Barto	00706-1	Boyertown	2,854	110	0	1,081,085	3,875	1.91	378.80	1.358	279.0	0.0
9	Bern Church	00789-1	Reading	1,426	66	0	1,075,414	2,955	1.90	754.15	2.072	363.9	0.0
10	Taxville	00575-4	York	2,214	39	2	1,042,523	5,741	1.84	470.88	2.593	181.6	1.4
11	Fairview	00519-4	Hanover	2,694	34	2	1,016,922	8,808	1.80	377.48	3.269	115.5	9.9
12	Flying Hills	00777-1	Reading	1,774	75	0	1,016,877	4,314	1.80	573.21	2.432	235.7	1.0
13	Gardners	00754-4	Gettysburg	626	41	0	1,009,195	1,623	1.78	1,612.13	2.593	621.8	0.0
14	Shawnee	00895-3	Stroudsburg	3,639	82	0	999,596	4,992	1.77	274.69	1.372	200.2	0.7
15	Mountain	00740-4	Dillsburg	2,642	46	1	898,128	4,213	1.59	339.94	1.595	213.2	0.0
16	Ottsville	00660-3	Easton	870	48	0	889,179	1,459	1.57	1,022.04	1.677	609.4	3.6
17	Hokes	00587-4	York	892	29	0	888,427	1,987	1.57	995.99	2.228	447.1	3.0
18	Bernville	00786-1	Hamburg	1,847	93	0	850,753	5,849	1.50	460.61	3.167	145.5	1.0
19	Hill	00734-4	York	1,635	46	1	845,192	2,953	1.49	516.94	1.806	286.2	0.0
20	Lickdale	00626-2	Lebanon	1,495	54	2	819,564	4,930	1.45	548.20	3.298	166.2	0.0
21	Barto	00705-1	Boyertown	875	63	2	804,188	2,568	1.42	919.07	2.935	313.2	0.7
22	Queen St	00522-4	York	2,117	36	1	777,809	5,665	1.37	367.41	2.676	137.3	0.2
23	Ferndale	00871-3	Easton	484	39	1	766,554	2,250	1.35	1,583.79	4.649	340.7	1.0
24	Saylorsburg	00114-3	Stroudsburg	691	22	1	726,099	1,423	1.28	1,050.79	2.059	510.3	1.0
25	S 6Th St	00415-2	Lebanon	1,186	9	2	688,883	3,715	1.22	580.85	3.132	185.4	0.0
26	Raintree	00642-4	York	1,854	25	1	679,774	3,711	1.20	366.65	2.002	183.2	1.9
27	Campbelltown	00731-2	Lebanon	2,846	70	1	675,884	4,425	1.19	237.49	1.555	152.7	0.0
28	Birdsboro	00756-1	Reading	1,558	76	1	655,896	5,449	1.16	420.99	3.497	120.4	4.2
29	Palmer	00657-3	Easton	1,445	25	1	632,627	6,251	1.12	437.80	4.326	101.2	0.0
30	Stouchburg	00758-2	Lebanon	1,071	27	2	604,197	2,937	1.07	564.14	2.742	205.7	0.0
31	Broad Street	00776-2	Lebanon	1,919	13	0	593,242	3,368	1.05	309.14	1.755	176.1	0.0
32	Windsor	00797-4	York	1,531	92	3	591,685	5,895	1.04	386.47	3.850	100.4	3.0
33	Crossroads	00729-4	York	762	30	3	587,982	2,377	1.04	771.63	3.119	247.4	1.0
34	Raubsville St	00079-3	Easton	794	19	1	580,148	1,841	1.02	730.66	2.319	315.1	0.0
35	Lickdale	00625-2	Lebanon	1,003	86	0	578,010	1,894	1.02	576.28	1.888	305.2	0.0

Met-Ed													
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
36	Shawnee	00822-3	Stroudsburg	3,773	65	2	562,437	5,572	0.99	149.07	1,477	100.9	0.6
37	Birdsboro	00757-1	Reading	1,738	55	1	546,952	3,716	0.97	314.70	2,138	147.2	1.2
38	S Nazareth	00809-3	Easton	3,180	49	2	538,898	8,896	0.95	169.46	2,797	60.6	0.0
39	East Prospect	00765-4	York	1,919	42	4	531,652	8,793	0.94	277.05	4,582	60.5	0.0

Penelec													
Circuit Rank	Substation	Circuit Desc	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
1	DuBois	00137-23	DuBois	2.865	92	1	1,801,885	15,930	3.11	628.93	5.560	113.1	1.8
2	Logan	00700-81	Lewistown	1.006	49	0	1,581,368	4,260	2.73	1,571.94	4.235	371.2	0.0
3	Natl Forge Sw Sta	00577-41	Warren	1.212	55	0	1,409,769	12,631	2.43	1,163.18	10.422	111.6	2.6
4	Piney	00523-51	Oil City	1.506	63	3	1,376,924	7,425	2.37	914.29	4.930	185.4	0.0
5	Revloc	00069-72	Altoona	552	6	1	1,356,997	1,654	2.34	2,458.33	2.996	820.4	0.0
6	Milroy	00128-81	Lewistown	1.719	41	2	1,268,139	4,153	2.19	737.72	2.416	305.4	0.1
7	Carlisle Pike	00643-83	Shippensburg	3.198	25	2	1,107,913	8,308	1.91	346.44	2.598	133.4	0.0
8	Rolling Meadows	00310-31	Erie	3.301	41	1	1,099,228	10,911	1.89	333.00	3.305	100.7	0.2
9	Timblin	00103-23	Dubois	688	39	1	1,039,508	3,932	1.79	1,510.91	5.715	264.4	1.6
10	Marienville	00328-51	Oil City	1,200	55	0	958,195	2,419	1.65	798.50	2.016	396.1	0.0
11	Birmingham	00168-22	Philipsburg	1,083	57	3	955,378	6,471	1.65	882.16	5.975	147.6	0.1
12	Madera	00166-22	Philipsburg	1,716	49	0	945,888	9,892	1.63	551.22	5.765	95.6	0.8
13	Springboro	00237-52	Meadville	2,776	88	0	880,973	6,238	1.52	317.35	2.247	141.2	1.7
14	Grover	00527-63	Towanda	1,059	54	1	861,368	3,372	1.48	813.38	3.184	255.4	0.0
15	Lake Como	00786-65	Montrose	467	18	0	845,912	1,199	1.46	1,811.37	2.567	705.5	0.0
16	Thompson	00436-65	Montrose	1,347	57	0	800,611	4,250	1.38	594.37	3.155	188.4	1.6
17	Curryville	00644-71	Altoona	1,791	46	0	768,470	3,371	1.32	429.07	1.882	228.0	1.0
18	Madera	00165-22	Philipsburg	1,512	42	1	755,643	4,684	1.30	499.76	3.098	161.3	0.8
19	Thompson	00446-65	Montrose	508	26	0	744,883	1,868	1.28	1,466.31	3.677	398.8	0.0
20	Edgewood	00089-13	Indiana	870	39	2	710,845	3,441	1.23	817.06	3.955	206.6	0.2
21	Reedsville	00127-81	Lewistown	1,008	28	0	710,244	1,720	1.22	704.61	1.706	412.9	0.5
22	Logan	00701-81	Lewistown	1,415	31	1	696,683	3,109	1.20	492.36	2.197	224.1	0.0
23	Warren South	00220-41	Warren	2,747	79	1	687,524	6,783	1.19	250.28	2.469	101.4	0.0
24	Meveytown	00112-81	Lewistown	1,336	53	0	686,874	2,618	1.18	514.13	1.960	262.4	0.0
25	Mansfield	00558-63	Mansfield Pa	761	40	3	658,748	3,234	1.14	865.63	4.250	203.7	0.6
26	Utica Junction	00331-51	Oil City	645	45	2	646,390	1,653	1.11	1,002.16	2.563	391.0	2.3
27	Philipsburg	00162-22	Philipsburg	3,296	87	2	638,406	10,012	1.10	193.69	3.038	63.8	2.5
28	Dushore	00669-62	Towanda	246	10	1	636,966	679	1.10	2,589.29	2.760	938.1	2.3
29	East Pike	00094-13	Indiana	1,505	10	1	635,434	3,098	1.10	422.22	2.058	205.1	1.0
30	Brookville	00125-23	Dubois	617	33	1	617,135	3,350	1.06	1,000.22	5.429	184.2	0.3
31	Nanty Glo	00066-72	Altoona	694	8	0	612,303	1,156	1.06	882.28	1.666	529.7	1.6
32	Utica Junction	00318-51	Oil City	839	64	0	588,058	1,838	1.01	700.90	2.191	319.9	2.3
33	Lake Como	00787-65	Montrose	890	28	1	580,537	2,740	1.00	652.29	3.079	211.9	0.9

Penelec													
Circuit Rank	Substation	Circuit Desc	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
34	Boyer	00584-31	Erie	1.692	26	1	578,573	4,246	1.00	341.95	2,509	136.3	1.4
35	Titusville West	00395-51	Oil City	633	22	0	568,521	2,028	0.98	898.14	3,204	280.3	1.0
36	Cambria County Priso	00202-72	Altoona	89	6	2	565,331	1,936	0.97	6,352.03	21,753	292.0	0.0
37	Blairsville East	00082-13	Indiana	1,563	53	0	560,081	2,729	0.97	358.34	1,746	205.2	0.0
38	Buffalo Road	00265-31	Erie	983	12	0	553,998	1,626	0.96	563.58	1,654	340.7	0.1
39	Industrial	00170-81	Lewistown	766	13	2	548,515	2,136	0.95	716.08	2,789	256.8	1.0
40	Salix	00070-11	Johnstown	2,294	43	0	543,186	4,744	0.94	236.79	2,068	114.5	0.9
41	Monrocton	00770-62	Towanda	579	8	0	538,854	1,234	0.93	930.66	2,131	436.7	0.3
42	New Albany Sw Stati	00526-62	Towanda	160	4	2	530,295	468	0.91	3,314.34	2,925	1,133.1	2.2
43	North Warren	00207-41	Warren	1,363	55	1	524,387	2,808	0.90	384.73	2,060	186.7	2.0
44	Mcconnellstown	00099-82	Altoona	773	20	1	522,135	1,382	0.90	675.47	1,788	377.8	0.7
45	Hilltop	00048-11	Johnstown	1,563	19	1	515,950	3,308	0.89	330.10	2,116	156.0	1.3
46	Millfair Road	00283-34	Erie	828	19	2	513,887	2,434	0.89	620.64	2,940	211.1	0.9
47	Green Garden	00539-31	Erie	1,058	8	1	502,949	2,115	0.87	475.38	1,999	237.8	0.0
48	Tyrone North	00643-22	Philipsburg	1,477	11	0	496,052	3,824	0.86	335.85	2,589	129.7	1.0
49	Tiffany	00440-65	Montrose	1,383	31	0	492,241	5,739	0.85	355.92	4,150	85.8	1.2
50	North Warren	00596-41	Warren	1,130	47	2	473,467	4,272	0.82	419.00	3,781	110.8	2.4
51	Port Allegany	00151-42	Bradford	481	23	1	468,352	900	0.81	973.70	1,871	520.4	0.0
52	Erie East	00234-31	Erie	1,152	59	1	459,466	2,299	0.79	398.84	1,996	199.9	0.2
53	L And R	00120-81	Lewistown	625	16	1	459,047	1,810	0.79	734.48	2,896	253.6	0.0
54	Shelocta	00102-13	Indiana	1,144	28	1	454,084	4,524	0.78	396.93	3,955	100.4	0.0
55	Union City	00206-43	Erie	2,308	89	0	448,824	4,612	0.77	194.46	1,998	97.3	0.1
56	Russell Hill	00282-65	Montrose	1,000	56	0	440,690	1,681	0.76	440.69	1,681	262.2	0.1
57	Laurel Pipeline	00036-71	Altoona	928	33	0	433,031	3,962	0.75	466.63	4,269	109.3	0.0
58	Laurel Lake Tran	00449-65	Montrose	550	31	2	425,276	1,839	0.73	773.23	3,344	231.3	2.8
59	Marienville	00327-51	Oil City	745	24	1	412,112	1,232	0.71	553.17	1,654	334.5	0.0
60	Revloc	00071-72	Altoona	453	15	0	411,801	1,340	0.71	909.05	2,958	307.3	0.0
61	Dubois	00131-23	Dubois	721	29	0	407,201	1,288	0.70	564.77	1,786	316.1	0.5
62	Shade Gap 115Kv	00622-82	Lewistown	668	12	3	404,602	2,098	0.70	605.69	3,141	192.9	0.0

Penn Power													
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
1	Stoneboro	W-131	Clark	1,301	60	1	820,814	3,393	4.99	630.91	2.608	241.9	0.0
2	Thompson Run	D550	Zelienople	975	28	1	747,656	4,147	4.55	766.83	4.253	180.3	0.0
3	Camp Reynolds	W-134	Clark	1,737	76	0	693,572	2,427	4.22	399.29	1.397	285.8	0.0
4	Stoneboro	W-132	Clark	1,050	59	1	662,239	2,788	4.03	630.70	2.655	237.5	0.0
5	Evans City	D611	Zelienople	941	40	0	529,532	1,168	3.22	562.73	1.241	453.4	0.0
6	Henderson	W-281	Clark	751	25	0	494,255	1,102	3.01	658.13	1.467	448.5	0.0
7	Bedford	D-445	New Castle	982	53	1	490,476	1,928	2.98	499.47	1.963	254.4	0.0
8	Koppel	D-531	New Castle	949	34	1	480,993	1,773	2.93	506.84	1.868	271.3	0.0
9	Perry	W-156	Clark	1,049	44	1	478,787	2,241	2.91	456.42	2.136	213.6	0.0

West Penn Power												
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI
1	Franklin	Rogersville	Jefferson	823	50	3	1,498,265	3,038	2.09	1,820.49	3.69	493.2
2	Waterville	Waterville	State College	356	20	3	1,323,102	3,137	1.84	3,716.58	8.81	421.8
3	Flintstone	Chaneyville	Hyndman	564	54	1	1,240,009	2,528	1.73	2,198.60	4.48	490.5
4	Avella	W Middletown	Washington Pa	1,135	62	0	1,148,513	2,777	1.60	1,011.91	2.45	413.6
5	Rutan	Bristoria	Jefferson	1,122	81	0	1,134,079	3,968	1.58	1,010.77	3.54	285.8
6	Mather	Jefferson	Jefferson	1,365	22	2	1,071,922	3,011	1.49	785.29	2.21	356.0
7	North Washington	Poke Run	Arnold	1,231	68	1	1,026,372	5,576	1.43	833.77	4.53	184.1
8	Westraver	Pittsburgh Coal	Charleroi	1,887	33	1	966,169	7,296	1.35	512.01	3.87	132.4
9	Piney Fork	Stoltz	Charleroi	1,916	21	1	954,765	2,885	1.33	498.31	1.51	330.9
10	Roundhill	Roundhill	Charleroi	947	36	0	888,456	2,377	1.24	938.18	2.51	373.8
11	Bedford Road	Rt 220 North	Hyndman	790	30	0	836,795	2,748	1.17	1,059.23	3.48	304.5
12	Dutch Fork	Claysville	Washington Pa	1,602	65	0	829,446	2,373	1.16	517.76	1.48	349.5
13	Cooperstown	Twin Willows	Butler	1,569	28	2	760,260	5,180	1.06	484.55	3.30	146.8
14	Bethlen	Darlington	Latrobe	1,238	74	0	736,575	4,718	1.03	594.97	3.81	156.1
15	Smith	Florence	Washington Pa	762	48	2	725,913	3,518	1.01	952.64	4.62	206.3
16	Bethel Park	Clifton	Boyce	924	15	7	690,673	5,922	0.96	747.48	6.41	116.6
17	Houston	Weavertown	Washington Pa	2,134	34	5	664,366	12,917	0.93	311.32	6.05	51.4
18	St. Clair	Skyridge	Boyce	897	23	3	654,813	3,680	0.91	730.00	4.10	177.9
19	Whiteley	Mt. Morris	Jefferson	1,075	31	0	648,395	1,873	0.90	603.16	1.74	346.2
20	Bethlen	Laurel Valley	Latrobe	1,443	62	4	602,538	7,282	0.84	417.56	5.05	82.7
21	Kiski Valley Distrib	Kittanning Rd	Arnold	1,783	37	1	597,908	3,233	0.83	335.34	1.81	184.9
22	Saltsburg	Saltsburg	Arnold	1,400	48	0	591,785	2,027	0.82	422.70	1.45	292.0
23	Atherton	East Residential	State College	1,997	23	2	590,435	6,719	0.82	295.66	3.36	87.9
24	Cecil	Hendersonville	Boyce	2,024	18	3	548,269	8,236	0.76	270.88	4.07	66.6
25	Bethel Park	Dashwood	Boyce	2,159	17	2	539,179	7,046	0.75	249.74	3.26	76.5
26	Fort Palmer	West Fairfield	Latrobe	968	61	0	528,592	1,903	0.74	546.07	1.97	277.8
27	State College	West Residential	State College	1,329	14	2	524,984	3,033	0.73	395.02	2.28	173.1
28	California	Malden	Charleroi	1,073	25	0	484,017	2,607	0.67	451.09	2.43	185.7
29	Avella	Penowa	Washington Pa	660	32	1	482,513	1,772	0.67	731.08	2.68	272.3
30	Piney Fork	Knobole	Charleroi	1,641	30	1	478,673	3,136	0.67	291.70	1.91	152.6
31	Shanor Manor	Oncida	Butler	1,078	27	0	472,135	1,718	0.66	437.97	1.59	274.8

West Penn Power												
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI
32	Karns City	Kaylor	Butler	1,152	32	0	469,155	2,185	0.65	407.25	1.90	214.7
33	Smith	Francis Mine	Washington Pa	1,433	52	1	466,001	2,866	0.65	325.19	2.00	162.6
34	Charleroi	N. Charleroi	Charleroi	1,084	14	0	453,494	2,350	0.63	418.35	2.17	193.0
35	Smith	Burgettstown	Washington Pa	1,888	48	0	439,101	2,710	0.61	232.57	1.44	162.0
36	Amity	Amity	Washington Pa	523	39	0	429,702	1,335	0.60	821.61	2.55	321.9
37	Superior	Culmerville	Arnold	1,195	21	2	419,615	3,864	0.58	351.14	3.23	108.6
38	Graysville	Graysville	Jefferson	582	30	0	417,510	1,661	0.58	717.37	2.85	251.4
39	Kane	Russell City	St Marys	600	16	0	408,391	1,482	0.57	680.65	2.47	275.6
40	Harrison City	Claridge	Jeannette	2,064	27	2	404,791	6,396	0.56	196.12	3.10	63.3

**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	North Bangor	00826-3	<i>Performance was driven by a vehicle (63%), and equipment failure (19%)</i>			2Q 2019 3Q 2019
			Three-phase overhead inspection	Complete	Feb-19	
			Repair items identified during circuit inspection	Complete	Sep-19	
			Repair items identified during circuit inspection	To be completed 2019	99%	
2	Mountain	00744-4	<i>Performance was driven by trees off ROW (87%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Perform accelerated backbone and three phase circuit assessment	Complete	Mar-19	
			Replace pole from inspection	Complete	Jun-19	
			Replace pole from inspection	Complete	Aug-19	
			Upgrade Zone 2 recloser to EMS radio controlled	To be completed 2019	75%	
Enhanced tree trimming	To be completed 2019	0%				
3	N Cornwall	00610-2	<i>Performance was driven by vehicle (36%), trees off ROW (32%) and line failure (12%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Thermovision and overhead inspection	Complete	Oct-18	
			Install SCADA devices #1	Complete	Nov-18	
			Install SCADA devices #2	Complete	Nov-18	
			Install SCADA devices #8	Complete	Nov-18	
			Three-phase overhead inspection	Complete	Jan-19	
			Repair/replace high priority items identified during inspection	To be completed 2019	50%	
			Remove switch that limits backfeed capacity	To be completed 2019	50%	
Porcelain cutout replacement in the lockout zone	To be completed 2019	50%				

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	Carsonia	00764-1	<i>Performance was driven by trees off ROW (46%) and vehicle (33%)</i>			1Q 2019 2Q 2019 3Q 2019
			On cycle tree trimming	Complete	Nov-18	
			Targeted forestry inspection	Complete	Mar-19	
			Targeted forestry inspection	Complete	Jun-19	
			Overhead circuit inspection	Complete	Jun-19	
			Engineering circuit tie addition review	Complete	Sep-19	
			Mainline pole replacement	To be completed 2019	50%	
			Engineering circuit split review	To be completed 2019	25%	
5	Huffs Church	00600-1	<i>Performance driven by tree off ROW (73%) and an outage caused by a vehicle (18%)</i>			1Q 2019 2Q 2019 3Q 2019
			Overhead mainline circuit inspection	Complete	Nov-18	
			Thermovision and overhead inspection	Complete	Jan-19	
			Targeted forestry inspection	Complete	Feb-19	
			Replace mainline guy wire from inspection	Complete	Mar-19	
			Replace mainline pole from inspection	Complete	Jul-19	
			Replace crossarm from inspection	Complete	Sep-19	
			Repair mainline guy wire from inspection	To be completed 2019	50%	
			Replace mainline crossarm	To be completed 2019	50%	
Enhanced tree trimming	To be completed 2019	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
6	Lynnville	00735-1	<i>Performance was driven by an outage caused by a vehicle (33%), trees off ROW (29%), and animal caused outage (23%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Replace pole from inspection #1	Complete	Oct-18	
			Replace pole from inspection #2	Complete	Oct-18	
			On cycle tree trimming	Complete	Nov-18	
			Replace pole from inspection #3	Complete	Nov-18	
			Replace pole from inspection #4	Complete	Nov-18	
			Replace pole from inspection #5	Complete	Dec-18	
			Replace pole from inspection #6	Complete	Dec-18	
			Upgrade mainline recloser	Complete	Mar-19	
			Replace line clamp from thermovision inspection #1	Complete	Apr-19	
			Overhead circuit inspection	Complete	May-19	
			Install SCADA switch #1	Complete	Sep-19	
			Replace line clamp from thermovision inspection #2	To be completed 2019	50%	
			Replace pole from thermovision inspection	To be completed 2019	50%	
			Replace arrester from thermovision inspection	To be completed 2019	50%	
			Install SCADA switch #2	To be completed 2019	50%	
Install SSCADA switch #3	To be completed 2019	50%				
7	Crossroads	00728-4	<i>Performance was driven by trees off ROW (40%) and vehicle accident (37%)</i>			1Q 2019 2Q 2019 3Q 2019
			Install SCADA switch #2	Complete	Dec-18	
			Install SCADA recloser #1	Complete	Dec-18	
			Post Storm Patrol	Complete	Feb-19	
			Lockout Zone Circuit Inspection	Complete	Apr-19	
Install SCADA switch #3	To be Completed 2019	50%				
8	Barto	00706-1	<i>Performance was driven by trees off ROW (45%) and vehicle (45%)</i>			
			Overhead mainline circuit inspection	Complete	Mar-19	

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
9	Bern Church	00789-1	<i>Performance was driven by trees off ROW (94%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Three-phase overhead inspection	Complete	Nov-18	
			On cycle tree trimming	Complete	Dec-18	
			Three-phase overhead inspection	Complete	Mar-19	
			Replace mainline pole from inspection #1	Complete	Jun-19	
			Replace mainline pole from inspection #2	Complete	Jun-19	
			Targeted forestry inspection	Complete	Aug-19	
			Enhanced tree trimming	To be completed 2019	25%	
10	Taxville	00575-4	<i>Performance was driven by trees off ROW (68%) and underground dig-in (22%)</i>			
			Install SCADA recloser	Complete	Sep-19	
			Engineering Review to identify for Targeted Mainline Inspection	Complete	Sep-19	
			Repair/Replace items from Capacitor Inspection	Complete	May-19	
11	Fairview	00519-4	<i>Performance was driven by trees off ROW (92%). Three storm events accounted for 83% of all circuit minutes.</i>			2Q 2019 3Q 2019
			Install fault indicators	Complete	Dec-18	
			Perform accelerated backbone and three phase circuit assessment	Complete	Jan-19	
			Thermovision and overhead inspection	Complete	Jan-19	
			Enhanced tree trimming	To be completed 2019	0%	
12	Flying Hills	00777-1	<i>Performance was driven trees off ROW (66%)</i>			1Q 2019 2Q 2019 3Q 2019
			Overhead mainline circuit inspection	Complete	Dec-18	
			Targeted forestry inspection	Complete	Mar-19	
			Replace mainline underground cable in large residential development	Complete	May-19	
13	Gardners	00754-4	<i>Performance was driven by trees off ROW (89%). One storm event accounted for 91% of all circuit minutes.</i>			4Q2018 1Q 2019 2Q 2019 3Q 2019
			Perform accelerated backbone and three phase circuit assessment	Complete	Feb-19	
			Thermovision and overhead inspection	Complete	Feb-19	
			On cycle tree trimming	Complete	Mar-19	
			Upgrade Zone 2 recloser to EMS radio controlled	To be completed 2019	50%	

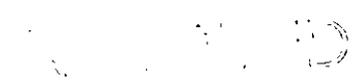
Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
14	Shawnee	00895-3	<i>Performance was driven by equipment failure (59%), and trees off ROW (25%)</i>			1Q 2019 2Q 2019 3Q 2019
			Install SCADA switch #1	Complete	Nov-18	
			Install SCADA switch #2	Complete	Nov-18	
			Install SCADA switch #3	Complete	Nov-18	
			Three-phase overhead inspection	Complete	Jan-19	
			Repair items identified during circuit inspection	Complete	Mar-19	
15	Mountain	00740-4	<i>Performance was driven by trees off ROW (83%) and equipment failures (7%). Two storm events accounted for 60% of all circuit minutes.</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Upgrade Zone 2 recloser to EMS radio controlled	Complete	Nov-18	
			Perform accelerated backbone and three phase circuit assessment	Complete	Nov-18	
			On cycle tree trimming	Complete	Dec-18	
			Perform accelerated backbone and three phase circuit assessment	Complete	Feb-19	
			Install SCADA recloser #1	To be completed 2019	50%	
Install SCADA recloser #2	To be completed 2019	50%				
16	Ottsville	00660-3	<i>Performance was driven by trees off ROW (94%)</i>			1Q 2019 2Q 2019 3Q 2019
			Install SCADA recloser	Complete	Dec-18	
			Install SCADA switch #1	Complete	Dec-18	
			Install SCADA switch #2	Complete	Dec-18	
			Thermovision and overhead inspection	Complete	Feb-19	
			Replace high priority item identified during post storm inspection #1	Complete	May-19	
			Replace high priority item identified during post storm inspection #2	Complete	Sep-19	
			Replace high priority item identified during post storm inspection #3	Complete	Sep-19	
			Replace high priority item identified during post storm inspection #4	Complete	Oct-19	
			Replace high priority item identified during post storm inspection #5	Complete	Oct-19	
Replace pole from inspection	To be completed 2019	50%				
17	Hokes	00587-4	<i>Performance was driven by 95% tree off ROW</i>			2Q 2019 3Q 2019
			Replace Regulator	Complete	Apr-19	
			Engineering Review to identify future SCADA Devices	Complete	Jun-19	
			Install SCADA switch #1	Complete	Sep-19	
			Install SCADA switch #2	Complete	Sep-19	
			Engineering Review to identify for Targeted Mainline Inspection	Complete	Sep-19	
Repair/replace high priority items identified during inspection	To be completed 2019	10%				

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	
18	Bernville	00786-1	<i>Performance was driven by trees off ROW (51%) &amp; line and equipment failures (28%)</i>				4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Replace arrester on mainline switch from inspection	Complete	Oct-18		
			Replace porcelain cutout with polymer cutout from inspection	Complete	Oct-18		
			Replace pole from inspection #1	Complete	Oct-18		
			Replace crossarm from inspection #1	Complete	Nov-18		
			Replace pole from inspection #2	Complete	Nov-18		
			Replace pole from inspection #3	Complete	Nov-18		
			Replace crossarm from inspection #2	Complete	Dec-18		
			Replace pole from inspection #4	Complete	Dec-18		
			Replace crossarm from inspection #3	Complete	Dec-18		
			Install SCADA switch #1	Complete	Dec-18		
			Install SCADA switch #2	Complete	Dec-18		
			Three-phase overhead inspection	Complete	Mar-19		
			Targeted mainline circuit rehabilitation	Complete	May-19		
			Replace crossarm brace from thermovision inspection #1	Complete	May-19		
			Replace line clamp from thermovision inspection	Complete	Jun-19		
			Replace crossarm brace from thermovision inspection #2	Complete	Sep-19		
			Upgrade mainline recloser	Complete	Sep-19		
			Replace crossarm brace from thermovision inspection #3	To be completed 2019	50%		
			Replace crossarm brace from thermovision inspection #4	To be completed 2019	25%		
			Install SCADA recloser	To be completed 2019	50%		
			Install SCADA switch #1	To be completed 2019	50%		
			Install SCADA switch #2	To be completed 2019	50%		
			Targeted Mainline Circuit Rehabilitation #1	To be completed 2019	25%		
Targeted Mainline Circuit Rehabilitation #2	To be completed 2019	25%					
Targeted Mainline Circuit Rehabilitation #3	To be completed 2019	25%					

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
19	Hill	00734-4	<i>Performance was driven by tree off ROW (86%)</i>			
			Repair/Replace items from Capacitor Inspection #1	Complete	Apr-19	
			Repair/replace high priority items identified during overhead circuit patrol	Complete	Jul-19	
			Three-phase overhead inspection	Complete	Oct-19	
			Replace priority pole	Complete	Oct-19	
			Repair/Replace items from Capacitor Inspection #2	To be completed 2020	50%	
			Repair/Replace items from Capacitor Inspection #3	To be completed 2020	50%	
20	Lickdale	00626-2	<i>Performance was driven by trees off ROW (42%) and vehicle (30%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			On cycle tree trimming	Complete	Dec-18	
			Three-phase overhead inspection	Complete	Jan-19	
			Repair/replace high priority items identified during inspection	Complete	Mar-19	
			Install SCADA switch #1	Complete	Aug-19	
			Install SCADA switch #2	Complete	Aug-19	
			Install SCADA switch #3	Complete	Aug-19	
			Install SCADA recloser #1	Complete	Aug-19	
			GOAB Replacement	To be completed 2019	50%	
			Targeted Mainline Circuit Rehabilitation #1	To be completed 2019	50%	
			Targeted Mainline Circuit Rehabilitation #2	To be completed 2019	50%	
Targeted Mainline Circuit Rehabilitation #3	To be completed 2019	50%				
21	Barto	00705-1	<i>Performance was driven by trees off ROW (66%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Thermovision and overhead inspection	Complete	Oct-18	
			Three-phase overhead inspection	Complete	Mar-19	
			Targeted forestry inspection	Complete	May-19	
			Enhanced three phase tree trimming	To be completed 2019	0%	
22	Queen Street	00522-4	<i>Performance was driven by trees off ROW (42%), Wind (19%), unknown (18%), and equipment failure (14%)</i>			1Q 2019 2Q 2019 3Q 2019
			Post-storm circuit patrol	Complete	Feb-19	
			Complete circuit protection study	Complete	Feb-19	
			Complete engineering review for additional remote-control devices	Complete	Feb-19	
			Repair Equipment Failure	Complete	Apr-19	
			Targeted Mainline Inspection	To be completed 2019	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
23	Ferndale	00871-3	<i>Performance was driven by trees off ROW (66%), and equipment failure (20%)</i>			1Q 2019 2Q 2019 3Q 2019
			Repair items identified during circuit inspection	Complete	Oct-18	
			Three-phase overhead inspection	Complete	Feb-19	
24	Saylorsburg	00114-3	<i>Performance was driven by vehicle accidents (50%), and trees off ROW (32%)</i>			1Q 2019 2Q 2019 3Q 2019
			On cycle tree trimming	To be completed 2019	50%	
25	S 6Th St	00415-2	<i>Performance was driven by unknown cause (80%).</i>			
			Three-phase overhead inspection	Complete	Jan-19	
			On cycle tree trimming	Complete	Mar-19	
			Post storm circuit patrol	Complete	Aug-19	
26	Raintree	00642-4	<i>Performance was driven by a vehicle accident (71%)</i>			2Q 2019 3Q 2019
			Repair/Replace items from Capacitor Inspection	Complete	Jan-19	
			Repair/Replace items from Capacitor Inspection	Complete	May-19	
			Repair/Replace items from Capacitor Inspection	Complete	Feb-19	
			Repair/Replace items from Recloser Inspection	Complete	Oct-19	
27	Campbelltown	00731-2	<i>Performance was driven by trees off ROW (39%) and vehicle accidents (38%)</i>			2Q 2019 3Q 2019
			Three-phase overhead inspection	Complete	Jan-19	
			Replace crossarm from inspection	To be completed 2019	50%	
			Enhanced three-phase tree trimming	To be completed 2019	25%	

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	
28	Birdsboro	00756-1	<i>Performance was driven by an outage caused by a trees off ROW (80%)</i>				1Q 2019 2Q 2019 3Q 2019
			On cycle tree trimming	Complete	Dec-18		
			Overhead mainline circuit inspection	Complete	Mar-19		
			Mainline Tie Recloser Upgrade	Complete	Mar-19		
			Targeted forestry inspection	Complete	Mar-19		
			Replace mainline poles	Complete	May-19		
			Targeted tree trimming to improve reliability	To be completed 2019	75%		
			Replace mainline pole #1	To be completed 2019	50%		
			Replace mainline pole #2	To be completed 2019	50%		
			Replace mainline pole #3	To be completed 2019	50%		
			Replace mainline pole #4	To be completed 2019	50%		
			Replace mainline pole #5	To be completed 2019	50%		
			Replace mainline pole #6	To be completed 2019	50%		
Install additional mainline switch	To be completed 2019	25%					
29	Palmer	00657-3	<i>Performance was driven by trees off ROW (77%)</i>				
			Thermovision and overhead inspection	Complete	Mar-19		
			Install SCADA recloser	To be completed 2019	50%		
30	Stouchburg	00758-2	<i>Performance was driven by wind (39%) and unknown (38%)</i>				2Q 2019 3Q 2019
			Three-phase overhead inspection	Complete	Jan-19		
			Install SCADA device #1	To be completed 2019	50%		
			Install SCADA device #2	To be completed 2019	50%		
			Line project to reconductor four spans and improve coordination	To be completed 2020	50%		
31	Broad St	00776-2	<i>Performance was driven by trees off ROW (75%)</i>				
			Three-phase overhead inspection	Completed	Feb-19		
			On cycle tree trimming	To be completed 2020	0%		



NOV - 1 2019

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	
32	Windsor	00797-4	<i>Performance was driven by trees off ROW (82%), forced outage (6%) and equipment failure (6%)</i>				4Q 2018 2Q 2019 3Q 2019
			Install SCADA switch #1	Complete	Sep-19		
			Install SCADA switch #2	Complete	Sep-19		
			Install SCADA switch #3	Complete	Sep-19		
			Install SCADA switch #4	Complete	Sep-19		
			Replace/repair high priority items identified during overhead circuit patrol	To be completed 2019	97%		
			Targeted Mainline Inspection	To be completed 2019	0%		
33	Crossroads	00729-4	<i>Performance was driven by forced outage (28%) and lightning strike (26%)</i>				
			Replace H-Frame Structures	Complete	Oct-19		
			Install SCADA switch #1	To be completed 2019	50%		
			Install SCADA recloser #1	To be completed 2019	50%		
			Replace recloser #1	To be completed 2019	50%		
			Replace recloser #2	To be completed 2019	50%		
34	Raubsville	00079-3	<i>Performance was driven by trees off ROW (72%), and equipment failure (12%)</i>				1Q 2019 2Q 2019 3Q 2019
			Repair items identified during circuit inspection	Complete	Feb-19		
			Thermovision and overhead inspection	Complete	Mar-19		
35	Lickdale	00625-2	<i>Performance was driven by trees off ROW (37%) and equipment failure (19%)</i>				4Q 2018 1Q 2019 2Q 2019 3Q 2019
			On cycle tree trimming	Complete	Dec-18		
			Three-phase overhead inspection	Complete	Jan-19		
			Repair/replace high priority items identified during inspection	Complete	Feb-19		
			Repair/replace high priority items identified during inspection	Complete	Jul-19		
			Install SCADA device #1	To be completed 2019	50%		
			Install SCADA device #2	To be completed 2019	50%		
36	Shawnee	00822-3	<i>Performance was driven by equipment failure (36%), trees off ROW (27%), and line failure (18%)</i>				4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Porcelain cutout replacement #1	Complete	Dec-18		
			Porcelain cutout replacement #2	Complete	Dec-18		
			Porcelain cutout replacement #3	Complete	Dec-18		
			Three-phase overhead inspection	Complete	Jan-19		
			Backbone thermovision inspection	Complete	Feb-19		
			Install Supervisory Control and Data Acquisition (SCADA) switch	To be completed 2019	50%		
			On cycle tree trimming	To be completed 2019	80%		

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
37	Birdsboro	00757-1	<i>Performance was driven by outages caused by vehicle accidents (45%) and trees off ROW (44%)</i>			2Q 2019 3Q 2019
			On cycle tree trimming	Complete	Oct-18	
			Install SCADA switch #1	Complete	Nov-18	
			Install SCADA switch #2	Complete	Dec-18	
			Replace mainline pole from inspection #1	Complete	Jan-19	
			Replace mainline pole from inspection #2	Complete	Mar-19	
			Three-phase overhead inspection	Complete	Mar-19	
			Targeted forestry inspection	Complete	May-19	
38	S Nazareth	00809-3	<i>Performance was driven by vehicle accidents (31%), line failure (26%), and equipment failure (13%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Install SCADA switch	Complete	Nov-18	
			Replace pole from inspection	Complete	Jan-19	
			Three-phase overhead inspection	Complete	Feb-19	
			Install SCADA recloser #1	To be completed 2019	50%	
			Install SCADA recloser #2	To be completed 2019	50%	
			Install SCADA recloser #3	To be completed 2019	50%	
			Install SCADA recloser #4	To be completed 2019	50%	
			Construct circuit tie	To be completed 2019	50%	
Targeted mainline circuit rehabilitation	To be completed 2019	20%				
39	E Prospect	00765-4	<i>Performance was driven by trees off ROW (64%), lightning (15%), and equipment failure (11%)</i>			
			Replace/repair high priority items identified during overhead circuit patrol	Complete	Dec-18	

Met-Ed					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	4Q 2018	1Q 2019	2Q 2019	3Q 2019
19th and Cotton	00156-1	X	X		
Allen	00502-4	X	X	X	
Ferndale	00076-3	X		X	
Friedensburg	00769-1	X		X	
Gardners	00752-4	X	X	X	
Moselem	00782-1	X	X	X	
Myerstown	00751-2	X	X	X	
Newberry	00577-4	X	X		
North Bangor	00813-3	X	X		
River View	00793-1	X	X		
South Hamburg	00801-1	X	X		
Shawnee	00860-3	X	X		
Shawnee	00899-3	X	X	X	
Straban	00676-4	X	X		
Swatara Hill	00763-2	X	X		
West Boyertown	00714-1	X	X	X	

<b>Met-Ed</b>				
<b>Unranked circuits with remedial actions scheduled to be or recently completed</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Progress of Remedial Work or Date Completed</b>
19TH and Cotton	00156-1	Repair mainline spacers from inspection #1	To be completed 2019	50%
19TH and Cotton	00156-1	Repair mainline spacers from inspection #2	To be completed 2019	50%
19TH and Cotton	00156-1	Repair mainline spacers from inspection #3	To be completed 2019	50%
Allen	00502-4	Upgrade zone 2 recloser to EMS radio controller	Complete	Sep-19
Allen	00502-4	Install SCADA recloser	To be completed 2019	75%
Allen	00502-4	Cycle tree trimming	To be completed 2019	0%
Belfast	00812-3	Install SCADA recloser #1	To be completed 2019	50%
Belfast	00812-3	Install SCADA recloser #2	To be completed 2019	50%
Belfast	00812-3	Overhead circuit inspection	To be completed 2019	50%
Birchwood	00624-3	Install SCADA recloser	To be completed 2019	50%
Clearfield	00631-3	Construct circuit tie	To be completed 2019	90%
Clearfield	00632-3	Construct circuit tie	To be completed 2019	90%
Ferndale	00076-3	On cycle tree trimming	To be completed 2019	80%
Friedensburg	00769-1	Complete Circuit Split	To be completed 2019	99%
Friedensburg	00769-1	Install SCADA switch #1	To be completed 2019	50%
Friedensburg	00769-1	Install SCADA switch #2	To be completed 2019	50%
Gardners	00752-4	On cycle tree trimming	To be completed 2019	99%
Hill	00737-4	Install SCADA switch #1	To be completed 2019	25%
Leesport	00812-1	On cycle tree trimming	To be completed 2019	0%
Moselem	00782-1	Install SCADA switch #1	To be completed 2019	50%
Moselem	00782-1	Install SCADA switch #2	To be completed 2019	50%
Moselem	00782-1	Install SCADA switch #3	To be completed 2019	25%
Moselem	00782-1	Install SCADA recloser #1	To be completed 2019	25%
Moselem	00782-1	Install SCADA recloser #2	To be completed 2019	25%
Moselem	00782-1	Targeted mainline circuit rehabilitation #1	To be completed 2019	50%
Moselem	00782-1	Targeted mainline circuit rehabilitation #2	To be completed 2019	50%
Moselem	00782-1	Targeted mainline circuit rehabilitation #3	To be completed 2019	50%
Myerstown	00751-2	Install SCADA switch #1	To be completed 2019	50%
Newberry	00577-4	Install SCADA switch #2	To be completed 2019	50%
No. Bangor	00813-3	On cycle tree trimming	To be completed 2019	50%
North Bangor	00838-3	Install SCADA recloser #1	To be completed 2019	50%
North Bangor	00838-3	Install SCADA recloser #2	To be completed 2019	50%

<b>Met-Ed</b>				
<b>Unranked circuits with remedial actions scheduled to be or recently completed</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Progress of Remedial Work or Date Completed</b>
North Bangor	00838-3	On cycle tree trimming	To be completed 2019	0%
North Lebanon	00715-2	Install SCADA devices #1	To be completed 2019	50%
North Lebanon	00715-2	Install SCADA devices #2	To be completed 2019	50%
North Lebanon	00715-2	Install SCADA devices #3	To be completed 2019	50%
North Lebanon	00715-2	Install SCADA devices #4	To be completed 2019	50%
North Lebanon	00715-2	Install SCADA devices #5	To be completed 2019	50%
North Lebanon	00715-2	Install SCADA devices #6	To be completed 2019	50%
North Lebanon	00715-2	Install SCADA devices #7	To be completed 2019	50%
North Lebanon	00715-2	Install SCADA devices #8	To be completed 2019	50%
North Lebanon	00715-2	Install SCADA devices #9	To be completed 2019	50%
Northwood	00821-3	On cycle tree trimming	To be completed 2019	94%
Orrtanna	00764-4	Targeted mainline circuit rehabilitation	To be completed 2019	50%
Riverview	00793-1	Install SCADA recloser #1	To be completed 2019	50%
R Riverview	00793-1	Install SCADA switch #1	To be completed 2019	50%
Riverview	00793-1	Install SCADA switch #2	To be completed 2019	50%
Riverview	00793-1	Install SCADA switch #3	To be completed 2019	50%
S Hamburg	00801-1	Replace crossarm from inspection	To be completed 2019	50%
S Hamburg	00801-1	Replace crossarm from inspection	To be completed 2019	50%
S Hamburg	00801-1	Replace crossarm from inspection	To be completed 2019	50%
S Hamburg	00801-1	Replace mainline crossarm from inspection #1	To be completed 2019	25%
S Hamburg	00801-1	Replace mainline crossarm from inspection #2	To be completed 2019	25%
S Hamburg	00801-1	Replace mainline crossarm from inspection #3	To be completed 2019	25%
S Hamburg	00801-1	Replace mainline crossarm from inspection #4	To be completed 2019	25%
S Hamburg	00801-1	Replace mainline crossarm from inspection #5	To be completed 2019	25%
Shawnee	00837-3	Install SCADA recloser	To be completed 2019	50%
Shawnee	00837-3	On cycle tree trimming	To be completed 2019	30%
Straban	00676-4	Construct circuit tie	Complete	Sep-19
Straban	00676-4	Install SCADA recloser	To be completed 2019	50%
Swatara Hill	00765-2	Install SCADA recloser #1	To be completed 2019	50%
Swatara Hill	00765-2	Install SCADA recloser #2	To be completed 2019	50%
Swatara Hill	00765-2	Install SCADA switch #1	To be completed 2019	50%
W. Boyertown	00714-1	Replace mainline pole from inspection	To be completed 2019	50%
Windsor	00316-4	Replace/repair high priority items identified during overhead circuit patrol	To be completed 2019	97%

Penclec						
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	DuBois	00137-23	<i>Performance was driven by trees off ROW (77%) and equipment failure (16%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by trees	Complete	Nov-18	
			Targeted circuit rehabilitation	Complete	Nov-18	
			Repair damage caused by trees during a storm	Complete	Jan-19	
			Repair damage caused by trees	Complete	Jun-19	
			On cycle tree trimming	To be Completed 2019	65%	
2	Logan	00700-81	<i>Performance was driven by trees off ROW (88%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by a vehicle	Complete	Oct-18	
			Repair damage caused by a vehicle	Complete	Nov-18	
			Repair damage caused by trees	Complete	Mar-19	
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees during a storm	Complete	Aug-19	
3	Natl Forge Sw Station	00577-41	<i>Performance was driven by trees off ROW (77%) and equipment failure (17%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by trees	Complete	Oct-18	
			Repair damage caused by trees	Complete	Oct-18	
			Repair equipment failure	Complete	Apr-19	
4	Piney	00523-51	<i>Performance was driven by trees off ROW (57%) and equipment failure (35%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by trees	Complete	Nov-18	
			Repair equipment failure	Complete	Jun-19	
			Repair equipment failure	Complete	Aug-19	
			Circuit inspection	Complete	Sep-19	
			Install new radio-controlled switch	To be Completed 2019	50%	
5	Revloc	00069-72	<i>Performance was driven by trees off ROW (100%)</i>			1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Feb-19	
			Repair damage caused by trees during a storm	Complete	May-19	
6	Milroy	00128-81	<i>Performance was driven by breaker operation of unknown cause (50%) and trees off ROW (45%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by trees	Complete	Oct-18	
			Repair damage caused by trees during a storm	Complete	Jun-19	
			Restore breaker operation of unknown cause	Complete	Aug-19	

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
7	Carlisle Pike	00643-83	<i>Performance was driven by trees off ROW (53%) and line failure (33%)</i>			2Q 2019 3Q 2019
			Repair line failure	Complete	Mar-19	
			Repair damage caused by trees during a storm	Complete	May-19	
8	Rolling Meadows	00310-31	<i>Performance was driven by equipment failure (75%) and line failure (12%)</i>			2Q 2019 3Q 2019
			Repair equipment failure	Complete	Apr-19	
			Repair equipment failure	Complete	Jun-19	
9	Timblin	00103-23	<i>Performance was driven by trees off ROW (82%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Circuit inspection	Complete	Oct-18	
			Repair damage caused by trees during a storm	Complete	Nov-18	
			Targeted circuit rehabilitation	Complete	May-19	
			Repair damage caused by trees	Complete	Jun-19	
10	Marienville	00328-51	<i>Performance was driven by trees off ROW (80%)</i>			4Q 2018 1Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Nov-18	
			Repair damage caused by trees during a storm	Complete	Jul-19	
11	Birmingham	00168-22	<i>Performance was driven by vehicle accident (58%) and trees off ROW (21%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by vehicle accident	Complete	Oct-18	
			Repair damage caused by trees	Complete	Dec-18	
			Repair damage caused by trees during a storm	Complete	Jan-19	
			Repair damage caused by vehicle accident	Complete	Jan-19	
12	Madera	00166-22	<i>Performance was driven by vehicle (58%) and equipment failure (21%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair equipment failure	Complete	Nov-18	
			Repair equipment failure	Complete	Jan-19	
			Repair damage caused by a vehicle	Complete	Feb-19	
			Repair damage caused by a vehicle	Complete	Jul-19	
13	Springboro	00237-52	<i>Performance was driven by trees off ROW (87%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Feb-19	
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees	Complete	Sep-19	
			Targeted circuit rehabilitation	To be Completed 2019	0%	

Penclev						
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	Grover	00527-63	<i>Performance was driven by non-company human error (62%), trees off ROW (13%) and equipment failure (12%)</i>			4Q 2018
			Repair equipment failure	Complete	Nov-18	1Q 2019
			Repair damage caused by non-company human error	Complete	Sep-19	2Q 2019 3Q 2019
15	Lake Como	00786-65	<i>Performance was driven by trees off ROW (61%) and line failure (36%)</i>			
			Repair damage caused by trees during a storm	Complete	Apr-19	2Q 2019
			Repair damage caused by trees during a storm	Complete	Apr-19	3Q 2019
16	Thompson	00436-65	<i>Performance was driven by trees off ROW (37%), equipment failure (35%), and line failure (14%)</i>			
			Repair damage caused by trees	Complete	Oct-18	4Q 2018
			Repair line failure	Complete	Mar-19	1Q 2019
			Circuit inspection	Complete	May-19	2Q 2019
17	Curryville	00644-71	<i>Performance was driven by trees off ROW (46%) and equipment failure (46%)</i>			
			Repair damage caused by trees during a storm	Complete	Jun-19	
			Repair equipment failure	Complete	Sep-19	
18	Madera	00165-22	<i>Performance was driven by trees off ROW (88%)</i>			
			Repair damage caused by trees	Complete	Nov-18	4Q 2018
			Repair damage caused by trees during a storm	Complete	Jan-19	1Q 2019
			Repair damage caused by trees during a storm	Complete	Feb-19	2Q 2019
			Repair damage caused by trees during a storm	Complete	May-19	3Q 2019
19	Thompson	00446-65	<i>Performance was driven by trees off ROW (65%) and equipment failure (21%)</i>			
			Repair equipment failure	Complete	Mar-19	
			Repair damage caused by trees during a storm	Complete	Apr-19	2Q 2019
			Repair damage caused by trees during a storm	Complete	Apr-19	3Q 2019
			On cycle tree trimming	Complete	Oct-19	
20	Edgewood	00089-13	<i>Performance was driven by trees off ROW (67%) and line failure (17%)</i>			
			Repair damage caused by trees during a storm	Complete	May-19	
			Repair line failure	Complete	Jul-19	
			Repair damage caused by trees during a storm	Complete	Jul-19	

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	Reedsville	00127-81	<i>Performance was driven by trees off ROW (98%)</i>			
			Repair damage caused by trees during a storm	Complete	Aug-19	
			Repair damage caused by trees during a storm	Complete	Aug-19	
22	Logan	00701-81	<i>Performance was driven by trees off ROW (49%), non-company human error (19%), and lightning (14%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair equipment failure	Complete	Nov-18	
			Repair damage caused by non-company human error	Complete	May-19	
			Repair line failure	Complete	May-19	
23	Warren South	00220-41	<i>Performance was driven by trees off ROW (80%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Install advanced distribution protective devices	Complete	Dec-18	
			Repair damage caused by trees	Complete	Jan-19	
			On cycle tree trimming	To be Completed 2019	82%	
24	McVeytown	00112-81	<i>Performance was driven by trees (49%), line failure (27%), and equipment failure (15%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair equipment failure	Complete	Nov-18	
			Repair line failure	Complete	Dec-18	
			Repair damage caused by a tree during a storm	Complete	May-19	
25	Mansfield	00558-63	<i>Performance was driven by line failure (83%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair line failure	Complete	Nov-18	
			Repair line failure	Complete	Jun-19	
			Targeted circuit rehabilitation	To be Completed 2019	50%	
26	Utica Junction	00331-51	<i>Performance was driven by trees off ROW (79%) and equipment failure (18%)</i>			
			Repair damage caused by trees during a storm	Complete	Aug-19	
			Repair equipment failure	Complete	Aug-19	
27	Philipsburg	00162-22	<i>Performance was driven by equipment failure (31%), trees off ROW (24%), and lightning (24%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Install advanced distribution protective devices	Complete	Dec-18	
			Repair equipment failure	Complete	Jan-19	
			Split large circuits	Complete	Apr-19	
			Targeted circuit rehabilitation	Complete	Apr-19	
Repair damage caused by lightning	Complete	Aug-19				

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
28	Dushore	00669-62	<i>Performance was driven by trees off ROW (98%)</i>			2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees	Complete	May-19	
			On cycle tree trimming	Complete	Aug-19	
29	East Pike	00094-13	<i>Performance was driven by line failure (72%) and vehicle accident (34%)</i>			1Q 2019 3Q 2019
			Repair damage caused by a vehicle	Complete	Jan-19	
			Repair line failure	Complete	Sep-19	
30	Brookville	00125-23	<i>Performance was driven by trees off ROW (49%) and equipment failure (45%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Circuit inspection	Complete	Oct-18	
			Repair damage caused by trees during a storm	Complete	Jan-19	
			Repair equipment failure during a storm	Complete	Feb-19	
			Repair equipment failure	Complete	Apr-19	
			On cycle tree trimming	To Be Completed 2019	99%	
31	Nanty Glo	00066-72	<i>Performance was driven by trees off ROW (99%)</i>			2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	May-19	
			Repair damage caused by trees	Complete	Jun-19	
32	Utica Junction	00318-51	<i>Performance was driven by trees off ROW (65%) and vehicle accident (15%)</i>			3Q 2019
			Repair damage caused by vehicle accident	Complete	May-19	
			Repair damage caused by trees during a storm	Complete	Jul-19	
33	Lake Como	00787-65	<i>Performance was driven by trees off ROW (61%) and line failure (32%)</i>			4Q 2018 3Q 2019
			Repair damage caused by trees during a storm	Complete	Jul-19	
34	Boyer	00584-31	<i>Performance was driven by line failure (50%), trees off ROW (28%), and equipment failure (16%)</i>			2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Nov-18	
			Repair equipment failure	Complete	Mar-19	
			Repair line failure	Complete	Jun-19	
35	Titusville West	00395-51	<i>Performance was driven by trees off ROW (48%) and line failure (36%)</i>			
			Repair damage caused by trees during a storm	Complete	Nov-18	
			Repair line failure	Complete	Jul-19	
36	Cambria County Prison	00202-72	<i>Performance was driven by line failure (95%)</i>			2Q 2019 3Q 2019
			Repair line failure	Complete	Apr-19	

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	Blairsville East	00082-13	<i>Performance was driven by trees off ROW (49%), fuse operation of unknown cause (18%), and non-company human error (12%)</i>				2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Feb-19		
			Repair damage caused by lightning	Complete	Feb-19		
			Repair damage caused by trees during a storm	Complete	May-19		
			Repair damage caused by trees during a storm	Complete	May-19		
			Restored fuse operation of unknown cause	Complete	Jun-19		
			Repair damage caused by non-company human error	Complete	Sep-19		
38	Buffalo Road	00265-31	<i>Performance was driven by line failure (96%)</i>				4Q 2018 1Q 2019 3Q 2019
			Repair line failure	Complete	Nov-18		
			Repair line failure	Complete	Aug-19		
			Circuit inspection	Complete	Jul-19		
39	Industrial	00170-81	<i>Performance was driven by lightning (45%), wind (30%), and trees off ROW' (20%)</i>				
			Repair damage caused by wind	Complete	Apr-19		
			Repair damage caused by trees	Complete	Jul-19		
			Repair damage caused by lightning	Complete	Aug-19		
40	Salix	00070-11	<i>Performance was driven by trees off ROW (29%), vehicle accident (25%), lightning (24%), and line failure (15%)</i>				2Q 2019 3Q 2019
			Repair damage caused by a vehicle	Complete	Dec-18		
			Repair line failure	Complete	Feb-19		
			Repair damage caused by lightning	Complete	Jul-19		
41	Monroeton	00770-62	<i>Performance was driven by line failure (73%) and trees off ROW (26%)</i>				2Q 2019 3Q 2019
			Repair line failure	Complete	Apr-19		
			Repair damage caused by trees	Complete	Aug-19		
42	New Albany SW Station	00526-62	<i>Performance was driven by trees off ROW (96%)</i>				2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Apr-19		
			Repair damage caused by trees	Complete	May-19		
43	North Warren	00207-41	<i>Performance was driven by equipment failure (55%) and vehicle accident (27%)</i>				4Q 2018 3Q 2019
			Replace substation recloser	Complete	Oct-18		
			Repair damage caused by a vehicle	Complete	Dec-18		
			Targeted circuit rehabilitation	Complete	Feb-19		
			Repair equipment failure	Complete	Jul-19		

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
44	McConnellstown	00099-82	<i>Performance was driven by breaker operation of primary contact (83%) and trees off ROW (14%)</i>			1Q 2019
			Restore breaker operation of primary contact	Complete	Jan-19	2Q 2019
			Repair damage caused by trees	Complete	Aug-19	3Q 2019
45	Hilltop	00048-11	<i>Performance was driven by line failure (74%) and structure fire (24%)</i>			1Q 2019
			Repair line failure	Complete	Jan-19	2Q 2019
			Forced outage due to structure fire	Complete	Jan-19	3Q 2019
46	Millfair Road	00283-34	<i>Performance was driven by trees off ROW (81%)</i>			1Q 2019
			Repair line failure	Complete	Oct-18	2Q 2019
			Repair damage caused by trees during a storm	Complete	Jan-19	3Q 2019
47	Green Garden	00539-31	<i>Performance was driven by line failure (92%)</i>			
			Repair line failure	Complete	Jul-19	
48	Tyrone North	00643-22	<i>Performance was driven by line failure (48%), trees off ROW (29%), and non-company human error (22%)</i>			
			Repair line failure	Complete	Oct-18	2Q 2019
			Repair damage caused by non-company human error	Complete	Apr-19	3Q 2019
			Repair damage caused by trees	Complete	Aug-19	
			Circuit inspection	Complete	Sep-19	
49	Tiffany	00440-65	<i>Performance was driven by bird (70%) and trees off ROW (17%)</i>			
			Repair damage caused by a bird	Complete	Aug-19	
			Repair damage caused by trees during a storm	Complete	Aug-19	
50	North Warren	00596-41	<i>Performance was driven by trees off ROW (63%) and equipment failure (26%)</i>			4Q 2018
			Repair damage caused by trees	Complete	Nov-18	1Q 2019
			Repair damage caused by trees during a storm	Complete	Nov-18	2Q 2019
			Repair damage caused by trees during a storm	Complete	Jan-19	3Q 2019
			Repair equipment failure	Complete	Jun-19	
51	Port Allegany	00151-42	<i>Performance was driven by trees off ROW (79%)</i>			
			Repair damage caused by trees during a storm	Complete	Aug-19	
			Repair damage caused by trees	Complete	Aug-19	
52	Erie East	00234-31	<i>Performance was driven by object in contact with line (61%) and trees off ROW (17%)</i>			
			Repair damage caused by trees during a storm	Complete	Jan-19	
			Repair damage caused by object in contact with line	Complete	Sep-19	

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
53	L. and R	00120-81	<i>Performance was driven by line failure (46%) and vehicle accident (41%)</i>			
			Repair damage caused by a vehicle	Complete	Jun-19	
			Repair line failure	Complete	Aug-19	
54	Shelocta	00102-13	<i>Performance was driven by vehicle accident (66%), line failure (15%), and trees off ROW (12%)</i>			
			Repair line failure	Complete	Mar-19	
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by a vehicle	Complete	Jul-19	
			Repair damage caused by a vehicle	Complete	Jul-19	
55	Union City	00206-43	<i>Performance was driven by trees off ROW (28%), equipment failure (26%), and non-company human error (12%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Jan-19	
			Repair equipment failure during a storm	Complete	Jan-19	
			Repair line failure	Complete	Jan-19	
			Install advanced distribution protective devices	Complete	Jan-19	
			Targeted circuit rehabilitation	Complete	Jan-19	
			Repair damage caused by non-company human error	Complete	Aug-19	
			Install new radio-controlled switch	To be Completed 2019	50%	
56	Russell Hill	00282-65	<i>Performance was driven by trees off ROW (81%)</i>			1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Jan-19	
			Repair damage caused by trees	Complete	Jan-19	
			Repair damage caused by trees	Complete	Mar-19	
57	Laurel Pipeline	00036-71	<i>Performance was driven by line failure (85%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair line failure	Complete	Oct-18	
			Repair line failure	Complete	Oct-18	
58	Laurel Lake	00449-65	<i>Performance was driven by trees off ROW (43%), line failure (28%), and lightning (10%)</i>			
			Repair damage caused by lightning	Complete	May-19	
			Repair line failure	Complete	Aug-19	
59	Marienville	00327-51	<i>Performance was driven by line failure (74%) and tree of ROW (20%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair line failure	Complete	Dec-18	
			Repair damage caused by trees	Complete	Sep-19	
			Install new radio controlled recloser	To be Completed 2019	50%	

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
60	Revloc	00071-72	<i>Performance was driven by trees off ROW (42%), line failure (27%), and equipment failure (24%)</i>			2Q 2019 3Q 2019
			Repair line failure	Complete	Jan-19	
			Repair equipment failure	Complete	Apr-19	
			Repair damage caused by trees during a storm	Complete	May-19	
61	Dubois	00131-23	<i>Performance was driven by trees off ROW (69%) and line failure (17%)</i>			2Q 2018 3Q 2019
			Repair line failure	Complete	Feb-19	
			Repair damage caused by trees during a storm	Complete	Aug-19	
62	Shade Gap 115KV	00622-82	<i>Performance was driven by trees off ROW (68%) and ice (29%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repaired damage caused by ice	Complete	Nov-18	
			Repair damage caused by trees during a storm	Complete	May-19	

<b>Penelec</b>					
<b>Unranked circuits appearing 2 or more quarters in the last 4 quarters</b>					
<b>Substation</b>	<b>Circuit</b>	<b>4Q 2018</b>	<b>1Q 2019</b>	<b>2Q 2019</b>	<b>3Q 2019</b>
Blairsville East	00080-13	X	X	X	
Brookville West	00121-23		X	X	
Clymer	00110-13	X	X		
East Hickory	00201-41	X	X	X	
East Pike	00095-13	X	X	X	
Emlenton	00322-51	X	X		
Erie South	00259-31	X	X	X	
Fairview East	00242-34	X	X		
Glory	00105-13	X	X	X	
Grandview	00354-51	X	X		
Industrial Park	00796-65	X	X		
Kearsarge	00528-31	X	X	X	
Lawrenceville	00632-63	X	X	X	
Lenox	00755-65	X	X	X	
Mansfield	00699-63	X	X		
Meshoppen	00283-65		X	X	
Mildred	00771-62	X	X	X	
N Meshoppen Tran	00530-65	X	X		
N Meshoppen Tran	00534-65	X	X		
Northeast	00591-31	X	X	X	
Page Road	00445-43	X	X		
Penmar	00002-12	X	X	X	
Reed Street	00549-31	X	X		
Seward	00075-11	X	X	X	
Seward	00079-11	X	X	X	
Shawville	00151-21	X	X		
Springboro	00217-52	X	X	X	
Timblin	00115-23	X	X		
Tunkhannock	00533-65	X	X		

<b>Penelec</b>				
<b>Unranked circuits with remedial actions scheduled to be or recently completed</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work Completed</b>	<b>Progress of Remedial Work or Date Completed</b>
Brookville West	00121-23	Circuit inspection	Complete	Sep-19
Cooper	00069-11	On cycle tree clearing	To be Completed 2019	90%
East Hickory	00201-41	On cycle tree clearing	To be Completed 2019	0%
East Pike	00095-13	On cycle tree clearing	To be Completed 2019	0%
Erie South	00259-31	Install new GOAB switch	To be Completed 2019	50%
French Road	00550-31	Circuit inspection	Complete	Jul-19
Timblin	00115-23	On cycle tree clearing	To be Completed 2019	25%
Waren Eddy Sub	00249-41	Circuit inspection	To be Completed 2019	99%

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	Stoneboro	W-131	<i>Performance was driven by trees off ROW (85%) and line failure (6%)</i>			2Q 2019 3Q 2019
			Repair damage caused by tree	Complete	Sep-18	
			Repair wire damage due to tornado	Complete	Jan-19	
			Repair damage caused by trees during a storm	Complete	May-19	
			Repair damage caused by trees during a storm	Complete	Jul-19	
2	Thompson Run	D550	<i>Performance was driven by trees off ROW (43%), equipment failure (35%), line failure (9%) and vehicle (9%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair damage caused by tree	Complete	Mar-18	
			Repair damage caused by tree	Complete	Jul-18	
			Repair damage caused by tree	Complete	Oct-18	
			Repair damage caused by a vehicle	Complete	Dec-18	
			Repair damage caused by trees during a storm	Complete	Feb-19	
			Repair damage caused by trees during a storm	Complete	Jun-19	
			Replace crossarm	Complete	Jun-19	
Repair line failure during storm	Complete	Jul-19				
3	Camp Reynolds	W-134	<i>Performance was driven by trees off ROW (77%), equipment failure (10%) and line failure (9%)</i>			4Q 2018 3Q 2019
			Repair line failure	Complete	Dec-18	
			Patrol entire circuit for Off ROW hazard trees	Complete	Dec-18	
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees during a storm	Complete	May-19	
			Repair damage caused by tree	Complete	Jul-19	
			Repair damage caused by trees during a storm	Complete	Aug-19	
			Repair damage caused by trees during a storm	Complete	Aug-19	
Replace pole	Complete	Aug-19				
4	Stoneboro	W-132	<i>Performance was driven by trees off ROW (69%), bird (12%) and line failure (5%)</i>			2Q 2019 3Q 2019
			Repair equipment failure	Complete	Oct-18	
			Repair damage from bird nest	Complete	Apr-19	
			Repair damage caused by trees during a storm	Complete	May-19	
			Repair damage caused by trees during a storm	Complete	Aug-19	

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
5	Evans City	D611	<i>Performance was driven by trees off ROW (89%) and equipment failure (7%)</i>			2Q 2019 3Q 2019
			Replace cutout	Complete	Dec-18	
			Repair damage caused by trees during a storm	Complete	May-19	
			Repair damage caused by trees during a storm	Complete	Sep-19	
6	Henderson	W-281	<i>Performance was driven by trees off ROW (58%) and lightening (31%)</i>			
			Repair damage caused by trees during a storm	Complete	Jul-19	
			Repair damage caused by lightning	Complete	Jul-19	
7	Bedford	D-445	<i>Performance was driven by trees off ROW (97%) and equipment failure (1%)</i>			2Q 2019 3Q 2019
			Replace transformer	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees during a storm	Complete	Jun-19	
8	Koppel	D-531	<i>Performance was driven by trees off ROW (89%) and line failure (5%)</i>			4Q 2018 1Q 2019 2Q 2019 3Q 2019
			Repair line failure	Complete	Sep-18	
			Pole was replaced and equipment repaired following tree damage during storm	Complete	Nov-18	
			Pole was replaced and equipment repaired following damage by tree	Complete	Jan-19	
			Repair damage caused by trees during a storm	Complete	Feb-19	
			Repair damage caused by trees during a storm	Complete	Feb-19	
9	Perry	W-156	<i>Performance was driven by equipment failure (67%), bird (25%) and trees off ROW (5%)</i>			2Q 2019 3Q 2019
			Repair damage caused by trees during a storm	Complete	Aug-18	
			Replace switch	Complete	Feb-19	
			Repair damage from bird nest	Complete	Apr-19	
			Repair damage from bird nest	Complete	Sep-19	

<b>Penn Power</b>					
<b>Unranked circuits appearing 2 or more quarters in the last 4 quarters</b>					
<b>Substation</b>	<b>Circuit</b>	<b>4Q 2018</b>	<b>1Q 2019</b>	<b>2Q 2019</b>	<b>3Q 2019</b>
Jamestown	W-162	X	X	X	
Seneca	W-701	X	X		

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

West Penn Power						
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	Franklin	Rogersville	<i>Performance driven by off ROW trees (56%) and line failure (29%)</i>			Q1 2019 Q2 2019 Q3 2019
			On cycle tree trimming	Complete	Dec-18	
			Repair damage caused by a tree during a storm	Complete	Jan-19	
			Repair damage caused by a tree during a storm	Complete	Jan-19	
			Repair equipment failure	Complete	Jun-19	
			Repair damage caused by a tree	Complete	Jun-19	
			Repair line failure during a storm	Complete	Jul-19	
2	Waterville	Waterville	<i>Performance driven by other electric utility (68%) and off ROW tree (18%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Restore outage caused by other electric utility	Complete	Dec-18	
			Repair damage caused by a tree	Complete	Mar-19	
			Restore outage caused by other electric utility	Complete	May-19	
			Repair damage caused by a tree	Complete	Jun-19	
			Restore outage caused by other electric utility during a storm	Complete	Jun-19	
3	Flintstone	Chaneysville	<i>Performance driven by off ROW trees (86%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Repair equipment failure	Complete	Dec-18	
			Repair damage caused by a tree during a storm	Complete	Jan-19	
			Repair damage caused by a tree during a storm	Complete	Feb-19	
			Repair damage caused by a tree during a storm	Complete	Apr-19	
			Forced outage to repair damage during a storm	Complete	Jun-19	
			Restore unknown outage	Complete	Jul-19	
4	Avella	W Middletown	<i>Performance driven by off ROW trees (78%) and line failure (12%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Repair line failure	Complete	Oct-18	
			Repair damage caused by a tree during a storm	Complete	Dec-18	
			Repair damage caused by a tree during a storm	Complete	Jan-19	
			Repair damage caused by a tree	Complete	Feb-19	
			Repair line failure	Complete	Jun-19	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
Repair line failure during a storm	Complete	Jul-19				
			Repair damage caused by a tree during a storm	Complete	Jul-19	

West Penn Power							
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	
5	Rutan	Bristoria	<i>Performance driven by off ROW trees (53%), equipment failure (13%), and line failure (12%)</i>				Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Repair equipment failure	Complete	Oct-18		
			Repair damage caused by a tree during a storm	Complete	Oct-18		
			Repair line failure during a storm	Complete	Feb-19		
			Repair equipment failure during a storm	Complete	Feb-19		
			Repair damage caused by a tree	Complete	May-19		
			Repair line failure during a storm	Complete	Jun-19		
			Overhead circuit inspection	Complete	Jun-19		
			Repair damage caused by a tree during a storm	Complete	Jul-19		
			Restore unknown outage	Complete	Aug-19		
Forestry off cycle work	Complete	Sep-19					
6	Mather	Jefferson	<i>Performance driven by off ROW trees (84%)</i>				Q2 2019 Q3 2019
			Repair damage caused by a vehicle during a storm	Complete	Apr-19		
			Repair damage caused by a tree during a storm	Complete	May-19		
			Repair damage caused by a tree during a storm	Complete	Jun-19		
			Repair damage caused by a tree	Complete	Jul-19		
7	North Washington	Poke Run	<i>Performance driven by off ROW trees (72%) and line failure (11%)</i>				Q2 2019 Q3 2019
			Repair damage caused by a tree	Complete	Apr-19		
			Repair damage caused by a tree during a storm	Complete	Jun-19		
			Repair damage caused by a tree during a storm	Complete	Jul-19		
			Repair line failure	Complete	Aug-19		
Repair damage caused by a tree	Complete	Sep-19					
8	Westraver	Pittsburgh Coal	<i>Performance driven by off ROW trees (46%) and line failure (44%)</i>				Q2 2019 Q3 2019
			Repair line failure	Complete	Jun-19		
			Repair damage caused by a tree during a storm	Complete	Jun-19		
			Overhead circuit inspection	In Progress	93%		
			Repair damage caused by a tree	Complete	Jul-19		
Repair damage caused by a tree during a storm	Complete	Jul-19					
9	Piney Fork	Stoltz	<i>Performance driven by off ROW trees (89%)</i>				
			Repair damage caused by a tree during a storm	Complete	Aug-19		
			Repair damage caused by a tree during a storm	Complete	Sep-19		

West Penn Power						
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	Roundhill	Roundhill	<i>Performance driven by off ROW trees (89%)</i>			
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			Repair damage caused by a tree during a storm	Complete	Aug-19	
11	Bedford Road	Rt 220 North	<i>Performance driven by off ROW trees (67%) and vehicle (22%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Repair damage caused by a vehicle	Complete	Nov-18	
			On cycle tree trimming	Complete	Jan-19	
			Repair damage caused by a tree during a storm	Complete	Jan-19	
			Restore unknown outage during a storm	Complete	May-19	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
			Repair damage caused by a tree during a storm	Complete	Aug-19	
12	Dutch Fork	Claysville	<i>Performance driven by off ROW trees (52%) and vehicle (25%)</i>			Q4 2018 Q1 2019 Q3 2019
			Enhanced WPC remediation	Complete	Nov-18	
			Repair damage caused by a tree	Complete	Dec-18	
			Forced outage to repair damage	Complete	Jan-19	
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			Repair damage caused by a vehicle during a storm	Complete	Jul-19	
13	Cooperstown	Twin Willows	<i>Performance driven by off ROW trees (51%) and vehicle (32%)</i>			Q2 2019 Q3 2019
			Repair damage caused by a tree	Complete	Jul-18	
			Repair damage caused by a tree during a storm	Complete	May-19	
			Repair damage caused by a tree	Complete	Jun-19	
			Repair line failure during a storm	Complete	Aug-19	
14	Bethlen	Darlington	<i>Performance driven by off ROW trees (65%) and unknown (15%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Overhead circuit inspection	Complete	Oct-18	
			Repair line failure	Complete	Nov-18	
			Repair damage caused by a tree	Complete	Nov-18	
			Repair damage caused by a tree	Complete	Jan-19	
			Repair damage caused by a tree	Complete	Apr-19	
			Repair damage caused by a tree	Complete	Jun-19	
			Restore unknown outage	Complete	Jun-19	
			Repair equipment failure during a storm	Complete	Jul-19	
Repair damage caused by a tree during a storm	Complete	Jul-19				

West Penn Power						
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	Smith	Florence	<i>Performance driven by off ROW trees (55%) and forced outage (19%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Restore damage caused by a tree	Complete	Dec-18	
			Enhanced WPC remediation	To Be Completed 2019	0%	
			Repair damage caused by a tree during a storm	Complete	Jan-19	
			Restore unknown failure	Complete	May-19	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
			Forced outage to repair damage	Complete	Jul-19	
			Repair line failure during a storm	Complete	Jul-19	
16	Bethel Park	Clifton	<i>Performance driven by off ROW trees (59%) and unknown (18%)</i>			Q2 2019 Q3 2019
			On cycle tree trimming	Complete	Oct-19	
			Repair damage caused by a tree during a storm	Complete	May-19	
			Restore unknown outage during a storm	Complete	Jun-19	
			Repair line failure	Complete	Aug-19	
			Repair damage caused by a tree during a storm	Complete	Sep-19	
17	Houston	Weavertown	<i>Performance driven by vehicle (49%), human error-company (26%), and unknown (12%)</i>			Q2 2019 Q3 2019
			Repair damage caused by a vehicle during a storm	Complete	Jun-19	
			Repair line failure	Complete	Sep-19	
18	St. Clair	Skyridge	<i>Performance driven by off ROW trees (91%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Repair line failure	Complete	Oct-18	
			Repair equipment failure	Complete	Jan-19	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			Repair damage caused by a tree during a storm	Complete	Sep-19	
19	Whiteley	Mt. Morris	<i>Performance driven by equipment failure (56%) and off ROW trees (32%)</i>			
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			Repair equipment failure	Complete	Sep-19	
20	Bethlen	Laurel Valley	<i>Performance driven by equipment failure (33%), off ROW trees (32%), and forced outages (22%)</i>			
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			Repair equipment failure	Complete	Aug-19	
			Forced outage to repair damage during a storm	Complete	Sep-19	

West Penn Power						
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	Kiski Valley	Kittanning Rd	<i>Performance driven by off ROW trees (54%) and line failure (39%)</i>			Q4 2018 Q1 2019 Q3 2019
			Repair line failure	Complete	Dec-18	
			Repair line failure	Complete	Mar-19	
			Repair damage caused by a tree	Complete	Mar-19	
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			Repair line failure	Complete	Sep-19	
22	Saltsburg	Saltsburg	<i>Performance driven by off ROW trees (35%), vehicle (26%), and line failure (19%)</i>			
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			Repair line failure during a storm	Complete	Jul-19	
			Restore unknown outage	Complete	Aug-19	
23	Atherton	East Residential	<i>Performance driven by equipment failure (62%) and line failure (20%)</i>			
			On cycle tree trimming	Complete	Feb-19	
			Repair damage caused by a tree	Complete	Jul-19	
			Repair equipment failure during a storm	Complete	Jul-19	
			Repair line failure	Complete	Aug-19	
24	Cecil	Hendersonville	<i>Performance driven by off ROW trees (41%), equipment failure (35%), and line failure (24%)</i>			
			Repair line failure	Complete	Aug-19	
			Repair damage caused by a tree	Complete	Sep-19	
25	Bethel Park	Dashwood	<i>Performance driven by equipment failure (41%), off ROW trees (31%), and vehicle (17%)</i>			
			Repair equipment failure during a storm	Complete	Sep-19	
			Repair damage caused by a tree during a storm	Complete	Sep-19	
26	Fort Palmer	West Fairfield	<i>Performance driven by off ROW trees (84%)</i>			Q1 2019 Q2 2019 Q3 2019
			Repair damage caused by a tree during a storm	Complete	Feb-19	
			Restore unknown outage	Complete	Mar-19	
			Repair damage caused by a tree during a storm	Complete	May-19	
			Zone 1 Infrared Inspection	Complete	Jul-19	
			Repair damage caused by a tree	Complete	Jul-19	
27	State College	West Residential	<i>Performance driven by vehicle (60%) and off ROW trees (31%)</i>			
			Repair damage caused by a vehicle	Complete	Aug-19	
			Repair damage caused by a tree during a storm	Complete	Aug-19	
			Zone 1 Infrared Inspection	Complete	Aug-19	
28	California	Malden	<i>Performance driven by off ROW trees (94%)</i>			
			Repair damage caused by a tree during a storm	Complete	Jul-19	

West Penn Power						
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
29	Avella	Penowa	<i>Performance driven by off ROW trees (65%) and line failure (25%)</i>			
			Repair line failure during a storm	Complete	Jul-19	
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			On cycle tree trimming	Complete	Sep-19	
30	Piney Fork	Knothole	<i>Performance driven by line failure (69%) and off ROW trees (28%)</i>			
			Repair damage caused by a tree	Complete	Jul-19	
			Repair line failure	Complete	Aug-19	
31	Shanor Manor	Oneida	<i>Performance driven by equipment failure (77%) and off ROW trees (19%)</i>			
			On cycle tree trimming	Complete	Oct-18	
			Repair damage caused by a tree	Complete	Aug-19	
32	Karns City	Kaylor	<i>Performance driven by line failure (34%), forced outage (27%), off ROW trees (18%), and vehicle (18%)</i>			Q4 2018 Q1 2019 Q3 2019
			Overhead circuit inspection	Complete	Oct-18	
			Repair line failure during a storm	Complete	Oct-18	
			Repair damage caused by a vehicle	Complete	Nov-18	
			Repair damage caused by a tree	Complete	Feb-19	
			Repair damage caused by a tree during a storm	Complete	Jul-19	
33	Smith	Francis Mine	<i>Performance driven by off ROW trees (88%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Repair damage caused by a tree during a storm	Complete	Dec-18	
			Repair damage caused by a tree	Complete	Mar-19	
			Repair damage caused by a tree	Complete	Apr-16	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			Zone 1 Infrared Inspection	Complete	Jul-19	
34	Charleroi	N. Charleroi	<i>Performance driven by vehicle (62%) and off ROW trees (20%)</i>			Q2 2019 Q3 2019
			On cycle tree trimming	Complete	Nov-18	
			Repair line failure during a storm	Complete	Jun-19	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
			Repair equipment failure	Complete	Sep-19	

West Penn Power						
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
35	Smith	Burgettstown	<i>Performance driven by off ROW trees (58%), equipment failure (15%), and vehicle (11%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Repair equipment failure	Complete	Oct-18	
			Repair line failure during a storm	Complete	Nov-18	
			Repair damage caused by a tree during a storm	Complete	Nov-18	
			On cycle tree trimming	Complete	Nov-18	
			Repair equipment failure	Complete	Jan-19	
			Repair damage caused by a vehicle	Complete	Apr-19	
			Repair damage caused by a tree	Complete	Jun-19	
Repair damage caused by a tree during a storm	Complete	Jul-19				
36	Amity	Amity	<i>Performance driven by off ROW trees (86%)</i>			Q1 2019 Q2 2019 Q3 2019
			Repair damage caused by a tree during a storm	Complete	Jan-19	
			Forced outage to repair damage during a storm	Complete	Mar-19	
			Repair line failure	Complete	Apr-19	
			Repair damage caused by a tree during a storm	Complete	Apr-19	
			Overhead circuit inspection	Complete	Jul-19	
Repair damage caused by a tree during a storm	Complete	Jul-19				
37	Superior	Culmerville	<i>Performance driven by vehicle (52%), off ROW trees (16%), on ROW trees (14%), and unknown (14%)</i>			Q2 2019 Q3 2019
			Repair damage caused by a vehicle	Complete	Apr-19	
			Repair damage caused by a tree	Complete	May-19	
			Restore unknown outage	Complete	Jun-19	
Repair damage caused by a tree	Complete	Sep-19				
38	Graysville	Graysville	<i>Performance driven by off ROW trees (59%) and on ROW trees (16%)</i>			
			Repair damage caused by a tree during a storm	Complete	Jul-19	
			Repair line failure	Complete	Aug-19	
Repair damage caused by a tree	Complete	Aug-19				
39	Kane	Russell City	<i>Performance driven by off ROW trees (60%) and line failure (32%)</i>			Q4 2018 Q1 2019 Q2 2019 Q3 2019
			Forced outage to repair damage during a storm	Complete	Oct-18	
			Underground Substation exit replacement	Complete	Oct-18	
			Repair damage caused by a tree	Complete	Dec-18	
			Repair line failure	Complete	Jan-19	
			Repair damage caused by a tree during a storm	Complete	Jan-19	
			Repair damage caused by a tree during a storm	Complete	May-19	
Repair damage caused by a tree	Complete	Aug-19				

West Penn Power						
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	Harrison City	Claridge	<i>Performance driven by off ROW trees (50%), equipment failure (18%), and forced outage (11%)</i>			
			Forced outage to repair damage	Complete	Jul-19	
			Repair damage caused by a tree	Complete	Aug-19	

West Penn					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	4Q 2018	1Q 2019	2Q 2019	3Q 2019
Driftwood	Driftwood	X	X		
Dutch Fork	W Alexander	X	X		
Emporium	Emporium Jct	X	X	X	
Emporium	West Creek	X	X		
Kersey	Shelvey	X	X		
Krendale	Unionville	X	X		
Luxor	Rolling Acres		X	X	
Peters	Library	X	X	X	
Peters	McMurray	X	X	X	
Piney Fork	Gillhall	X	X		
Ridgway	Montmorenci	X	X	X	
Rutan	Windridge	X	X	X	
Sewickley	Wendel	X	X	X	
Shaffers Corner	Seventh St Rd	X	X	X	
Silverville 138-12	Cole Road	X	X		
St. Clair	Lesnett	X	X	X	
St. Clair	Valley	X	X		
Thompson Farm	Toftrees	X	X	X	
Vanceville	Vanceville		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
Purcell	Artemas	On cycle tree trimming	To Be Completed 2019	87%
Kersey	Shelvey	On cycle tree trimming	To Be Completed 2019	94%
Krendale	Unionville	Overhead circuit inspection	Complete	Sep-19
Rutan	Windridge	On cycle tree trimming	To Be Completed 2019	87%

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	456	232	235	66
2Q	297	103	384	34
3Q	111	57	507	19
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.*

<b>Met-Ed – Third Party Line Hit Incidents</b>			
<b>3rd Quarter 2019 12-Month Rolling</b>			
<b>Cause of Line Hit</b>	<b>Number of Incidents</b>	<b>Invoice Amount (\$)</b>	<b>Recovery Amount (\$)</b>
Dig In - Other	25	14,295	6,062
Excavated in Tolerance	27	187,549	28,935
Excavation Inconsistent with Ticket Scope	20	29,410	19,337
Excavation Prior to Lawful Start Date	3	4,499	2,672
Expired Ticket	7	11,906	6,094
Hand Digging	1	427	427
Marked Improperly	20	159,291	17,342
No Ticket	26	52,454	25,612
<b>Total</b>	<b>129</b>	<b>459,831</b>	<b>106,481</b>

<b>Penelec – Third Party Line Hit Incidents</b>			
<b>3rd Quarter 2019 12-Month Rolling</b>			
<b>Cause of Line Hit</b>	<b>Number of Incidents</b>	<b>Invoice Amount (\$)</b>	<b>Recovery Amount (\$)</b>
Dig In - Other	32	3,043	3,043
Excavated in Tolerance	36	79,931	49,956
Excavation Inconsistent with Ticket Scope	2	0	0
Excavation Prior to Lawful Start Date	5	1,670	0
Expired Ticket	5	3,105	1,362
Hand Digging	3	971	0
Marked Improperly	43	146,624	123,006
No Ticket	48	62,434	44,703
<b>Total</b>	<b>174</b>	<b>297,778</b>	<b>222,070</b>

<b>Penn Power – Third Party Line Hit Incidents</b>			
<b>3rd Quarter 2019 12-Month Rolling</b>			
<b>Cause of Line Hit</b>	<b>Number of Incidents</b>	<b>Invoice Amount (\$)</b>	<b>Recovery Amount (\$)</b>
Dig In - Other	13	2,856	2,977
Excavated in Tolerance	17	37,050	20,130
Excavation Inconsistent with Ticket Scope	2	2,313	2,448
Excavation Prior to Lawful Start Date	2	1,913	3,032
Expired Ticket	5	5,097	5,097
Hand Digging	0	0	0
Marked Improperly	9	18,374	16,180
No Ticket	18	27,627	14,682
<b>Total</b>	<b>66</b>	<b>95,230</b>	<b>64,546</b>

<b>West Penn – Third Party Line Hit Incidents</b>			
<b>3rd Quarter 2019 12-Month Rolling</b>			
<b>Cause of Line Hit</b>	<b>Number of Incidents</b>	<b>Invoice Amount (\$)</b>	<b>Recovery Amount (\$)</b>
Dig In - Other	53	113,073	94,443
Excavated in Tolerance	5	9,207	7,996
Excavation Inconsistent with Ticket Scope	3	1,855	1,972
Excavation Prior to Lawful Start Date	1	0	0
Expired Ticket	5	2,536	2,183
Hand Digging	14	14,192	10,956
Marked Improperly	26	70,630	68,324
No Ticket	43	69,392	32,844
<b>Total</b>	<b>150</b>	<b>280,885</b>	<b>218,718</b>

<b>Cause of Line Hit</b>	<b>Definition</b>
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

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Joint 3<sup>rd</sup> Quarter 2019 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  
SECRETARY'S BUREAU

**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 – 5<sup>th</sup> Floor  
Harrisburg, PA 17101-1923

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

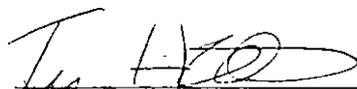
Scott Rubin  
Utility Workers Union of America  
333 Oak Lane  
Bloomsburg, PA 17815-2036

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, 2019



\_\_\_\_\_  
Teresa Harrold  
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Counsel for Metropolitan Edison Company,  
Pennsylvania Electric Company, Pennsylvania  
Power Company and West Penn Power Company



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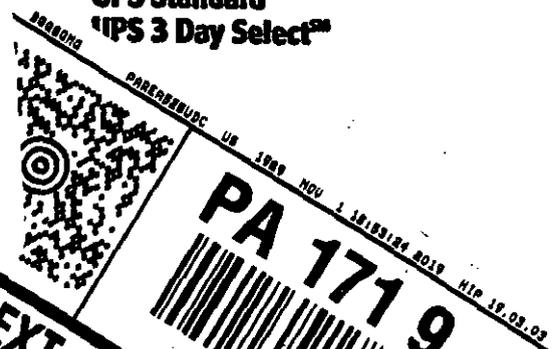


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