



2800 Pottsville Pike
PO Box 16001
Reading, PA 19612-6001

Tori L. Giesler, Esq.
(610) 921-6658
(330) 315-9263 (Fax)

August 1, 2019

RECEIVED

AUG - 1 2019

VIA UNITED PARCEL SERVICE

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

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

M-2016-2522508

Re: Joint 2nd 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 2nd 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,

Tori L. Giesler

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



RECEIVED

AUG - 1 2019

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Joint 2019 2nd 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 2nd 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.¹

Major Event(s)

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

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

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

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

2Q 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
SAIFI	1.15	1.38	1.54	1.26	1.52	1.91	1.12	1.34	1.30	1.05	1.26	1.20
CAIDI	117	140	150	117	141	122	101	121	138	170	204	162
SAIDI	135	194	230	148	213	233	113	162	179	179	257	195
MAIFI ²			1.26			1.924			0.109			
Customers Served ³	565,776			580,287			164,067			717,106		
Number of Sustained Interruptions	12,418			14,220			3,436			13,136		
Customers Affected	868,545			1,111,029			212,775			858,876		
Customer Minutes	130,073,956			135,292,234			29,295,313			139,508,316		
Number of Customer Momentary Interruptions	712,174			1,116,704			17,838					

² MAIFI values are not available for West Penn.

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

Unique Events Occurring in 2Q 2019:

Met-Ed

- On May 14, 2019 at 1657, Met-Ed was notified of a car pole accident on Cherry Valley Road in Stroudsburg impacting 4,303 customers. The accident resulted in a broken pole and down wires. Data indicates that the two outage orders associated with the car pole accident, both similar in length, had a reliability impact of was 4.168 minutes of SAIDI, 0.0074 of SAIFI, and an overall CAIDI of 562.1 minutes.
- On Wednesday, May 29, 2019, a line of severe thunderstorms moved east across most of Pennsylvania which produced heavy rain, lightning strikes, hail, and strong winds impacting 35,280 customers. Met-Ed's service territory received up to two inches of precipitation and had recorded wind gusts in excess of fifty-five miles per hour, which caused damage to Met-Ed's facilities. Data indicates the reliability impact of the storm was 16.7 minutes of SAIDI, 0.06 of SAIFI, and an overall storm CAIDI of 267.1 minutes.

Penelec

- Beginning the early morning of Sunday, April 14, 2019 and continuing through the morning of Monday, April 15, 2019, a strong storm system producing thunderstorms moved across Pennsylvania, including the Penelec service territory impacting 31,221 customers. Over the two-day period, this system produced wind gusts of thirty to fifty miles per hour, with some areas experiencing maximum gusts exceeding sixty miles per hour, heavy rains and lightning. Data indicates the reliability impact of the storm was 17.1 minutes of SAIDI, 0.05 of SAIFI, and an overall storm CAIDI of 317.6 minutes.
- Beginning the morning of Friday, April 19, 2019 and continuing through the evening of Saturday, April 20, 2019, a strong storm system producing thunderstorms moved through Pennsylvania, including the Penelec service territory impacting 9,031 customers. Over the two-day period, this system produced wind gusts of forty-five to sixty miles per hour, heavy rains, lightning, and two confirmed tornados in the Penelec service territory. Data indicates the reliability impact of the storm was 5.8 minutes of SAIDI, 0.02 of SAIFI, and an overall storm CAIDI of 370.3 minutes.
- Beginning the afternoon of Sunday, May 19, 2019 and continuing into the early morning of Monday, May 20, 2019, scattered thunderstorms moved through Pennsylvania, including the Penelec service territory impacting 11,066 customers. The storms produced wind gusts up to sixty miles per hour and lightning in the Penelec service territory. Data indicates the reliability impact of the storm was 5.7 minutes of SAIDI, 0.02 of SAIFI, and an overall storm CAIDI of 297.1 minutes.

Penelec Continued

- Beginning the morning of Tuesday, May 28, 2019 and continuing through the evening of Wednesday, May 29, 2019, a line of severe thunderstorms moved through Pennsylvania, including the Penelec service territory impacting 26,192 customers. Over the two-day period, the storm produced high winds, heavy rain, and lightning. Wind gusts up to fifty-seven miles per hour continued through Thursday, May 30, 2019. Data indicates the reliability impact of the storm was 8.7 minutes of SAIDI, 0.05 of SAIFI, and an overall storm CAIDI of 193.4 minutes.

West Penn

- Beginning the afternoon of Tuesday, May 28, 2019 and continuing through the evening of Wednesday, May 29, 2019, a line of severe thunderstorms moved through Pennsylvania, including the West Penn service territory impacting 26,194 customers. Over the two-day period, the storm produced high winds, heavy rain, and lightning. Wind gusts up to fifty-seven miles per hour continued through Thursday, May 30, 2019. Data indicates the reliability impact of the storm was 7.9 minutes of SAIDI, 0.04 of SAIFI, and an overall storm CAIDI of 216.9 minutes.
- 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. See Attachment B for the wind reports for June 29 and 30. Data indicates 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 System Average Interruption Frequency Index (“SAIFI”) and System Average Interruption Duration Index (“SAIDI”). The methodology consists of the following steps:

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

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

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				
2nd Quarter 2019 12-Month Rolling	Met-Ed			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Customer Minutes
Trees off ROW - tree	52,093,465	2,327	212,220	40.05%
Equipment failure	26,097,768	2,713	206,728	20.06%
Vehicle	12,202,312	307	69,256	9.38%
Unknown	7,941,255	1,480	81,390	6.11%
Line failure	7,770,420	1,121	49,131	5.97%
Trees off ROW - limb	4,921,755	632	35,243	3.78%
Forced outage	4,162,655	454	69,406	3.20%
Lightning	3,349,600	345	22,821	2.58%
Trees on ROW	3,175,608	372	12,704	2.44%
Animal	3,144,204	1,284	29,224	2.42%
Wind	1,093,872	102	6,206	0.84%
Human error - company	752,408	61	26,972	0.58%
Human error - non-company	742,654	81	10,316	0.57%
Overload	597,468	67	10,898	0.46%
Trees - sec/service	588,664	520	1,344	0.45%
Object contact with line	496,385	52	4,125	0.38%
Bird	296,322	351	3,210	0.23%
UG dig-up	170,143	39	917	0.13%
Customer equipment	143,461	37	9,006	0.11%
Other utility - non-electric	111,279	7	824	0.09%
Ice	94,998	13	318	0.07%
Other electric utility	63,519	15	6,016	0.05%
Previous lightning	34,633	23	119	0.03%
Fire	24,629	6	135	0.02%
Vandalism	2,592	6	10	0.00%
Switching error	1,344	1	4	0.00%
Contamination	543	2	2	0.00%
Total	130,073,956	12,418	868,545	100%

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 June 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-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.

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

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.

⁴ Pursuant to 52 Pa. Code § 57.198, every two years an electric distribution company shall file, and receive approval from the Commission of, a biennial plan for the periodic inspection, maintenance, repair and replacement of its facilities. 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				
2nd Quarter 2019 12-Month Rolling	Penelec			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Customer Minutes
Trees off ROW - tree	51,420,357	2,038	266,960	38.01%
Equipment failure	27,563,374	3,119	316,811	20.37%
Line failure	15,824,422	1,743	151,205	11.70%
Unknown	6,341,521	1,647	75,285	4.69%
Forced outage	5,682,645	1,091	65,345	4.20%
Vehicle	5,620,431	311	32,853	4.15%
Lightning	4,487,012	756	44,350	3.32%
Wind	4,433,253	43	8,581	3.28%
Animal	3,342,319	1,325	30,652	2.47%
Trees off ROW - limb	2,411,153	367	21,016	1.78%
Human error - company	1,660,718	121	46,439	1.23%
Human error - non-company	1,158,361	91	7,767	0.86%
Object contact with line	1,035,359	38	3,700	0.77%
Trees - sec/service	816,252	770	2,874	0.60%
Overload	780,201	54	13,959	0.58%
Bird	747,248	350	8,393	0.55%
Other electric utility	524,236	83	2,042	0.39%
Trees on ROW	436,946	109	4,434	0.32%
Ice	232,793	13	1,926	0.17%
Other utility - non-electric	219,291	4	702	0.16%
Previous lightning	201,150	43	978	0.15%
UG dig-up	159,141	55	1,622	0.12%
Fire	77,138	12	399	0.06%
Contamination	48,849	5	120	0.04%
Switching Error	36,820	4	909	0.03%
Customer equipment	30,582	19	1,698	0.02%
Vandalism	662	9	9	0.00%
Total	135,292,234	14,220	1,111,029	100%

Proposed Solutions – Penelec

Penelec analyzes its outage data to develop solutions for improving reliability. The following paragraphs identify the top outage causes for the rolling twelve-month period ending June 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 right-of-way 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 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

Outage by Cause				
2nd Quarter 2019 12-Month Rolling	Penn Power			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Customer Minutes
Trees off ROW - tree	14,081,206	884	79,242	48.07%
Equipment failure	3,110,738	340	27,762	10.62%
Vehicle	3,082,984	100	14,771	10.52%
Animal	2,006,239	467	20,405	6.85%
Line failure	1,630,760	301	11,028	5.57%
Lightning	1,216,732	269	11,620	4.15%
Trees off ROW - limb	991,693	161	5,304	3.39%
Unknown	955,713	157	18,347	3.26%
Human error - non-company	594,715	27	5,229	2.03%
Overload	515,432	54	7,413	1.76%
Bird	457,929	336	4,238	1.56%
Forced outage	186,399	84	4,400	0.64%
Trees - sec/service	168,817	154	469	0.58%
Human error - company	91,995	17	1,121	0.31%
Trees on ROW	62,367	17	392	0.21%
Wind	50,035	3	109	0.17%
Previous lightning	39,802	24	312	0.14%
UG dig-up	34,550	17	468	0.12%
Ice	7,936	1	16	0.03%
Object contact with line	5,410	8	92	0.02%
Vandalism	2,420	2	24	0.01%
Customer equipment	1,292	11	11	0.00%
Fire	149	2	2	0.00%
Total	29,295,313	3,436	212,775	100%

Proposed Solutions – Penn Power

Penn Power analyzes its outage data to develop solutions for improving reliability. The following paragraphs identify the top outage causes for the rolling twelve-month period ending June 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 right-of-way 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				
2nd Quarter 2019 12-Month Rolling	West Penn			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Customer Minutes
Trees off ROW – tree	63,386,276	3,289	266,153	45.44%
Equipment failure	22,898,718	2,608	162,433	16.41%
Line failure	14,614,716	1,335	93,254	10.48%
Vehicle	9,030,251	365	68,763	6.47%
Unknown	8,003,266	1,757	66,905	5.74%
Trees on ROW	4,920,508	523	19,151	3.53%
Trees off ROW – limb	3,697,435	223	25,381	2.65%
Forced outage	3,555,254	698	68,760	2.55%
Lightning	1,810,397	153	12,992	1.30%
Animal	1,627,148	1,160	17,127	1.17%
Human error - non-company	1,075,443	77	11,336	0.77%
Human error – company	977,451	55	21,845	0.70%
Other electric utility	843,528	18	2,007	0.60%
Wind	777,507	28	3,536	0.56%
Other utility - non-electric	517,935	6	2,125	0.37%
Bird	402,562	312	4,258	0.29%
Trees - sec/service	328,755	393	773	0.24%
Overload	317,427	24	5,344	0.23%
Contamination	154,509	6	3,356	0.11%
Object contact with line	115,430	30	886	0.08%
Fire	108,868	5	279	0.08%
Ice	107,721	2	60	0.08%
UG dig-up	103,158	45	708	0.07%
Customer equipment	89,254	15	589	0.06%
Switching error	23,116	3	772	0.02%
Vandalism	20,663	5	90	0.01%
Previous Lightning	1,020	1	15	0.00%
Total	139,508,316	13,136	858,898	100%

Proposed Solutions – West Penn

West Penn analyzes its outage data to develop solutions for improving reliability. The following paragraphs identify the top outage causes for the rolling twelve-month period ending June 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 right-of-way 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 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.

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

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 Annual	Completed		Planned Annual	Completed		Planned Annual	Completed		Planned Annual	Completed	
			2Q	YTD		2Q	YTD		2Q	YTD		2Q	YTD
Forestry	Transmission (Miles)	282.22	89.35	193.10	384.88	107.65	214.74	171.19	34.09	40.86	208.34	126.52	208.34
	Distribution (Miles)	2,845	628	1,189	3,953	948	1,683	1,141	304	600	4,480	1,053	1,986
Transmission	Aerial Patrols	2	1	1	2	1	1	2	1	1	2	1	1
	Groundline	890	0	0	981	928	928	122	151	151	1,547	0	0
Substation	Substation Inspections Class A	422	1	212	788	1	395	148	0	74	714	0	357
	Substation Inspections Class B	422	212	212	788	395	395	148	74	74	714	357	357
	Substation Inspections Class C	1,688	423	845	3,152	792	1,580	592	148	296	2,856	714	1,428
	Transformers	395	208	246	696	166	504	125	1	1	688	322	567
	Breakers	87	27	48	437	179	244	8	3	8	379	168	232
	Relay Schemes	114	36	85	146	79	144	18	5	18	185	85	109
Distribution	Capacitors	4,761	0	4,761	8,702	0	8,702	978	0	978	1,305	0	1,305
	Poles	28,000	10,521	14,663	41,584	8,730	25,615	10,657	0	10,657	45,074	11,441	36,021
	Reclosers	1,115	576	887	2,581	0	0	864	0	864	3,911	558	3,045
	Radio-Controlled Switches	760	285	387	2,706	1,074	1,272	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.

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

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 Expenditures⁵

Met-Ed T&D O&M –2Q / YTD June 2019 (\$)						
Transmission						
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	0	0	0	0	0
561	Load Dispatching	(9,591)	(36,050)	(33,675)	(74,745)	(150,250)
562	Station Expenses	3,192	0	6,540	0	0
563	Overhead Lines Expenses	14,895	15,915	42,680	54,050	56,800
565	Transmission of Electricity by Others	2,217,106	2,109,000	4,463,628	4,218,000	8,436,000
566	Miscellaneous Transmission Expenses	(48,359)	(4,239)	(56,861)	(8,803)	(18,298)
567	Rents	16,063	0	32,125	0	0
568	Maintenance Supervision and Engineering	3,472	0	3,472	0	0
569	Maintenance of Structures	50,814	6,950	104,555	15,255	29,209
570	Maintenance of Station Equipment	212,616	1,125	550,917	2,250	4,500
571	Maintenance of Overhead Lines	699	0	49,539	0	0
572	Maintenance of Underground Lines	0	0	2,976	0	0
573	Maintenance of Miscellaneous Transmission Plant	(2,287)	(1,197)	994	(2,395)	(4,790)
575	Market Administration, Monitoring & Compliance Services	0	0	0	0	0
Transmission Total		2,458,619	2,091,504	5,166,891	4,203,612	8,353,172
Distribution						
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	113,961	61,019	166,537	113,258	228,234
581	Load Dispatching	53,865	60,982	108,512	107,237	231,996
582	Station Expenses	199,685	229,006	258,201	454,892	912,328
583	Overhead Line Expenses	43,229	29,043	157,993	71,022	122,451
584	Underground Line Expenses	111	0	652	0	0
585	Distribution-Street Lighting & Signal System Expenses	0	0	0	0	0
586	Meter Expenses	145,536	143,242	301,055	289,456	640,356
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	1,978,988	1,522,718	3,954,035	3,054,303	6,404,140
589	Rents	124,602	130,867	259,164	261,735	523,469
590	Maintenance Supervision and Engineering	132,033	116,020	247,336	211,143	426,857
591	Maintenance of Structures	1,441	670	6,534	1,397	2,790
592	Maintenance of Station Equipment	1,596,049	1,902,508	3,065,674	3,538,190	7,292,017
593	Maintenance of Overhead Lines	9,561,795	8,931,960	27,875,107	17,246,151	34,016,659
594	Maintenance of Underground Lines	230,884	597,545	876,061	1,109,523	2,229,571
595	Maintenance Line Transformer	61,821	281,648	131,525	563,297	1,126,594
596	Maintenance of Street Lighting and Signal Systems	136,429	102,128	316,911	216,219	400,145
597	Maintenance of Meters	415,206	620,606	816,214	1,200,026	2,348,044
598	Maintenance of Miscellaneous Distribution Plant	282,853	609,238	482,893	1,239,742	2,381,957
Distribution Total		15,078,487	15,339,200	39,024,404	29,677,591	59,287,607
Met-Ed Total		17,537,106	17,430,705	44,191,295	33,881,203	67,640,780

⁵ Budgets are subject to change.

Penelec						
T&D O&M –2Q /YTD June 2019 (\$)						
Transmission						
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	0	0	0	0	0
561	Load Dispatching	(4,026)	(52,061)	458	(110,688)	(224,895)
562	Station Expenses	59,110	43,863	109,872	78,036	157,082
563	Overhead Lines Expenses	72,786	46,690	352,367	375,299	531,051
565	Transmission of Electricity by Others	7,870,056	6,905,679	15,570,677	13,811,358	27,622,716
566	Miscellaneous Transmission Expenses	(36,726)	0	(37,764)	0	0
567	Rents	50,674	71,299	217,445	118,246	275,000
568	Maintenance Supervision and Engineering	37,111	0	70,326	0	0
569	Maintenance of Structures	73,161	7,492	149,818	16,443	31,485
570	Maintenance of Station Equipment	120,656	72,139	206,877	144,279	288,560
571	Maintenance of Overhead Lines	90,746	0	172,136	0	0
572	Maintenance of Underground Lines	0	0	106	0	0
573	Maintenance of Miscellaneous Transmission Plant	2,514	0	3,351	0	0
575	Market Administration, Monitoring & Compliance Services	0	0	0	0	0
Transmission Total		8,336,063	7,095,103	16,815,670	14,432,973	28,681,000
Distribution						
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	105,161	81,726	253,387	162,634	325,625
581	Load Dispatching	107,469	83,246	193,361	152,812	311,134
582	Station Expenses	124,743	0	301,745	0	0
583	Overhead Line Expenses	20,520	11,162	55,161	65,325	91,827
584	Underground Line Expenses	337,223	299,885	548,476	477,984	970,299
585	Distribution-Street Lighting & Signal System Expenses	0	0	0	0	0
586	Meter Expenses	155,553	200,092	326,806	386,347	778,690
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	2,626,348	2,721,181	5,309,615	5,087,521	10,818,822
589	Rents	297,316	306,851	833,452	613,703	1,227,405
590	Maintenance Supervision and Engineering	134,272	124,443	243,909	226,455	457,831
591	Maintenance of Structures	0	0	0	0	0
592	Maintenance of Station Equipment	1,563,669	1,496,643	3,578,467	2,883,180	5,911,064
593	Maintenance of Overhead Lines	9,078,073	8,695,716	21,833,920	17,016,357	35,394,672
594	Maintenance of Underground Lines	354,784	55,751	689,054	66,055	146,475
595	Maintenance Line Transformer	54,013	60,415	114,914	120,831	241,662
596	Maintenance of Street Lighting and Signal Systems	219,579	682,925	524,525	1,427,561	2,912,376
597	Maintenance of Meters	727,641	1,081,263	1,353,359	2,104,327	4,200,560
598	Maintenance of Miscellaneous Distribution Plant	321,475	0	640,256	0	32,545
Distribution Total		16,227,839	15,901,301	36,800,409	30,791,092	63,820,986
Penelec Total		24,563,903	22,996,403	53,616,079	45,224,065	92,501,987

Penn Power						
T&D O&M -2Q / YTD June 2019 (\$)						
Transmission						
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	404	346	758	647	1,325
561	Load Dispatching	1,774	31,544	(3,805)	62,883	125,907
562	Station Expenses	0	(78)	0	(150)	(347)
563	Overhead Lines Expenses	0	(136)	0	(261)	(603)
565	Transmission of Electricity by Others	1,102,852	1,037,223	2,211,820	2,074,446	4,148,892
566	Miscellaneous Transmission Expenses	1,398	868	1,863	1,683	4,216
567	Rents	0	0	0	0	0
568	Maintenance Supervision and Engineering	3,214	3,379	6,151	6,586	13,054
569	Maintenance of Structures	6,284	2,221	13,650	4,594	9,575
570	Maintenance of Station Equipment	1,850	762	5,355	1,524	3,047
571	Maintenance of Overhead Lines	2,490	21,861	10,159	45,189	89,459
572	Maintenance of Underground Lines	0	0	0	0	0
573	Maintenance of Miscellaneous Transmission Plant	897	0	878	0	0
575	Market Administration, Monitoring & Compliance Services	0	0	0	0	0
Transmission Total		1,121,163	1,097,991	2,246,829	2,197,139	4,394,526
Distribution						
Category	2Q Actuals	2Q 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	14,714	0	27,511	0	0
583	Overhead Line Expenses	8,232	0	110,603	0	0
584	Underground Line Expenses	75,315	130,978	124,379	263,420	526,031
585	Distribution-Street Lighting & Signal System Expenses	17,611	21,195	33,208	40,869	82,500
586	Meter Expenses	0	0	0	0	0
587	Customer Installations Expenses	146,542	195,351	378,139	370,162	782,612
588	Miscellaneous Distribution Expenses	166,088	82,609	290,647	165,219	330,437
589	Rents	36,934	31,177	69,546	56,766	114,777
590	Maintenance Supervision and Engineering	0	0	0	0	0
591	Maintenance of Structures	216,896	76,740	551,929	154,184	308,743
592	Maintenance of Station Equipment	3,144,777	3,549,466	7,718,266	6,955,841	13,683,588
593	Maintenance of Overhead Lines	59,418	12,331	101,689	24,186	49,513
594	Maintenance of Underground Lines	9,099	12,735	17,901	25,470	50,939
595	Maintenance Line Transformer	11,322	5,239	28,146	10,479	20,957
596	Maintenance of Street Lighting and Signal Systems	98,869	135,160	194,217	256,353	520,239
597	Maintenance of Meters	75,045	12,548	160,180	23,131	56,497
598	Maintenance of Miscellaneous Distribution Plant					
Distribution Total		4,080,859	4,265,529	9,806,361	8,346,080	16,526,833
Penn Power Total		5,202,022	5,363,521	12,053,190	10,543,220	20,921,358

West Penn						
T&D O&M -2Q / YTD June 2019 (S)						
Transmission						
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget	
560	Operation Supervision and Engineering	14,439	12,893	23,205	23,853	47,984
561	Load Dispatching	297,587	266,187	488,134	489,675	987,631
562	Station Expenses	113,246	30,283	428,839	59,849	119,757
563	Overhead Lines Expenses	(146,953)	6,322	(23,210)	6,322	22,127
565	Transmission of Electricity by Others	13,639,186	15,284,934	27,279,518	30,569,868	61,139,736
566	Miscellaneous Transmission Expenses	191,472	97,060	418,294	180,231	388,389
567	Rents	5,990	5,990	11,980	11,980	23,960
568	Maintenance Supervision and Engineering	210,481	147,946	389,240	273,200	617,028
569	Maintenance of Structures	11,922	8,305	25,460	18,226	34,899
570	Maintenance of Station Equipment	1,009,559	517,100	1,933,648	972,688	1,976,768
571	Maintenance of Overhead Lines	1,939,284	1,958,560	4,539,435	3,506,562	8,948,508
572	Maintenance of Underground Lines	286	0	447	0	0
573	Maintenance of Miscellaneous Transmission Plant	0	0	0	0	0
575	Market Administration, Monitoring & Compliance Services	5	0	80	0	0
Transmission Total		17,286,506	18,335,579	35,515,071	36,112,454	74,306,787
Distribution						
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget	
580	Operation Supervision and Engineering	47,455	9,265	84,218	18,215	40,721
581	Load Dispatching	489,712	555,552	885,570	1,025,318	2,032,520
582	Station Expenses	213,874	281,465	352,861	538,844	1,063,203
583	Overhead Line Expenses	348,325	353,852	906,168	761,934	1,001,275
584	Underground Line Expenses	444,578	324,963	743,543	650,075	1,300,000
585	Distribution-Street Lighting & Signal System Expenses	0	0	0	0	0
586	Meter Expenses	377,616	458,364	740,673	824,648	1,699,416
587	Customer Installations Expenses	0	0	0	0	0
588	Miscellaneous Distribution Expenses	4,217,572	3,875,163	8,522,995	7,460,367	15,053,815
589	Rents	0	0	0	0	0
590	Maintenance Supervision and Engineering	193,926	204,215	373,975	377,737	775,543
591	Maintenance of Structures	0	0	0	0	0
592	Maintenance of Station Equipment	2,026,976	2,325,050	3,736,366	3,792,704	8,738,340
593	Maintenance of Overhead Lines	9,191,262	9,416,714	32,080,230	17,671,770	35,705,974
594	Maintenance of Underground Lines	340,910	375,090	651,746	657,007	1,105,759
595	Maintenance Line Transformer	39,769	75,799	68,036	151,599	303,198
596	Maintenance of Street Lighting and Signal Systems	196,294	174,633	400,779	331,017	663,079
597	Maintenance of Meters	382,619	356,499	605,809	666,723	1,336,071
598	Maintenance of Miscellaneous Distribution Plant	78,733	45,651	155,709	94,208	174,905
Distribution Total		18,589,619	18,832,276	50,308,679	35,022,165	70,993,818
West Penn Power Total		35,876,125	37,167,855	85,823,750	71,134,619	145,300,605

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^{6, 7}

Met-Ed					
T&D Capital – 2Q/YTD June 2019 (\$)					
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity	2,452,833	6,897,275	3,492,471	9,508,179	18,816,849
Condition	4,679,878	5,237,626	8,839,871	11,497,494	20,865,773
Facilities	578,729	79,882	1,037,650	161,837	401,995
Forced	12,072,618	12,251,791	22,250,026	23,840,931	47,374,775
Meter Related	370,519	867,672	875,277	1,631,459	3,184,048
New Business	4,365,875	4,160,243	9,332,501	9,164,113	17,430,231
Other	6,845,641	2,723,709	19,190,077	13,501,801	18,497,289
Reliability	5,723,872	12,219,662	8,721,558	20,423,733	35,689,750
Street Light	198,164	361,113	392,091	732,823	1,355,698
Tools & Equipment	222,871	314,862	817,946	628,484	1,367,255
Vegetation Management	3,277,119	3,323,974	6,281,300	5,723,131	11,676,319
Met-Ed Total	40,788,118	48,437,808	81,230,767	96,813,984	176,659,981

Penelec					
T&D Capital – 2Q/YTD June 2019 (\$)					
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity	-5,766	2,518	-480,782	5,518	9,232
Condition	3,245,241	2,203,426	6,276,617	4,162,169	8,025,004
Facilities	220,449	130,871	987,961	265,210	612,343
Forced	12,861,143	10,987,754	25,986,282	20,123,818	41,673,023
Meter Related	493,574	299,147	986,682	601,423	1,199,288
New Business	3,369,100	3,098,310	6,019,003	6,051,199	12,077,113
Other	7,093,026	6,820,869	11,330,535	16,058,940	28,512,226
Reliability	7,296,201	7,620,666	15,201,860	11,301,621	24,395,291
Street Light	675,952	1,064,950	1,234,637	2,050,701	4,152,570
Tools & Equipment	576,082	340,087	1,017,795	675,799	4,733,828
Vegetation Management	6,461,342	5,555,366	11,974,086	11,074,991	21,136,461
Penelec Total	42,286,342	38,123,966	80,534,674	72,371,389	146,526,379

⁶ Budgets are subject to change.

⁷ General note: Capital reported on Generally Accepted Accounting Principles (GAAP) basis.

Penn Power					
T&D Capital – 2Q/YTD June 2019 (\$)					
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity	508,650	90,016	397,174	232,629	233,499
Condition	186,639	974,557	304,188	1,627,183	5,028,802
Facilities	3,562	0	6,380	0	23,425
Forced	3,047,480	1,813,482	6,734,592	3,602,198	6,794,376
Meter Related	169,495	156,187	356,356	310,077	656,288
New Business	2,034,623	1,463,306	3,403,455	3,224,345	5,984,260
Other	1,000,259	(1,344,003)	2,180,232	(1,402,257)	(3,181,698)
Reliability	4,215,823	10,309,009	7,210,190	15,498,053	29,697,638
Street Light	75,994	142,682	214,934	285,215	570,580
Tools & Equipment	21,741	64,914	112,878	128,702	161,646
Vegetation Management	634,945	815,104	1,267,992	1,520,091	2,971,030
Penn Power Total	11,899,210	14,485,254	22,188,370	25,026,235	48,939,848

West Penn					
T&D Capital – 2Q/YTD June 2019 (\$)					
Category	2Q Actuals	2Q Budget	YTD Actuals	YTD Budget	Annual Budget
Capacity	2,891,963	3,296,786	3,628,602	5,824,063	(2,769,181)
Condition	7,756,040	6,830,677	12,038,491	11,145,159	21,879,413
Facilities	269,393	63,485	529,929	126,927	352,465
Forced	15,716,857	12,050,691	30,321,850	25,082,647	48,992,024
Meter Related	345,134	379,651	759,169	733,089	1,510,550
New Business	6,967,465	8,665,097	12,238,434	16,130,592	28,682,457
Other	10,563,992	12,626,170	27,462,433	33,250,159	44,082,329
Reliability	12,527,769	13,366,339	23,044,046	22,197,342	59,905,144
Street Light	607,249	469,874	965,572	918,893	1,839,136
Tools & Equipment	573,101	841,786	1,287,503	1,282,818	2,981,970
Vegetation Management	6,327,161	6,254,467	12,104,933	13,008,219	26,926,912
West Penn Total	64,546,126	64,845,023	124,380,962	129,699,909	234,383,219

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

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).⁸

Staffing Levels

Met-Ed 2019												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2020 ¹¹
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other ⁹	Retirement	Voluntary Separation	Other ¹⁰	
Distribution	Line Leader	48	49					5	2		2	
	Line Troubleshooter	35	35					2	2			
	Lineman	128	136				15	2			9	
Substation	Substation Leader	15	15									
	Substation Employee	66	70				5	2			3	
Transmission	Line Leader	1	1									
	Lineman	10	10									
	Total	303	316				20	11	4		14	

⁸ 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.

⁹ Includes transfers and promotions.

¹⁰ Includes transfers, voluntary separations, and promotions.

¹¹ Hiring plan to be provided annually in the 4Q report.

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

Penelec 2019												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2020 ¹⁴
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other ¹²	Retirement	Voluntary Separation	Other ¹³	
Distribution	Line Leader	70	68								2	
	Line Troubleshooter	67	65			1			1		2	
	Lineman	122	148				27	53			54	
Substation	Substation Leader	34	35					2			1	
	Substation Employee	27	38			1	6	10			6	
Transmission	Line Leader	5	5									
	Lineman	21	21			2				2		
	Total	346	380			4	33	65	1	2	65	

¹² Includes transfers and promotions.

¹³ Includes transfers, involuntary separations, and promotions.

¹⁴ Hiring plan to be 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 ¹⁷
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other ¹⁵	Retirement	Voluntary Separation	Other ¹⁶	
Distribution	Line Leader	23	22								1	
	Line Troubleshooter	9	9									
	Lineman	44	48					4				
Substation	Substation Leader	5	5									
	Substation Employee	19	23					4				
Transmission	Line Leader	1	1									
	Lineman	3	3									
	Total	104	111					8			1	

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

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

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

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

West Penn 2019												
Department	Position	Staffing Level				Staff Added in Quarter			Staff Lost in Quarter			Plan to Hire in 2020 ²⁰
		1Q	2Q	3Q	4Q	New Hire – Experienced	New Hire – PSI Student	Other ¹⁸	Retirement	Voluntary Separation	Other ¹⁹	
Distribution	Line Leader	54	55					7	2		4	
	Line Troubleshooter	67	61					1	1		6	
	Lineman	103	133			5	22	16			13	
Substation	Substation Leader	16	21					6	1			
	Substation Employee	72	75				8	7			12	
Transmission	Line Leader	0	0									
	Lineman	1	5				2	2				
	Total	313	350			5	32	39	4		35	

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

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

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

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.

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

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

Call-out Acceptance Rate

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

This portion of the report is confidential.

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

Call-out Response

This portion of the report is confidential.

Call-Out Procedure:

When an event occurs, Met-Ed, Penelec, Penn Power and West Penn²² 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.

²² Penelec, Penn Power and West Penn utilize ARCOS, an automated calling system to complete the call out process.

ATTACHMENT A

Worst Performing Circuits - Reliability Indices

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

Met-Ed													
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
1	Mountain	00744-4	Dillsburg	1,672	105	0	2,915,980	7,150	43.80	1,744.01	4.276	407.8	0.5
2	No Bangor	00826-3	Easton	3,193	106	0	2,455,925	7,026	36.89	769.16	2.200	349.5	0.0
3	Carsonia	00764-1	Reading	2,827	58	3	2,381,712	11,574	35.77	842.49	4.094	205.8	0.9
4	North Cornwall	00610-2	Lebanon	2,133	61	1	1,647,818	7,330	24.75	772.54	3.436	224.8	0.0
5	Lickdale	00626-2	Lebanon	1,642	71	3	1,436,770	7,710	21.58	875.01	4.695	186.4	0.9
6	Bern Church	00789-1	Reading	1,425	77	1	1,409,274	4,067	21.17	988.96	2.854	346.5	0.0
7	Huffs Church	00600-1	Boyertown	1,244	96	0	1,200,599	2,941	18.03	965.11	2.364	408.2	0.0
8	Hokes	00587-4	York	892	32	1	1,131,621	3,761	17.00	1,268.63	4.216	300.9	3.1
9	Campbelltown	00731-2	Lebanon	2,842	81	1	1,123,512	4,684	16.87	395.32	1.648	239.9	0.0
10	Lynnville	00735-1	Hamburg	1,370	38	1	1,102,586	3,570	16.56	804.81	2.606	308.8	1.0
11	Shawnee	00895-3	Stroudsburg	3,587	84	0	1,060,388	5,564	15.93	295.62	1.551	190.6	1.8
12	Moselem Sub	00782-1	Reading	2,385	40	3	1,015,206	6,771	15.25	425.66	2.839	149.9	0.0
13	Fairview	00519-4	Hanover	2,681	36	2	1,000,843	8,354	15.03	373.31	3.116	119.8	12.9
14	Gardners	00754-4	Gettysburg	599	38	0	965,755	1,439	14.51	1,612.28	2.402	671.1	0.0
15	Ottsville	00660-3	Easton	869	44	0	947,533	1,884	14.23	1,090.37	2.168	502.9	1.6
16	Bernville	00786-1	Hamburg	1,846	105	0	943,881	5,682	14.18	511.31	3.078	166.1	2.0
17	Queen St	00522-4	York	2,121	42	2	942,989	7,860	14.16	444.60	3.706	120.0	0.2
18	Barto	00705-1	Boyertown	874	64	2	919,097	2,506	13.80	1,051.60	2.867	366.8	1.4
19	Mountain	00740-4	Dillsburg	2,635	57	2	904,795	6,886	13.59	343.38	2.613	131.4	0.0
20	S Nazareth	00809-3	Easton	3,180	54	2	866,371	9,388	13.01	272.44	2.952	92.3	0.0
21	Flying Hills	00777-1	Reading	1,771	61	0	864,062	3,803	12.98	487.89	2.147	227.2	1.0
22	Birdsboro	00756-1	Reading	1,596	85	1	854,886	5,608	12.84	535.64	3.514	152.4	3.1
23	Raintree	00642-4	York	1,848	43	1	831,562	4,459	12.49	449.98	2.413	186.5	0.0
24	Crossroads	00728-4	York	1,147	58	1	794,830	3,891	11.94	692.96	3.392	204.3	0.9
25	Windsor	00797-4	York	1,529	84	2	783,698	5,798	11.77	512.56	3.792	135.2	4.0
26	Saylorsburg	00114-3	Stroudsburg	690	33	1	749,696	1,619	11.26	1,086.52	2.346	463.1	1.0
27	Ferndale	00871-3	Easton	483	37	0	746,549	1,816	11.21	1,545.65	3.760	411.1	1.0
28	Shawnee	00899-3	Stroudsburg	1,574	68	2	721,699	6,997	10.84	458.51	4.445	103.1	0.7

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

Met-Ed													
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
29	Gardners	00752-4	Gettysburg	1,498	77	0	719,102	3,258	10.80	480.04	2.175	220.7	1.0
30	Myerstown	00751-2	Lebanon	511	15	0	707,714	3,348	10.63	1,384.96	6.552	211.4	0.7
31	Friedensburg	00769-1	Reading	2,089	83	2	695,682	6,130	10.45	333.02	2.934	113.5	1.1
32	Raubsville St	00079-3	Easton	794	27	2	685,346	2,804	10.29	863.16	3.531	244.4	0.0
33	Lickdale	00625-2	Lebanon	1,003	87	0	666,409	2,350	10.01	664.42	2.343	283.6	0.0
34	W Boyertown	00714-1	Boyertown	1,870	55	3	666,034	7,062	10.00	356.17	3.776	94.3	2.0
35	Stouchburg	00758-2	Lebanon	930	23	2	661,651	3,368	9.94	711.45	3.622	196.5	0.0
36	Allen	00502-4	Dillsburg	1,047	26	4	647,589	7,153	9.73	618.52	6.832	90.5	0.0
37	Birdsboro	00757-1	Reading	1,772	69	1	640,357	3,905	9.62	361.38	2.204	164.0	2.3
38	Ferndale	00076-3	Easton	639	34	1	639,164	1,725	9.60	1,000.26	2.700	370.5	1.0
39	Shawnee	00822-3	Stroudsburg	3,772	86	2	630,197	6,457	9.47	167.07	1.712	97.6	1.3

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

Penelec													
Circuit Rank	Substation	Circuit Desc	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
1	Revloc	00069-72	Altoona	552	10	2	1,633,475	2,228	2.81	2,959.19	4.036	733.2	0.0
2	Dubois	00137-23	Dubois	2,847	96	1	1,428,678	14,698	2.46	501.82	5.163	97.2	2.2
3	Natl Forge SW	00577-41	Warren	1,245	57	0	1,376,576	12,164	2.37	1,105.68	9.770	113.2	7.7
4	Warren South	00220-41	Warren	2,631	74	2	1,374,376	11,798	2.37	522.38	4.484	116.5	2.0
5	East Pike	00095-13	Indiana	3,472	33	1	1,334,886	6,122	2.30	384.47	1.763	218.0	0.0
6	Erie South	00259-31	Erie	3,285	83	1	1,269,323	5,432	2.19	386.40	1.654	233.7	1.5
7	Rolling Meadows	00310-31	Erie	2,750	40	1	1,124,738	10,729	1.94	409.00	3.901	104.8	0.6
8	Lenox	00755-65	Montrose	685	23	1	1,118,107	2,505	1.93	1,632.27	3.657	446.4	5.5
9	Seward	00079-11	Johnstown	753	20	1	1,080,552	1,943	1.86	1,435.00	2.580	556.1	5.6
10	Grover	00527-63	Towanda	1,062	70	0	1,019,339	3,446	1.76	959.83	3.245	295.8	7.6
11	Timblin	00103-23	Dubois	674	35	1	1,003,547	3,218	1.73	1,488.94	4.774	311.9	0.4
12	Carlisle Pike	00643-83	Shippensburg	3,199	25	2	985,233	7,491	1.70	307.98	2.342	131.5	0.5
13	Madera	00166-22	Philipsburg	1,937	64	1	943,421	11,887	1.63	487.05	6.137	79.4	7.8
14	Milroy	00128-81	Lewistown	1,720	41	3	933,107	5,980	1.61	542.50	3.477	156.0	0.0
15	Mcveytown	00112-81	Lewistown	1,324	66	0	914,264	2,808	1.58	690.53	2.121	325.6	2.4
16	Logan	00700-81	Lewistown	1,008	43	0	896,728	3,101	1.55	889.61	3.076	289.2	8.0
17	Birmingham	00168-22	Philipsburg	1,084	65	3	888,286	6,320	1.53	819.45	5.830	140.6	0.8
18	Brookville	00125-23	Dubois	617	44	1	843,829	4,223	1.45	1,367.63	6.844	199.8	1.8
19	North Warren	00596-41	Warren	1,129	42	3	842,818	5,077	1.45	746.52	4.497	166.0	1.3
20	Lake Como	00786-65	Montrose	468	19	0	824,460	983	1.42	1,761.67	2.100	838.7	11.8
21	Madera	00165-22	Philipsburg	1,279	46	1	820,320	4,838	1.41	641.38	3.783	169.6	4.8
22	Springboro	00237-52	Meadville	2,782	98	0	782,031	5,295	1.35	281.10	1.903	147.7	5.2
23	Springboro	00217-52	Meadville	476	21	1	773,070	907	1.33	1,624.10	1.905	852.3	1.2
24	Thompson	00446-65	Montrose	511	30	0	760,490	2,043	1.31	1,488.24	3.998	372.2	0.0
25	Monroeton	00770-62	Towanda	579	9	0	746,655	1,371	1.29	1,289.56	2.368	544.6	1.6
26	Pennmar	00002-12	Somerset	791	28	1	673,705	3,304	1.16	851.71	4.177	203.9	2.5
27	Glory	00105-13	Indiana	419	17	2	655,172	2,229	1.13	1,563.66	5.320	293.9	0.8
28	Dushore	00669-62	Towanda	249	12	1	645,824	726	1.11	2,593.67	2.916	889.6	2.0
29	Nanty Glo	00066-72	Altoona	668	7	0	611,123	1,148	1.05	914.85	1.719	532.3	1.7
30	Kearsarge	00528-31	Erie	1,543	18	0	600,616	4,910	1.04	389.25	3.182	122.3	2.8
31	Boyer	00584-31	Erie	1,693	23	1	576,212	4,235	0.99	340.35	2.501	136.1	6.5
32	Shade Gap 115Kv	00622-82	Lewistown	667	20	4	562,695	2,815	0.97	843.62	4.220	199.9	0.8
33	Cambria County	00202-72	Altoona	89	3	2	561,809	1,912	0.97	6,312.46	21.483	293.8	0.0

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

Pencil													
Circuit Rank	Substation	Circuit Desc	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
34	Thompson	00436-65	Montrose	1,349	61	0	560,018	3,010	0.97	415.14	2.231	186.1	2.6
35	Blairsville East	00080-13	Indiana	1,027	29	1	556,048	4,294	0.96	541.43	4.181	129.5	7.0
36	Mcconnellstown	00099-82	Altoona	774	24	1	553,614	1,336	0.95	715.26	1.726	414.4	7.1
37	Mansfield	00558-63	Mansfield Pa	724	42	2	552,766	2,260	0.95	763.49	3.122	244.6	24.5
38	Piney	00523-51	Oil City	1,493	66	3	547,974	5,895	0.94	367.03	3.948	93.0	3.0
39	Millfair Road	00283-34	Erie	830	14	3	546,910	3,116	0.94	658.93	3.754	175.5	1.7
40	Salix	00070-11	Johnstown	2,252	42	0	541,717	3,944	0.93	240.55	1.751	137.4	0.6
41	Blairsville East	00082-13	Indiana	1,565	63	0	536,668	2,656	0.92	342.92	1.697	202.1	0.0
42	New Albany SW	00526-62	Towanda	160	6	2	533,523	494	0.92	3,334.52	3.088	1,080.0	2.0
43	Hilltop	00048-11	Johnstown	1,919	25	1	523,928	3,411	0.90	273.02	1.777	153.6	1.1
44	Philipsburg	00162-22	Philipsburg	3,358	91	1	507,991	7,580	0.88	151.28	2.257	67.0	2.8
45	Northeast	00591-31	Erie	584	17	1	492,645	2,276	0.85	843.57	3.897	216.5	1.1
46	Meshoppen	00283-65	Montrose	367	42	0	478,200	1,760	0.82	1,303.00	4.796	271.7	1.8
47	Revloc	00071-72	Altoona	453	14	0	467,751	1,682	0.81	1,032.56	3.713	278.1	0.0
48	Marienville	00327-51	Oil City	747	25	1	464,760	1,297	0.80	622.17	1.736	358.3	3.4
49	Russell Hill	00282-65	Montrose	1,003	65	0	457,950	1,997	0.79	456.58	1.991	229.3	2.4
50	Philipsburg	00164-22	Philipsburg	2,384	51	0	441,855	3,931	0.76	185.34	1.649	112.4	3.0
51	Union City	00206-43	Erie	2,160	84	0	441,155	4,235	0.76	204.24	1.961	104.2	0.4
52	Laurel Pipeline	00036-71	Altoona	928	37	0	433,389	3,972	0.75	467.01	4.280	109.1	1.4
53	Wyalusing	00532-62	Towanda	737	51	2	428,796	1,862	0.74	581.81	2.526	230.3	3.8
54	Logan	00701-81	Lewistown	1,417	31	1	411,177	3,961	0.71	290.17	2.795	103.8	0.0
55	East Hickory	00201-41	Warren	302	29	3	395,115	1,629	0.68	1,308.33	5.394	242.6	3.3
56	Seward	00075-11	Johnstown	913	39	1	379,309	4,155	0.65	415.45	4.551	91.3	2.7
57	Albion	00417-34	Erie	773	30	1	374,079	1,298	0.64	483.93	1.679	288.2	1.8
58	Warren Eddy	00249-41	Warren	408	26	1	373,863	1,003	0.64	916.33	2.458	372.7	2.2
59	Brookville West	00121-23	Dubois	766	33	0	364,830	1,815	0.63	476.28	2.369	201.0	3.5
60	Lawrenceville	00632-63	Mansfield Pa	646	12	2	364,709	1,375	0.63	564.57	2.128	265.2	4.4
61	Tyrone North	00643-22	Philipsburg	1,477	11	0	363,409	2,829	0.63	246.05	1.915	128.5	5.8
62	Mildred	00771-62	Towanda	516	12	2	362,910	1,096	0.63	703.31	2.124	331.1	5.8

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

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	1,410	74	1	919,781	3,903	5.61	652.33	2.768	235.7	0.0
2	Thompson Run	D550	Zelienople	975	31	1	902,221	4,380	5.50	925.35	4.492	206.0	0.0
3	Jamestown	W-162	Clark	1,041	26	0	851,256	2,492	5.19	817.73	2.394	341.6	0.0
4	Jackson	W731	Zelienople	1,859	13	0	640,702	3,471	3.91	344.65	1.867	184.6	0.0
5	Evans City	D611	Zelienople	942	39	0	598,351	1,203	3.65	635.19	1.277	497.4	0.0
6	Stoneboro	W-132	Clark	1,000	38	1	553,283	2,492	3.37	553.28	2.492	222.0	0.0
7	Bedford	D-445	New Castle	985	61	1	543,076	2,240	3.31	551.35	2.274	242.4	0.0
8	Koppel	D-531	New Castle	957	42	1	521,221	1,766	3.18	544.64	1.845	295.1	0.0
9	Perry	W-156	Clark	1,050	50	1	512,227	2,369	3.12	487.84	2.256	216.2	0.0

West Penn Power												
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI
1	Waterville	Waterville	State College	357	23	3	1,407,145	3,688	1.96	3941.58	10.331	381.5
2	Flintstone	Chaneyville	Hyndman	565	56	1	1,350,408	2,826	1.88	2390.10	5.002	477.9
3	Rutan	Bristoria	Jefferson	1,125	79	0	1,271,306	4,026	1.77	1130.05	3.579	315.8
4	Franklin	Rogersville	Jefferson	831	48	2	1,114,835	2,364	1.55	1341.56	2.845	471.6
5	Mather	Jefferson	Jefferson	1,366	20	2	1,069,549	2,987	1.49	782.98	2.187	358.1
6	Smith	Francis Mine	Washington PA	1,433	57	4	1,042,637	7,274	1.45	727.59	5.076	143.3
7	Bethlen	Darlington	Latrobe	1,234	80	0	994,918	4,802	1.39	806.25	3.891	207.2
8	Avella	W Middletown	Washington PA	1,135	51	0	934,268	2,417	1.30	823.14	2.130	386.5
9	Bedford Road	Rt 220 North	Hyndman	792	35	0	925,051	3,595	1.29	1167.99	4.539	257.3
10	Thompson Farm	Toftrees	State College	1,268	9	3	863,216	4,874	1.20	680.77	3.844	177.1
11	Shaffers Corner	Seventh St Rd	Arnold	2,062	25	1	855,616	3,464	1.19	414.94	1.680	247.0
12	Peters	Library	Boyce	1,806	14	1	841,385	3,607	1.17	465.88	1.997	233.3
13	St. Clair	Lesnett	Boyce	1,643	16	5	805,079	7,801	1.12	490.01	4.748	103.2
14	Smith	Florence	Washington PA	761	55	1	793,588	2,839	1.11	1042.82	3.731	279.5
15	Fort Palmer	West Fairfield	Latrobe	968	69	0	793,260	2,569	1.10	819.48	2.654	308.8
16	Hickory	Hickory	Washington PA	943	42	0	757,902	1,584	1.06	803.71	1.680	478.5
17	Peters	Mcmurray	Boyce	1,428	23	1	717,751	2,949	1.00	502.63	2.065	243.4
18	Cooperstown	Twin Willows	Butler	1,560	34	2	700,629	4,757	0.98	449.12	3.049	147.3
19	Houston	Weavertown	Washington PA	2,131	40	5	683,764	12,920	0.95	320.87	6.063	52.9
20	Luxor	Rolling Acres	Latrobe	924	33	3	677,800	3,696	0.94	733.55	4.000	183.4
21	Smith	Burgettstown	Washington PA	1,886	51	0	666,516	4,317	0.93	353.40	2.289	154.4
22	Ridgway	Montmorenci	St Marys	690	10	2	657,976	1,398	0.92	953.59	2.026	470.7
23	Franklin	South Waynesburg	Jefferson	2,035	60	0	641,035	3,425	0.89	315.00	1.683	187.2
24	Vanceville	Vanceville	Charleroi	1,458	44	0	627,202	2,800	0.87	430.18	1.920	224.0
25	Amity	Amity	Washington PA	525	42	1	621,502	2,059	0.87	1183.81	3.922	301.8
26	Charleroi	N. Charleroi	Charleroi	1,086	17	0	603,872	3,865	0.84	556.05	3.559	156.2
27	Bethel Park	Clifton	Boyce	966	14	7	603,020	6,007	0.84	624.24	6.218	100.4
28	St. Clair	Skyridge	Boyce	897	20	2	602,635	4,426	0.84	671.83	4.934	136.2
29	North Washington	Poke Run	Arnold	1,230	62	1	588,578	4,823	0.82	478.52	3.921	122.0
30	Rutan	Windridge	Jefferson	539	40	0	583,838	2,060	0.81	1083.19	3.822	283.4
31	Superior	Culmerville	Arnold	1,194	23	3	581,353	5,026	0.81	486.90	4.209	115.7
32	Youngwood	Spare	Jeannette	379	19	4	577,221	3,874	0.80	1523.01	10.222	149.0

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

West Penn Power												
Circuit Rank	Substation	Circuit	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI
33	Huntingdon	Penna Ave	Jeannette	1,706	18	1	547,964	3,974	0.76	321.20	2.329	137.9
34	Emporium	Emporium Jct	St Marys	598	23	1	541,973	2,186	0.75	906.31	3.656	247.9
35	Sewickley	Wendel	Jeannette	970	19	1	538,459	2,236	0.75	555.11	2.305	240.8
36	N. Greensburg	Cabin Hill	Jeannette	1,215	13	1	510,782	3,158	0.71	420.40	2.599	161.7
37	North Union	Phillips	Uniontown	1,464	31	0	506,341	2,557	0.71	345.86	1.747	198.0
38	Bethlen	Wilpen	Latrobe	1,337	53	0	505,648	2,406	0.70	378.20	1.800	210.2
39	Westraver	Pittsburgh Coal	Charleroi	1,910	32	0	498,433	3,206	0.69	260.96	1.679	155.5
40	Kane	Russell City	St Marys	705	20	0	486,047	1,955	0.68	689.43	2.773	248.6

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

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	Mountain	00744-4	<i>Performance was driven by trees off ROW (86%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Perform accelerated backbone and three phase circuit assessment	Complete	Mar-19	
			Upgrade Zone 2 recloser to Emergency Management System ("EMS") radio controlled	To be Completed 2019	50%	
2	North Bangor	00826-3	<i>Performance was driven by a vehicle accident (70%)</i>			
			Three-phase overhead inspection	Complete	Feb-19	
			Repair items identified during circuit inspection	To be Completed 2019	50%	
			Repair items identified during circuit inspection	To be Completed 2019	50%	
3	Carsonia	00764-1	<i>Performance was driven by outages caused by equipment failure (39%), outages caused by trees OFF ROW (34%) and an outage caused by a vehicle (23%)</i>			3Q 2018 1Q 2019 2Q 2019
			Install SCADA switch	Complete	Jul-18	
			On cycle tree trimming	Complete	Nov-18	
			Targeted forestry inspection	Complete	Mar-19	
			Mainline pole replacement	To be Completed 2019	50%	
			Targeted forestry inspection	To be Completed 2019	25%	
			Engineering circuit tie addition review	To be Completed 2019	25%	
			Engineering circuit split review	To be Completed 2019	25%	
Overhead circuit inspection	To be Completed 2019	20%				

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
4	N Cornwall	00610-2	<i>Performance was driven by vehicle accidents (42%), trees off ROW (24%) and line failure (14%)</i>			4Q 2018 1Q 2019 2Q 2019
			Thermovision and overhead inspection	Complete	Oct-18	
			Post 8/17/2018 storm circuit patrol	Complete	Aug-18	
			Protection review	Complete	Sep-18	
			Install SCADA devices #1	Complete	Nov-18	
			Install SCADA devices #2	Complete	Nov-18	
			Install SCADA devices #3	Complete	Sep-18	
			Install SCADA devices #4	Complete	Sep-18	
			Install SCADA devices #5	Complete	Sep-18	
			Install SCADA devices #6	Complete	Sep-18	
			Install SCADA devices #7	Complete	Sep-18	
			Install SCADA devices #8	Complete	Nov-18	
			Install SCADA devices #9	Complete	Sep-18	
			Install SCADA devices #10	Complete	Sep-18	
			Three-phase overhead inspection	Complete	Jan-19	
			Repair/replace high priority items identified during inspection	To be Completed 2019	25%	
			Remove switch that limits backfeed capacity	To be Completed 2019	25%	
Porcelain cutout replacement in the lockout zone	To be Completed 2019	25%				
5	Lickdale	00626-2	<i>Performance was driven by equipment failure (46%), trees off ROW (25%), and vehicle accidents (16%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			On cycle tree trimming	Complete	Dec-18	
			Targeted mainline rehabilitation	Complete	Sep-18	
			Repair/replace high priority items identified during inspection	Complete	Mar-19	
			Three-phase overhead inspection	Complete	Jan-19	
			Install SCADA switch #1	To be Completed 2019	50%	
			Install SCADA switch #2	To be Completed 2019	50%	
			Install SCADA switch #3	To be Completed 2019	50%	
			Install SCADA recloser #1	To be Completed 2019	50%	
			GOAB Replacement	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
6	Bern Church	00789-1	<i>Performance was driven by trees off ROW (73%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Install additional fault indicators	Complete	Aug-18	
			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	To be Completed 2019	25%	
7	Huff's Church	00600-1	<i>Performance driven by an outage caused by a tree off ROW (43%), other outages caused by trees off ROW (26%) and an outage caused by a vehicle (20%)</i>			1Q 2019 2Q 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	To be Completed 2019	95%	
			Repair mainline guy wire from inspection	To be Completed 2019	25%	
			Replace crossarm from inspection	To be Completed 2019	50%	
Replace mainline crossarm	To be Completed 2019	50%				
8	Hokes	00587-4	<i>Performance was driven by 84% Tree off ROW and 10% unknown cause outage</i>			
			Replace Regulator	Complete	Apr-19	
			Engineering Review to Identify future SCADA Devices	Complete	Jun-19	
			Install SCADA switch #1	To be Completed 2019	50%	
			Install SCADA switch #2	To be Completed 2019	50%	
Repair/replace high priority items identified during inspection	To be Completed 2019	10%				
9	Campbelltown	00731-2	<i>Performance was driven by trees off ROW (64%) and vehicle accidents (23%)</i>			
			Three-phase overhead inspection	Complete	Jan-19	
			Overhead circuit inspection	Complete	Sep-18	
			Replace crossarm from inspection	To be Completed 2019	25%	
			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
10	Lynnville	00735-1	<i>Performance was driven by an outage caused by a vehicle (36%), and outage caused by a tree off ROW during a storm (32%), and an outage caused by a raccoon (24%)</i>			4Q 2018 1Q 2019 2Q 2019
			Enhanced tree trimming	Complete	Sept-18	
			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	
			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 #1	To be Completed 2019	50%	
Install SCADA switch #2	To be Completed 2019	50%				
Install SSCADA switch #3	To be Completed 2019	50%				
11	Shawnee	00895-3	<i>Performance was driven by equipment failure (63%), and trees off ROW (22%)</i>			1Q 2019 2Q 2019
			Install SCADA switch #1	Complete	Nov-18	
			Install SCADA switch #2	Complete	Nov-18	
			Install SCADA switch #3	Complete	Nov-18	

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
12	Moselem	00782-1	<i>Performance was driven by an outage caused by vehicle accidents (60%) and an outage related to a vehicle accident (19%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Replace mainline pole	Complete	Sept-18	
			Overhead mainline circuit inspection	Complete	Nov-18	
			Thermovision and overhead inspection	Complete	Jan-19	
			Install SCADA switch #1	To be Completed 2019	50%	
			Install SCADA switch #2	To be Completed 2019	50%	
			Install SCADA switch #3	To be Completed 2019	25%	
			Install SCADA recloser #1	To be Completed 2019	25%	
			Install SCADA recloser #2	To be Completed 2019	25%	
			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%	
13	Fairview	00519-4	<i>Performance was driven by trees off ROW (91%). Three storm events accounted for 84% of all circuit minutes</i>			
			Install fault indicators	Complete	Dec-18	
			Perform accelerated backbone and three phase circuit assessment	Complete	Jan-19	
			Thermovision and overhead inspection	Complete	Jan-19	
14	Gardners	00754-4	<i>Performance was driven by trees off ROW (93%). One storm event accounted for 95% of all circuit minutes</i>			4Q 2018 1Q 2019 2Q 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%	
15	Ottsville	00660-3	<i>Performance was driven by trees off ROW (95%)</i>			1Q 2019 2Q 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	Complete	May-19	
			Replace pole from inspection	To be Completed 2019	50%	
			Replace high priority item identified during post storm inspection #1	To be Completed 2019	50%	
			Replace high priority item identified during post storm inspection #2	To be Completed 2019	50%	
			Replace high priority item identified during post storm inspection #3	To be Completed 2019	50%	
Replace high priority item identified during post storm inspection #4	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
16	Bernville	00786-1	<i>Performance was driven by outages caused by trees off ROW (57%) & line and equipment failures (20%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 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	To be Completed 2019	25%	
			Replace crossarm brace from thermovision inspection #3	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%	
			Replace mainline crossarm braces from inspection	To be Completed 2019	25%	
			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%				
Upgrade mainline recloser	To be Completed 2019	50%				
17	Queen Street	00522-4	<i>Performance was driven by Trees Off Row (35%) Line Failure (18%) Wind (16%), and Unknown (15%)</i>			1Q 2019 2Q 2019
			Repair Line Failure	Complete	Jul-18	
			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	

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	Barto	00705-1	<i>Performance was driven by trees off ROW (63%)</i>			4Q 2018 1Q 2019 2Q 2019
			Targeted mainline circuit rehabilitation	Complete	Jul-18	
			Thermovision and overhead inspection	Complete	Oct-18	
			Three-phase overhead inspection	Complete	Mar-19	
			Targeted forestry inspection	Complete	May-19	
19	Mountain	00740-4	<i>Performance was driven by trees off ROW (70%) and equipment failures (12%). Two storm events accounted for 62% of all circuit minutes</i>			4Q 2018 1Q 2019 2Q 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%				
20	S Nazareth	00809-3	<i>Performance was driven by equipment failure (50%), vehicle accidents (16%), and line failure (16%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 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	20%	
Targeted mainline circuit rehabilitation	To be Completed 2019	0%				
21	Flying Hills	00777-1	<i>Performance was driven by trees off ROW (52%) and two outages caused by an UG cable failure and an UG cable dig-in (13%)</i>			1Q 2019 2Q 2019
			Enhanced tree trimming	Complete	Sept-18	
			Overhead mainline circuit inspection	Complete	Dec-18	
			Targeted forestry inspection	Complete	Mar-19	
			Replace mainline underground cable in large residential development	Complete	May-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
22	Birdsboro	00756-1	<i>Performance was driven by trees off ROW (48%) and an outage caused by a tree off ROW during a storm (38%)</i>			3Q 2018 1Q 2019 2Q 2019
			Install new mainline switch	Complete	Sept-18	
			Overhead circuit inspection	Complete	Sept-18	
			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	25%	
			Replace mainline pole #2	To be Completed 2019	25%	
			Replace mainline pole #3	To be Completed 2019	25%	
			Replace mainline pole #4	To be Completed 2019	25%	
			Replace mainline pole #5	To be Completed 2019	25%	
Install additional mainline switch	To be Completed 2019	25%				
23	Raintree	00642-4	<i>Performance was driven by 58% vehicle accident, and 21% by Trees on ROW</i>			
			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	To be Completed 2019	50%	
24	Crossroads	00728-4	<i>Performance was driven by 69% Trees off ROW and 15% Line failure</i>			1Q 2019 2Q 2019
			Install SCADA switch	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	25%	
25	Windsor	00797-4	<i>Performance was driven by Trees Off Row (52%), Unknown Cause (19%), and Vehicle Accidents (17%)</i>			4Q 2018 2Q 2019
			Repair Items from Backbone inspection	Complete	Aug-18	
			Install SCADA switch #1	To be Completed 2019	75%	
			Install SCADA switch #2	To be Completed 2019	75%	
			Install SCADA switch #3	To be Completed 2019	75%	
			Install SCADA switch #4	To be Completed 2019	75%	
			Replace/repair high priority items identified during overhead circuit patrol	To be Completed 2019	92%	

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

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
26	Saylorsburg	00114-3	<i>Performance was driven by vehicle accidents (48%), and trees off ROW (31%)</i>			1Q 2019
			On cycle tree trimming	To be Completed 2019	9%	2Q 2019
27	Ferndale	00871-3	<i>Performance was driven by trees off ROW (69%), and equipment failure (17%)</i>			1Q 2019 2Q 2019
			Overhead circuit inspection	Complete	Sep-18	
			Repair items identified during circuit inspection	Complete	Oct-18	
			Three-phase overhead inspection	Complete	Feb-19	
28	Shawnee	00899-3	<i>Performance was driven by trees off ROW (53%) and unknown outages (31%)</i>			4Q 2018 1Q 2019 2Q 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	
			Backbone Thermovision inspection	Complete	Feb-19	
29	Gardners	00752-4	<i>Performance was driven by trees off ROW (71%). Two tree outages accounted for 45% of all circuit minutes</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Thermovision and overhead inspection	Complete	Nov-18	
			Perform accelerated backbone and three phase circuit assessment	Complete	Nov-18	
			Perform accelerated backbone and three phase circuit assessment	Complete	Mar-19	
			On cycle tree trimming	To be Completed 2019	99%	
30	Myerstown	00751-2	<i>Performance was driven by an outage cused by line failure (47%) and an unknown outage (44%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Post-storm circuit patrol	Complete	Aug-18	
			Review backfeed coordination	Complete	Aug-18	
			Install SCADA switch	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	
31	Friedensburg	00769-1	<i>Performance was driven by trees off ROW (49%), and vehicle accidents (21%)</i>				3Q 2018 4Q 2018 2Q 2019
			Install SCADA switch #1	Complete	Dec-18		
			Install SCADA switch #2	Complete	Nov-18		
			Install SCADA switch #3	Complete	Nov-18		
			Install SCADA switch #4	Complete	Nov-18		
			Install SCADA recloser #1	Complete	Nov-18		
			Install SCADA recloser #2	Complete	Nov-18		
			Enhanced tree trimming	Complete	Dec-18		
			On cycle tree trimming	Complete	Dec-18		
			Overhead mainline circuit inspection	Complete	Dec-18		
			Overhead mainline circuit inspection	Complete	Mar-19		
			Install SCADA switch #5	To be Completed 2019	50%		
			Install SCADA switch #6	To be Completed 2019	50%		
			Complete Circuit Split	To be Completed 2019	50%		
32	Raubsville	00079-3	<i>Performance was driven by trees off ROW (71%), and vehicle accidents (10%)</i>				1Q 2019 2Q 2019
			Repair items identified during circuit inspection	Complete	Feb-19		
			Thermovision and overhead inspection	Complete	Mar-19		
33	Lickdale	00625-2	<i>Performance was driven by trees off ROW (46%) and equipment failure (17%)</i>				3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Post-storm circuit patrol	Complete	Aug-18		
			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	To be Completed 2019	95%		
			Install SCADA device #1	To be Completed 2019	50%		
			Install SCADA device #2	To be Completed 2019	50%		
34	W Boyertown	00714-1	<i>Performance was driven by trees off ROW (91%)</i>				4Q 2018 1Q 2019 2Q 2019
			Targeted forestry inspection	Complete	Jul-18		
			Targeted forestry inspection	Complete	Nov-18		
			Overhead mainline circuit inspection	Complete	Nov-18		
			Targeted forestry inspection	Complete	Feb-19		
			Overhead mainline circuit inspection	Complete	Mar-19		
Replace mainline pole from inspection	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
35	Stouchburg	00758-2	<i>Performance was driven by wind (36%), unknown (28%), and trees off ROW (25%)</i>			
			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%	
36	Allen	00502-4	<i>Performance was driven by line failures (53%), trees off ROW (27%), and equipment failures (18%). Three outages accounted for 46% of all circuit minute.</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Perform accelerated backbone and three phase circuit assessment	Complete	Nov-18	
			Targeted mainline circuit rehabilitation	Complete	Dec-18	
			Perform accelerated backbone and three phase circuit assessment	Complete	Feb-19	
			Thermovision and overhead inspection	Complete	Feb-19	
			Replace underground exit	Complete	Mar-19	
			Upgrade Zone 2 recloser to EMS radio controlled	To be Completed 2019	50%	
			Install Supervisory Control and Data Acquisition (SCADA) recloser	To be Completed 2019	50%	
On cycle tree trimming	To be Completed 2019	0%				
37	Birdsboro	00757-1	<i>Performance was driven by trees off ROW (50%) and vehicle accidents (38%)</i>			
			Three-phase overhead inspection	Complete	Sep-18	
			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	Ferndale	00076-3	<i>Performance was driven by trees off ROW (89%)</i>			4Q 2018 2Q 2019
			On cycle tree trimming	To be Completed 2019	80%	
39	Shawnee	00822-3	<i>Performance was driven by equipment failure (35%), trees off ROW (28%), and line failure (16%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 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	15%				

Met-Ed					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	3Q 2018	4Q 2018	1Q 2019	2Q 2019
19th and Cotton	00156-1	X	X	X	
Belfast	00812-3	X	X		
Birchwood	00624-3	X	X		
Bushkill Falls	00698-3	X	X		
Newberry	00577-4	X	X	X	
Nisky	00176-3	X	X		
North Bangor	00813-3	X	X	X	
North Lebanon	00715-2	X	X		
Northwood	00821-3	X	X		
River View	00793-1		X	X	
South Hamburg	00801-1		X	X	
Shawnee	00837-3	X		X	
Shawnee	00860-3	X	X	X	
Smith Street	00219-4	X	X		
Straban	00676-4	X	X	X	
Swatara Hill	00763-2	X	X	X	
Swatara Hill	00765-2	X	X		

Met-Ed				
Unranked circuits with remedial actions scheduled to be or recently completed				
Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed
19Th And Cotton	00156-1	Overhead circuit inspection	Complete	Mar-19
19Th And Cotton	00156-1	Repair mainline spacers from inspection #1	To be Completed 2019	25%
19Th And Cotton	00156-1	Repair mainline spacers from inspection #2	To be Completed 2019	25%
19Th And Cotton	00156-1	Repair mainline spacers from inspection #3	To be Completed 2019	25%
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%
Birchwood	00624-3	Overhead circuit inspection	To be Completed 2019	May-19
Newberry	00577-4	Install SCADA recloser	To be Completed 2019	50%
No Bangor	00813-3	Three-phase overhead inspection	Complete	Feb-19
No Bangor	00813-3	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	Three-phase overhead inspection	Complete	Mar-19
Northwood	00821-3	On cycle tree trimming	To be Completed 2019	94%
Riverview	00793-1	Overhead mainline circuit inspection	Complete	Mar-19
Riverview	00793-1	Replace mainline pole from inspection	Complete	Mar-19
Riverview	00793-1	Install mainline tap fuse	Complete	Apr-19
Riverview	00793-1	Install SCADA recloser #1	To be Completed 2019	50%
Riverview	00793-1	Install SCADA devices #1	To be Completed 2019	50%
Riverview	00793-1	Install SCADA devices #2	To be Completed 2019	50%

Met-Ed				
Unranked circuits with remedial actions scheduled to be or recently completed				
Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed
Riverview	00793-1	Install SCADA devices #3	To be Completed 2019	50%
S Hamburg	00801-1	Replace pole from inspection	Complete	Feb-19
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	Overhead mainline circuit inspection	Complete	Mar-19
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	00860-3	Three-phase overhead inspection	Complete	Jan-19
Shawnee	00860-3	Replace priority reject poles	Complete	Mar-19
Shawnee Sub	00837-3	Three-phase overhead inspection	Complete	Jan-19
Shawnee Sub	00837-3	Install SCADA recloser #1	To be Completed 2019	50%
Shawnee Sub	00837-3	On cycle tree trimming	To be Completed 2019	9%
Straban	00676-4	Perform accelerated backbone and three phase circuit assessment	Complete	Feb-19
Straban	00676-4	Thermovision and overhead inspection	Complete	Feb-19
Straban	00676-4	Construct circuit tie	To be Completed 2019	75%
Straban	00676-4	Install SCADA recloser #1	To be Completed 2019	50%
Swatara Hill	00763-2	Three-phase overhead inspection	Complete	Jan-19
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 devices #1	To be Completed 2019	50%
Swatara Hill	00765-2	Three-phase overhead inspection	Complete	Feb-19
Clearfield	00631-3	Construct circuit tie #1	To be Completed 2019	50%
Clearfield	00632-3	Construct circuit tie #2	To be Completed 2019	50%
Hill	00737-4	Install SCADA devices #1	To be Completed 2019	25%
Leesport	00812-1	Three-phase overhead inspection	Complete	Mar-19
Leesport	00812-1	On cycle tree trimming	To be Completed 2019	0%

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

Met-Ed				
Unranked circuits with remedial actions scheduled to be or recently completed				
Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Progress of Remedial Work or Date Completed
North Bangor	00838-3	On cycle tree trimming	To be Completed 2019	0%
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%
Orrtanna	00764-4	Targeted mainline circuit rehabilitation	To be Completed 2019	0%
Windsor	00795-4	Replace/repair high priority items identified during overhead circuit patrol	To be Completed 2019	84%
Windsor	00316-4	Replace/repair high priority items identified during overhead circuit patrol	To be Completed 2019	94%

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
1	Revloc	00069-72	<i>Performance was driven by trees off ROW (84%)</i>			1Q 2019 2Q 2019
			Repair damage caused by non-company human error	Complete	Aug-18	
			Repair damage caused by trees during a storm	Complete	Feb-19	
			Repair damage caused by trees during a storm	Complete	May-19	
2	DuBois	00137-23	<i>Performance was driven by trees off ROW (70%) and equipment failure (21%)</i>			4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Sep-18	
			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	13%				
3	Natl Forge Sw Sta	00577-41	<i>Performance was driven by trees off ROW (77%) and equipment failure (17%)</i>			4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees	Complete	Oct-18	
			Repair damage caused by trees	Complete	Oct-18	
			Repair equipment failure	Complete	Apr-19	
4	Warren South	00220-41	<i>Performance was driven by trees off ROW (91%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Jul-18	
			Porcelain cutout replacement	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Sep-18	
			Install advanced distribution protective devices	Complete	Dec-18	
			Repair damage caused by trees	Complete	Jan-19	
On cycle tree trimming	To be Completed 2019	45%				
5	East Pike	00095-13	<i>Performance was driven by trees off ROW (77%) and equipment failure (15%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Aug-18	
			Repair damage caused by trees during a storm	Complete	Nov-18	
			Repair line failure	Complete	Jan-19	
			Repair damage caused by trees	Complete	Feb-19	
			On cycle tree trimming	To be Completed 2019	15%	

Penelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed	Appeared in 2 of 4 Quarters
6	Erie South	00259-31	<i>Performance was driven by equipment failure (79%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair equipment failure	Complete	Sep-18	
			On cycle tree trimming	Complete	Oct-18	
			Repair equipment failure	Complete	Nov-18	
			Install advanced distribution protective devices	Complete	Dec-18	
			Targeted circuit rehabilitation	Complete	Jun-19	
			Install new GOAB switch	To be Completed 2019	0%	
7	Rolling Meadows	00310-31	<i>Performance was driven by equipment failure (85%)</i>			
			Repair equipment failure	Complete	Apr-19	
			Repair equipment failure	Complete	Jun-19	
8	Lenox	00755-65	<i>Performance was driven by trees off ROW (86%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Sep-18	
			Repair line failure	Complete	Sep-18	
			Repair damage caused by trees during a storm	Complete	Apr-19	
9	Seward	00079-11	<i>Performance was driven by trees off ROW (95%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Sep-18	
			Circuit inspection	Complete	Apr-19	
10	Grover	00527-63	<i>Performance was driven by trees off ROW (76%) and equipment failure (11%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Sep-18	
			Repair equipment failure	Complete	Nov-18	
11	Timblin	00103-23	<i>Performance was driven by trees off ROW (88%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 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	
			On cycle tree trimming	To be Completed 2019	86%	
12	Carlisle Pike	00643-83	<i>Performance was driven by trees off ROW (59%) and line failure (38%)</i>			
			Repair damage caused by trees during a storm	Complete	May-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
13	Madera	00166-22	<i>Performance was driven by an unknown cause (31%), equipment failure (22%), vehicle (19%), and trees off ROW (17%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Restore recloser operation of unknown cause	Complete	Sep-18	
			Restore recloser operation of unknown cause	Complete	Sep-18	
			Repair equipment failure	Complete	Nov-18	
			Repair equipment failure	Complete	Jan-19	
			Repair damage caused by a vehicle	Complete	Feb-19	
14	Milroy	00128-81	<i>Performance was driven by trees off ROW (67%) and unknown cause (31%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Restore breaker operation of unknown cause	Complete	Aug-18	
			Restore breaker operation of unknown cause	Complete	Sep-18	
			Repair damage caused by trees	Complete	Oct-18	
			Repair damage caused by trees during a storm	Complete	Jun-19	
15	McVeytown	00112-81	<i>Performance was driven by trees (61%) and line failure (21%)</i>			4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by a tree during a storm	Complete	Sep-18	
			Repair equipment failure	Complete	Nov-18	
			Repair line failure	Complete	Dec-18	
			Repair damage caused by a tree during a storm	Complete	May-19	
16	Logan	00700-81	<i>Performance was driven by trees off ROW (80%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees	Complete	Sep-18	
			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	
17	Birmingham	00168-22	<i>Performance was driven by vehicle accident (63%) and trees off ROW (16%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Restored fuse operation of unknown cause	Complete	Jul-18	
			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	

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
18	Brookville	00125-23	<i>Performance was driven by trees off ROW (62%) and an unknown cause (17%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Restored recloser operation of unknown cause	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Sep-18	
			Replace cap & pin insulators	Complete	Sep-18	
			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	
			On cycle tree trimming	To Be Completed 2019	79%	
19	North Warren	00596-41	<i>Performance was driven by trees off ROW (83%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair equipment failure during a storm	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Aug-18	
			Repair damage caused by trees	Complete	Nov-18	
			Repair damage caused by trees during a storm	Complete	Nov-18	
			Repair damage caused by trees during a storm	Complete	Jan-19	
20	Lake Como	00786-65	<i>Performance was driven by trees off ROW (60%) and line failure (37%)</i>			
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair line failure	Complete	Apr-19	
21	Madera	00165-22	<i>Performance was driven by trees off ROW (92%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Jul-18	
			Circuit inspection	Complete	Jul-18	
			Repair damage caused by trees	Complete	Nov-18	
			Repair damage caused by trees during a storm	Complete	Jan-19	
			Repair damage caused by wind	Complete	Feb-19	
			Repair damage caused by trees during a storm	Complete	May-19	
			Install advanced distribution protective devices	Complete	Jan-19	
22	Springboro	00237-52	<i>Performance was driven by trees off ROW (81%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 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	
			Targeted circuit rehabilitation	To be Completed 2019	0%	

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
23	Springboro	00217-52	<i>Performance was driven by trees off ROW (87%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Apr-19	
24	Thompson	00446-65	<i>Performance was driven by trees off ROW (64%) and equipment failure (18%)</i>			
			Repair equipment failure	Complete	Mar-19	
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees during a storm	Complete	Apr-19	
			On cycle tree trimming	To be Completed 2019	0%	
25	Monroeton	00770-62	<i>Performance was driven by line failure (53%) and object in contact with line (28%)</i>			
			Repair damage caused by object in contact with line	Complete	Aug-18	
			Repair line failure	Complete	Apr-19	
26	Pennmar	00002-12	<i>Performance was driven by wind (62%) and trees off ROW (19%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by wind	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Sep-18	
			Repair damage caused by trees	Complete	Feb-19	
27	Glory	00105-13	<i>Performance was driven by trees off ROW (91%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Jul-18	
			Repair damage caused by trees	Complete	Aug-18	
			Repair damage caused by trees during a storm	Complete	Nov-18	
			Repair damage caused by trees	Complete	May-19	
28	Dushore	00669-62	<i>Performance was driven by trees off ROW (96%)</i>			
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees	Complete	May-19	
			On cycle tree trimming	To be Completed 2019	0%	
29	Nanty Glo	00066-72	<i>Performance was driven by trees off ROW (100%)</i>			
			Repair damage caused by trees during a storm	Complete	May-19	
			Repair damage caused by trees	Complete	Jun-19	
30	Kearsarge	00528-31	<i>Performance was driven by equipment failure (49%) and line failure (44%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair line failure	Complete	Aug-18	
			Repair equipment failure	Complete	Feb-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
31	Boyer	00584-31	<i>Performance was driven by line failure (50%) and trees off ROW (32%)</i>			
			Repair damage caused by trees during a storm	Complete	Nov-18	
			Repair line failure	Complete	Jun-19	
32	Shade Gap 115KV Sub	00622-82	<i>Performance was driven by trees off ROW (43%) and equipment failure (33%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees	Complete	Aug-18	
			Repair equipment failure	Complete	Sep-18	
			Repair damage caused by trees during a storm	Complete	May-19	
33	Cambria County Prision	00202-72	<i>Performance was driven by line failure (96%)</i>			
			Repair line failure	Complete	Apr-19	
34	Thompson	00436-65	<i>Performance was driven by trees off ROW (60%) and line failure (20%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Aug-18	
			Repair damage caused by trees	Complete	Oct-18	
			Repair line failure	Complete	Mar-19	
			Targeted circuit rehabilitation	Complete	May-19	
35	Blairsville East	00080-13	<i>Performance was driven by trees off ROW (55%) and equipment failure (23%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Sep-18	
			Repair equipment failure	Complete	May-19	
36	McConnellstown	00099-82	<i>Performance was driven by object contact of line (79%) and lightning (11%)</i>			1Q 2019 2Q 2019
			Repair damage caused by lightning	Complete	Aug-18	
			Restore breaker operation of primary contact	Complete	Jan-19	
37	Mansfield	00558-63	<i>Performance was driven by line failure (86%)</i>			4Q 2018 1Q 2019 2Q 2019
			Repair line failure	Complete	Nov-18	
			Repair line failure	Complete	Jun-19	
			Targeted circuit rehabilitation	To be Completed	50%	
38	Piney	00523-51	<i>Performance was driven by trees off ROW (70%) and equipment failure (12%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees	Complete	Sep-18	
			Repair damage caused by trees	Complete	Nov-18	
			Repair equipment failure	Complete	Jun-19	
			Install new radio-controlled switch	To be Completed 2019	50%	
			Circuit inspection	To be Completed 2019	0%	

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
39	Millfair Road	00283-34	<i>Performance was driven by trees off ROW (77%) and line failure (13%)</i>			1Q 2019 2Q 2019
			Repair line failure	Complete	Oct-18	
			Repair damage caused by trees during a storm	Complete	Jan-19	
40	Salix	00070-11	<i>Performance was driven by trees off ROW (53%), vehicle accident (25%), and line failure (18%)</i>			
			Repair damage caused by trees during a storm	Complete	Sep-18	
			Repair damage caused by a vehicle	Complete	Dec-18	
41	Blairsville East	00082-13	<i>Performance was driven by trees off ROW (52%), unknown cause (17%), and lightning (10%)</i>			
			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	
			Restored fuse operation of unknown cause	Complete	Jun-19	
42	New Albany SW Station	00526-62	<i>Performance was driven by trees off ROW (95%)</i>			
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees	Complete	May-19	
43	Hilltop	00048-11	<i>Performance was driven by line failure (73%) and structure fire (24%)</i>			1Q 2019 2Q 2019
			Repair line failure	Complete	Jan-19	
			Forced outage due to structure fire	Complete	Jan-19	
44	Philipsburg	00162-22	<i>Performance was driven by equipment failure (42%), trees off ROW (19%), and vehicle accident (18%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by a vehicle	Complete	Aug-18	
			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				
45	Northeast	00591-31	<i>Performance was driven by line failure (73%) and equipment failure (16%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair line failure	Complete	Jul-18	
			Repair equipment failure	Complete	Sep-18	
			Repair line failure	Complete	Oct-18	

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	
46	Meshoppen	00283-65	<i>Performance was driven by line failure (30%), equipment failure (28%), trees off ROW (12%) and lightning (10%)</i>				1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Aug-18		
			Repair damage caused by lightning	Complete	Aug-18		
			On cycle tree trimming	Complete	Oct-18		
			Restored breaker operation of unknown cause	Complete	Oct-18		
			Repair equipment failure	Complete	Dec-18		
			Repair line failure	Complete	Mar-19		
			Repair equipment failure	Complete	May-19		
47	Revioc	00071-72	<i>Performance was driven by trees off ROW (37%), line failure (35%), and equipment failure (21%)</i>				
			Repair line failure	Complete	Jan-19		
			Repair equipment failure	Complete	Apr-19		
			Repair damage caused by trees during a storm	Complete	May-19		
48	Marienville	00327-51	<i>Performance was driven by line failure (66%) and tree of ROW (24%)</i>				4Q 2018 1Q 2019 2Q 2019
			Repair line failure	Complete	Dec-18		
			Install new radio controlled recloser	To be Completed	50%		
49	Russell Hill	00282-65	<i>Performance was driven by trees off ROW (75%) and fuse operation of unknown cause (11%)</i>				1Q 2019 2Q 2019
			Restore fuse operation of unknown cause	Complete	Aug-18		
			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		
50	Philipsburg	00164-22	<i>Performance was driven by trees off ROW (57%), line failure (14%), and fuse operation of unknown cause (12%)</i>				
			Restore fuse operation of unknown cause	Complete	Aug-18		
			On cycle tree trimming	Complete	Oct-18		
			Repair line failure	Complete	Oct-18		
			Repair damage caused by trees during a storm	Complete	Mar-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	
51	Union City	00206-43	<i>Performance was driven by trees off ROW (36%), equipment failure (33%), and line failure (9%)</i>				3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Replace substation breaker	Complete	Jul-18		
			Repair equipment failure	Complete	Sep-18		
			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		
			Install new radio-controlled switch	To be Completed 2019	50%		
Targeted circuit rehabilitation	To be Completed 2019	50%					
52	Laurel Pipeline	00036-71	<i>Performance was driven by line failure (85%)</i>				4Q 2018 1Q 2019 2Q 2019
			Repair line failure	Complete	Oct-18		
			Repair line failure	Complete	Oct-18		
53	Wyalusing sub	00532-62	<i>Performance was driven by breaker operation of unknown cause (63%) and trees off ROW (30%)</i>				3Q 2018 2Q 2019
			Repair damage caused by trees during a storm	Complete	Aug-18		
			Repair damage caused by trees during a storm	Complete	Apr-19		
			Restore breaker operation of unknown cause	Complete	Apr-19		
54	Logan	00701-81	<i>Performance was driven by non-company human error (31%), lightning (29%), equipment failure (18%), and line failure (15%)</i>				3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by lightning	Complete	Sep-18		
			Repair equipment failure	Complete	Nov-18		
			Repair damage caused by non-company human error	Complete	May-19		
			Repair line failure	Complete	May-19		
55	East Hickory	00201-41	<i>Performance was driven by trees off ROW (95%)</i>				3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by trees during a storm	Complete	Jul-18		
			Repair damage caused by trees	Complete	Sep-18		
			Repair damage caused by trees	Complete	Dec-18		
			Replace substation recloser	Complete	Feb-19		
			Repair damage caused by trees	Complete	Jun-19		
			On cycle tree trimming	To Be Completed 2019	0%		

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
56	Seward	00075-11	<i>Performance was driven by equipment failure (68%) and trees off ROW (15%)</i>			4Q 2018 1Q 2019 2Q 2019
			Repair equipment failure	Complete	Oct-18	
			Repair equipment failure	Complete	Nov-18	
57	Alibion	00417-34	<i>Performance was driven by trees off ROW (88%)</i>			
			Repair damage caused by trees during a storm	Complete	Apr-19	
			Repair damage caused by trees during a storm	Complete	May-19	
58	Waren Eddy Sub	00249-41	<i>Performance was driven by wind (47%) and trees off ROW (39%)</i>			
			Repair damage caused by trees during a storm	Complete	Jul-18	
			Repaired damage caused by wind	Complete	Apr-19	
			Circuit inspection	To be Completed	0%	
59	Brookville West	00121-23	<i>Performance was driven by trees off ROW (42%), equipment failure (37%), and vehicle accident (20%)</i>			3Q 2018 1Q 2019 2Q 2019
			Repair damage caused by a vehicle	Complete	Sep-18	
			Repair equipment failure	Complete	Nov-18	
			Repair damage caused by trees during a storm	Complete	Feb-19	
			Repair damage caused by trees during a storm	Complete	Jun-19	
			Circuit inspection	To be Completed 2019	0%	
60	Lawrenceville	00632-63	<i>Performance was driven by non-company human error (59%) and vehicle accident (40%)</i>			4Q 2018 1Q 2019 2Q 2019
			Repair damage caused by a vehicle	Complete	Aug-18	
			Repair damage caused by non-company human error	Complete	Oct-18	
			Replace substation recloser	Complete	Feb-19	
61	Tyrone North Sub	00643-22	<i>Performance was driven by line failure (66%) and non-company human error (29%)</i>			
			Repair line failure	Complete	Oct-18	
			Repair damage caused by non-company human error	Complete	Apr-19	
			Circuit inspection	To be Completed 2019	0%	
62	Mildred	00771-62	<i>Performance was driven by equipment failure (97%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Repair equipment failure	Complete	Jul-18	
			Repair equipment failure	Complete	Jul-18	

Penelec					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	3Q 2018	4Q 2018	1Q 2019	2Q 2019
Buffalo Road	00265-31	X	X	X	
Clymer	00110-13		X	X	
Cooper	00069-11	X	X		
Emlenton	00322-51		X	X	
Fairview East	00242-34		X	X	
Grandview	00354-51	X	X	X	
Industrial Park	00796-65		X	X	
Lake Como	00787-65	X	X		
Madera	00167-22	X	X		
Mansfield	00699-63		X	X	
Marienville	00328-51	X	X	X	
N Meshoppen Tran	00530-65		X	X	
N Meshoppen Tran	00534-65	X	X	X	
Page Road	00445-43	X	X	X	
Philipsburg	00161-22	X	X		
Powell Ave	00513-31	X	X		
Reed Street	00549-31	X	X	X	
Shawville	00151-21		X	X	
Timblin	00115-23		X	X	
Tunkhannock	00533-65	X	X	X	
Union City	00207-43	X	X		

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

Penelec				
Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Progress of Remedial Work or Date Completed
Buffalo Road	00265-31	Circuit inspection	To be Completed 2019	0%
Grandview	00354-51	Replace substation recloser	Complete	May-19
Emlenton	00322-51	Replace substation recloser	Complete	Jun-19
Industrial Park	00796-65	On cycle tree clearing	Complete	May-19
Industrial Park	00796-65	Circuit inspection	Complete	May-19
Timblin	00115-23	On cycle tree clearing	To Be Completed 2019	0%
French Road	00550-31	Circuit inspection	To be Completed 2019	0%
Cooper	00069-11	On cycle tree clearing	To Be Completed 2019	0%
Somerset	00017-12	Install advanced Dx protective devices	To be completed 2019	95%

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 (87%) and wind (4%)</i>			
			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	
2	THOMPSON RUN	D550	<i>Performance was driven by trees off ROW (57%), equipment failure (29%) and vehicle (7%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			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	
3	JAMESTOWN	W-162	<i>Performance was driven by trees off ROW (85%) and bird (9%)</i>			3Q 2018 4Q 2018 1Q 2019 2Q 2019
			Restore fuse after operation from bird nest	Complete	Jul-18	
			Pole was replaced and equipment repaired following tree damage	Complete	Sep-18	
			Pole was replaced and equipment repaired following tree damage	Complete	Oct-18	
			Pole was replaced and equipment repaired following tree damage	Complete	Oct-18	
			Repair damage caused by trees during a storm	Complete	Feb-19	
			Repair damage caused by trees during a storm	Complete	May-19	
4	JACKSON	W731	<i>Performance was driven by trees off ROW (91%) and equipment failure (6%)</i>			
			Replace cutout	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Sep-18	
			Repair damage caused by trees during a storm	Complete	May-19	
5	EVANS CITY	D611	<i>Performance was driven by trees off ROW (90%) and equipment failure (6%)</i>			
			Replace cutout	Complete	Dec-18	
			Repair damage caused by trees during a storm	Complete	May-19	
6	STONEBORO	W-132	<i>Performance was driven by trees off ROW (73%), bird (13%) and line failure (6%)</i>			
			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	

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
7	BEDFORD	D-445	<i>Performance was driven by trees off ROW (92%) and equipment failure (5%)</i>			
			Replace transformer	Complete	Jul-18	
			Repair damage caused by trees during a storm	Complete	Apr-19	
8	KOPPEL	D-531	<i>Performance was driven by trees off ROW (84%) and line failure (10%)</i>			4Q 2018 1Q 2019 2Q 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 (63%), bird (19%) and trees off ROW (11%)</i>			1Q 2019 2Q 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	

Penn Power					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	3Q 2018	4Q 2018	1Q 2019	2Q 2019
Adams Ridge	W-780	X	X		
Canal	W-101	X	X		
Ellwood Sw Str	D-590	X		X	
Hickory	W-243	X	X		
Ingomar	D-620	X	X		
Seneca	W-701	X	X	X	

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

West Penn 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	Waterville	Waterville	<i>Performance driven by other electric utility (55%) and off ROW trees (30%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Repair damage caused by a tree during a storm	Complete	Aug-18	
			Repair damage caused by a tree	Complete	Aug-18	
			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	
2	Flintstone	Chaneysville	<i>Performance driven by off ROW trees (88%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Repair damage caused by a tree	Complete	Aug-18	
			Repair damage cause by a tree during a storm	Complete	Sep-18	
			Zone 2 Infrared Inspection	Complete	Sep-18	
			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				
3	Rutan	Bristoria	<i>Performance driven by off ROW trees (55%), equipment failure (14%), and line failure (11%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Repair equipment failure during a storm	Complete	Jul-18	
			Repair damage caused by a tree during a storm	Complete	Aug-18	
			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				
4	Franklin	Rogersville	<i>Performance driven by off ROW trees (79%) and equipment failure (13%)</i>			1Q2019 2Q2019
			Zone 1 Infrared Inspection	Complete	Sep-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				

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	Mather	Jefferson	<i>Performance driven by off ROW trees (84%)</i>			
			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	
6	Smith	Francis Mine	<i>Performance driven by off ROW trees (82%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Repair damage caused by a tree during a storm	Complete	Jul-18	
			Restore unknown outage during a storm	Complete	Aug-18	
			Reliability job to install fuses	Complete	Aug-18	
			Repair damage caused by a tree	Complete	Sep-18	
			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				
7	Bethlen	Darlington	<i>Performance driven by off ROW trees (74%) and unknown (11%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Repair damage caused by a tree	Complete	Aug-18	
			Repair damage caused by a tree during a storm	Complete	Aug-18	
			Forced outage to repair damage	Complete	Sep-18	
			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				
8	Avella	W Middletown	<i>Performance driven by off ROW trees (78%) and line failure (10%)</i>			4Q2018 1Q2019 2Q2019
			Line rehabilitation	Complete	Aug-18	
			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				

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	
9	Bedford Road	Rt 220 North	<i>Performance driven by off ROW trees (64%) and vehicle (20%)</i>				3Q2018 4Q2018 1Q2019 2Q2019
			Forced outage to repair damage	Complete	Aug-18		
			Repair damage caused by a tree	Complete	Aug-18		
			Restore outage caused by human error-noncompany	Complete	Sep-18		
			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					
10	Thompson Farm	Toftrees	<i>Performance driven by line failure (71%) and equipment failure (29%)</i>				3Q2018 4Q2018 1Q2019 2Q2019
			Repair equipment failure during a storm	Complete	Jul-18		
			Repair line failure	Complete	Aug-18		
			Repair line failure	Complete	Oct-18		
			Repair line failure during a storm	Complete	Nov-18		
11	Shaffers Corner	Seventh St Rd	<i>Performance driven by off ROW trees (92%)</i>				3Q2018 4Q2018 1Q2019 2Q2019
			Repair damage caused by a tree during a storm	Complete	Jul-18		
			Repair damage caused by a tree during a storm	Complete	Sep-18		
			Overhead circuit inspection	Complete	Oct-18		
			Restore unknown outage	Complete	Oct-18		
			Repair damage caused by a tree during a storm	Complete	Nov-18		
			Repair equipment failure during a storm	Complete	Mar-19		
Repair damage caused by a tree during a storm	Complete	May-19					
12	Peters	Library	<i>Performance driven by lightning (53%) and vehicle (38%)</i>				3Q2018 4Q2018 1Q2019 2Q2019
			Repair equipment failure during a storm	Complete	Aug-18		
			Repair damage caused by lightning during a storm	Complete	Sep-18		
			Restore unknown outage	Complete	Nov-18		
			Repair damage caused by a tree	Complete	Mar-19		
			Overhead circuit inspection	Complete	Apr-19		
Repair line failure	Complete	May-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	
13	St. Clair	Lesnett	<i>Performance driven by line failure (51%) and off ROW trees (38%)</i>				3Q2018 4Q2018 1Q2019 2Q2019
			Repair line failure	Complete	Jul-18		
			Repair line failure during a storm	Complete	Aug-18		
			Repair damage caused by a tree during a storm	Complete	Aug-18		
			Zone 2 Infrared Inspection	Complete	Aug-18		
			Repair damage caused by an animal	Complete	Oct-18		
			Repair damage caused by a tree during a storm	Complete	Jan-19		
			Repair damage caused by a tree	Complete	Jun-19		
14	Smith	Florence	<i>Performance driven by off ROW trees (51%) and line failure (22%)</i>				3Q2018 4Q2018 1Q2019 2Q2019
			Repair equipment failure during a storm	Complete	Sep-18		
			Repair damage caused by a tree during a storm	Complete	Sep-18		
			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		
15	Fort Palmer	West Fairfield	<i>Performance driven by off ROW trees (86%)</i>				3Q2018 1Q2019 2Q2019
			Repair damage caused by a tree	Complete	Aug-18		
			Repair damage caused by a tree	Complete	Sep-18		
			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		
16	Hickory	Hickory	<i>Performance driven by off ROW trees (65%), vehicle (12%), and line failure (11%)</i>				
			Repair line failure	Complete	Jun-19		
			Repair damage caused by a tree during a storm	Complete	Jun-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
17	Peters	McMurray	<i>Performance driven by off ROW trees (80%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Repair damage caused by a tree during a storm	Complete	Jul-18	
			Restore unknown outage	Complete	Aug-18	
			Repair line failure	Complete	Aug-18	
			Repair line failure	Complete	Oct-18	
			Overhead circuit inspection	Complete	Nov-18	
			Repair damage caused by a tree during a storm	Complete	Feb-19	
			Repair damage caused by wind during a storm	Complete	May-19	
18	Cooperstown	Twin Willows	<i>Performance driven by off ROW trees (62%) and vehicle (34%)</i>			3Q2018 2Q2019
			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	
19	Houston	Weavertown	<i>Performance driven by vehicle (48%) and human error-company (25%)</i>			
			Repair damage caused by a vehicle during a storm	Complete	Jun-19	
20	Luxor	Rolling Acres	<i>Performance driven by off ROW trees (79%) and unknown (17%)</i>			1Q2019 2Q2019
			Forced outage to repair damage	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	Mar-19	
			Restore unknown outage	Complete	Jun-19	
21	Smith	Burgettstown	<i>Performance driven by off ROW trees (34%), equipment failure (20%), and line failure (19%)</i>			4Q2018 1Q2019 2Q2019
			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	
22	Ridgway	Montmorenci	<i>Performance driven by off ROW trees (89%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Repair damage caused by a tree during a storm	Complete	Sep-18	
			Zone 2 Infrared Inspection	Complete	Sep-18	
			Repair equipment failure during a storm	Complete	Nov-18	
			Repair line failure	Complete	Jan-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	
23	Franklin	South Waynesburg	<i>Performance driven by off ROW trees (59%) and line failure (26%)</i>				
			Repair damage caused by a tree during a storm	Complete	May-19		
			Repair damage caused by a tree during a storm	Complete	May-19		
24	Vanceville	Vanceville	<i>Performance driven by off ROW trees (75%)</i>				3Q2018 1Q2019 2Q2019
			On cycle tree trimming	Complete	Dec-18		
			Repair damage caused by a tree during a storm	Complete	Jul-18		
			Repair damage caused by a tree during a storm	Complete	97%		
			Repair damage caused by a tree during a storm	Complete	Jan-19		
			Restore unknown outage	Complete	Jun-19		
25	Amity	Amity	<i>Performance driven by off ROW trees (55%) and line failure (39%)</i>				3Q2018 1Q2019 2Q2019
			Repair damage caused by a tree during a storm	Complete	Aug-18		
			Repair line failure	Complete	Sep-18		
			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	To be Completed 2019	99%		
26	Charleroi	N. Charleroi	<i>Performance driven by vehicle (47%) and line failure (28%)</i>				
			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		
27	Bethel Park	Clifton	<i>Performance driven by off ROW trees (62%) and unknown (21%)</i>				
			On cycle tree trimming	Complete	Sep-18		
			Repair damage caused by a tree during a storm	Complete	May-19		
			Restore unknown outage during a storm	Complete	Jun-19		
28	St. Clair	Skyridge	<i>Performance driven by line failure (42%) and off ROW trees (37%)</i>				3Q2018 4Q2018 1Q2019 2Q2019
			Repair line failure	Complete	Jul-18		
			Repair damage caused by a tree during a storm	Complete	Aug-18		
			Zone 1 Infrared Inspection	Complete	Aug-18		
			Forced outage to repair damage during a storm	Complete	Sep-18		
			Repair line failure	Complete	Oct-18		
			Repair equipment failure	Complete	Jan-19		
Repair damage caused by a tree during a storm	Complete	Jun-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	North Washington	Poke Run	<i>Performance driven by off ROW trees (53%) and line failure (24%)</i>			
			Repair damage caused by a tree	Complete	Apr-19	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
30	Rutan	Windridge	<i>Performance driven by off ROW trees (85%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Forced outage to repair damage during a storm	Complete	Jul-18	
			Repair damage caused by a tree	Complete	Sep-18	
			Repair damage caused by a tree during a storm	Complete	Sep-18	
			Repair equipment failure	Complete	Oct-18	
			Repair damage caused by a tree during a storm	Complete	Nov-18	
			Repair damage caused by a tree during a storm	Complete	Mar-19	
			Repair damage caused by a tree during a storm	Complete	May-19	
			On cycle tree trimming	To be Completed 2019	87%	
31	Superior	Culmerville	<i>Performance driven by off ROW trees (39%) and vehicle (38%)</i>			
			Repair damage caused by a vehicle	Complete	Apr-19	
			Repair damage caused by a tree	Complete	May-19	
			Restore unknown outage	Complete	Jun-19	
32	Youngwood	Spare	<i>Performance driven by line failure (42%) and off ROW trees (36%)</i>			4Q2018 1Q2019 2Q2019
			Repair damage caused by lightning	Complete	Oct-18	
			Repair damage caused by a tree during a storm	Complete	Oct-18	
33	Huntingdon	Penna Ave	<i>Performance driven by equipment failure (55%) and vehicle (22%)</i>			
			Repair damage caused by a vehicle	Complete	Apr-19	
			Repair equipment failure	Complete	May-19	
34	Emporium	Emporium Jct	<i>Performance driven by off ROW trees (66%) and human error non-company (33%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Repair equipment failure during a storm	Complete	Jul-18	
			Repair damage caused by a tree	Complete	Sep-18	
			Restore unknown outage	Complete	Sep-18	
			Repair damage caused by a tree during a storm	Complete	Oct-18	
			Repair damage caused by a tree	Complete	Mar-19	
			Repair damage caused by human error non-company	Complete	May-19	
Repair damage caused by a tree	Complete	Jun-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	Sewickley	Wendel	<i>Performance driven by off ROW trees (75%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Zone 1 Infrared Inspection	Complete	Jul-18	
			Forced outage to repair damage	Complete	Aug-18	
			Repair equipment failure	Complete	Sep-18	
			Repair damage caused by a tree during a storm	Complete	Sep-18	
			Repair damage caused by a tree	Complete	Nov-18	
36	N. Greensburg	Cabin Hill	<i>Performance driven by off ROW trees (92%)</i>			
			Repair damage caused by a tree	Complete	Jun-19	
37	North Union	Phillips	<i>Performance driven by off ROW trees (68%) and on ROW trees (19%)</i>			
			Repair damage caused by human error non-company	Complete	May-19	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
38	Bethlen	Wilpen	<i>Performance driven by off ROW trees (71%) and vehicle (15%)</i>			
			On cycle tree trimming	Complete	Nov-18	
			Repair damage caused by a vehicle during a storm	Complete	Apr-19	
			Forced outage to repair damage during a storm	Complete	May-19	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
39	Westraver	Pittsburgh Coal	<i>Performance driven by line failure (50%) and off ROW trees (31%)</i>			
			Repair line failure	Complete	Jun-19	
			Repair damage caused by a tree during a storm	Complete	Jun-19	
			Overhead circuit inspection	To be Completed 2019	10%	
40	Kane	Russell City	<i>Performance driven by off ROW trees (49%) and line failure (41%)</i>			3Q2018 4Q2018 1Q2019 2Q2019
			Repair line failure during a storm	Complete	Jul-18	
			Repair damage caused by a tree	Complete	Sep-18	
			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				

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

West Penn					
Unranked circuits appearing 2 or more quarters in the last 4 quarters					
Substation	Circuit	2Q 2018	3Q 2018	4Q 2018	1Q 2019
Cooperstown	Twin Willows	X	X		
Franklin	West Waynesburg	X	X	X	
Frazier	Star Junction	X	X		
Harwick	Harmar	X	X		
Houston	McGovern	X		X	
North Union	Gallatin		X	X	
Purcell	Artemas	X		X	
Saltsburg	Salina		X	X	
St. Clair	Fort Couch		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	57%
Kersey	Shelvey	On cycle tree trimming	To be Completed 2019	52%
Dutch Fork	W Alexander	On cycle tree trimming	Complete	Jan-19
Krendale	Unionville	Overhead circuit inspection	To be Completed 2019	97%

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				
4Q				

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

Met-Ed – Third Party Line Hit Incidents			
2nd Quarter 2019 12-Month Rolling			
Cause of Line Hit	Number of Incidents	Invoice Amount (\$)	Recovery Amount (\$)
Dig In - Other	18	11,969	5,759
Excavated in Tolerance	26	196,372	29,956
Excavation Inconsistent with Ticket Scope	18	35,273	25,217
Excavation Prior to Lawful Start Date	3	2,672	437
Expired Ticket	6	19,913	4,142
Hand Digging	1	427	427
Marked Improperly	17	24,148	19,967
No Ticket	32	58,655	32,004
Total	121	349,429	117,909

Penelec – Third Party Line Hit Incidents			
2nd Quarter 2019 12-Month Rolling			
Cause of Line Hit	Number of Incidents	Invoice Amount (\$)	Recovery Amount (\$)
Dig In - Other	19	3,043	3,043
Excavated in Tolerance	31	58,966	46,971
Excavation Inconsistent with Ticket Scope	2	0	0
Excavation Prior to Lawful Start Date	3	1,670	0
Expired Ticket	5	2,203	1,491
Hand Digging	3	971	0
Marked Improperly	40	133,811	122,898
No Ticket	40	83,875	37,216
Total	143	284,539	211,619

Penn Power – Third Party Line Hit Incidents			
2nd Quarter 2019 12-Month Rolling			
Cause of Line Hit	Number of Incidents	Invoice Amount (\$)	Recovery Amount (\$)
Dig In - Other	13	2,856	867
Excavated in Tolerance	12	33,851	20,130
Excavation Inconsistent with Ticket Scope	1	2,313	2,448
Excavation Prior to Lawful Start Date	2	0	0
Expired Ticket	4	5,461	5,097
Hand Digging	0	0	0
Marked Improperly	6	17,949	9,125
No Ticket	16	19,760	11,929
Total	54	82,190	49,596

West Penn – Third Party Line Hit Incidents			
2nd Quarter 2019 12-Month Rolling			
Cause of Line Hit	Number of Incidents	Invoice Amount (\$)	Recovery Amount (\$)
Dig In - Other	51	138,888	29,077
Excavated in Tolerance	6	10,013	5,369
Excavation Inconsistent with Ticket Scope	4	2,493	2,449
Excavation Prior to Lawful Start Date	1	3,092	0
Expired Ticket	4	3,381	3,381
Hand Digging	14	22,624	13,243
Marked Improperly	32	112,338	108,842
No Ticket	36	55,966	29,033
Total	148	348,795	191,394

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

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Joint 2nd Quarter 2019 Reliability Report – :
Metropolitan Edison Company, :
Pennsylvania Electric Company :
Pennsylvania Power Company and West :
Penn Power Company – Public Version :**

CERTIFICATE OF SERVICE

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

Service by first class mail, as follows:

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

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

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

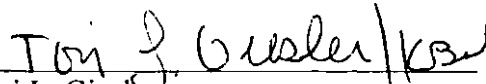
Scott Rubin
Utility Workers Union of America
333 Oak Lane
Bloomsburg, PA 17815-2036

Service by electronic mail, as follows:

David Dulick, General Counsel
David_Dulick@ccsenergy.com

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

Dated: August 1, 2019


Tori L. Giesler
Attorney No. 207742
FirstEnergy Service Company
2800 Pottsville Pike
P.O. Box 16001
Reading, Pennsylvania 19612-6001
(610) 921-6658
tgiesler@firstenergycorp.com

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

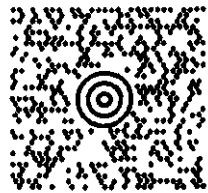
MAIL ROOM
(610) 921-6633
AE-1440
2800 POTTSVILLE PIKE
READING PA 19605-2459

4 LBS PAK 1 OF 1

SHIP TO:

ROSEMARY CHIAVETTA, SECRETARY
PA PUBLIC UTILITY COMMISSION
2ND FLOOR
COMMONWEALTH KEYSTONE BUILDING
400 NORTH STREET
HARRISBURG PA 17120-0079

USA



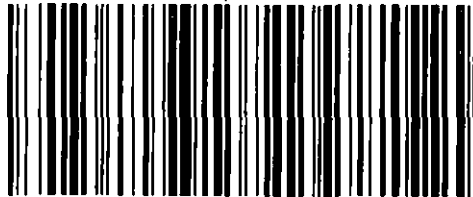
PA 171 9-20



Do

UPS NEXT DAY AIR SAVER **1P**

TRACKING #: 1Z AE1 440 13 5845 0618



BILLING: P/P

REF 1:503003
REF 2:tori giesler-reap-37

HS 21.0.16

LP2644 15.0A 07/2019



SEE NOTICE ON REVERSE regarding UPS terms, and notice of limitation of liability. Where allowed by law, shipper authorizes UPS to act as forwarding agent for export control and customs purposes. If exported from the US, shipper certifies that the commodities, technology or software were exported from the US in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited. BSO BY 0219