

2800 Pottsville Pike P.O. Box 16001 Reading, PA 19612-6001

610-929-3601

February 22, 2013

VIA UNITED PARCEL SERVICE

Rosemary Chiavetta, Secretary Pennsylvania Public Utility Commission P.O. Box 3265 Harrisburg, PA 17120 FEB 2 2 2013

RECEIVED

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

Re: Supplemental Submission - Joint 4th Quarter 2012 Reliability Report – Pennsylvania Power Company, Pennsylvania Electric Company and Metropolitan Edison Company – Public Version

Dear Secretary Chiavetta:

Pursuant to 52 Pa. Code § 57.195(d) and (e), enclosed for filing on behalf of Pennsylvania Power Company ("Penn Power"), Pennsylvania Electric Company ("Penelec") and Metropolitan Edison Company ("Met-Ed") (collectively, "the Companies") are two copies of a supplemental report of the Joint 4th Quarter 2012 Reliability Report – Public Version ("Joint Report"). Please date stamp the additional copy and return it in the postage-prepaid envelope provided.

On January 25, 2013, Met-Ed and Penelec separately filed requests for exclusion of major outage for reliability reporting purposes in accordance with the requirements of Commission Order entered May 11, 2004 at Docket No. M-00991220. Secretarial Letters were issued for both Met-Ed and Penelec on February 1, 2013 approving those requests. Therefore, Met-Ed and Penelec hereby submit this supplemental filing which provides changes to the Major Events, Reliability Index Values, Worst Performing Circuits and Outage by Cause sections.

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.

. Ole= Sincerely, Þ

Douglas S. Elliott President, Pennsylvania Operations (610) 921-6060 elliottd@firstenergycorp.com

dlm Enclosures

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

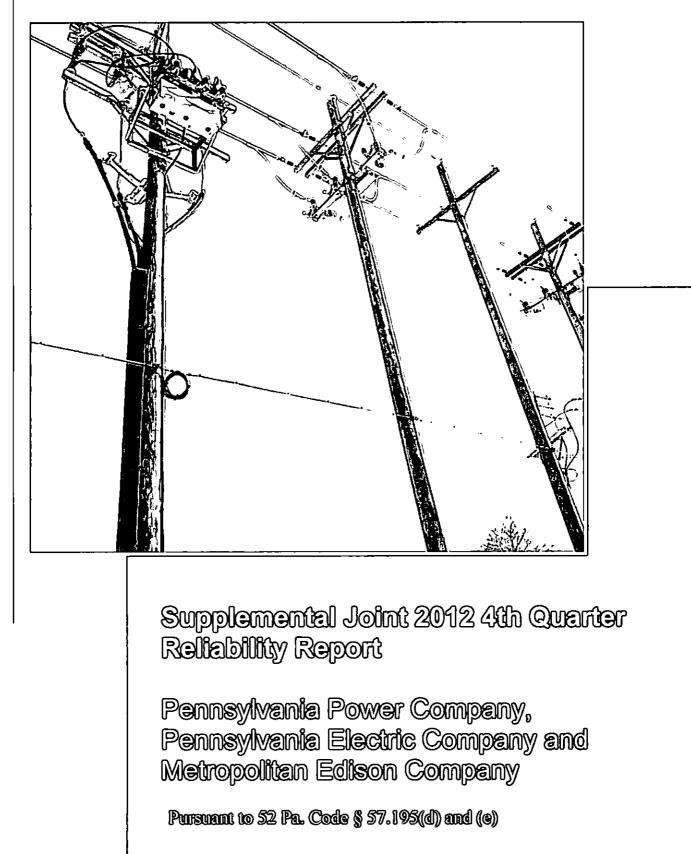
PUBLIC VERSION

RECEIVED

FEB 2 2 2013



PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU



Supplemental Joint 4th Quarter 2012 Reliability Report – Pennsylvania Power Company, Pennsylvania Electric Company and Metropolitan Edison Company

<u>Section 57.195(e)(1)</u>: 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 future¹.

Major Events

FirstEnergy Company	Customers Affected	Time and Du	ration of the Event.	Cause of the Event	Commission Approval Status			
		Duration	10 days, 8 hours and 20 minutes					
Met-Ed	296,592	Start Date/Time	October 29, 2012 12:03pm	Hurricane Sandy	Approved on February 1, 2013			
		End Date/Time	November 8, 2012 8:23pm					
		Duration	5 days, 2 hours and 47 minutes					
Penelec	96,856	Start Date/Time	October 29, 2012 12:16pm	Hurricane Sandy	Approved on February 1, 2013			
		End Date/Time	November 3, 2012 3:03pm					

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.

<u>Section 57.195(e)(2):</u> 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.

40 2012	ج بيد ترجيع ال	enn Powe	r i	'	Penelec		· · · · ·	Met-Ed		
(12-Mo.Rolling) SAIFI CAIDI SAIDI Customers Served ² Number of Sustained Interruptions Customers Affected	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual	
SAIFI	1.12	1.34	1.17	1.26	1.52	1.41	1.15	1.38	1.29	
CAIDI	101	121	114	117	141	138	117	140	120	
SAIDI	113	162	133	148	213	194	135	194	155	
		157,482			583,225		548,153			
Sustained		3,330			11,521			9,013		
		184,126			822,950			709,874		
Customer Minutes	:	20,952,827		1	13,316,787			84,718,376		

Reliability Index Values

² Represents the average number of customers served during the reporting period

<u>Section 57.195(e)(3):</u> 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 the Companies use 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.

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

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

Worst Performing Circuits - Remedial Action

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

.

<u>Section 57,195(e)(5)</u>: 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 - Penn Power

	Outages by	Cause		
4th Quarter 2012 12-Month Rolling		Penn P	ower	
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
TREES/NOT PREVENTABLE	7,883,570	759	36866	23%
LIGHTNING	2,996,554	643	17,143	19%
ANIMAL	1,067,067	485	19,826	15%
BIRD	302,385	339	3,688	10%
EQUIPMENT FAILURE	2,750,656	332	30660	10%
	2,294,859	286	16,222	9%
OVERLOAD	301,395	86	4,636	3%
VEHICLE	872,390	72	8,644	2%
PREVIOUS LIGHTNING	36,879	66	295	2%
UNKNOWN	246,839	64	2,695	2%
FORCED OUTAGE	610,131	53	7,632	2%
HUMAN ERROR - NON-COMPANY	254,954	35	1,627	1%
HUMAN ERROR - COMPANY	676,759	34	28,928	1%
TREES/PREVENTABLE	77,425	27	893	1%
CUSTOMER EQUIPMENT	428,545	15	2909	0%
OBJECT CONTACT WITH LINE	52,291	10	422	0%
	15,390	8	109	0%
FIRE	58,674	5	800	0%
VANDALISM	4,518	4	13	0%
CONTAMINATION	4,930	3	14	0%
WIND	4,478	2	14	0%
CALL ERROR	11,088	1	84	0%
OTHER UTILITY-NON ELEC	1,050	1	6	0%
TOTAL	20,952,827	3,330	184,126	100100%

Proposed Solutions - Penn Power

Trees Not-Preventable

Forestry Services reviews the "Trees Not-Preventable" outages to see if there has been a high frequency of occurrences on the circuit. A patrol of the circuit is conducted to identify trees that need to be trimmed or removed to avoid future outages. In addition, line and forestry personnel patrol for Danger/Priority trees as part of their daily work routine. The Danger/Priority Tree program identifies off right-of-way trees that present a hazard to power lines. Under this program all circuits that have had "Trees Not-Preventable" caused outages are prioritized based on customer outage minutes. A patrol of the three-phase backbone of each circuit is performed and foresters work with private property owners to remove any potentially dangerous tree conditions.

Lightning

The number of lightning-caused outages is mitigated through Penn Power's reliability improvement strategy. This includes inspection and maintenance practices such as circuit inspections and annual main feed inspections. These inspections can locate blown lightning arresters, broken grounds, and other conditions which could lead to higher lightning-caused outages. Substations also contain lightning protection through equipment such as line arresters and grounding. These items are maintained by the substation group based on the substation practices. Distribution protection coordination reviews allow for a fewer number of customers affected and quicker isolation of the affected circuit sections. In addition, Penn Power conducts periodic reviews of multi-operation devices to identify causes and trends and will engineer solutions to reduce the frequency of the outages.

<u>Animal</u>

Animal guards are installed on equipment where a high frequency of animal-related outages is experienced. When possible, animal guards are installed at the time service is restored for the outages caused by animals. In addition, Penn Power installs animal guards on new overhead transformers.

Outages by Cause - Penelec

	Outages by	Cause		
4th Quarter 2012		Pene	lec	
12-Month Rolling		Number of		% Based on
Cause	Customer Minutes	Sustained Interruptions	Customers Affected	Number of Outages
EQUIPMENT FAILURE	23,140,103	3,036	200,965	26.35%
UNKNOWN	11,223,749	2,044	117,411	17.74%
TREES/NOT PREVENTABLE	41,128,588	1,825	163,997	15.84%
ANIMAL	2,155,071	1,185	31,806	10.29%
LINE FAILURE	15,678,176	868	114,517	7.53%
FORCED OUTAGE	3,105,186	605	33,952	5.25%
LIGHTNING	5,535,695	535	40,698	4.64%
VEHICLE	6,041,986	371	39,463	3.22%
BIRD	800,110	262	5,936	2.27%
HUMAN ERROR - COMPANY	424,924	198	12,252	1.72%
CUSTOMER EQUIPMENT	1,106,736	111	34,711	0.96%
HUMAN ERROR -NON-COMPANY	415,439	92	8,176	0.80%
OVERLOAD	501,682	89	5,979	0.77%
OTHER ELECTRIC UTILITY	244,436	59	1,514	0.51%
PREVIOUS LIGHTNING	84,247	58	344	0.50%
TREES/PREVENTABLE	145,029	57	548	0.49%
UG DIG-UP	94,399	49	483	0.43%
ICE	112,447	18	246	0.16%
VANDALISM	770,802	18	3,583	0.16%
OBJECT CONTACT WITH LINE	194,423	16	1,232	0.14%
FIRE	87,570	10	819	0.09%
OTHER UTILITY-NON ELEC	277,520	6	239	0.05%
SWITCHING ERROR	44,770	4	4,070	0.03%
CONTAMINATION	455	3	7	0.03%
WIND	3,244	2	2	0.02%
itōtāl	113316787	11,521	822 950	100%

,

.

Proposed Solutions – Penelec

Equipment Failure

Porcelain cutout failures represent approximately one-third of the equipment failure outages in Penelec's territory. To address this cause, Penelec has been replacing porcelain cutouts with polymer cutouts on the main feed three-phase backbone of circuits since 2009.

In addition, inspection and maintenance practices, such as overhead circuit inspections, identify and correct potential equipment-related problems before they cause an outage. Penelec's entire main feed three-phase backbone system has been inspected at least once since 2008 and is currently on a five-year cycle of inspections. Off-cycle inspections are performed based on circuit performance and may include infrared scanning to assist in identification of potential equipment problems.

To reduce the impact of outages, distribution circuit protection coordination reviews and the enhanced circuit protection schemes that result provide isolation of equipment failures.

To limit the number of multiple outages at the same location, Engineering Services continually monitors and investigates devices.experiencing three or more outages in sixty days to identify causes and trends of equipment failures and other outages.

<u>Unknown</u>

Outage-by-cause analysis is one of the tools used to analyze and develop circuit and system reliability improvement plans. If the troubleshooter cannot accurately identify the cause of an outage, that outage is coded with an unknown cause. To limit the number of unknown outages, and to identify the outage cause, troubleshooters are directed to continue to patrol a circuit, even after service has been restored, as long as those patrols will not interfere with restoration of other customers. Significant unknown outages are reviewed by Reliability Engineering, with post outage circuit inspections being completed as needed by reliability inspectors.

Trees Not-Preventable

Forestry Services reviews the "Trees Not-Preventable" outages to see if there has been a high frequency of occurrences on the circuit. A patrol of the circuit is conducted to identify dead or diseased trees that need to be trimmed or removed to avoid future outages. In addition, line and forestry personnel patrol for Danger/ Priority trees as part of their daily work routine. The Danger/Priority Tree inspections identify off right-of-way trees that present a hazard to power lines. Circuits are then prioritized by customer minutes due to "Trees Not-Preventable" outages. A patrol of the entire circuit is performed and Forestry Services works with private property owners to remove any potentially dangerous tree conditions. This practice has been adopted as part of the Company's normal tree trimming maintenance program.

Outages by Cause - Met-Ed

	Outages by	Cause		
4th Quarter 2012 12-Month Rolling		Met	-Ed	
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
TREES/NOT PREVENTABLE	32,371,510	2,044	177,791	22.68%
EQUIPMENT FAILURE	14,508,654	1,946	152,066	21.59%
UNKNOWN	7,134,496	1,218	91,844	13.51%
ANIMAL	1,338,572	1,094	14,499	12.14%
LIGHTNING .	6,261,982	831	41,355	9.22%
LINE FAILURE	6,568,441	580	49,030	6.44%
FORCED OUTAGE	3,284,898	332	66,466	3.68%
VEHICLE	6,889,128	267	48,700	2.96%
BIRD	167,917	181	3,947	2.01%
TREES/PREVENTABLE	1,784,595	141	12,994	1.56%
HUMAN ERROR - NON-COMPANY	770,638	76	4,507	0.84%
PREVIOUS LIGHTNING	129,220	64	701	0.71%
HUMAN ERROR - COMPANY	261,548	56	18,525	0.62%
OVERLOAD	855,133	54	10,090	0.60%
UG DIG-UP	95,492	31	478	0.34%
OBJECT CONTACT WITH LINE	628,515	26	7,063	0.29%
WIND	1,021,924	23	2,200	0.26%
CUSTOMER EQUIPMENT	430,596	18	2,052	0.20%
VANDALISM	5,501	11	45	0.12%
OTHER ELECTRIC UTILITY	107,588	9	4,532	0.10%
FIRE	99,181	8	978	0.09%
OTHER UTILITY-NON ELEC	. 2,736	2	10	0.02%
CONTAMINATION	111	1	1	0.01%
TOTAL	84,718,376	9,013	709 874	100%

.

.

Proposed Solutions - Met-Ed

Trees Not-Preventable

Forestry Services reviews areas where "Trees Not-Preventable" outages occur to see if there has been a high frequency of occurrence. A patrol of the circuit is conducted to identify trees that need to be trimmed or removed to avoid future outages. In addition, line and forestry personnel patrol for Danger/Priority trees as part of their daily work routine. The Danger/Priority Tree program identifies off right-of-way trees that present a hazard to power lines.

Under the Danger/Priority Tree program, circuits identified by the Engineering Department that have had "Trees Not-Preventable" caused outages are prioritized based on customer outage minutes. A patrol of the three-phase backbone of each circuit is performed and foresters identify any potentially dangerous tree conditions. If the tree cannot be removed, overhang at the location is removed.

Equipment Failure

The number of equipment failures is mitigated by way of inspection and maintenance practices, such as circuit inspections and others. Further, distribution circuit protection coordination reviews and the enhanced circuit protection schemes that result will provide isolation of equipment failures and lessen the impact of outages to a smaller number of customers. In addition, the Engineering Department periodically conducts a multi-operation device review to identify causes and trends of equipment failures and other outage causes. Engineering then plans accordingly to repair or replace facilities.

<u>Unknown</u>

Outage-by-cause analysis is one of the tools used to analyze and develop circuit and system reliability improvement plans. If the troubleshooter cannot accurately identify the cause of an outage, that outage is coded with an unknown cause. To limit the number of unknown outages, and to identify the outage cause, troubleshooters are directed to continue to patrol a circuit, even after service has been restored, as long as those patrols will not interfere with restoration of other customers. Significant unknown outages are reviewed by Reliability Engineering, with post outage circuit inspections being completed as needed by reliability inspectors.

<u>Section 57.195(e)(6):</u> 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).

T&D Inspection and Maintenance Programs

Information is not required for the 4th Quarter report.

<u>Section 57.195(e)(7):</u> 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 or FERC account code as available. (For first, second and third quarter reports only).

Budgeted vs. Actual T&D Operation & Maintenance Expenditures

Information is not required for the 4th Quarter report.

<u>Section 57,195(e)(8)</u>: 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

Information is not required for the 4th Quarter report.

<u>Section 57.195(e)(9)</u>: 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).

Staffing Levels

.

a de la companya de la compa	Penn Power 2012	· · ·		······································	· -
Department	Staff	1Q	2Q	3Q	4Q
Line	Leader / Chief	27	26	27	27
Line	Lineman	63	64	66	66
Substation	Technician	4	4	4	4
Substation	Construction & Maintenance (C&M)	20	21	21	21
	Total	193	113	113	113

	Penelec 2012	a		•	
Department	Staff	1Q	2Q	3Q	4Q
Line	Leader / Chief	155	153	147	148
Line	Lineman	187	181	177	191
Substation	Technician	6	7	7	7
oustation	Construction & Maintenance (C&M)	73	72	71	72
	ାଙ୍କ	429	ମ୍ୟର	4002	418

	Met-Ed 2012			· · · · · · · · · · · · · · · · · · ·	
Department	Staff	1Q	2Q	3Q	4Q
Line	Leader / Chief	52	52	52	51
Linc	Lineman	171	171	179	179
Substation	Technician	15	15	15	15
	Construction & Maintenance (C&M)	56	56	59	59
	িয়ত্য	294	203	305	303

•

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

Contractor Expenditures

This portion of the report is confidential per Docket L-00301061.

<u>Section 57.195(e)(11):</u> 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

This portion of the report is confidential per Docket L-00301061.

Call-out Response

This portion of the report is confidential per Docket L-00301061.

.

.

.

.

•

ATTACHMENT A

Worst Performing Circuits - Reliability Indices

Supplemental Submission – Joint 2012 Quarterly Reliability Report for the period ending December 31, 2012

Penn Pov	ver	с											
Circult Rank	Substation	Circuit Desc	District	Average Customers (1)	Outages (2)	Lockouts (3)	Customer Minutes (4)	Customers Affected (5)	SAIDI Impact (6)	SAIÐI (7)	SAIFI (7)	CAIDI (7)	MAIFI (7)
1	Jackson	W730	Zelienople	1,960	18	0	784,950	2,164	4,98	400	1.1	363	0.0
2	Evans City	D611	Zelienople	950	33	1	667,571	2,363	4.24	703	2.49	283	1.0
3	Stoneboro	W-132	Clark	1,072	41	1	583,475	2,532	3.71	544	2.36	230	0.0
4	Stoneboro	W-130	Clark	808	38	0	400,418	1,897	2.54	496	2,35	211	0,2
5	Union	W-562	New Castle	944	16	0	342,063	1,625	2.17	362	1.72	211	2.0
6	Hadley	W-195	Clark	936	43	0	334,292	1,292	2.12	357	1.38	259	0.0
7	Wheatland	W-149	Clark	838	18	1	318,042	1,209	2.02	380	1.44	263	2.0
8	Bessemer	D-393	New Castle	1,084	39	0	305,907	1,311	1.94	282	1.21	233	0.0
9	Hermitage	W-260	Clark	2,428	68	0	287,482	2,927	1,83	118	1.21	98	3.0

.

.

(1) Average Customers served by the circuit for the 12-month period.

(2) Number of unique outages experienced by one or more customers on the circuit during the period, due to distribution outage causes.

- (3) Number of circuit lockouts during the period
- (4) Total customer minutes of outage during the period due to distribution outage causes.
- (5) Number of customer outages during the period due to outage causes.
- (6) Impact of the outages on this circuit to the Company's system SAIDI.
- (7) Distribution circuit SAIDI, SAIFI, CAIDI and MAIFI due to distribution outage causes.

Supplemental Submission – Joint 2012 Quarterly Reliability Report for the period ending December 31, 2012

.

Penelec	یک را کریک در کرد است میشد داد. دارست میدود و بادگیری داد از میانید	ا د بود محمو می رسم ^ا دید. ان ادامیم افراد است ا				in sinanan'				والمرجوعة	المي أن موجات الم المية المحالة	• • • • • • • • • •	
Circuit Rank	Substation	Circuit Desc	District	Average Gustomers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAIDI	SAIFI	CAIDI	MAIFI
				-1	-2	-3	-4	-5	-6	-7	-7	-7	-7
1	Madera	00167-22	Philipsburg	1,632	41	5	1,927,045	7,669	3.30	1,181	4.70	251	14.29
2	Lucerne	00068-13	Indiana	479	11	3	1,838,436	4,016	3.15	3,838	8.38	458	0.00
3	Madera	00166-22	Philipsburg	2,216	55	1	1,662,178	7,500	2.85	750	3.38	222	6.95
4	Belwood North	00635-22	Philipsburg	1,107	29	3	1,574,193	4,274	2.70	1,422	3.86	368	0.00
5	Salix	00070-11	Johnstown	2,267	46	0	1,443,546	4,616	2.48	637	2.04	313	5.29
6	Hooversville	00019-12	Somerset	1,895	48	0	1,284,192	4,105	2.20	678	2.17	313	2.34
7	Shawville	00151-21	Clearfield	2,320	42	1	1,272,076	6,918	2.18	548	2.98	184	1.39
8	Union City	00206-43	Erie	3,780	120	0	1,230,391	4,698	2.11	326	1.24	262	23.28
9	Philipsburg	00152-22	Philipsburg	3,254	73	0	1,207,938	8,368	2.07	371	2.57	144	21.12
10	East Pike	00095-13	Indiana	3,392	41	2	1,173,917	9,501	2.01	346	2.80	124	22.12
11	Timblin	00103-23	Punxsutawney	748	36	0	868,118	3,432	1.49	1,161	4.59	253	39.12
12	Blairsville East	00082-13	Indiana	1,340	39	1	839,879	2,941	1.44	627	2.19	286	24.61
13	St. Benedict	00057-72	Ebensburg	920	11	0	806,434	1,602	1.38	877	1,74	503 ·	9,98
14	Edinboro	00421-34	Erie	630	11	2	805,792	1,515	1.38	1,279	2.40	532	2.72
[15	DuBois	00124-23	DuBois	2,093	30	0	796,791	11,429	1.37	381	5.46	70	1.25
16	Madera	00165-22	Philipsburg	983	35	2	772,663	2,554	1.32	786	2.60	303	7.31
[17]	Warren South	00220-41	Warren	2,960	60	0	753,548	4,317	1.29	255	1.45	175	9.64
18	Tower Hill	00580-63	Mansfield	405	18	1	750,934	2,544	1.29	1,854	6.28	295	12.51
19	Rolling Meadows	00310-31	Erie	3,024	15	1	675,757	5,215	1.16	223	1.72	130	1.00
20	Punxsutawney	00829-23	Punxsutawney	582	11	1	665,593	1,628	1.14	1,144	2.80	409	2.98
21	Samuel Rea Car Shop	00031-71	Altoona	1,662	14	1	664,439	2,194	1.14	400	1.32	303	0.35
22	Edgewood	00089-13	Indiana	896	36	3	654,192	3,840	1.12	730	4.29	170	30.08
23	Philipsburg	00164-22	Philipsburg	2,335	43	0	646,942	4,997	1.11	277	2.14	129	2.10
24	Mahaffey	00010-21	Clearfield	137	10	0	620,441	272	1.06	4,529	1.99	2,281	5.21
25	Erie South	00259-31	Erie	2,489	58	0	601,811	5,672	1.03	242	2.28	106	2.19
26	Seward	00075-11	Johnstown	906	35	0	601,077	1,414	1.03	663	1.56	425	11.61

.

.

Penelec										·····			·
Circuit Rank	Substation	Gircuit Desc	District	Average Customers	Outages	Lockouts	Customer Minutes	Customers Affected	SAIDI Impact	SAID)	SAIFI	CAIDI	MAIFI
				-1	-2	-3	-4	-5	-6	-7	-7	-7	-7
27	Pittsburgh Avenue	00524-31	Erie	1,582	26	1	561,975	2,520	0.96	334	1.50	223	0.17
28	Brookville	00123-23	DuBcis	528	20	1	522,407	1,391	0.90	989	2.63	376	18.79
29	Grover	00527-63	Mansfield	1,107	57	0	515,898	1,357	0.88	466	1.23	380	7.87
30	Curryville	00644-71	Alicona	1,775	44	0	498,393	2,466	0.85	281	1.39	202	12.28
31	Clymer	00110-13	Indiana	1,055	30	1	493,482	2,581	0.85	463	2.42	191	11.47
32	Saxton	00625-73	Bedford	1,233	25	1	487,727	3,462	0.84	396	2.81	141	7.93
33	Edinboro	00419-34	Erie	457	10	1	480,307	693	0.82	1,028	1.48	693	3.82
34	Tunkhannock	00533-65	Montrose	1,235	41	0	472,374	1,768	0.81	382	1.43	267	8.41
35	Crown	00319-51	Oil City	1,322	67	1	418,998	3,446	0.72	317	2.61	122	25.99
j 36	Thompson	00436-65	Montrose	1,353	43	0	411,853	4,115	0.71	304	3.04	100	11.68
37	Portage	00081-72	Ebensburg	546	11	2	400,418	1,310	0.69	733	2.40	306	0.00
i 38	Brookville	00125-23	DuBois	625	24	0	398,007	3,131	0.68	637	5.01	127	5.40
39	Lenox	00755-65	Montrose	686	33	0	390,172	3,261	0.67	569	4.75	120	7.94
40	Park Plaza	00183-71	Altoona	1,488	37	1	386,658	2,212	0.66	260	1.49	175	2.99
41	Dixonville East	00120-13	Indiana	439	14	3	379,529	1,636	0.65	865	3.73	232	16.43
42	Tionesta	00344-51	Oil City	529	18	1	378,077	1,085	0.65	715	2.05	348	3.50
43	Logan	00700-81	Lewistown	1,024	23	0	376,352	2,318	0.65	368	2.26	162	8.85
44	Wyalusing	00532-62	Towanda	702	22	0	375,952	1,899	0.64	536	2.71	198	17.81
45	Tiffany	00435-65	Montrose	787	25	1	368,160	2,149	0.63	468	2.73	171	15.16
46	Tionesta Junction Sw Sta	00498-51	Oil Cdy	926	36	1	364,347	6,744	0.62	393	7.28	54	10.09
47	Mansfield	00699-63	Mansfield	752	30	2	359,222	1,771	0.62	478	2.36	203	0.30
48	Knox	00323-51	Oil City	1,322	42	0	357,790	2,206	0.61	271	1.67	162	5.36
49	Erie East	00234-31	Erie	1,002	56	2	357,330	2,665	0.61	357	2.66	134	7.97
50	Cambridge Springs	00461-52	Meadville	524	14	1	357,286	832	0.61	682	1.59	429	0.70
51	Hollidaysburg	00202-71	Atoona	887	11	3	349,927	2,697	0.60	395	3.04	130	1.25
52	Tower Hill	00581-63	Mansfield	516	26	0	341,954	879	0.59	663	1.70	389	10.01

.

.

Penelec						ما میں دارا دار بیا میں دارا دار			دومیرو ومیترد. اور دارم دار ایروس د				
Circuit Rank	Substation	Circuit Desc	District	Average Customers -1	Outages	Lockouts	Customer Minutes -4	Customers Affected	SAIDI Impact -6	SAIDI -7	SAIFI -7	CAIDI -7	LIADFI -7
53	South Mansfield	00619-63	Mansfield	518	20	5	338,037	3,065	0.58	653	5.92	110	15.44
54	Corry East	00440-43	Ērie	596	24	2	335,245	2,586	0.57	562	4.34	130	7.35
55	DuBois Central	00119-23	DuBois	1,049	27	0	328,097	2,349	0.56	313	2.24	140	1.59
56	Union City	00207-43	Erie	848	36	3	328,027	2,874	0.56	387	3.39	114	37.42
57	Glen Campbell	00680-21	Clearfield	464	20	0	327,374	1,721	0.56	706	3.71	190	12.80
58	East Pike	00095-13	Indiana	2,616	26	0	319,303	4,581	0.55	122	1.75	70	1.94
59	Viscose Hill	00116-81	Lewistown	628	8	1	314,540	799	0.54	501	1.27	394	3.68

.

.

.

Met-Ed)	• • •		1		ļ			
Circuit Rank	Substation	Circuit Desc	District	Average Customers (1)	Outages (2)	Lockouts (3)	Circuit Minutes (4)	Customer Affected (5)	SAIDI Impact (5)	SAIDI (7)	SAIFI (7)	GAIDI (7)	MAIFI (7)
1	Snydersville	00621-3	Streudsburg	1,755	5,478	45	2	1,441,753	821.51	2.63	3.12	263.19	0
2	Leesport	00811-1	Reading	1,481	7,046	43	3	1,233,291	832.74	2.25	4.76	175.03	0
3	Bernville	00786-1	Reading	1,823	3,606	75	0	1,126,264	617.81	2.05	1.98	312.33	0
4	Barto	00705-1	Boyertown	2,080	5,440	99	1	1,110,456	533.87	2.03	2.62	204.13	3.99
5	Mountain	00744-4	Hanover	1,809	5,427	94	0	1,007,840	557.13	1.84	3	185.71	3.76
6	Shawnee	00895-3	Stroudsburg	3,753	8,397	84	0	972,095	259.02	1.77	2.24	115.77	5.57
[7	Shawnee	00899-3	Stroudsburg	1,638	6,225	48	1	939,237	573.4	1.71	3.8	150.88	1.09
8	Bath	00873-3	Easton	2,136	4,216	60	0	842,405	394.38	1.54	1.97	199.81	3.99
9	Flying Hills	00776-1	Reading	1,488	2,324	40	0	809,292	543.88	1.48	1.56	348.23	6.75
10	Bern Church	00789-1	Reading	1,428	4,997	61	2	759,773	532.05	1.39	3.5	152.05	1.92
11	Birdsboro	00756-1	Reading	1,522	6,957	87	0	751,605	493.83	1.37	4.57	108.04	1.9
12	Birdsboro	00757-1	Reading	1,920	6,554	64	3	737,024	383.87	1.34	3.41	112.45	1.94
13	South Lebanon	00772-2	Lebanon	1,566	6,939	28	4	708,270	452.28	1.29	4.43	102.07	3.27
14	Mohnton	00123-1	Reading	638	884	13	0	703,230	1,102.24	1.28	1.39	795.51	1
15	Shawnee	00822-3	Stroudsburg	3,479	4,609	76	1	682,758	196.25	1.25	1.32	148.14	1.75
l 16	Baldy	00736-1	Reading	859	2,615	31	0	678,353	789.7	1.24	3.04	259.41	7.6
17	Gardners	00752-4	Hanover	1,415	3,925	61	0	642,507	454.07	1.17	2.77	163.7	4
18	Campbellown	00634-2	Lebanco	1,028	7,833	25	7	637,655	620.29	1.15	7.62	81.41	12.03
19	Frystown	00701-2	Lebanon	1,615	5,530	58	1	634,782	393.05	1.16	3.42	114.79	3.73
20	North Lebanon	00712-2	Lebanon	1,909	3,149	42	1	625,876	327.86	1.14	1.65	198.75	7,97
21	Yorkana	00708-4	York	1,465	5,734	30	1	561,304	383.14	1.02	3.91	97.89	5.17
22	Bern Church	00791-1	Reading	695	1,228	24	1	558,562	803.69	1.02	1.77	454.86	0.96
23	West Boyertown	00717-1	Boyertown	1,294	4,573	13	3	552,629	427.07	1.01	3.53	120.85	1
24	Angelica	00129-1	Reading	696	1,553	20	1	526,218	756.06	0.96	2.23	338.84	0
25	N. Bangor	00826-3	Easton	2,613	5,295	67	0	519,272	198.73	0.95	2.03	98.07	1.39
26	South Hamburg	00743-1	Reading	1,158	3,418	53	2	514,097	443.95	0.94	2.95	150.41	2.38
27	Barto	00706-1	Boyertown	2,662	3,973	79	1	506,576	190.3	0.92	1.49	127.5	4.99
28	Collins	00761-2	Lebanon	637	1,252	16	1	505,627	793.76	D.92	1.97	403.85	4.79
29	Swatara Hill	00764-2	Lebanon	1,474	3,506	27	2	500,786	339.75	0.91	2.38	142.84	0
30	Carsonia	00171-1	Reading	1,230	3,492	8	3	496,080	403.32	0.91	2.84	142.06	0

.

acus Rank						han a star of the second s	1,7,7,7			r =:			
	Saparadon	Cécuit Desc	District	Average			Circuit	Customer	· · · · · · · · · · · · · · · · · · ·		1) Le		e .
31	Ch.			Oussomers (1)	0::ages (2)	LOCKOUS (3)	MESSES	Affected	SAIDI Impact		}		
32	Cly	00722-4	York	<u>+</u>	<u> </u>		(4)	(5)	(6)	SAIDI (7)	SAIFI (7)	CADI(7)	
33	Graniville	00720-2	Lebanon	1,480	5,854	22	3	479,872			1	}	1 4750177
	Birchwood	00624-3		1,371	3,441	26			324.24	0.88	3.96	81.97	
34	Taxville	00572-4	Stroudsburg	2,009	2,692	25	<u> </u>	476,837	347.8	0.87	Z.51		5.26
35	Dillsburg	00746-4	York	3,133	6,591			441,090	219.56	0.8		138.58	13.94
36	Allen		Hanover	2,430	3,926	19	-1	434,381	138.65	0.79	1.34	163.85	0
37	Belfast	00503_4	Hanover	2,069		34	1	431,896	177.73		2.1	65.91	9,17
38		00812-3	Easton	1,174	3,785	40	0	427,419	206.58	0.79	1.62	110.01	0
	Frystown	00702-2	Lebanon		4,491	28	1	425,183		0.78	1.83	112.92	2.98
				1,045	3,336	23	2		362.17	0.78	3.83	94.67	
								411,153	393.45	0.75	3.19		0
												123.25	4.98

Supplemental Submission – Joint 2012 Quarterly Reliability Report for the period ending December 31, 2012

.

ATTACHMENT B

Worst Performing Circuits – Remedial Action

In addition to specific remedial efforts taken and planned for the worst performing 5% of circuits identified in 52 Pa Code § 57.195(e)(3), the Companies have identified circuits that have been on this list for one year or more, or in four out of six quarters, in accordance with the Stratified Management and Operations Audit Implementation Plan dated February 14, 2007, Recommendation XI-4 at Docket Number D-05MGT003.

Penn Po	wer							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters		
			Performance was driven by three outages, one caused by a non-preventable tree, of failure with two occurring during weather conditions.	one caused by lightning, ar	nd one caused by line			
1	1 Jackson	W730	The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12			
		,	Equipment that was broken by lightning was replaced at time of restoration	Complete	Jul-12			
			Cable was reattached at time of restoration	Complete	Oct-12			
			Performance was driven by four outages, one caused by lightning, two caused by e preventable tree with three occurring during weather conditions.	caused by a non-	1			
		D611	Equipment that was broken by lightning was replaced at time of restoration	Complete	Jul-12			
2	Evans City		The equipment failure was repaired at the time of restoration	Complete	Jul-12			
2	Evans City	0011	The equipment failure was repaired at the time of restoration	Complete	Jul-12			
			The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12			
			Field review of circuit to identify visible equipment failures	Complete	Oct-12			
			Performance driven by three outages two caused by non-preventable trees and one caused by lightning with two occurring during weather conditions.					
			The problem tree was removed and associated repairs were made at time of restoration	Complete	Mar-12			
3	Stoneboro	W-132	The problem tree was removed and associated repairs were made at time of restoration	Complete	May-12			
-			Reliability job to install fuses and replace arrestors	Complete	May-12			
			Protection review completed on circuit	Complete	May-12			
			Equipment that was broken by lightning was replaced at time of restoration	Complete	Jul-12			
			Reliability job to install fuses and replace arrestors	Complete	Jul-12			
			Field review of circuit to identify visible equipment failures	Complete	Sep-12			
			Performance was driven by two outages both caused by non-preventable trees.					
4	Stoneboro	oro W-130	The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12			
			Field review of circuit to identify visible equipment failures	Complete	Sep-12			
			Performance was driven by one outage caused by lightning during weather condition					
5	บกเอก	W-562	Equipment that was broken by lightning was replaced at time of restoration	Complete	Jul-12			
			Field review of circuit to identify visible equipment failures	Complete	Sep-12			

Penn Po	wer		ار این میں میں بیان کا ایر اور ایک کا ای ایک کا ایک کا		<u> </u>			
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters		
			Performance was driven by one outage caused by a non-preventable tree during we	sther conditions.				
			The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12			
6	Hadley	W-195	Reliability job to make two coordination changes	Complete	Aug-12			
		•	Field review of circuit to identify visible equipment failures	Complete	Sep-12			
			Reliability job to install fault indicators, fuses and replace switches	Complete	· 0ct-12			
			Forestry to trim circuit	To be completed 2013				
			Performance was driven by one outage caused by a non-preventable tree.					
7	Wheatland	W-149	The problem tree was removed and associated repairs were made at time of restoration	Complete	May-12			
			Performance was driven by one outage caused by a non-preventable tree.					
8	Bessemer	D-393	The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12			
	9 Hermitage	114 550	Performance was driven by one outage caused by lightning during weather condition	5.	·			
9	Hermitage	W-260	Equipment that was broken by lightning was replaced at time of restoration	Complete	Aug-12			
			Performance driven by one outage caused by a non-preventable tree.	· · · · ·	· · · · · · · · · · · · · · · · · · ·			
	Zelienople	D603	Problem tree was removed and associated repairs were made at time of restoration	Complete	Apr-11			
			Forestry to trim circuit	Complete	Dec-12	·		
		W-102	Performance driven by one outage caused by a non-preventable tree during weather conditions.					
	Canal		W-102	W-102	Problem tree was removed and associated repairs were made at time of restoration	Complete	May-11	
]]		Forestry to trim circuit	Complete	Dec-12			
			Performance driven by two outages one caused by a line failure and one caused by	a human error non-compa	юу.			
			Cable was reattached at time of restoration	Complete	Dec-11			
			Equipment that was broken due to farmer plowing field was repaired at time of restoration	Complete	May-12			
	Camp Reynolds	W-134	Protection review including replacement of three reclosers	Complete	Mar-12			
			Reliability job to replace one cutout and make one coordination change	Complete	Apr-12			
			Nine Fauf Indicators to be installed	Complete	Aug-12			
			Field review of circuit to identify visible equipment fadures	Complete	Sep-12			
			Forestry to trim circuit	To be completed 2013				
			Performance was driven by two outages both caused by non-preventable trees durin	·	/			
			The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12			
	Mars	D616	The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12			
			Field review of circuit to identify visible equipment failures	Complete	Oct-12			
			Forestry to trim circuit	To be completed 2013				

Penelec		- -							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters			
			Performance was driven by trees non-preventable and equipment failure during a m	inor storm.					
	[[Repair equipment damage	Complete	Apr-12				
1	Madera	00167-22	Repair equipment damage	Complete	May-12				
			Repair damage caused by a tree during a storm	Complete	May-12				
			Add additional protection per circuit coordination	To be completed 2013					
2	Lucerne	00088-13	Performance was driven by trees non-preventable during storm.						
£	Lucenne	00000-10	Repair damage caused by a tree during a storm	Complete	May-12				
			Performance was driven by line failure during a storm, trees non-preventable and ve	shicle contact.		30 2011 40 2011			
3	Madera	a 00166-22	a 00166-22	Repair line failure	Complete	May-12	10 2012		
			Repair damage from vehicle	Complete	Aug-12	20 2012 30 2012			
			Repair damage caused by a tree	Complete	Sep-12	40 2012			
		orth 00635-22	Performance was driven by line failure during a storm.						
			h 00635-22	00635-22		Repair line failure	Complete	May-12	
4	Bellwood North				Repair fine failure	Complete	May-12	1	
			Add addational protection per circuit coordination	To be completed 2013					
			Full cycle tree clearing	To be completed 2013					
			Performance was driven by trees non-preventable and line failure during a minor st	om.		3Q 2011 4Q 2011			
5	Salbx	00070-11	Repair damage caused by a tree during a storm	Complete	Nay-12	10 2012 20 2012			
			Repair line failure	Complete	Dec-12	30 2012 40 2012			
			Performance was driven by trees non-preventable during a minor storm.	<u> </u>					
6	Hooversville	00019-12	Repair damage caused by a tree during a storm	Complete	Jul-12				
			Add additional protection per circuit coordination	To be completed 2013					
			Performance was driven by trees non-preventable during a storm.						
7	Shawville	00151-21	Repair damage caused by a tree during a storm	Complete	May-12	1			
'	SUBWY	00131-21	Add additional protection per circuit coordination	To be completed 2013					
			Circuit inspection	To be completed 2013					

.

Peñelec		· · · ·					
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters	
			Performance was driven by trees non-preventable during a minor storm, lightning a	nd line failure.	-		
			Repair line failure	Complete	May-12	30 2011	
8	Union City	00206-43	Repair damage caused by lightning	Complete	May-12	40 2011	
	-		Repair damage caused by a tree during a storm	Complete	Jul-12	3Q 2012 4Q 2012	
			Add additional protection per circuit coordination	Complete	Dec-12		
_			Full cycle tree clearing	Complete	Dec-12		
			Performance was driven by lightning during a minor storm and equipment failure.		40 2011		
9	PhEpsburg	00162-22	Repair damage caused by lightning	Complete	May-12	10 2012 20 2012	
5	mapsourg		Repair equipment failure	Complete	Sep-12	30 2012	
			Full cycle tree clearing	Complete	Dec-12	40 2012	
		000 95 -13	Performance was driven by trees non-preventable during a minor storm and equipm	nent failure.			
10	East Pike		Repair damage caused by a tree during a storm	Complete	Jul-12	1	
			Repair equipment damage	Complete	Sep-12		
		00103-23	Performance was driven by a car pole accident and trees non-preventable during a	•			
				Repair damage from vehicle	Complete	Jan-12	10 2012
11	Timblin		Repair damage caused by a tree	Complete	May-12	2Q 2012 3Q 2012	
			Repair damage caused by a tree during a storm	Complete	Jul-12	40 2912	
			Circuit inspection	To be completed 2013			
			Performance was driven by equipment failure and lightning during a minor storm.			30 2011 40 2011	
12	Blairsville East	00082-13	Repair equipment failure	Complete	Apr-12	20 2012	
			Repair damage caused by lightning	Complete	May-12	30 2012 40 2012	
			Performance was driven by trees non-preventable and line failure during a storm.		1		
13	St. Benedict	00057-72	Repair line failure	Complete	Apr-12	1	
			Repair damage caused by a tree during a storm	Complete	May-12	1	
			Performance was driven by trees non-preventable during a minor storm.				
14	Edinboro	00421-34	Repair damage caused by a tree during a storm	Complete	Jul-12	1	
			Add additional protection per circuit coordination	To be completed 2013		1	

.

Peñèlec		<u> </u>						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters		
			Performance was driven by lightning, trees non-preventable and equipment failure.			· · · · · · · · · · · · · · · · · · ·		
15	DuBois	00124-23	Repair damage caused by lightning	Complete	Jul-12			
.5	000003	00124-23	Repair damage caused by a tree	Complete	Nov-12			
			Repair equipment failure	Complete	Dec-12			
			Performance was driven by trees non-preventable during a storm.					
			Repair damage caused by a tree during a storm	Complete	Apr-12			
16	Madera	00165-22	Repair damage caused by a tree during a storm	Complete	May-12			
			Add additional protection per circuit coordination	To be completed 2013				
			Circuit inspection	To be completed 2013				
	Warren South	with 00220-41	Performance was driven by non-preventable tree damage during a minor storm and a car pole accident.					
17			Repair damage caused by a tree during a storm	Complete	Feb-12	10 2012 20 2012		
			Repair damage from car pole accident	Complete	May-12	30 2012 40 2012		
		00580-63	Performance was driven by equipment failure.					
18	Tower Hill		Repair equipment damage	Complete	Feb-12			
	TO TO TAL		Repair equipment damage	Complete	Jul-12			
			Upgrade step transformer bank	Complete	Dec-12			
			Performance was driven by line failure during a minor storm.	••••••••••••••••••••••••••••••••••••••	•			
19	Rotting Meadows	00310-31	Add additional protection per circuit coordination	Complete	May-12			
			Repair fine faiture	Complete	Dec-12			
		· · ·	Performance was driven by trees non-preventable during a storm.		·			
20	Punxsutawney	00829-23	Repair damage caused by a tree during a storm	Complete	May-12			
			Full cycle tree clearing	To be completed 2013				
			Circuit inspection	To be completed 2013				
21	Samuel Rea	IRea 00034 74	00031-71 Performance was driven by trees non-preventable during a storm.			····		
21	Car Shop	VV001-1 1	Repair damage caused by a tree during a storm	Complete	Jul-12			

.

.

Penelec									
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters			
			Performance was driven by equipment feiture and an unknown cause during a minor storm as well as treas non-preventable.						
			Repair equipment fature	Complete	Jan-12	10 2012			
22	Edgewood	00089-13	Repair damage caused by a tree	Complete	May-12	20 2012 30 2012			
		•	Repair equipment failure during a storm	Complete	May-12	40 2012			
			Add additional protection per circuit coordination	Complete	Jun-12				
			Full cycle tree clearing	To be completed 2013					
•			Performance was driven by equipment failure and an unknown cause during a minor	r storm.					
23	Philipsburg	00164-22	Repair equipment failure	Complete	Dec-12				
			Add additional protection per circuit coordination	To be completed 2013					
24	Mahaffey	00010-21	Performance was driven by trees non-preventable during a minor storm.	·					
24	wanancy	00010-21	Repair damage caused by a tree during a storm	Complete	May-12				
		00259-31	Performance was driven by equipment failure, line failure and trees non-preventable	• •		30 2011			
			Repair damage caused by a tree during a storm	Complete	Feb-12	40 2011 10 2012			
25	Erie South		Repair equipment damage	Complete	Jun-12	20 2012			
			Repair line failure	Complete	Sep-12	30 2012			
			Add additional protection per circuit coordination	Complete	Jan-13	40 2012			
		00075-11	Performance was driven by trees non-preventable and an unknown cause during a minor storm.						
26	Seward		Repair damage caused by a tree during a storm	Complete	Jun-12				
			Add additional protection per circuit coordination	To be completed 2013					
			Performance was driven by lightning damage during a storm.	• · · · · · · · · · · · · · · · · · · ·					
27	Pätsburgh Avenue	00524-31	Repair damage caused by lightning	Complete	Jul-12				
			Circuit inspection	To be completed 2013					
			Performance was driven by equipment failure.	• • • •		10 2012			
	Denated	00400 00	Repair equipment damage	Complete	Jan-12	20 2012			
28	Brockville	00123-23	Add additional protection per circuit coordination	To be completed 2013	1	30 2012			
			Circuit inspection	To be completed 2013	j	40 2012			
			Performance was driven by non-preventable trees during a minor storm.						
29	Grover	00527-63	Repair damage caused by a tree during a storm	Complete	Apr-12	1Q 2012 2Q 2012			
			Add additional protection per circuit coordination	Complete	Sep-12	3Q 2012 4Q 2012			

.

Penelec								
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters		
			Performance was driven by lightning and line failure during a minor storm.					
30	Curryville	00644-71	Repair line failure	Complete	Jul-12			
			Repair damage caused by lightning	Complete	Jun-12			
			Performance was driven by trees non-preventable and equipment failure during a m					
			Repair damage caused by a tree and equipment failure during storm	Complete	Apr-12			
31	31 Clymer	Clymer 00110-	00110-13	Repair damage caused by a tree during a storm	Complete	Jul-12		
			Add additional protection per circuit coordination	To be completed 2013				
			Full cycle tree clearing	To be completed 2013				
32	Saxton	00625-73	Performance was driven by line failure and an unknown cause during a minor storm.					
32	52 - 58AIDII		Repair the failure	Complete	Sep-12			
			Performance was driven by trees non-preventable during a minor storm.	•	•			
33	Edinboro	00419-34	Repair damage caused by a tree during a storm	Complete	Jul-12			
			Circuit inspection	To be completed 2013				
		00533-65	Performance was driven by trees non-preventable.					
34	Tunkhannock		Repair damage caused by a tree	Complete	Aug-11	1Q 2012 2Q 2012		
			Repair damage caused by a tree	Complete	Nov-12	30 2012		
			Full cycle tree clearing .	To be completed 2013		4Q 2012		
			Performance was driven by line failure, equipment failure and non-preventable trees	s during a storm.				
35	Crown	00319-51	Repair line faiture	Complete	Feb-12			
55	Gorea	00312-31	Repair equipment failure	Complete	Aug-12			
			Repair damage caused by a tree	Complete	May-12			
			Performance was driven by trees non-preventable during a storm, animal contact an	nd equipment failure.				
			Repair equipment failure	Complete	May-12	3Q 2011 4Q 2011		
36	Thompson	00436-65	Repair damage caused by a tree during a storm	Complete	Jul-12	10 2012		
			Repair animal contact damage	Complete	Jul-12	2Q 2012 3Q 2012		
			Full cycle tree clearing	Complete	Sep-11	40 2012		
			Add additional protection per circuit coordination	Complete	Dec-12			

.

.

•

enelec					l L			
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters		
			Performance was driven by non-preventable trees and an unknown cause during a r	ninor storm.				
37	Portage	00081-72	Repair damage caused by a tree during a storm	Complete	Apr-12			
			Install additional arresters and fault indicators	Complete	0 ct -12			
·			Performance was driven by trees non-preventable and equipment failure.					
38	Brookville	00125-23	Repair equipment failure	Complete	Jul-12			
	DIGORTEG		Repair damage caused by a tree	Complete	Aug-12			
			Circuit inspection	To be completed 2013				
			Performance was driven by trees non-preventable and equipment failure.	30 2011				
39	39 Lenox 00	nox 00755-65	Repair damage caused by a tree	Complete	Jun-12	40 2011 10 2012 20 2012		
			Repair equipment damage	Complete	Jan-12	3Q 2012 4Q 2012		
40	Dock Diago	00183-71	Performance was driven by trees non-preventable during a storm.					
40	40 Park Plaza		Repair damage caused by a tree	Complete	Jul-12			
		00120-13	Performance was driven by trees non-preventable and equipment failure during a storm.					
41 .	Dixonville East		Repair equipment failure	Complete	Mar-12			
41 .	DECONVICE LASI	00120-15	Repair damage caused by a tree	Complete	Aug-12			
			Circuit inspection	To be completed 2013				
			Performence was driven by trees non-preventable during a storm.					
42	Tionesta	00344-51	Repair damage caused by a tree during a storm	Complete	Jun-12			
			Circuit inspection	To be completed 2013				
			Performance was driven by trees non-preventable during a storm.			3Q 2011		
43	Logan	00700-81	Add additional protection per circuit coordination	Complete	May-12	4Q 2011		
43	Logan	00100-01	Repair damage caused by a tree during a storm	Complete	Jun-12	10 2012 40 2012		
			Repair damage caused by a tree during a storm	Complete	Jul-12	44 2012		
			Performance was driven by a car pole accident and equipment failure.					
44	Wyalusing	00532-62	Repair car pole accident damage	Complete	War-12			
			Repair equipment failure	Complete	Aug-12			

.

.

Penelec						· ·		
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters		
			Performance was driven by line failure and trees non-preventable during a storm.			3Q 2011		
			Repair damage caused by a tree during a storm	Complete	Jun-12	40 2011		
45	Tiffany	00435-65	Repair line failure	Complete	Jun-12	1Q 2012 2Q 2012		
			Add additional protection per circuit coordination	Revised completion date: To be completed 2013		3Q 2012 4Q 2012		
			Full cycle tree clearing	To be completed 2013				
	Tionesta		Performance was driven by equipment failure and trees non-preventable during a st	prm.				
46	Junction Sw	00498-51	Repair damage caused by a tree during a storm	Complete	Jun-12			
	Sta		Repair equipment damage	Complete	Dec-12			
			Performence was driven by an unknown cause.					
47	Mansfield	00699-63	Line patrolled due to unknown caused outage	Complete	Apr-12			
47	mansher	00055-05	Add additional protection per circuit coordination	To be completed 2013				
			Circuit inspection	To be completed 2013				
			Performance was driven by equipment and line failure.					
48	Клох	00323-51	Repair line faiture	Complete	Aug-12			
40	NIDA	00325-51	Repair equipment damage	Complete	Sep-12			
			Circuit inspection	To be completed 2013				
		Performance was driven by equipment failure and vehicle damage.						
			Repair equipment damage	Complete	Jan-12	1Q 2012 2Q 2012		
49	Erie East	00234-31	Repair damage from vehicle	Complete	Sep-12	30 2012		
			Add additional protection per circuit coordination	Complete	Oct-12	40 2012		
			Full cycle tree clearing	To be completed 2013				
			Performance was driven by trees non-preventable during a storm.	-				
50	Cambridge Springs	00461-52	Repair damage caused by a tree during a storm	Complete	Jul-12			
			Circuit inspection	To be completed 2013				
		-	Performance was driven by trees non-preventable and an unknown cause during a r	ninor storm.				
51	Hollidaysburg	00202-71	Repair damage caused by a tree during a storm	Complete	Dec-12			
			Full cycle tree clearing	To be completed 2013				
			Performance was driven by lightning damage, animal contact and line failure.					
52	Tower Hill	00581-63	Repair damage from animal contact	Complete	Apr-12			
			Repair damage cause by lightning	Complete	May-12			

enelec		/-` ·-			[
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters	
	6 th		Performance was driven by line and equipment failure.				
53	South Mansfield	00619-63	Repair fine failure	Complete	Feb-12		
			Repair equipment damage	Complete	Sep-12		
			Performance was driven by frees non-preventable and line failure.			1	
			Repair the failure	Complete	Jun-12		
54	Corry East	00440-43	Repair damage caused by a tree	Complete	Aug-12		
			Full cycle tree clearing	To be completed 2013			
			Circuit inspection	To be completed 2013			
55	DuBois Central		Repair car pole accident damage	Complete	Mar-12		
			Repair line failure	Complete	Jul-12		
			Performance was driven by line failure and equipment failure.				
56	Union City	00207-43	Repair line faiture	Complete	Mar-12		
			Repair line faiture	Complete	Jun-12		
57	Glen Campbell	00680-21	Performance was driven by trees non-preventable during a minor storm.				
57		00000-21	Repair damage caused by a tree	Complete	May-12		
			Performance was driven by trees non-preventable during a minor storm, equipment	failure and line failure.	·	30 2011	
58	East Pike	00096-13	Repair damage caused by a tree	Complete	Ju⊢12	4Q 2011	
	LUSTING	00030-15	Repair line failure	Complete	Jul-12	1Q 2012 4Q 2012	
			Repair equipment failure	Complete	Jul-12	402012	
			Performance was driven by trees non-preventable during storm.				
59	Viscose Hill	00116-81	Repair damage caused by a tree during a storm	Complete	May-12		
			Add additional protection per circuit coordination	To be completed 2013		_	
			Performance was driven by trees non-preventable and an unknown cause during a s	storm.			
	Tiffany	00440-65	Add additional protection per circuit coordination	Revised completion date: To be completed 2013			
			Full cycle tree clearing	Complete	Dec-12		

•

enelec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of (Quarters
			Performance was driven by trees non-preventable during minor storm, equipment fa	allure and line failure.		
•	Laurei Lake	00449-65	Repair equipment damage	Complete	Jan-12	
			Add additional protection per circuit coordination	Revised completion date: To be completed 2013		
		Performance was driven by trees non-preventable during a storm.				
			Repair damage caused by a tree during a storm	Complete	Sep-11	3Q 2011 4Q 2011
	Brcoklyn	00749-65	Add additional protection per circuit coordination	Revised completion date: To be completed 2013		10 2012 20 2012
			Circuit inspection	Complete	Apr-12	
			Performance was driven by trees non-preventable and an unknown cause during a	storm.		30 2011
	Montrose	00457-65	Repair damage caused by a tree during a storm	Complete	Aug-11	40 2011
			Add addiional protection per circuit coordination	Revised completion date: To be completed 2013		10 2012 20 2012
	Lake Comp 00787-65 Performance was driven by trees non-preventable during a storm.					
	Lake Collid		Add additional protection per circuit coordination	Complete	Dec-12	•
	Starruca	00744-65	Performance was driven by trees non-preventable during a storm.			
	Charloca	00144-00	Add additional protection per circuit coordination	Complete	Oct-12	
	Lake Como	00786-65	Performance was driven by trees non-preventable during a storm.			
		00100-00	Add additional protection per circuit coordination	Complete	Oct-12	
	Thompson	00442-65	Performance was driven by trees non-preventable during a storm.			
	monpson	00442-05	Add additional protection per circuit coordination	Complete	Oct-12	
	Susquehanna	00279-65	Performance was driven by trees non-preventable during a storm.	▲ <u>•</u> • • • • •		
	Susquenanna	00219-00	Circuit inspection	Complete	Aug-12	
	Oakland	00132-65	Performance was driven by trees non-preventable during a storm.			
	Caxello	00102-00	Add additional protection per circuit coordination	Complete	Dec-12 .	
	Lake Como	00788-65	Performance was driven by trees non-preventable during a storm.	-	<u> </u>	
	Lake Como	00700-00	Add additional protection per circuit coordination	Complete	Oct-12	
	Brooktyn	00748-65	Performance was driven by trees non-preventable during a storm.			
	Brookyn	00740-03	Full cycle tree clearing	Complete	Jan-12	

.

.

Penelec		· · · ·				;;
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
			Performance was driven by line failure and trees non-preventable during a minor sto	orm, equipment failure and	a car pole accident.	
	Mansfield	00559-63	Add additional protection per circuit coordination	Complete	Aug-12	
			Full cycle tree clearing	Complete	Mar-12	
	Scalp Level	00932-11	Performance was driven by equipment failure during a minor storm.			
			Full cycle tree clearing	Complete	Jun-12	
	Russell Hill	00282-65	Performance was driven by trees non-preventable during a storm.			
	NUSSERIIM	00202-00	Full cycle tree clearing	Complete	Apr-12	
		Performance was driven by equipment and line failure during a minor storm.				
	McVeytown	00112-81	Add additional protection per circuit coordination	Complete	May-12	
			Circuit inspection	Complete	Aug-12	_
Ĩ	Mildred	00771-62	Performance was driven by trees non-preventable during a storm.			
	inidicu	00171-02	Add additional protection per circuit coordination	Complete	Dec-12	
			Performance was driven by equipment failure and line failure.			
	Mansfield	00558-63	Add additional protection per circuit coordination	Complete	Aug-12	
		000000	Circuit inspection	Complete	Aug-12	
			Full cycle tree clearing	Complete	Sep-12	
	Punxsutawney	00625-23	Performance was driven by trees non-preventable and line failure during a minor st	orm.		
	- anxiata timey	00020-20	Circuit inspection	Complete	Jun-12	
	East Towanda	00525-62	Performance was driven by lightning, equipment failure and trees non-preventable of	luring a minor storm.		
	Lesi towaliga	00020-02	Add additional protection per circuit coordination	Complete	Feb-12	
			Performance was driven by trees non-preventable, equipment failure and lightning	damage during minor storn	ns.	
	Union City	00206-43	Add additional protection per circuit coordination	Complete	Dec-12	
			Full cycle tree clearing	Complete	Dec-12	

Met-Ed							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6	
Nalik	30031811011	Gircuit		Completed	Completed	Quarters	
			Performance was driven by single storm on 5/26/12 which contributed to 37% of circ		r failure on 4/3/12 which		
			contributed 30% of circuit minutes and a vehicle accident on 11/22/12 which contributed 22% of minutes.				
			Replace switch	Complete	Jun-12		
1	Snydersville	00621-3	Replace recloser	Complete	Aug-12		
			Perform accelerated backbone and three phase assessment	Complete	Aug-12		
			Replace crossarm found during circuit assessment	Complete	Oct-12		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
			Performance was driven by four outages during two severe weather events caused by wehicle accidents (22%) and an outage caused by a crossarm problem (9%).	y wind and trees (51%), thr	ee outages caused by		
			Perform accelerated three phase assessment	Complete	Jan-12		
			Perform accelerated backbone assessment	Complete	Jan-12		
			Comprehensive tree trimming	Complete	Jan-12		
			Replace mainline crossarm from assessment	Complete	Feb-12		
			Replace mainline crossarm from assessment	Complete	Apr-12		
2	Leesport	00811-1	Replace mainline crossarm from assessment	Complete	May-12		
-	Leosport	00011-1	Spot forestry inspection	Complete	Nov-12		
			Engineering review for the installation of an additional mainline recloser	Complete	Dec-12		
			Pole top repair from assessment	To be completed 2013			
			Replace mainline crossarm from assessment	To be completed 2013			
			Replace maintine crossarm brace from assessment	To be completed 2013			
			Install fuse/bypass on mainline	To be completed 2013			
			Comprehensive circuit patrol	To be completed 2013			
			Install maintine recloser	To be completed 2013			
			Performance was driven by two outages related to a vehicle accident (67%) and an o	utage caused by lightning	(18%).		
			Perform accelerated backbone assessment	Complete	Jan-12		
			Replace mainline porcelain cutouts with polymer cutouts	Complete	Mar-12		
			Complete forestry assessment of three phase for SAIFI analysis	Complete	Mar-12		
			Replace mainline crossarm from backbone assessment	Complete	Apr-12	302011	
3	Bernville	00786-1	Replace mainline porcelain cutouts with polymer cutouts	Complete	Apr-12	402011	
3	Detuame	00700-1	Comprehensive circuit patrol	Complete	Apr-12	102012	
			Install mainline recloser	Complete	May-12	402012	
			Spot forestry inspection	Complete	Nov-12		
			install additional mainline tap fusing	Complete	Dec-12		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
	-		Comprehensive tree trimming	To be completed 2013			

Met-Ed			Press and the second			
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6
N.GIIK	JUDIELOU	Circuit	· · · · · · · · · · · · · · · · · · ·	Completed	Completed	Quarters
			Performance was driven by tree-caused outeges (61%) and a transmission substate	ion equipment problem (219	6).	
			Perform accelerated backbone assessment	Complete	Jan-12	
			Perform accelerated three phase assessment	Complete	Jan-12	
			Mainline forestry inspection	Complete	Mar-12	
			Install additional mainline tap fusing	Complete	Apr-12	
	Barto	00705-1	Engineering mainline protection coordination analysis	Compiete	Apr-12	
4	Band 00703-1	00705-1	Comprehensive tree trimming	Compiete	May-12	
			Transmission substation equipment repair	Complete	Jul-12	
		ł	Mainline forestry inspection	Complete	Aug-12	
			Spot forestry inspection	Complète	Sep-12	
			Spot forestry inspection	Complete	Nov-12	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
			Performance was driven by trees at 81% of circuit minutes.	•		
			Perform accelerated circuit reliability assessment of mainline	Complete	Mar-12	
			Perform accelerated circuit reliability assessment of three phase	Complete	War-12	302011
			Perform fuse changes at ten locations to improve circuit coordination	Complete	Jun-12	402011
5	Mountain	00744-4	Perform accelerated post storm forestry vegetation assessment	Complete	 Jul-12	102012
			Perform tree work identified during accelerated post storm forestry assessment	Complete	Jul-12	302012
			Perform follow up forestry vegetation assessment	Complete	Sep-12	402012
			Perform tree work identified during follow up forestry assessment	Complete	Sep-12	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
			Performence was driven by a single storm on 7/23/12 which contributed 36% of circ contributed 13% of circuit minutes.	uit minutes and a cutout fail	ure on 3/25/12 which	
			Perform accelerated backbone and three phase assessment	Complete	Jan-12	3Q2011 4Q2011
	_		Repair split pole top found on circuit assessment	Complete	Oct-12	102012
6	Shawnee	00895-3	Correct fuse coordination	Complete	Oct-12	202012
			Comprehensive tree trimming	Complete	Oct-12	302012
		ł	Perform accelerated backbone circuit assessment	To be completed 2013		402012
			Replace porcelain cutouts on circuit backbone with polymer cutouts	To be completed 2013		
			Performance was driven by non-preventable trees which contributed 47% of circuit minutes and equipment failure on 9/22/12 which contributed 15% of circuit minutes.	minutes, lightning which cor	ntributed 19% of circuit	
		1	Perform accelerated backbone and three phase assessment	Complete	Jan-12	
_			Perform accelerated single phase assessment	Complete	Feb-12	
7	Shawnee	00899-3	Comprehensive tree trimming	Complete	Dec-12	
			Install tap fuse on backbone	Complete	Dec-12	
		1	Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
		1	Engineering to evaluate additional radio controlled switch on circuit	To be completed 2013		

Met-Ed					- Ft	
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
			Performance was driven by a vehicle accident on 9/5/12 which contributed 57% of ci- contributed 18% of minutes.			dansio
8	Bath	00873-3	Perform accelerated backbone and three phase assessment	Complete	Jan-12	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
			Replace porcelain cutouts on circuit backbone with polymer cutouts	To be completed 2013	Ì	
			Performance was driven by two trees non-preventable outages during a severe storm tree crew (15%) and other trees non-preventable outages (28%).	n event (39%), an outage ca	aused by a non-company	
			Comprehensive tree trimming	Complete	May-12	
			Perform accelerated backbone and three phase assessment	Complete	Jul-12	
			Spot forestry patrol	Complete	Jul-12	
			Engineering review for the installation of an additional mainline recloser	Complete	Jul-12	
9	Flying Hills	00776-1	Spot tree removals	Complete	Sep-12	
			Engineering review for the creation of an additional circuit tie	Complete	Dec-12	
			Engineering circuit inspection	Complete	Dec-12	
			Spot forestry patrol	Complete	Dec-12	
			Spot tree trimming and removals (Freemansville Road)	To be completed 2013		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
			Install additional set of mainline disconnects	To be completed 2013		
•			Performance was driven by trees non-reventable outages (52%), outages caused by problems (10%).	wind and lightning (26%) (and underground cable	
			Replace underground cable in Davis Bridge Road underground residential distribution	Complete	Jan-12	
			Replace additional underground cable in Plum Creek Estates underground residential distribution	Complete	Jun-12	
10	Bern Church	00789-1	Spot forestry inspections	Complete	Aug-12	
			Fuse upgrades for tap coordination improvement	Complete	Aug-12	
]		Relocate maintine tap from off road location to along public roadway	Complete	Sep-12	
			Replace additional underground cable in Plum Creek Estates underground residential distribution	Complete	Oct-12	
			Perform accelerated backbone circuit assessment	To be completed 2013		

•

.

.

Met-Ed	<u> </u>						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6	
TODATION .		United it		Completed	Completed	Quarters	
			Performance was driven by trees non-preventable outages (61%) and an outage caused by a fuse holder problem (13%).				
			Proactive every other month mainline forestry inspection	Complete	Jan-12		
			Spot mainline tree trimming and removals	Complete	Jan-12		
			Replace crossarm from circuit assessment	Complete	Jan-12		
			Proactive every other month mainline forestry inspection	Complete	Mar-12		
			Spot mainline tree trimming and removals	Complete	. Apr-12	30,2011	
			Proactive every other month mainline forestry inspection	Complete	May-12		
			Spot mainline tree trimming and removals	Complete	Jun-12		
			Replace bypass disconnects mainline recloser	Complete	Jun-12	402011	
11	Birdsboro	00756-1	Perform accelerated backbone and three phase assessment	Complete	Jul-12	102012	
			Engineering review for the installation of an additional mainline reclose	er Complete	Jul-12	202012	
		1	Proactive every other month mainline forestry inspection	Complete	Sep-12	302012	
			Spot mainline tree trimming and removals	Complete	Oct-12	402012	
			Proactive every other month mainline forestry inspection	Complete	Nov-12		
			Replace mainline crossarm from assessment	Complete	Dec-12		
			Spot tree trimming and removals	Complete	Dec-12		
			Proactive every other month mainline forestry inspection	To be completed 2013			
			Upgrade mainline recloser and customer redistribution project	To be completed 2013			
			Comprehensive circuit patrol	To be completed 2013			
	1		Upgrade mainline disconnects to gang operated air break switch	To be completed 2013			

•

•

let-Ed	ب به چيت ۽ ج	· · · ·		· · · · · · · · · · · · · · · · · · ·	د. د غیرمود شروعی میکند در در د غیرمود شروعی میکند می	
	<u> </u>			Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6
Rank	Substation	Circuit	Remedial Action Planned or Taken	Completed	Completed	Quarters
			Performance was driven by trees non-preventable outages (37%) and an outage cau	ised by a broken crossarm	(25%).	
			Proactive every other month mainline forestry inspection	Complete	Jan-12	
			Spot mainline tree trimming and removals	Complete	Jan-12	1
		1	Perform engineering SAIFI improvement study	Complete	Feb-12	
			Replace primary underground cable and submersibles in Maple Springs underground residential distribution	Complete	Mar-12	
			Proactive every other month mainline forestry inspection	Complete	Mar-12	1
			Spot maintine tree trimming and removals	Complete	Apr-12	1
			Proactive every other month mainline forestry inspection	Complete	May-12	1
	ľ		Replace mainline crossarm from assessment	Complete	May-12	302011
			Spot mainine tree trimming and removals	Complete	Jun-12	402011
			Replace mainline crossarm from assessment	Complete	Jun-12	102012
12	Birdsboro	00757-1	Upgrade mainline disconnects to gang operated air break switch	Complete	Jun-12	202012
			Perform accelerated backbone assessment	Complete	Jun-12	302012
			Perform accelerated three phase assessment	Complete	Jun-12	402012
			Engineering review for the installation of an additional mainline recloser	Complete	Jul-12	
			Complete forestry assessment of three phase for SAIFI analysis	Complete	Sep-12	
			Proactive every other month mainline forestry inspection	Complete	Sep-12	1
			Spot mainline tree trimming and removals	Complete	Oct-12	1
			Proactive every other month mainline forestry inspection	Complete	Nov-12	1
			Spot tree trimming and removals	Complete	Dec-12	1
			Proactive every other month mainline forestry inspection	To be completed 2013		1
			Replace additional mainline crossarms from assessment	To be completed 2013		
			Comprehensive circuit patrol	To be completed 2013		
	ľ		Performance was primarily driven by vehicle accidents (57%), tree caused damage	(21%) and forced outages	(16%).	
			Perform accelerated three phase circuit assessment	Complete	Jul-12	1
13	South Lebanon	00772-2	Perform accelerated backbone assessment	Complete	Jul-12	1
15	Soun Leoanon	00772-2	Perform accelerated backbone and three phase circuit assessment	To be completed 2013		1
			Replace deteriorated crossarm	To be completed 2013		
			Install fault indicators two locations	To be completed 2013	1	
			Performance was driven by a trees non-preventable outage during a severe storm ev	vent that included a broken	pole (90%).	
			Comprehensive circuit patrol	Complete	Apr-12	1
14	Mohnton	00123-1	Repair sink hole surrounding mainline pole	Complete	May-12]
	l		Perform accelerated backbone and three phase circuit assessment	To be completed 2013		1
			Replace mainline pin insulator	To be completed 2013	1	

Met-Ed				é	· · · · · · · · · · · · · · · · · · ·		
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6	
Addix	3003/2004	Gircan		Completed	Completed	Quarters	
			Performance was driven by non-preventable trees which contributed 41% of circuit minutes and equipment failure which contributed 24% of circuit minutes.				
			Comprehensive tree trimming	Complete	Jan-12	302011	
15	Shawnee	00822-3	Perform accelerated backbone and three phase assessment	Complete	Jan-12	4Q2011	
15	Sharriee	5/18 WHEE 00022-5	Install fault indicators	Complete	Mar-12	102012	
			Replace three sets of fault indicators	Complete	Aug-12	402012	
			Repair conditioned items from circuit assessment	Complete	Sep-12		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
			Performance was driven by an outage during a severe storm event where no perman preventable outages (39%).	ent condition was identified	(42%) and trees non-		
			Complete mainline switch repair	Complete	Feb-12		
		l.	Install fuse/bypass on mainline	Complete	Feb-12		
		· ·	Install additional mainline tap fuses	Complete	Mar-12		
16	Baldy	00736-1	Replace mainline crossarms from comprehensive patrol	Complete	Jun-12		
			Engineering review for the installation of an additional mainline recloser	Complete	Jul-12		
			Comprehensive tree trimming	Complete	Dec-12		
			Install new mainline recloser	To be completed 2013			
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
		1	Upgrade and relocate existing mainline recloser	To be completed 2013			
			Performance was driven by trees at 63% of circuit minutes and a capacitor bank pro	blem at 16% of circuit mini	ries.		
			Perform accelerated circuit reliability assessment of mainline	Complete	Apr-12		
			Perform accelerated circuit reliability assessment of three phase	Complete	Apr-12	402011	
17	Gardners	00752-4	Perform accelerated circuit reliability assessment of single phase backbone	Complete	Apr-12	102012 202012	
.,	Gardina's	001 32-4	Perform post Hurricane Sandy accelerated circuit reliability assessment of mainline	Complete	Nov-12	302012	
			Perform post Hurricane Sandy accelerated circuit reliability assessment of three phase	Complete	Nov-12	402012	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
			Performance was primarily driven by line failures (61%) and outages of unknown ca	use (35%).			
			Comprehensive tree trimming	Complete	Jun-12		
			Comprehensive circuit patrol	Complete	Aug-12		
18	Campbelitown	00634-2	Install fault indicators at two locations	Complete	Aug-12		
			Replace recloser on circuit backbone	To be completed 2013			
			Perform accelerated backbone circuit assessment	To be completed 2013			
			Replace poles at three locations to improve clearance	To be completed 2013			

.

Aet-Ed						
0k	Cubatation	Cimercia	Downsting Addison Discount of Takan	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6
Rank	Substation	Circuit	Remedial Action Planned or Taken	Completed	Completed	Quarters
19	Frystown	00701-2	Performance was primarily driven by equipment failure (45%), line failure (19%), t origin (13%).	ree caused demage (17%) an	d outages of unknown	
19	Frystown	00701-2	Comprehensive circuit patrol	To be completed 2013		
			Replace insulators on three phase at one location	To be completed 2013		
			Performance was primarily driven by vehicle accidents (54%) and tree caused out	ages (37%).		
			Replace deteriorated crossarm	To be completed 2013		
20	North Lebanon	00712-2	Perform accelerated backbone circuit assessment	To be completed 2013		
			Comprehensive tree trimming	To be completed 2013		
			Replace recloser and control with triple single unit	To be completed 2013		
			Performance was driven by vehicle caused outages (74% of minutes).			
			Perform accelerated circuit reliability assessment of backbone	Complete	May-12	
			Perform accelerated circuit reliability assessment of three phase	Complete	May-12	302011
			Forestry to perform on cycle comprehensive circuit tree trimming	Complete	May-12	402011
21	Yorkana	00708-4	Personal letter to be sent to each customer on this circuit explaining reliability improvements	Complete	May-12	102012 202012
			Reconfigure circuit to minimize line exposure	Complete	May-12	302012
			Perform accelerated single phase assessment	Complete	Jun-12	402012
			Perform accelerated backbone and three phase circuit assessment	Complete	Jun-12	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
			Performance was driven by two outages during a severe weather event caused by	wind and a tree (86%).		
	Dura Ohurah	00791-1	Install additional mainline tap fuses	Complete	Jun-12	
22	Bern Church	00791-1	Spot forestry inspection	Compiete	Aug-12	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
			Performance was driven by two trees non-preventable outages (74%).			
			Perform accelerated backbone and three phase assessment	Complete	Jul-12	
23	West Boyertown	00717-1	Comprehensive tree trimming	Complete	Oct-12	
			Install additional mainline tap fusing	To be completed 2013		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
			Performance was driven by trees non-preventable outages (53%) and an outage c (30%).	aused by lightning during a s	evere storm event	
24	Angelica	00129-1	Comprehensive circuit patrol	Complete	May-12	
			Comprehensive tree trimming on substation source circuit	Complete	Dec-12	
			Perform accelerated backbone circuit assessment	To be completed 2013		
		Performance was driven by non-preventable trees which contributed 40% of circuit minutes and 25% of minutes due to an outage of unknown cause on 11/28/12.				3Q2011
25	N. Bangor	00826-3	Perform accelerated backbone and three phase assessment	Complete	Mar-12	402011
	-		Forestry to perform mid-cycle inspection	Complete	Nov-12	302012
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		402012

Met-Ed	> * *	+					
				Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6	
Rank	Substation	Circuit	Remedial Action Planned or Taken	Completed	Completed	Quarters	
			Performance was driven by two outages caused by crossarm problems (41%) and t	rees non-preventable outag	es (35%).		
			Perform accelerated backbone assessment	Complete	Jul-12		
			Lîne Manager mainline patrol	Complete	Jul-12		
			Mainline crossarm replacements	Complete	Jul-12		
26	South Hamburg	00743-1	Engineering review for the installation of an additional mainline recloser	Complete	Jul-12		
			Comprehensive tree trimming	Complete	Dec-12		
			Replace mainline crossams from backbone assessment	To be completed 2013			
			Comprehensive circuit patrol	To be completed 2013			
			Performance was driven by a transmission substation equipment problem (42%) and caused by trees (40%).	d two outages during a seve	ere weather event		
			Spot forestry patrol	Complete	Jan-12		
			Install additional mainline tap fusing	Complete	Apr-12		
27	Barto	00706-1	Comprehensive tree trimming	Complete	Apr-12		
			Transmission substation equipment repair	Complete	Jul-12		
			Engineering review for the installation of additional mainline reclosers	Complete	Jul-12		
			Spot forestry inspection	Complete	Nov-12		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
			Performance was primarily driven by tree caused outages (91%).	•			
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
28	Collins	00761-2	Comprehensive tree trimming	To be completed 2013			
			Replace deteriorated crossarm	To be completed 2013	,		
			Replace deteriorated crossarm	To be completed 2013			
			Performance was primarily driven by vehicle accidents (55%), outages of unknown origins (18%), equipment failure (14%) and line failures (8%).				
			Perform accelerated backbone and three phase circuit assessment	Complete	May-12	102012	
29	Swatara Hill	00764-2	Replace deteriorated crossarm	Complete	Nov-12	202012 302012	
			Replace deteriorated crossarm	Complete	Nov-12	402012	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		THE TE	
		ļ.	Comprehensive tree trimming	To be completed 2013			
			Performance was driven by an outage caused by line failure while circuit was used lightning during a severe storm event (31%) and an outage caused by a fuse holder	•	5), an outage caused by		
30	Carsonia	00171-1	Perform accelerated backbone assessment	Complete	Sep-12		
			Perform accelerated backbone circuit assessment	To be completed 2013			
			Performance was driven by tree caused outages (88% of minutes).				
				Complete	Oct-12		
			Performance was driven by tree caused outages (88% of minutes).		Oct-12 Dec-12		
			Performance was driven by tree caused outages (88% of minutes). Install radio controlled switch and radio controlled recloser with fauit indicators	Complete			
31	Cly	00722-4	Performance was driven by tree caused outages (88% of minutes). Install radio controlled switch and radio controlled recloser with fault indicators Perform accelerated circuit reliability assessment of backbone	Complete Complete	Dec-12		
31	Ciy	00722-4	Performance was driven by tree caused outages (88% of minutes). Install radio controlled switch and radio controlled recloser with fault indicators Perform accelerated circuit reliability assessment of backbone Perform accelerated circuit reliability assessment of three phase	Complete Complete Complete	Dec-12 Dec-12		
31	Ciy	00722-4	Performance was driven by tree caused outages (88% of minutes). Install radio controlled switch and radio controlled recloser with fault indicators Perform accelerated circuit reliability assessment of backbone Perform accelerated circuit reliability assessment of three phase Perform mid-cycle forestry patrol	Complete Complete Complete Complete	Dec-12 Dec-12 Dec-12		

<u>Met-Ed</u>						
Dank	Substation	Ciencit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6
Rank	Substation	Circuit	Remedial Action Planned of Taken	Completed	Completed	Quarters
			Performance was primarily driven by tree caused damage (37%), equipment damage a line failure (8%).	ge (36%), a scissor lift conta	cting the line (16%) and	
32	Grantville	00720-2	Comprehensive tree trimming	To be completed 2013		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
			Repair pole top	To be completed 2013		
33	Birchwood	00624-3	Performance was driven by a vehicle accident on 4/9/12 which contributed 42% of which contributed 48% of circuit minutes.	circuit minutes <mark>and an in</mark> sula	tor failure on 5/4/12	
			Perform accelerated backbone circuit assessment	To be completed 2013		
			Performance was driven by vehicle caused outages (77% of minutes).	· · · · · · · · ·		
			Perform accelerated circuit reliability assessment of backbone	Complete	Jun-12	
			Perform accelerated circuit reliability assessment of three phase	Complete	Jun-12	
			Perform SAIFI analysis initiative study	Complete	Apr-12	
34	Taxville	00572-4	Install fault indicators on the circuit three phase backbone	Complete	Sep-12	
			Replace/Repair high priority items identified during circuit patrol	Complete	Sep-12	
			Install additional fuse on the circuit	Complete	0ct-12	
			Perform accelerated backbone circuit assessment	To be completed 2013		
			Comprehensive tree trimming	To be completed 2013		
			Performance was driven by a conductor problem that accounted for 63% of circuit i	minutes and trees that accou	nted for 19%.	
		i i	Perform replacement of one priority one pole	Complete	Feb-12	
			Perform fuse changes at five locations to improve circuit coordination	Complete	Jun-12	
35	Dillsburg	00745-4	Perform accelerated circuit reliability assessment of three phase	Complete	Aug-12	
			Perform accelerated backbone assessment	Complete	Aug-12	
			Replace high priority items identified during circuit patrol	Complete	Dec-12	
			Perform accelerated backbone circuit assessment	To be completed 2013		
			Performance was driven by trees at 49% of circuit minutes and a vehicle related out	tage accounting for 22%.		
			Perform fuse changes at five locations to improve circuit coordination	Complete	Jun-12	
36	Allen	00503-4	Perform accelerated circuit reliability assessment of mainline	Complete	Sep-12	
			Perform accelerated circuit reliability assessment of three phase	Complete	Sep-12	
			Perform accelerated backbone circuit assessment	To be completed 2013		
37	Bolfast	00812-3	Performance was driven by a conductor problem on 8/4/12 which contributed 45% contributed 36% of circuit minutes.	of circuit minutes and non-pr	eventable trees which	
57	Belfast	00012-3	Perform accelerated backbone circuit assessment	To be completed 2013		
			Comprehensive tree trimming	To be completed 2013		

٠

				Status of Remedial Work	Date Remedial Work	Appeared in 4 of (
Rank	Substation	Circuit	Remedial Action Planned or Taken	Completed	Completed	Quarters	
			Performance was primarily driven by lightning damage (40%), vehicle accidents (25%), line failures (20%) and tree caused outages (9%).				
			Review step bank fusing	Complete	Apr-12		
		İ	Perform accelerated three phase circuit assessment	Complete	Jun-12	102012	
38	Frystown	00702-2	Replace crossarm and broken insulators	Complete	Jun-12	202012	
50	riystown	00102-2	Replace deteriorated crossarm	Complete	Dec-12	302012	
			Perform accelerated backbone circuit assessment	To be completed 2013		402012	
			Comprehensive circuit patrol	To be completed 2013			
			Install fault indicators one locations	To be completed 2013			
			Replace deteriorated crossarm	To be completed 2013			
			Performance was driven by trees non-preventable outages (44%) and two vehicle a	ccidents (27%).			
			Perform accelerated three phase assessment	Complete	Nov-11		
			Perform accelerated backbone assessment	Complete	Nov-11		
			Perform engineering SAIFI improvement study	Complete	Dec-11		
			Install additional one phase mainline tap fuses	Complete	Jan-12	302011	
	Ringing Rocks	00708-1	Install additional mainline recloser	Complete	Mar-12	402011 102012 202012 302012	
			Complete forestry assessment of three phase for SAIFI analysis	Complete	May-12		
			Complete accelerated backbone and three phase assessment for SAIFI analysis	Complete	Jun-12		
			Install additional mainline tap fuses	Complete	Aug-12		
			Spot forestry inspection	Complete	Nov-12		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
			Comprehensive tree trimming	To be completed 2013			
			Performance was driven by trees non-preventable outages (67%).	· · · · · · · · · · · · · · · · · · ·			
			Perform fautted circuit indicator installation engineering study	Complete	Aug-11		
			Perform mid-cycle forestry patrol	Complete	Jun-12 Jun-12 Dec-12 Nov-11 Nov-11 Dec-11 Jan-12 Mar-12 Mar-12 May-12 Jun-12 Aug-12 Nov-12		
			Perform accelerated three phase assessment	Complete	Dec-11	302011	
			Perform accelerated backbone assessment	Complete	Dec-11	402011	
	Lynnville	00737-1	Install overhead fault indicators at nine locations	Complete	Dec-11	1Q2012 2Q2012	
			Replace mainline recloser battery	Complete	May-12	202012	
			Perform accelerated backbone and three phase assessment	Complete	Jul-12		
		j	Complete engineering mainline coordination study	Revised Completion Date	Jan-13		
			Comprehensive tree trimming	To be completed 2013			

.

Met-Ed		l				
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6
	Substation	Girculi		Completed	Completed	Quarters
			Performance was driven by trees non-preventable outages (76%).			
			Replace mainline crossarm	Complete	Sept-11	
			Repair mainline switch	Complete	0ct-11	
			Mainline forestry spot tree trimming and removal	Complete	Dec-11	
			Perform accelerated three phase and backbone assessment	Complete	Dec-11	302011
	Bernville	00787-1	Comprehensive circuit patrol	Complete	Apr-12	4Q2011 1Q2012
			Replace crossarms from circuit assessment	Complete	Apr-12	202012
			Replace batteries on mainline reclosers	Complete	Jun-12	142012
			Replace arresters on mainline recloser	Complete	Dec-12	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		
	ļ		Comprehensive tree trimming	To be completed 2013		
			Performance was driven by tree caused outages (79% of minutes).			
			Perform accelerated backbone and three phase assessment	Complete	Jul-11	302011
	115-d-ss	00705 4	Perform accelerated circuit reliability assessment of backbone	Complete	May-12	402011
	Windsor	00795-4	Perform accelerated circuit reliability assessment of three phase	Complete	May-12	102012
			Comprehensive tree trimming	Complete	Dec-12	302012
			Comprehensive circuit patrol	To be completed 2013		
			Performance was driven by non-preventable tree caused outages (59% of minutes) . Perform accelerated backbone and three phase assessment	and one vehicle caused out Complete	age (36% of minutes). Dec-11	
			Install additional fusing on the circuit	Complete	Mar-12	302011
	Windsor 00796	00796-4	Perform accelerated circuit reliability assessment of backbone	Complete	May-12	402011
			Perform accelerated circuit reliability assessment of three phase	Complete		
				Complete	May-12	102012
			install additional fuse on the circuit	Complete	May-12 Mar-12	102012 202012
		:	Install additional fuse on the circuit Comprehensive tree trimming	·		
				Complete	Mar-12	
		:	Comprehensive tree trimming	Complete Complete	Mar-12	
	1		Comprehensive tree trimming Comprehensive circuit patrol	Complete Complete	Mar-12	
			Comprehensive tree trimming Comprehensive circuit patrol Performance was driven by non-preventable tree caused outages (61% of minutes).	Complete Complete To be completed 2013	Mar-12 Dec-12	
			Comprehensive tree trimming Comprehensive circuit patrol Performance was driven by non-preventable tree caused outages (61% of minutes). Perform accelerated backbone and three phase assessment	Complete Complete To be completed 2013 Complete	Mar-12 Dec-12 Nov-11	
			Comprehensive tree trimming Comprehensive circuit patrol Performance was driven by non-preventable tree caused outages (61% of minutes). Perform accelerated backbone and three phase assessment Install additional fusing on the circuit	Complete Complete To be completed 2013 Complete Complete	Mar-12 Dec-12 Nov-11 Mar-12	202012
			Comprehensive tree trimming Comprehensive circuit patrol Performance was driven by non-preventable tree caused outages (61% of minutes). Perform accelerated backbone and three phase assessment Install additional fusing on the circuit Install additional fusing on the circuit	Complete Complete To be completed 2013 Complete Complete Complete	Mar-12 Dec-12 Nov-11 Mar-12 Mar-12	
	Windsor	00797-4	Comprehensive tree trimming Comprehensive circuit patrol Performance was driven by non-preventable tree caused outages (61% of minutes). Perform accelerated backbone and three phase assessment Install additional fusing on the circuit Install additional fusing on the circuit Perform accelerated circuit reliability assessment of backbone	Complete Complete To be completed 2013 Complete Complete Complete Complete	Mar-12 Dec-12 Nov-11 Mar-12 Mar-12 Jun-12	302011
	Windsor	00797-4	Comprehensive tree trimming Comprehensive circuit patrol Performance was driven by non-preventable tree caused outages (61% of minutes). Perform accelerated backbone and three phase assessment Install additional fusing on the circuit Install additional fusing on the circuit Perform accelerated circuit reliability assessment of backbone Perform accelerated circuit reliability assessment of three phase	Complete Complete To be completed 2013 Complete Complete Complete Complete Complete	Mar-12 Dec-12 Nov-11 Mar-12 Mar-12 Jun-12 Jun-12	202012 302011 402011
	Windsor	00797-4	Comprehensive tree trimming Comprehensive circuit patrol Performance was driven by non-preventable tree caused outages (61% of minutes). Perform accelerated backbone and three phase assessment Install additional fusing on the circuit Install additional fusing on the circuit Perform accelerated circuit reliability assessment of backbone Perform accelerated circuit reliability assessment of three phase Replace/repair high priority items identified during circuit patrol	Complete Complete To be completed 2013 Complete Complete Complete Complete Complete Complete	Mar-12 Dec-12 Nov-11 Mar-12 Jun-12 Jun-12 Dec-12	202012 302011 402011 102012
	Windsor	00797-4	Comprehensive tree trimming Comprehensive circuit patrol Performance was driven by non-preventable tree caused outages (61% of minutes). Perform accelerated backbone and three phase assessment Install additional fusing on the circuit Install additional fusing on the circuit Perform accelerated circuit reliability assessment of backbone Perform accelerated circuit reliability assessment of three phase Replace/repair high priority items identified during circuit patrol Comprehensive tree trimming	Complete Complete To be completed 2013 Complete Complete Complete Complete Complete Complete Complete	Mar-12 Dec-12 Nov-11 Mar-12 Jun-12 Jun-12 Dec-12 Nov-12	202012 302011 402011 102012
	Windsor	00797-4	Comprehensive tree trimming Comprehensive circuit patrol Performance was driven by non-preventable tree caused outages (61% of minutes). Perform accelerated backbone and three phase assessment Install additional fusing on the circuit Install additional fusing on the circuit Perform accelerated circuit reliability assessment of backbone Perform accelerated circuit reliability assessment of three phase Replace/repair high priority items identified during circuit patrol Comprehensive tree trimming Perform accelerated circuit reliability assessment of backbone	Complete Complete To be completed 2013 Complete Complete Complete Complete Complete Complete Complete Complete Complete	Mar-12 Dec-12 Nov-11 Mar-12 Jun-12 Jun-12 Dec-12 Nov-12 Dec-12	202012 302011 402011 102012

<u>Aet-Ed</u>							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6	
NGIIN	3003/8/10/1	oncan		Completed	Completed	Quarters	
			Performance was driven by vehicle accidents which contributed 52% of circuit minu	les.		-	
			Install fauß indicators	Complete	Nov-11	ł	
			Perform SAIFI analysis initiative study	Complete	Dec-11	200044	
	S. Nazareth	00809-3	Perform accelerated backbone and three phase assessment	Complete	Feb-12	3Q2011 4Q2011	
	S. Nazarelli	00009-3	Comprehensive tree trimming	Complete	Mar-12		
			Install SCADA controlled switch	Complete	May-12		
			Replace porcelain cutouts on circuit backbone with polymer cutouts	Complete	Dec-12		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
		Performance was driven by non-preventable trees which contributed 63% of circuit minutes and lightning which contributed 26% of circuit minutes.					
			Study automation of sectionalizer on circuit	Complete	Sep-11	302011	
	Fox Ha	00816-3	Perform accelerated backbone and three phase assessment	Complete	Jan-12	402011	
	FOX THE	00010-3	Correct fuse miscoordinations identified during SAIFI analysis	Complete	Mar-12	102012	
			Replace sectionalizer with SCADA switch	Complete	Mar-12	202012	
			Comprehensive tree trimming	Complete	Apr-12		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
			Performance was driven by trees at 76% of circuit minutes. One tree related outage	accounted for 66% of the ci	rcuit's minutes.		
			Perform accelerated circuit reliability assessment of mainline	Complete	Jul-11		
			Perform accelerated circuit reliability assessment of three phase	Complete	Aug-11		
:			Perform accelerated circuit reliability assessment of single phase	Complete	Aug-11		
		Dillsburg 00749-4	Install a total of six fault circuit indicators at two locations on the circuit	Complete	Nov-11	302011	
	Dillehung		Perform SAIFI analysis initiative study	Complete	Dec-11	402011	
	Dasburg		Replace/repair high priority items identified during circuit patrol	Complete	Mar-12	102012	
			Perform replacement of five priority one poles	Complete	Mar-12	202012	
			Perform accelerated circuit reliability assessment of mainline	Complete	May-12		
			Perform accelerated circuit reliability assessment of three phase	Complete	May-12		
			Replace/repair high priority item identified during circuit patrol	Complete	Nov-12		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013		402011 102012 202012 302011 402011 102012 202012 302011 402011	
			Performance was primarily driven by wind caused damage (62%) and vehicle accide	ents (32%).			
			Install fault indicators at four locations	Complete	Sep-11		
			Replace deteriorated crossarm	Complete	Feb-12	302011	
		00715-2	Replace deteriorated crossarm	Complete	Mar-12	4Q2011	
	North Lebanon	00/15-2	Forestry patrol of backbone and all of three phase beyond recloser 71512	Complete	Mar-12	102012	
			Perform accelerated backbone and three phase circuit assessment	Complete	Jun-12	202012	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
			Comprehensive tree trimming	To be completed 2013			
		 	Performance was driven by equipment failure (54%) and trees non preventable (109				
	S. Hamburg	00801-1	Install additional fusing	Complete	Dec-12		
			Three phase pole repair from three phase assessment	Complete	Dec-12		

let-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6
ABUN	300305000	oncon	Remedial Report Planted of Taken	Completed	Completed	Quartera
	Myerstown	00750-2	Performance was primarily driven by tree caused outages (81%) and vehicle caus	ed outages (11%).		
	myerstown	00700-2	Transfer customers onto 751-2 line	Complete	Sep-12	
			Performance was primarily driven by tree caused outages (94%).			
			Repair slack in the span	Complete	Sep-12	
	Collins	00760-2	Replace failing crossarm	Complete	Aug-12	
	couns	00700-2	Mid-cycle trimming identified in patrol	Complete	Mar-12	
			Repair crossarm brace	Complete	Jul-12	
			Repair crossarm brace	Complete	Jul-12	
-			Performance was driven by a wind storm (87% of minutes in one event caused by	a tornado).		
	Taxville	₫e 00575-4 F	Perform accelerated circuit reliability assessment of backbone	Complete	Mar-12	
			Perform accelerated circuit reliability assessment of three phase	Complete	Mar-12	
			Performance driven by a storm related conductor problem that broke a cutout acc	ounting for 49% of circuit min	utes and 43% of circuit	
		00740-4	minutes due to trees during the 5/26/11 tornedo.			
			Install a total of nineteen fault current indicator at seven locations on the circuit	Complete	Jul-11	3Q2011 4Q2011 1Q2012
	Mountain		Perform accelerated circuit reliability assessment of mainline	Complete	Nov-11	
			Perform accelerated circuit reliability assessment of three phase	Complete	Nov-11	
			Perform accelerated circuit reliability assessment of single phase	Complete	Nov-11	
			Install sectionalizers at two locations	Complete	Jan-12	
			Perform accelerated circuit reliability assessment of mainline	Complete	Mar-12	
			Perform accelerated circuit reliability assessment of three phase	Complete	Mar-12	
			Replace/repair high priority items identified during circuit patrol	Complete	May-12	
			Performance driven by a wind storm (71% of minutes caused by a tornado).			
	Taxville	00573-4	Perform accelerated circuit reliability assessment of backbone	Complete Mar-	Mar-12	
	1 BAYWC	1dxvwe 00373-4	Perform accelerated circuit reliability assessment of three phase	Complete	Mar-12	
			Install an additional reclosers to protect the circuit three phase	Complete	Dec-12	
	North Cornwall	00610-2	Performance was primarily driven by vehicle accidents (31%), tree damage (34%)	and an outage of unknown of	igin (33%).	402011 102012
			Comprehensive tree trimming	Complete	Dec-12	
			Performance driven by trees (62% of minutes) and line failure (31% of minutes).			
	Mt. Bethel	00090-3	Forestry to perform on cycle comprehensive circuit tree trimming	Complete	Nov-12	
	ML Detter	00030-3	Upgrade 300A switch to 600A switch	Complete	Apr-12	
			Engineering to evaluate relocation of off road section of line	Complete	Sep-12	
	Annville	00743-2	Performance was primarily driven by tree caused outages (87%) and animal caus	ed outages (12%).		
		00743-2	Replace spacers missing from spacer cable	Complete	Dec-12	

Met-Ec						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6
AQUIN	0000000			Completed	Completed	Quarters
			Performance driven by non-preventable trees which contributed 72% of circuit minutes. 66% of tree caused minutes were from a tree caused lock out on 10/6/11.			
			Perform accelerated backbone and three phase assessment	Complete	Jan-12	3Q 2011
	Shawnee	00860-3	Perform accelerated single phase assessment	Complete	Feb-12	4Q 2011
			Replace three sets of fault indicators	Complete	Jun-12	10 2012
		i i	Install SCADA Controlled Switch	Complete	Sep-12	20 2012
	{		Repair conditioned items from circuit assessment	Complete	Nov-12	
	Bairs	00571-4	Performance was driven by non-preventable tree caused outages (47% of the minu	ites).		40 2011 10 2012 20 2012
	Daus	00571-4	Replace/repair high priority items identified during circuit patrol	Complete	Nov-12	
			Performance driven by a substation disconnect problem (28%), an outage caused by lightning (22%).	by an arrester problem (26%	i) and an outage caused	
	Friedensburg	00769-1	Replace crossarms from circuit assessment	Complete	Feb-12	
			Perform accelerated backbone and three phase assessment	Complete	Jul-12	
			Install additional mainline disconnects and fault indicators at one location	To be completed 2013		
	Newberry	00577-4	Performance was driven by non-preventable tree caused outages (26% of the minu the minutes).	rtes) and equipment failure ca	ause outages (44% of	
			Replace/repair high priority items identified during circuit patrol	Complete	Oct-12	20 2012
			Performance was driven by non-preventable tree caused outages (76% of minutes)	<i>).</i>		
	Newberry	00566-4	Perform accelerated circuit reliability assessment of backbone	Complete	Dec-12	
			Perform accelerated circuit reliability assessment of three phase	Complete	Jul-12	
			Performance driven by non-preventable tree caused outages (82% of minutes).			
			Perform accelerated circuit reliability assessment of three phase	Complete	Jan-12	
	Newberry	00576-4	Perform accelerated circuit reliability assessment of backbone	Complete	Jan-12	
	Newberry	00370-4	Install three radio controlled switches and recloser with fault indicators	Complete	Jan-12	
			Replace/repair high priority items identified during circuit patrol	Complete	Nov-12	
			Perform mid-cycle forestry patrol.	Complete	Aug-12	
			Performance was driven by line failure on 7/3/11 which contributed 40% of circuit r contributed 48% of circuit minutes.	minutes and a vehicle accide	nt on 12/17/2011 which	402011
	Glendon	00818 3	Perform accelerated backbone and three phase assessment	Complete	Mar-12	102012
	Glendon	00818-3	Perform accelerated backbone and three phase assessment installed new conductors on three spans of mainline	Complete Complete	Mar-12 Dec-12	202012
	Glendon	00818-3		•		

•

let-Ed							
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work	Appeared in 4 of 6	
RAILS	3003(4)1011	oncar		Completed	Completed	Quarters	
			Performance was driven by non-preventable trees which contributed 72% of circuit minutes. 66% of tree caused minutes were from a tree caused lock out on 10/6/11.				
		1	Perform accelerated backbone and three phase assessment	Complete	Jan-12	302011	
			Perform accelerated single phase assessment	Complete	Feb-12	402011	
	Shawnee	00860-3	Install SCADA Controlled Switch	Complete	Sep-12	102012	
			Replace three sets of fault indicators	Complete	Jun-12	202012	
			Repair conditioned items from circuit assessment	Complete	Nov-12	302012	
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
			Comprehensive tree trimming	To be completed 2013			
		00729-1	Performance was driven by trees non-preventable outages (66%) and an outage cau	used by a fuse holder proble	em (20%).		
	1		Comprehensive tree trimming	Complete	Nov-12		
	Lyons		Mainline forestry inspection	Complete	Nov-12		
			Comprehensive circuit patrol	To be completed 2013			
			Performance was driven by a conductor problem that accounted for 63% of circuit n 17% of the circuit minutes.	ninutes and a tree related ou	itage that accounted for		
			Perform accelerated circuit reliability assessment of three phase	Complete	Aug-12		
	Dillsburg	urg 00746-4 Per	Perform accelerated backbone assessment	Complete	Aug-12		
			Replace high priority items identified during circuit patrol	Complete	Dec-12		
			Perform accelerated backbone and three phase circuit assessment	To be completed 2013			
			Performance was driven by a line failure caused outages (82% of minutes).	•			
	Yoe	00559-4	Perform mid-cycle forestry patrol.	Complete	Aug-12		
	TOE	00359-4	Replace/repair high priority items identified during circuit patrol	Complete	Oct-12		
			Comprehensive circuit patrol	To be completed 2013			
			Performance was driven by non-preventable trees which contributed to 77% of circu	uit minutes.			
	Ottsville	00661-3	Install recloser	Complete	Aug-12		
			Comprehensive tree trimming	To be completed 2013			

•

Blank Page

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

:

:

:

:

:

Joint 4th Quarter 2012 Reliability Report – Pennsylvania Power Company, Pennsylvania Electric Company and Metropolitan Edison Company – Public Version



FEB 2 2 2013

PA PUBLIC UTILITY COMMISSION CERTIFICATE OF SERVICE SECRETARY'S BUREAU

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:

Steven C. Gray Acting Small Business Advocate 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

Dated: February 22, 2013

L Licco Jam

Tori L. Giesler Attorney No. 207742 FirstEnergy Service Company 2800 Pottsville Pike P.O. Box 16001 Reading, Pennsylvania 19612-6001 (610) 921-6203 tgiesler@firstenergycorp.com

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

