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November 1, 2011

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

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**PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU**

Re: Joint 3rd Quarter 2011 Reliability Report - Pennsylvania Power Company, Pennsylvania Electric Company, and Metropolitan Edison Company - Pursuant to 52 Pa. Code §57.195(d) and (e)

Dear Secretary Chiavetta:

L-00030161

Enclosed for filing on behalf of Pennsylvania Power Company, Pennsylvania Electric Company, and Metropolitan Edison Company (collectively, the "Companies") is an original and six (6) copies of the Joint 3rd Quarter 2011 Reliability Report – Public Version, pursuant to 52 Pa. Code §57.195(d) and (e).

On December 22, 2004, the Companies filed an Application for Protective Order at Docket No. L-000301061. The Application was granted, allowing the Companies to file proprietary versions of the quarterly reliability reports. The Proprietary Version of this report is being filed under separate cover.

In addition, pursuant to 52 Pa. Code § 57.198(l), the Companies are requesting the Commission's approval from the Commission to revise their approved and existing 2011-2012 Biennial Inspection & Maintenance plans. The Companies are respectfully submitting as an addendum to this quarterly reliability report the proposed prospective revisions to their plan and a discussion of the reasons for the revisions.

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

Sincerely,

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU



Joint 2011 3rd Quarter Reliability Report

Pennsylvania Power Company,
Pennsylvania Electric Company and
Metropolitan Edison Company

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

Joint 3rd Quarter 2011 Reliability Report – Pennsylvania Power Company, Pennsylvania Electric Company and Metropolitan Edison Company

Section 57.195(e)(1): A description of each major event that occurred during the preceding quarter, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted in order to avoid or minimize the impact of similar events in the future¹.

Major Events

FirstEnergy Company	Customers Affected	Time and Duration of the Event		Cause of the Event	Commission Approval Status
Met-Ed	224,735	Duration	8 days 16 hours, 1 minute	Hurricane Irene	Approved on October 12, 2011
		Start Date/Time	August 27, 2011 10:01pm		
		End Date/Time	September 5, 2011 2:02pm		
Penelec	60,737	Duration	8 days 12 hours, 30 minutes	Hurricane Irene and continuous frontal systems.	Request for Exclusion denied on October 21, 2011 Appeal Pending - submitted on October 31, 2011
		Start Date/Time	August 28, 2011 3:35am		
		End Date/Time	September 5, 2011 1:55pm		
Met-Ed	56,278	Duration	7 days 11 hours, 21 minutes	Tropical Storm Lee	Approved on October 22, 2011
		Start Date/Time	September 5, 2011 9:06pm		
		End Date/Time	September 13, 2011 11:45am		
Penelec	13,927	Duration	8 days 8 hours, 43 minutes	Tropical Storm Lee	Approved on October 22, 2011
		Start Date/Time	September 7, 2011 11:17am		
		End Date/Time	September 14, 2011 6:00pm		

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

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

Reliability Index Values

3Q/2011 (12-Mo Rolling)	Penn Power			Met-Ed		
	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual
SAIFI	1.12	1.34	1.08	1.15	1.38	1.34
CAIDI	101	121	131 ²	117	140	112
SAIDI	113	162	142	135	194	150
Customers Served ³	158,594			547,770		
Number of Sustained Interruptions	3,623			9,244		
Customers Affected	171,024			732,220		
Customer Minutes	22,461,282			81,979,298		

Penelec 3Q 2011 (12-Mo Rolling)	Benchmark	12-Month Standard	12-Month Actual assuming successful appeal (filed on October 31, 2011) of staff denial of Major Event Exclusion issued on October 21, 2011	12-Month Actual Assuming denial of Major Event Exclusion received on October 21, 2011 is upheld following review of appeal (filed on October 31, 2011)
SAIFI	1.26	1.52	1.27	1.37
CAIDI	117	141	120	165
SAIDI	148	213	152	226
Customers Served			585,679	585,679
Number of Sustained Interruptions			11,938	12,614
Customers Affected			742,590	803,327
Customer Minutes			88,974,204	132,267,202

² Penn Power's higher-than-normal CAIDI is directly attributed to several non-excludable storm events as well as a substation vandalism incident. The substation vandalism incident resulted in a 16 minute CAIDI impact.

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

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

Worst Performing Circuits – Reliability Indices

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

Penelec's ranking of the 5% Worst Performing Circuits will be provided in a supplemental submission within ten (10) days following a final order on Penelec's October 31, 2011 Petition for Appeal of staff action denying Penelec's request for a major event exclusion⁴.

⁴ The Commission's Acting Manager of the Energy, Water and Emergency Preparedness Division, Bureau of Technical Utility Services has allowed Penelec to delay its submittal of this information.

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

Worst Performing Circuits – Remedial Action

Penn Power and Met-Ed's Remedial Action for Worst Performing Circuits are provided in Attachment B of this report.

Penelec's ranking of the 5% Worst Performing Circuits will be provided in a supplemental submission within ten (10) days following a final order on Penelec's October 31, 2011 Petition for Appeal of staff action denying Penelec's request for a major event exclusion⁵.

⁵ The Commission's Acting Manager of the Energy, Water and Emergency Preparedness Division, Bureau of Technical Utility Services has allowed Penelec to delay its submittal of this information.

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

Outages by Cause

Outages by Cause – Penn Power

Outages by Cause				
3rd Quarter 2011 12-Month Rolling	Penn Power			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
LIGHTNING	3,900,833	863	29,406	23.82%
TREES/NOT PREVENTABLE	7,597,766	754	38,751	20.81%
ANIMAL	797,898	407	11,529	11.23%
EQUIPMENT FAILURE	2,016,489	391	36,797	10.79%
LINE FAILURE	2,311,716	352	15,263	9.72%
BIRD	297,977	270	4,330	7.45%
UNKNOWN	644,844	137	8,015	3.78%
OVERLOAD	319,706	95	3,277	2.62%
PREVIOUS LIGHTNING	66,981	82	611	2.26%
VEHICLE	1,087,986	82	7,201	2.26%
FORCED OUTAGE	216,743	68	6,822	1.88%
HUMAN ERROR -NON-COMPANY	223,556	44	3,207	1.21%
TREES/PREVENTABLE	77,667	34	493	0.94%
HUMAN ERROR - COMPANY	48,341	11	580	0.30%
CUSTOMER EQUIPMENT	10,481	9	130	0.25%
OBJECT CONTACT WITH LINE	17,388	7	247	0.19%
UG DIG-UP	5,969	6	15	0.17%
VANDALISM	2,814,964	5	4,335	0.14%
ICE	1,510	2	4	0.06%
OTHER ELECTRIC UTILITY	1,724	2	8	0.06%
FIRE	200	1	2	0.03%
WIND	543	1	1	0.03%
TOTAL	22,461,282	3,623	171,024	100.00%

Proposed Solutions – Penn Power

Trees Non-Preventable

Forestry Services reviews the “Trees Non-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 Non-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. In addition, additional assessments on eleven of Penn Power’s circuits with significant tree caused outages have been completed through May 2011.

Lightning

The number of lightning caused outages are mitigated through Penn Power's reliability improvement strategy. This includes the inspection and maintenance practices such as circuit inspections and annual main feed inspections. These inspections can locate blown lightning arresters, broken grounds, and other condition items 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.

Animal

Animal guards are installed on equipment where high frequencies of animal-related outages are 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 – Penelec⁶

Outages by Cause				
3rd Quarter 2011 12-Month Rolling	Penelec			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
EQUIPMENT FAILURE	31,431,511	3,657	286,522	30.63%
UNKNOWN	7,236,071	1,747	75,976	14.63%
TREES/NOT PREVENTABLE	20,368,081	1,670	120,988	13.99%
LINE FAILURE	13,247,105	1,056	111,901	8.85%
ANIMAL	1,019,963	1,023	12,796	8.57%
LIGHTNING	3,813,784	683	32,411	5.72%
FORCED OUTAGE	2,835,057	660	33,233	5.53%
VEHICLE	4,526,950	359	27,415	3.01%
BIRD	391,369	275	4,862	2.30%
OVERLOAD	1,134,094	206	12,795	1.73%
HUMAN ERROR - COMPANY	89,671	114	2,924	0.95%
OTHER ELECTRIC UTILITY	346,520	92	2,145	0.77%
HUMAN ERROR -NON-COMPANY	947,321	86	6,990	0.72%
PREVIOUS LIGHTNING	180,005	78	3,565	0.65%
UG DIG-UP	146,178	57	730	0.48%
ICE	19,788	39	143	0.33%
TREES/PREVENTABLE	72,216	37	614	0.31%
OBJECT CONTACT WITH LINE	585,061	32	3,366	0.27%
FIRE	41,685	20	306	0.17%
CUSTOMER EQUIPMENT	106,105	17	694	0.14%
VANDALISM	406,992	16	1,662	0.13%
CONTAMINATION	4,454	7	57	0.06%
OTHER UTILITY-NON ELEC	5,699	5	40	0.04%
SWITCHING ERROR	17,004	1	436	0.01%
WIND	1,520	1	19	0.01%
TOTAL	88,974,204	11,938	742,590	100.00%

⁶ Assuming denial of Major Event Exclusion received on October 21, 2011 is upheld following review of appeal (filed on October 31, 2011).

Proposed Solutions – Penelec

Equipment Failure

Porcelain cutout failures represent approximately one third of the equipment failure outages in Penelec. 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 5 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.

Unknown Outages

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 Non-Preventable

Forestry Services reviews the "Trees Non-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 Non-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 our normal tree trimming maintenance program.

Outages by Cause – Met-Ed

Outages by Cause				
3rd Quarter 2011 12-Month Rolling	Met-Ed			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
EQUIPMENT FAILURE	15,071,098	2,445	166,320	26.46%
TREES/NOT PREVENTABLE	28,934,093	1,849	176,372	20.01%
ANIMAL	3,578,140	1,165	36,162	12.61%
UNKNOWN	3,890,576	935	56,659	10.12%
LINE FAILURE	9,744,738	809	70,634	8.75%
LIGHTNING	4,469,967	627	39,099	6.78%
FORCED OUTAGE	3,133,556	358	60,654	3.87%
VEHICLE	5,566,661	300	46,417	3.25%
BIRD	231,093	198	2,957	2.14%
TREES/PREVENTABLE	884,982	140	5,379	1.51%
HUMAN ERROR -NON-COMPANY	588,790	81	10,491	0.88%
OVERLOAD	602,353	67	6,800	0.72%
WIND	3,412,064	53	19,343	0.57%
PREVIOUS LIGHTNING	99,380	52	939	0.56%
HUMAN ERROR - COMPANY	377,475	40	20,192	0.43%
UG DIG-UP	89,022	32	447	0.35%
CUSTOMER EQUIPMENT	58,056	24	1,720	0.26%
OBJECT CONTACT WITH LINE	531,239	24	6,190	0.26%
VANDALISM	376,839	17	3,141	0.18%
OTHER ELECTRIC UTILITY	306,040	11	2,144	0.12%
FIRE	14,498	7	61	0.08%
ICE	1,123	3	13	0.03%
OTHER UTILITY-NON ELEC	16,119	3	80	0.03%
CONTAMINATION	1,370	2	4	0.02%
TOTAL	81,979,272	9,242	732,218	100.00%

Proposed Solutions – Met-Ed

Equipment Failure

The number of equipment failures are 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.

Trees Non-Preventable

Forestry Services reviews areas where "Trees Non-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 Non-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.

Animal

Animal guards are installed on equipment where high frequencies of animal-related outages are experienced. When possible, animal guards are installed at the time service is restored for the outages caused by animals. In addition, Met-Ed requires animal guards to be installed on all new overhead and underground riser installations.

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

T&D Inspection and Maintenance Programs

Inspection and Maintenance 2011		Penn Power			Penelec			Met-Ed		
		Planned	Completed		Planned	Completed		Planned	Completed	
		Annual	3Q	YTD	Annual	3Q	YTD	Annual	3Q	YTD
Forestry	Transmission (Miles)	30.39	0.15	30.15	185.35	45.60	63.60	78.58	5.56	29.56
	Distribution (Miles)	1,136	355	972	3,729	1,035	2,699	2,874	745	1,968
Transmission	Aerial Patrols	2	0	1	2	1	2	2	0	1
	Groundline ⁷	0	0	0	1,301	1,665	1,665	0	0	0
Substation	General Inspections	960	480	720	4,956	2,487	3,726	2,616	1,308	1,962
	Transformers	125	55	125	761	597	757	337	153	337
	Breakers	36	7	36	439	40	422	241	38	184
	Relay Schemes	87	21	73	736	125	629	315	63	220
Distribution	Capacitors	995	0	998	8,654	0	8,654	4,621	0	4,627
	Poles	10,600	0	10,718	41,111	5,492	39,670	28,433	0	31,428
	Reclosers	748	362	745	2,478	2,563	2,563	901	901	901
	Radio-Controlled Switches	Penn Power has no radio-controlled switches			2,164	422	1,504	98 ⁸	25	74

General Note:

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

⁷ Transmission groundline inspections:

- Penn Power includes 69kV and 138kV
- Penelec includes 115kV
- Met-Ed includes 69kV, 115kV and 230 kV

⁸ Plan number changed from 92 to 98 due to the installation of additional switches

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

Budgeted vs. Actual T&D Operation & Maintenance Expenditures⁹

T&D O&M - 3Q / YTD September 2011 (\$)						
Company	PUC Category	3Q Actuals	3Q Budget	YTD Actual	YTD Budget	Annual Budget
Penn Power	Corrective Maintenance	354,697	104,996	854,381	278,765	368,409
	Preventive Maintenance	140,870	0	407,732	0	0
	Storms	352,033	311,245	835,400	904,133	1,195,123
	Vegetation Management	117,720	206,731	372,823	710,418	884,234
	Misc	1,100,828	1,305,774	2,882,386	4,011,814	5,186,713
	Operations	175,814	131,048	1,199,078	1,038,030	1,402,946
Penn Power Total		2,241,962	2,059,794	6,551,800	6,943,160	9,037,425
Penelec	Corrective Maintenance	923,247	1,008,242	2,521,796	2,754,132	3,695,388
	Preventive Maintenance	1,466,093	1,349,630	4,516,451	3,747,894	5,032,902
	Storms*	2,563,436	1,030,959	5,987,446	2,894,693	3,866,263
	Vegetation Management	2,286,150	1,468,585	4,502,465	3,285,799	4,986,170
	Misc	3,944,120	3,772,990	8,775,961	10,390,995	13,844,151
	Operations	3,711,036	3,359,205	10,966,078	12,037,921	16,212,823
Penelec Total		14,894,082	11,989,611	37,270,197	35,111,434	47,637,697
Met-Ed	Corrective Maintenance	760,948	704,900	2,048,656	2,016,461	2,656,243
	Preventive Maintenance	553,511	1,071,816	1,863,726	2,937,592	3,733,258
	Storms*	11,906,942	2,308,383	18,956,398	6,613,302	8,796,475
	Vegetation Management	1,334,103	1,288,430	3,044,649	3,158,897	4,784,291
	Misc	2,619,470	2,472,204	7,544,006	7,293,503	9,672,868
	Operations	2,751,520	2,147,525	9,464,715	8,694,496	11,637,799
Met-Ed Total		19,926,494	9,993,258	42,922,150	30,714,251	41,280,934
Grand Total		37,062,538	24,042,663	86,744,147	72,768,845	97,956,056

*Storms 3Q reflects storm restoration for Hurricane Irene and Tropical Storm Lee

⁹ Budgets based upon estimates and subject to change

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

Budgeted vs. Actual T&D Capital Expenditures¹⁰

T&D Capital Only Includes CIAC (net) - 3Q / YTD September 2011 (\$)						
Company	PUC Category	3Q Actual	3Q Budget	YTD Actual	YTD Budget	Annual Budget
Penn Power	New Business	1,366,947	942,103	3,606,348	2,085,276	2,860,500
	Reliability	1,155,547	2,242,481	3,066,574	6,823,724	8,884,642
	Capacity	293,003	(1,537)	778,742	509,688	516,666
	Misc*	(6,077)	331,453	580,921	984,146	1,302,047
	Forced	2,439,182	1,095,163	6,353,905	3,669,057	4,805,563
	Vegetation Management	1,478,320	1,168,315	4,087,806	3,894,384	4,867,980
Penn Power Total		6,726,922	5,777,978	18,474,297	17,966,276	23,237,398
Penelec	New Business	4,768,938	4,777,023	12,090,640	14,037,709	19,321,082
	Reliability	6,099,287	7,248,979	20,630,031	31,333,894	39,198,455
	Capacity	3,324,281	2,570,867	13,571,055	13,262,169	18,435,969
	Misc*	31,314	4,927,834	531,281	12,932,618	17,564,055
	Forced**	11,678,762	8,439,761	34,969,475	23,386,507	28,527,644
	Vegetation Management	3,498,625	4,502,421	11,725,117	12,120,509	15,669,629
Penelec Total		29,401,208	32,466,886	93,517,599	107,073,407	138,716,834
Met-Ed	New Business	4,454,323	5,701,526	11,250,331	16,199,024	21,454,639
	Reliability	3,284,395	7,910,241	13,875,438	19,908,939	25,848,587
	Capacity	1,744,681	1,655,012	6,257,606	5,061,451	7,944,344
	Misc*	(160,445)	2,289,426	391,493	7,926,207	9,552,347
	Forced**	12,246,786	6,185,832	28,353,007	17,033,579	21,518,803
	Vegetation Management	4,397,741	4,010,405	12,314,973	11,518,174	15,756,410
Met-Ed Total		25,967,482	27,752,442	72,442,849	77,647,374	102,075,130
Grand Total		62,095,611	65,997,305	184,434,745	202,687,057	264,029,362

*Misc 3Q and YTD actuals reflect timing of construction overhead clearing.

**Forced 3Q reflects storm restoration for Hurricane Irene and Tropical Storm Lee

¹⁰ Budgets based upon estimates and subject to change

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

Staffing Levels

PennPower 2011					
Department	Staff	1Q	2Q	3Q	4Q
Line	Leader / Chief	27	28	28	
	Lineman	54	63	64	
Substation	Technician	6	3	3	
	Construction & Maintenance (C&M)	14	20	21	
	Total	101	114	116	

Penelec 2011					
Department	Staff	1Q	2Q	3Q	4Q
Line	Leader / Chief	140	148	148	
	Lineman	189	196	204	
Substation	Technician	8	6	6	
	Construction & Maintenance (C&M)	69	71	74	
	Total	406	421	432	

Met-Ed 2011					
Department	Staff	1Q	2Q	3Q	4Q
Line	Leader / Chief	53	52	51	
	Lineman	159	168	173	
Substation	Technician	12	10	15	
	Construction & Maintenance (C&M)	57	58	57	
	Total	281	288	296	

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

Contractor Expenditures

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

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

Call-out Acceptance Rate

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

Call-out Response

Larger utilities report the amount of time it takes to obtain the necessary personnel during call-outs. The Companies have worked with other utilities to ensure consistency in calculating and reporting this data.

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

ATTACHMENT A

Worst Performing Circuits - Reliability Indices

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The Companies define their 5% worst performing circuits based on SAIDI. The Companies use SAIDI as a measure of circuit performance. The SAIDI index is a measure of the total customer minutes of distribution outages on the circuit. Beginning in 2006, distribution circuits were ranked based on SAIDI contribution to the overall Company SAIDI (customer minutes).

Penn Power													
Circuit Rank	Substation	Circuit Desc	District	Average Customers (1)	Outages (2)	Lockouts (3)	Customer Minutes (4)	Customers Affected (5)	SAIDI Impact (6)	SAIDI (7)	SAIFI (7)	CAIDI (7)	MAIFI (7)
1	KOPPEL	D-532	NEW CASTLE	1,195	21	0	428,731	1,767	2.70	359	1.48	243	2.43
2	MCDOWELL	W-122	CLARK	656	26	1	271,882	870	1.71	414	1.33	313	0.00
3	NEW WILMINGTON	D-441	NEW CASTLE	884	20	0	218,554	747	1.38	247	0.85	293	0.17
4	THOMPSON RUN	D550	ZELIENOPE	1,021	14	0	192,122	1,032	1.21	188	1.01	186	0.00
5	MCDOWELL	W-120	CLARK	1,037	17	0	181,744	420	1.14	175	0.41	433	0.00
6	CAMPBELL PP	W-140	CLARK	817	27	0	174,612	637	1.10	214	0.78	274	0.00
7	SOUTH DOCK STREET	D-207	CLARK	1,339	8	0	166,848	1,006	1.05	125	0.75	166	0.00
8	CASCADE	D-359	NEW CASTLE	1,319	4	1	166,688	1,401	1.05	126	1.06	119	0.00
9	CANAL	W-101	CLARK	1,502	14	1	165,434	1,794	1.04	110	1.19	92	0.00

- (1) Average number of 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 distribution outage causes.
- (6) Impact of the distribution outages on this circuit to Penn Power's SAIDI.
- (7) Distribution circuit SAIDI, SAIFI, CAIDI and MAIFI 12-Month Rolling due to distribution outage causes.

Met-Ed													
Circuit Rank	Substation	Circuit Desc	District	Average Customers (1)	Outages (2)	Lockouts (3)	Customer Minutes (4)	Customers Affected (5)	SAIDI Impact (6)	SAIDI (7)	SAIFI (7)	CAIDI (7)	MAIFI (7)
1	SHAWNEE	00895-3	STROUDSBURG	3,863	108	1	1,708,742	14,082	3.12	442	3.65	121	17.04
2	SHAWNEE	00822-3	STROUDSBURG	3,138	86	2	1,477,076	12,761	2.70	471	4.07	116	5.20
3	SWATARA HILL	00763-2	LEBANON	1,450	37	4	1,142,510	6,431	2.09	788	4.44	178	2.00
4	WINDSOR	00797-4	YORK	1,576	73	1	1,075,008	3,666	1.96	682	2.33	293	5.08
5	SHAWNEE	00860-3	STROUDSBURG	3,391	68	4	1,064,835	12,985	1.94	314	3.83	82	27.07
6	FOX HILL	00816-3	STROUDSBURG	3,748	66	1	939,788	6,010	1.72	251	1.60	156	12.40
7	SOUTH NAZARETH	00809-3	EASTON	2,908	73	3	869,280	10,045	1.59	299	3.45	87	24.18
8	YORKANA	00708-4	YORK	2,306	53	5	834,799	6,566	1.52	362	2.85	127	4.05
9	MOUNTAIN	00740-4	DILLSBURG	2,401	40	0	795,630	3,733	1.45	331	1.55	213	1.00
10	BERNVILLE	00786-1	HAMBURG	1,829	50	2	789,640	6,150	1.44	432	3.36	128	1.40
11	MOUNTAIN	00743-4	DILLSBURG	1,009	29	1	723,854	3,455	1.32	717	3.42	210	3.08
12	HILL	00737-4	YORK	2,173	36	1	718,215	6,901	1.31	331	3.18	104	8.03
13	WINDSOR	00795-4	YORK	1,004	62	2	701,806	3,611	1.28	699	3.60	194	1.04
14	YOE	00559-4	YORK	2,541	33	2	695,153	8,519	1.27	274	3.35	82	17.97
15	MOUNTAIN	00742-4	DILLSBURG	1,390	45	1	652,106	2,147	1.19	469	1.54	304	4.00
16	NORTH BANGOR	00826-3	EASTON	3,200	104	0	601,785	3,462	1.10	188	1.08	174	4.99
17	SHAWNEE	00837-3	STROUDSBURG	1,210	37	3	596,216	4,733	1.09	493	3.91	126	17.36
18	MOUNTAIN	00744-4	DILLSBURG	1,809	60	1	594,912	1,933	1.09	329	1.07	308	1.37
19	NORTH BANGOR	00813-3	EASTON	1,330	37	0	592,605	1,779	1.08	446	1.34	333	0.00
20	NORTH LEBANON	00715-2	LEBANON	1,354	26	1	590,162	2,867	1.08	436	2.12	206	0.00
21	BIRDSBORO	00756-1	READING	1,535	71	0	572,257	3,929	1.04	373	2.56	146	12.58
22	STRABAN	00676-4	GETTYSBURG	1,079	41	0	571,787	3,597	1.04	530	3.33	159	2.00
23	LYNNVILLE	00749-1	HAMBURG	745	45	3	571,387	3,072	1.04	767	4.12	186	16.84
24	BERN CHURCH	00789-1	READING	1,429	53	1	570,545	3,796	1.04	399	2.66	150	12.25
25	FLYING HILLS	00777-1	READING	1,746	41	2	569,024	4,989	1.04	326	2.86	114	15.01
26	DILLSBURG	00749-4	DILLSBURG	1,793	46	3	555,717	5,987	1.01	310	3.34	93	4.99
27	TAXVILLE	00575-4	YORK	1,952	31	2	538,548	3,638	0.98	276	1.86	148	6.55

Met-Ed													
Circuit Rank	Substation	Circuit Desc	District	Average Customers (1)	Outages (2)	Lockouts (3)	Customer Minutes (4)	Customers Affected (5)	SAIDI Impact (6)	SAIDI (7)	SAIFI (7)	CAIDI (7)	MAIFI (7)
28	SOUTH HAMBURG	00801-1	HAMBURG	2,038	46	1	537,406	2,908	0.98	264	1.43	185	0.31
29	BERNVILLE	00787-1	HAMBURG	1,739	42	1	535,195	2,421	0.98	308	1.39	221	6.29
30	WINDSOR	00796-4	YORK	826	35	0	533,127	2,085	0.97	645	2.52	256	6.32
31	BIRDSBORO	00757-1	READING	1,918	45	1	529,982	2,737	0.97	276	1.43	194	5.47
32	HILL	00734-4	YORK	1,585	47	1	525,203	2,998	0.96	331	1.89	175	1.00
33	BIRCHWOOD	00624-3	STROUDSBURG	1,933	35	2	517,492	3,408	0.94	268	1.76	152	17.22
34	ANNVILLE	00743-2	LEBANON	1,165	24	0	510,540	2,921	0.93	438	2.51	175	0.16
35	ANNVILLE	00744-2	LEBANON	755	13	1	509,551	2,856	0.93	675	3.78	178	0.00
36	GLENDON	00818-3	EASTON	1,250	17	0	495,294	1,873	0.90	396	1.50	264	1.00
37	LYNNVILLE	00737-1	HAMBURG	754	39	2	493,660	2,150	0.90	655	2.85	230	17.48

- (1) Average number of 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 distribution outage causes.
- (6) Impact of the distribution outages on this circuit to Met-Ed's SAIDI.
- (7) Distribution circuit SAIDI, SAIFI, CAIDI and MAIFI 12-Month Rolling due to distribution outage causes.

ATTACHMENT B

Worst Performing Circuits – Remedial Action

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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 Power						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
1	Koppel	D-532	Performance driven by two outages caused by equipment failure and a non-preventable tree during weather conditions.	Complete	Sep-11	
			The equipment failure (broken pole) was repaired at the time of restoration and the tree was removed at time of restoration			
2	McDowell	W-122	Performance driven by one outage caused by a non-preventable tree during weather conditions.	Complete	Jul-11	
			Problem tree was removed at time of restoration			
3	New Wilmington	D-441	Performance driven by one outage caused by a non-preventable tree during weather conditions.	Complete	Jul-11	
			Problem tree was removed at time of restoration			
4	Thompson Run	D550	Performance driven by one outage caused by a non-preventable tree during weather conditions.	Complete	Sep-11	
			Problem tree was removed at time of restoration			
			Forestry to trim circuit in 2011	Complete	Aug-11	
5	McDowell	W-120	Performance driven by one outage caused by a non-preventable tree during weather conditions	Complete	Aug-11	
			Problem tree was removed at time of restoration			
6	Campbell PP	W-140	Performance driven by one outage caused by lightning during weather conditions.	Complete	Aug-11	
			Lightning damage was repaired at the time of restoration			
7	South Dock Street	D-207	Performance driven by one outage caused by an overload condition	Complete	Jul-11	
			Overload condition was resolved at time of restoration			
8	Cascade	D-359	Performance driven by one outage caused by lightning during weather conditions	Complete	Aug-11	
			Lightning damage was repaired at the time of restoration			

Penn Power						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
9	Canal	W-101	Performance driven by one outage caused by a non-preventable tree during weather conditions.			
			Protection Review to be engineered in 4Q 2011	To be completed in 2012		
	Hartstown	W-126	The performance of this circuit was driven by two outages caused by non-preventable trees during weather conditions.			2Q 2010 3Q 2010 4Q 2010 1Q 2011
			Problem tree was removed at time of restoration	Complete	Jun-10	
			Problem tree was removed at time of restoration	Complete	Jul-10	
			Forestry to trim circuit in 2010	Complete	Jun-10	
			A targeted engineering review was conducted on the circuit and a capital project was developed from the review aimed at improving the reliability of a portion of the circuit, which has been experiencing line and equipment failures, through the replacement	Complete	Feb-11	
Problems trees were removed at time of outage	Complete	Mar-11				

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
1	Shawnee	00895-3	Performance was driven by non-preventable trees, and vehicle accidents			4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Perform accelerated three phase and backbone assessment	Complete	Mar-11	
			Replace current limiting fuses on step transformers	Complete	Mar-11	
			Operate and maintain circuit tie switches	Complete	Apr-11	
			Install new electronic recloser	Complete	May-11	
Forestry to perform on cycle comprehensive circuit tree trimming	To be completed in 2012					
2	Shawnee	00822-3	Performance was driven by line failure, equipment failure and non-preventable trees. 53% of circuit minutes due to line failure during storm restoration on 11/18/10 while back feeding other circuits.			2Q 2010 3Q 2010 4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Perform accelerated single phase assessment	Complete	Jun-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Perform accelerated backbone and three phase assessment	Complete	Mar-11	
			Repair critical items identified from circuit patrol	Complete	Mar-11	
			Replace current limiting fuses on step transformers	Complete	Apr-11	
			Forestry to perform on cycle comprehensive circuit Tree Trimming	To be completed in 2011		
Install Fault Indicators	To be completed in 2011					
3	Swatara Hill	00763-2	Performance was primarily driven by vehicle accidents (40%), equipment failures (26%), safety related forced outages (13%) and lightning damage (11%).			4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Spot Trimming along Ridge Road	Complete	Dec-10	
			Replace Underground Cable along Bassler Drive, Rhodes Drive, Chestnut Rd and Koch Ln	Complete	Dec-10	
			Replace recloser along Steinruck Road	Complete	Jan-11	
			Correct 3 coordination issues	Complete	Mar-11	
			Install regulators along Roundtop Road	Complete	Jul-11	
			Perform accelerated backbone assessment	Complete	Aug-11	
			Accelerated circuit assessment 3 phase	Complete	Aug-11	
			Install additional disconnect switches	To be completed in 2011		
			Install fault indicators 4 locations	To be completed in 2011		
Balance load beyond recloser 76342	To be completed in 2012					
Repair broken insulator on three phase	To be completed in 2012					

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
4	Windsor	00797-4	Performance was driven by equipment failure causes (18% of minutes-86% of these minutes caused by a tornado) and non-preventable tree-caused outages (57% of minutes-72% of these minutes caused by a tornado).			4Q 2010 2Q 2011 3Q 2011
			Perform Accelerated backbone and three phase assessment	To be completed in 2011		
			Forestry to perform on cycle comprehensive circuit Tree Trimming	To be completed in 2012		
5	Shawnee	00860-3	Performance was driven by lightning and non-preventable trees. 30% of minutes from lightning strike to a recloser on 5/30/11. 28% of minutes from non-preventable trees.			2Q 2010 3Q 2010 4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Perform fuse and coordination study	Complete	Sep-10	
			Repair critical items identified from circuit patrol	Complete	Nov-10	
			Install Fault Indicators	Complete	Feb-11	
			Perform accelerated backbone and three phase assessment	Complete	Mar-11	
			Replace current limiting fuses on step transformers	Complete	Mar-11	
			Correct fuse miscoordinations identified during SAIFI analysis	Complete	Apr-11	
Operate and maintain circuit tie switches	Complete	Jun-11				
6	Fox Hill	00816-3	Performance was driven by non-preventable trees (73% of circuit minutes), line failure and a storm on 7/7/11.			2Q 2010 3Q 2010 4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Perform accelerated single phase assessment	Complete	Sep-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Perform accelerated backbone and three phase assessment	Complete	Mar-11	
			Replace current limiting fuses on step transformers	Complete	Mar-11	
			Install Fault indicators	Complete	Mar-11	
			Forestry to perform off cycle patrol and trim	Complete	Apr-11	
			Study automation of sectionalizer on circuit	Complete	Sep-11	
			Install Single Phase fuse	Complete	Sep-11	
			Correct fuse miscoordinations identified during SAIFI analysis	To be completed in 2011		
Install SCADA control on sectionalizer	To be completed in 2012					
Forestry to perform on cycle comprehensive circuit tree trimming	To be completed in 2012					
7	S. Nazareth	00809-3	Performance was driven by non-preventable trees and equipment failure.			
			Perform accelerated assessment on the circuit backbone and 3phase of the circuit	Complete	Feb-11	
			Install fault Indicators	Complete	May-11	
			Perform SAIFI analysis initiative study	To be completed in 2011		
			Install Fault Indicators	To be completed in 2011		
			Forestry to perform on cycle comprehensive circuit tree trimming	To be completed in 2012		
Install SCADA controlled switch	To be completed in 2012					
8	Yorkana	00708-4	Performance driven by wind cause (34% of minutes) and non-preventable tree cause outages (60% of minutes)			2Q 2010 3Q 2010 4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Perform thermal scan of the circuit three phase backbone	Complete	Aug-10	
			Repair critical items identified from backbone assessment after wind storm	Complete	Dec-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Perform Accelerated backbone and three phase assessment	Complete	Feb-11	
			Replaced damaged recloser found during repair of hot spot identified from thermal scan	Complete	Mar-11	
			Install radio controlled reclosers for sectionalizing.	To be completed in 2011		
Forestry to perform on cycle comprehensive circuit Tree Trimming	To be completed in 2012					

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
9	Mountain	00740-4	Performance driven by a storm related conductor problem that broke a cutout accounting for 49% of circuit minutes and 43% of circuit minutes due to trees during the 5/26/11 tornado/storm.			
			Forestry to perform on cycle comprehensive circuit Tree Trim in 2010	Complete	May-10	
			Replace 2 poles, 2 crossarm, and 2 insulators found during Line patrol	Complete	Nov-10	
			Install a total of 19 FCI at 7 locations on the circuit	Complete	Jul-11	
			Perform normal circuit reliability assessment of mainline	To be completed in 2011		
			Perform normal circuit reliability assessment of three phase	To be completed in 2011		
			Perform accelerated circuit reliability assessment of single phase - Regulatory Required 2011	To be completed in 2011		
Install sectionalizers at two locations	To be completed in 2012					
10	Bernville	00786-1	Performance was driven by trees non-preventable (40%), lightning (25%) and a vehicle accident (8%).			2Q 2010 4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Install 3PH mainline fault indicators 2 locations	Complete	May-11	
			Replace 1 mainline 3 phase recloser and move it to a more effective location	Complete	Sept-11	
			Install 1 Additional New Mainline 3 phase recloser	To be completed in 2011		
			Perform accelerated backbone assessment	To be completed in 2011		
Perform SAIFI analysis initiative study	To be completed in 2011					
11	Mountain	00743-4	Performance was driven by the 5/26/11 tornado / storm which accounted for 49% of circuit minutes and related post storm incidents accounted for 46% of circuit minutes.			
			Forestry to perform on cycle comprehensive circuit Tree Trim in 2011	Complete	Jun-10	
			Perform post storm accelerated circuit reliability assessment of mainline - Post Storm	Complete	Jun-11	
			Perform post storm accelerated circuit reliability assessment of three phase - Post Storm	Complete	Jun-11	
			Perform accelerated circuit reliability assessment of single phase - Regulatory Required 2011	Complete	Jun-11	
			Install 2 FCI at one location	To be completed in 2011		
Change recloser settings to improve downstream coordination of protective devices	To be completed in 2011					
12	Hill	00737-4	Performance driven by non-preventable tree cause outages (92% of minutes).			4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Install additional Fault indicators	Complete	Feb-11	
			Forestry to perform spot assessment of tree prone outage area	Complete	Mar-11	
			Forestry to perform follow-up tree work as result of spot assessment	Complete	Mar-11	
			Replace sectionalizer	To be completed in 2011		
			Install an additional recloser to protect the circuit 3 phase	To be completed in 2011		
			Perform Accelerated backbone and three phase assessment	To be completed in 2011		
			Forestry to perform spot assessment of tree prone outage area	To be completed in 2011		
Forestry to perform on cycle comprehensive circuit Tree Trimming	To be completed in 2012					

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
13	Windsor	00795-4	Performance driven by wind cause (56% of minutes in one event caused by a tornado) and non-preventable tree cause outages (26% of minutes).			2Q 2010 3Q 2010 4Q 2010 2Q 2011 3Q 2011
			Perform Accelerated backbone and three phase assessment	Complete	Jul-11	
			Forestry to perform on cycle comprehensive circuit Tree Trimming	To be completed in 2012		
14	Yoe	00559-4	Performance driven by line failure causes (31% of minutes) and non-preventable tree caused outages (45% of minutes-88% of these minutes caused by a tornado).			
			Perform Accelerated backbone and three phase assessment	To be completed in 2011		
			Perform mid-cycle forestry patrol.	To be completed in 2011		
15	Mountain	00742-4	Performance driven by the 5/26/11 tornado / storm which accounted for 86% of circuit minutes.			
			Forestry to perform on cycle comprehensive circuit Tree Trim in 2010	Complete	Jun-10	
			Perform accelerated circuit reliability assessment of mainline - Post Storm	Complete	Jun-11	
			Perform accelerated circuit reliability assessment of three phase - Post Storm	Complete	Jun-11	
			Perform accelerated circuit reliability assessment of single phase - Regulatory Required 2011	Complete	Jun-11	
			Forestry to perform tree inspection in worst hit part of circuit - Post Storm	Complete	Jun-11	
Forestry removed three danger trees as result of post storm inspection	Complete	Jun-11				
16	No Bangor	00826-3	Performance was driven by line failure, lightning and non-preventable trees.			2Q 2010 3Q 2010 4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Perform accelerated backbone and three phase assessment	Complete	Feb-11	
			Perform in depth inspection of backbone fuses	Complete	Apr-11	
			Operate and maintain circuit tie switches	Complete	May-11	
			Install new electronic recloser	Complete	Jun-11	
			Replace current limiting fuses on step transformers	Complete		
Install Sectionalizer	To be completed in 2011					
17	Shawnee	00837-3	Performance was driven by non-preventable trees. 47% of circuit minutes due to single storm on 7/7/11.			
			Perform accelerated three phase assessment	Complete	Apr-11	
			Forestry to perform on cycle comprehensive circuit tree trimming	To be completed in 2011		
			Install telemetered fault indicators on radio controlled switch	To be completed in 2012		
18	Mountain	00744-4	Performance driven by trees at 89% of circuit minutes (the 5/26/10 tornado / storm at 65% of circuit minutes).			
			Perform accelerated circuit reliability assessment of single phase	Complete	Oct-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Engineering and Forestry Perform mainline vegetation assessment	Complete	Jan-11	
			Perform accelerated circuit reliability assessment of mainline	Complete	Mar-11	
			Perform accelerated circuit reliability assessment of three phase	Complete	Mar-11	
			Installed new single phase trip and lockout recloser, 74492, identified in SAIFI Analysis	Complete	May-11	
			Installed new single phase trip and lockout recloser, 74472, identified in SAIFI Analysis	Complete	May-11	
			Install FCI identified in SAIFI Analysis - 1 location total of 3 FCI	Complete	Jun-11	
			GOAB Inspections (8) identified in SAIFI Analysis	To be completed in 2011		
			Install new 600A disconnect switches identified in SAIFI Analysis	To be completed in 2011		
Perform accelerated circuit reliability assessment of single phase	To be completed in 2011					
Install new three phase fuses identified in SAIFI Analysis	To be completed in 2011					

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
19	No Bangor	00813-3	Performance driven by non-preventable trees and equipment failure. 51% of circuit minutes due to tree caused outage on 9/22/10, and 26% from transformer failure during extreme heat on 7/22/11.			3Q 2010 4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Perform accelerated backbone and three phase assessment	Complete	Apr-11	
			Perform in depth inspection of backbone fuses	Complete	Apr-11	
			Forestry to perform on cycle comprehensive circuit Tree Trimming	Complete	Jun-11	
			Upgrade step transformers	Complete	Aug-11	
20	North Lebanon	00715-2	Performance was primarily driven by tree caused outages (31%) and wind caused damage (62%).			
			Accelerated circuit assessment 3 phase	Complete	Aug-10	
			Accelerated circuit assessment 1 phase	Complete	Aug-10	
			Perform accelerated backbone assessment	Complete	Aug-10	
			Install fault indicators 4 locations	Complete	Sep-11	
Forestry Patrol of Backbone and all of Three-Phase beyond recloser 71512	To be completed in 2012					
21	Birdsboro	00756-1	Performance driven by trees non preventable (71%).			2Q 2010 3Q 2010 4Q 2010 1Q 2011 3Q 2011
			Upgrade T-12 Tie Recloser	Complete	Oct-10	
			Install Fault Indicators 1 add'l Mainline Location	Complete	Nov-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Replace Mainline Tie-Switch (tree damaged)	Complete	Feb-11	
			Perform accelerated backbone assessment	Complete	Mar-11	
			Perform accelerated three phase assessment	Complete	Mar-11	
			Install Single Phase Electronic Sectionalizer	Complete	Apr-11	
			Forestry to perform off cycle patrol and trim	Complete	May-11	
			Replace fuses to improve tap coordination	Complete	Jun-11	
			Repair high priority items (riser, crossarm, riser) identified during circuit assessment	Complete	Jul-11	
Repair additional high priority items (crossarm, insulator) identified during circuit assessment	To be completed in 2011					
22	Straban	00676-4	Performance driven by trees at 51% of circuit minutes; an animal contact in a three phase bank on 10/17/10 for 20% of circuit minutes; and a recloser lock out w/o reclose for a temporary fault condition for 16% of circuit minutes.			4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Perform normal circuit reliability assessment of mainline	Complete	Jul-10	
			Perform normal circuit reliability assessment of three phase	Complete	Jul-10	
			Perform recloser inspection (did not reclose) - Replaced Battery	Complete	Aug-11	
			Perform accelerated circuit reliability assessment of mainline	To be completed in 2011		
Perform accelerated circuit reliability assessment of three phase	To be completed in 2011					
23	Lynnville	00749-1	Performance driven by trees non preventable (45%), 2 vehicle accidents (17%), and an equipment problem (14%).			
			Replace mainline crossarm	Complete	Dec-10	
			Perform accelerated three phase assessment	Complete	Sep-11	
			Perform accelerated backbone assessment	Complete	Sep-11	
			Spot Forestry Patrol	Complete	Sep-11	
			Perform Faulted Circuit Indicator Installation Engineering Study	Complete	Sep-11	
			Perform mid-cycle forestry patrol.	Complete	Sep-11	
			Install main line tap fuses at 5 locations.	To be completed in 2011		
Install OH Fault Indicator at 1 Location	To be completed in 2011					

Met.Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
24	Bern Church	00789-1	Performance driven by trees non preventable (40%), two vehicle accidents (21%), and equipment problems (15%).			
			Guy Wire Repairs at three locations	Complete	Jul-10	
			Forestry to perform on cycle comprehensive circuit Tree Trimming	Complete	Aug-10	
			Install OH Fault indicators at a three phase sectionalizing location	Complete	Apr-11	
			Replace solid blade with sectionalizer	Complete	Jun-11	
			Replace pin insulator on single phase mainline	Complete	Aug-11	
			Perform accelerated backbone assessment	Complete	Sep-11	
			Perform accelerated three phase assessment	Complete	Sep-11	
			Perform accelerated single phase assessment	Complete	Sep-11	
Create UG loop in Plum Creek Estates URD	To be completed in 2011					
25	Flying Hills	00777-1	Performance driven by overhead and underground line problems (36%), a vehicle accident (15%) and a non-company tree crew (13%).			
			Perform Faulted Circuit Indicator Installation Engineering Study	Complete	Oct-10	2Q 2010
			Perform accelerated three phase assessment	Complete	Feb-11	3Q 2010
			Perform accelerated backbone assessment	Complete	Feb-11	4Q 2010
			Install Fault Indicators 9 Locations	Complete	Mar-11	1Q 2011
			Forestry to perform off cycle patrol and trim	Complete	Apr-11	3Q 2011
			Engineering mainline recloser analysis	To be completed in 2011		
Comprehensive Tree Trimming	To be completed in 2012					
26	Dillsburg	00749-4	Performance driven by a crossarm fire during T&L at 50% of circuit minutes and two tree related outages at 37% of circuit minutes.			
			Perform accelerated circuit reliability assessment of three phase - Post Storm	Complete	Jun-10	
			Perform accelerated circuit reliability assessment of mainline - Post Storm	Complete	Jun-10	
			Forestry to perform on cycle comprehensive circuit Tree Trim in 2010	Complete	Sep-10	
			Perform accelerated circuit reliability assessment of mainline - Regulatory Required 2011	Complete	Jul-11	
			Perform accelerated circuit reliability assessment of three phase - Regulatory Required 2011	Complete	Aug-11	
			Perform accelerated circuit reliability assessment of single phase - Regulatory Required 2011	Complete	Aug-11	
			Perform SAIFI analysis initiative study	To be completed in 2011		
Install a total of 6 FCI at 2 locations on the circuit	To be completed in 2012					
27	Taxville	00575-4	Performance driven by a wind storm (76% of minutes in one event caused by a tornado).			
			Perform mid-cycle forestry patrol.	Complete	Oct-11	
			Perform Accelerated backbone and three phase assessment	To be completed in 2011		
28	S Hamburg	00801-1	Performance driven by equipment failure (54%), and trees non preventable (10%).			
			Perform Fault Current Indicator Installation Engineering Study	Complete	Sep-10	
			Install additional OH Fault Indicator at 1 Location	Complete	Nov-10	
			Perform accelerated three phase assessment	Complete	Mar-11	
			Comprehensive Tree Trimming	To be completed in 2012		
			Install additional fusing	To be completed in 2012		
3PH Pole Repair from 3PH assessment	To be completed in 2012					

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
29	Bernville	00787-1	Performance driven by equipment problem (52%), and trees non preventable (25%).			
			Perform accelerated three phase and backbone assessment	Complete	Mar-10	
			Forestry spot patrol and trimming	Complete	Mar-10	
			Install additional mainline fault indicators (3 locations)	Complete	Nov-10	
			Perform additional accelerated three phase and backbone assessment	Complete	Oct-11	
			Mainline Spot Forestry Patrol	To be completed in 2011		
30	Windsor	00796-4	Circuit performance was driven by non-preventable tree cause outages and tornado (80% of minutes).			
			Perform Accelerated backbone and three phase assessment	Complete	Jul-10	
			Perform Accelerated backbone and three phase assessment	To be completed in 2011		
			Forestry to perform on cycle comprehensive circuit Tree Trimming	To be completed in 2012		
31	Birdsboro	00757-1	Performance driven by trees non-preventable (71%)			2Q 2010 3Q 2010 4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Comprehensive Tree Trimming	Complete	Jul-10	
			Upgrade T-12 Tie Recloser	Complete	Oct-10	
			Install mainline fault indicators 3 locations	Complete	Jan-11	
			Perform accelerated three phase assessment	To be completed in 2011		
			Perform accelerated backbone assessment	To be completed in 2011		
			Install additional mainline fault indicators	To be completed in 2012		
Upgrade Mainline Disconnects to GOAB	To be completed in 2012					
32	Hill	00734-4	Performance driven by equipment failure causes (75% of minutes- 77% of these minutes caused by a pin insulator on non-fused spur).			
			Helicopter Patrol transmission source	Complete	Sep-11	
			Install additional Fuses on non-fused spur	To be completed in 2011		
			Perform Accelerated backbone and three phase assessment	To be completed in 2011		
33	Birchwood	00624-3	Performance was driven by line failure, and non-preventable trees. 57% of circuit minutes due to line failure during storm on 12/27/10, and cold load pickup during restoration.			4Q 2010 1Q 2011 2Q 2011 3Q 2011
			Replace Form 3 control on recloser with Form 6	Complete	Jun-11	
			Perform accelerated backbone assessment	To be completed in 2011		
			Study phase balancing to relieve unbalance during cold load pickup	To be completed in 2011		
34	Annville	00743-2	Performance was primarily driven by tree caused outages (84%) and animal damages (10%).			2Q 2010 3Q 2010 2Q 2011 3Q 2011
			Post storm assessment due to excessive damage	Complete	Jun-10	
			Accelerated circuit assessment 1 phase	Complete	Aug-10	
			Forestry Patrol of Backbone and all of Three-Phase along Lancaster Ave	Complete	Oct-10	
			Comprehensive Tree Trimming	Complete	Mar-11	
			Install additional disconnect switches	Complete	Mar-11	
			Perform accelerated three phase circuit assessment	Complete	Jul-11	
			Perform accelerated backbone assessment	Complete	Jul-11	
Replace failed recloser with new unit	To be completed in 2011					

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
35	Annville	00744-2	Performance was primarily driven by conductor failure (67%), equipment failure (22%) and forced outages (8%).			
			Accelerated circuit assessment 3 phase	Complete	May-11	
			Perform accelerated backbone assessment	Complete	May-11	
			Comprehensive Tree Trimming	Complete	May-11	
			Install Fault Indicators 5 locations	To be completed in 2012		
			Replace arrestors as Switch 74469	To be completed in 2012		
			Replace Switch 74466	To be completed in 2012		
36	Glendon	00818-3	Performance driven by line failure on 7/3/11, which contributed 73% of circuit minutes.			
			Perform accelerated assessment on the circuit backbone	Complete	Mar-11	
37	Lynnville	00737-1	Performance driven by trees non preventable (52%), and line and equipment failures (37%).			
			Pole Replacements 6 Locs	Complete	Jun-10	
			Perform accelerated three phase assessment	Complete	Dec-10	
			Perform accelerated backbone assessment	Complete	Dec-10	
			Install additional mainline fusing	Complete	Feb-11	
			Perform Fault Current Indicator Installation Engineering Study	Complete	Aug-11	
			Perform mid-cycle forestry patrol.	To be completed in 2011		
			Install OH Fault Indicators at 9 Locations	To be completed in 2011		
	Annville	00742-2	Performance was primarily driven by tree caused outages (27%) and wind damage (50%).			2Q 2010 3Q 2010 4Q 2010 1Q 2011
			Post storm assessment due to excessive damage	Complete	Jun-10	
			Install GOAB to sectionalize	Complete	Sep-10	
			Perform accelerated backbone assessment	Complete	Mar-11	
			Install Fault Indicators on 3 phase 6 locations	Complete	Jun-11	
			Comprehensive Tree Trimming	Complete	May-11	
	North Cornwall	00610-2	Performance was primarily driven by equipment failures (41%), tree damage (24%) and conductor failure (13%).			2Q 2010 3Q 2010 4Q 2010 2Q 2011
			Accelerated circuit assessment 3 phase	Complete	Jun-10	
			Install Mainline 3 phase switch	Complete	Sep-10	
			Replace solids with fuses and move 4 spans upstream	Complete	Sep-10	
			Replace arrestors 2 locations on 3 phase backbone	Complete	Mar-11	
			Perform accelerated backbone assessment	Complete	Apr-11	
			Forestry to perform off cycle patrol and trim	Complete	Jan-11	
	Campbelltown	00731-2	Performance was primarily driven by tree caused outages (26%), wind damage (48.5%), UG cable failures (11.5%)			2Q 2010 3Q 2010 4Q 2010 1Q 2011
			Post storm assessment due to excessive damage	Complete	Jun-10	
			Forestry to perform mid-cycle assessment of remaining 3-phase	Complete	Sep-10	
			Perform accelerated backbone assessment	Complete	Mar-11	
			Perform SAIFI analysis initiative study	Complete	Feb-11	
			Trim locations identified in forestry review	Complete	Apr-11	
			Install Fault Indicators on 3 phase 6 locations	To be completed in 2011		
Repair high priority items identified during circuit assessment	To be completed in 2012					

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
	N Hanover	00514-4	Performance driven by the June 4 windstorm as cause at 79% of circuit minutes, which felled 7 poles; and 16% of circuit minutes from trees as cause during 7/19/10 storms.			2Q 2010 3Q 2010 4Q 2010 1Q 2011
			Perform accelerated circuit reliability assessment of three phase - No Priority 1 Findings	Complete	Jul-10	
			Perform accelerated circuit reliability assessment of mainline - No Priority 1 Findings	Complete	Jul-10	
			Replace 1 chipped cutout found during Line patrol	Complete	Mar-10	
			Forestry perform off cycle three phase vegetative patrol	Complete	Jan-11	
			Perform accelerated backbone assessment	To be completed in 2011		
			Forestry to perform on cycle comprehensive circuit Tree Trim in 2012	To be completed in 2012		
	Newberry	00576-4	Performance driven by non-preventable tree cause outages (66% of minutes).			2Q 2010 3Q 2010 4Q 2010 1Q 2011
			Perform accelerated assessment on the circuit backbone, 3 phases of the circuit and a portion of the single phase	Complete	Jun-10	
			Perform accelerated circuit single phase assessment	Complete	Jul-10	
			Perform accelerated assessment on the circuit backbone and 3 phase of the circuit after a wind storm	Complete	Oct-10	
			Install additional Fault Indicators on the circuit	Complete	Nov-10	
			Perform accelerated backbone assessment	Complete	Mar-11	
			Install three radio controlled switches and recloser with fault indicators	To be completed in 2011		
	Yorkana	00715-4	Performance driven by non-preventable tree cause outages (12% of minutes) and equipment problems (84% of minutes).			2Q 2010 3Q 2010 4Q 2010 1Q 2011
			Perform Accelerated assessment on the circuit backbone including all three and single phases of the circuit after a major hail storm.	Complete	May-10	
			Perform accelerated circuit three phase backbone assessment and record the locations of all splices	Complete	Jul-10	
			Install three radio controlled switches with fault indicators	Complete	Aug-10	
			Perform thermal scan of all splices on the circuit three phase backbone	Complete	Aug-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Perform accelerated backbone assessment	Complete	Feb-11	
			Forestry to perform off cycle patrol and trim	Complete	Mar-11	
	Barto	00705-1	Performance driven by Switch (Cutout) equipment failure(89% of the minutes) and a animal caused substation outage.			2Q 2010 3Q 2010 4Q 2010 1Q 2011 2Q 2011
			Install Faulted Circuit Indicators at seven locations	Complete	May-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Replace overloaded fuse with a single phase recloser, upgrade a fuse downstream of this location/ install fault indicators	Complete	Mar-11	
			Install Fault indicators on a heavily wooded section downstream of the new single phase recloser as 3 locations	Complete	Mar-11	
			Perform accelerated backbone assessment	Complete	Mar-11	
			Perform accelerated three phase assessment	Complete	Mar-11	
			Install 2 additional New mainline 3 phase reclosers	Complete	Jun-11	
			Install additional fusing 3 single phase locations	Complete	Jun-11	
			Forestry to perform off cycle patrol and trim	Complete	Apr-11	

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
	Allen	00503-4	Performance driven by trees as cause at 55% of minutes (includes both storm and non-storm tree outages). 79% of circuit minutes occurred during storm conditions.			
			Perform accelerated circuit reliability assessment of three phase - No Priority 1 Findings	Complete	Jun-10	
			Perform accelerated circuit reliability assessment of mainline - No Priority 1 Findings	Complete	Jun-10	
			Replace recloser destroyed by lightning in June 12 storm	Complete	Jul-10	
			Forestry perform off cycle trim	Complete	Jul-10	
			Perform accelerated circuit reliability assessment of three phase - No Priority 1 Findings	Complete	Oct-10	
			Perform accelerated circuit reliability assessment of mainline - No Priority 1 Findings	Complete	Oct-10	
			Replaced 1 crossarm and 1 other item identified during patrols	Complete	Nov-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	3Q 2010
			Engineering and Forestry Perform mainline vegetation assessment	Complete	Jan-11	4Q 2010
			Forestry to perform on cycle comprehensive circuit Tree Trim in 2011	Complete	Mar-11	1Q 2011
			Perform accelerated circuit reliability assessment of three phase - No Priority 1 Findings	Complete	Mar-11	2Q 2011
			Perform accelerated circuit reliability assessment of mainline - No Priority 1 Findings	Complete	Mar-11	
			Installed new single phase trip and lockout recloser, 50322, identified in SAIFI Analysis	Complete	Apr-11	
			GOAB Inspections (9) identified in SAIFI Analysis	Complete	May-11	
			Installed new single phase trip and lockout recloser, 50302, identified in SAIFI Analysis	Complete	May-11	
			Installed new three phase fuses identified in SAIFI Analysis - Haars Tap	Complete	Jun-11	
			Installed relocated three phase trip and lockout recloser identified in SAIFI Analysis	Complete	Jun-11	
	Install FCI identified in SAIFI Analysis - 2 locations total of 6 FCI	Complete	Jul-11			
	Install new single phase fuse identified in SAIFI Analysis - Dogwood Ln	Complete	Jul-11			
	Install new three phase fuses identified in SAIFI Analysis - Shorten BB along Rte74	Complete	Jul-11			
	Allen	00502-4	Performance driven by tree as cause at 81% of circuit minutes, 71% of minutes from trees during the 9/22/10 storm			
			Replaced 2 crossarms and 1 other item identified during Line patrol	Complete	May-10	
			Perform accelerated circuit reliability assessment of three phase - No Priority 1 Findings	Complete	Oct-10	2Q 2010
			Perform accelerated circuit reliability assessment of mainline - No Priority 1 Findings	Complete	Oct-10	3Q 2010
			Install fault indicators 4 locations	Complete	Nov-10	4Q 2010
			Perform accelerated circuit reliability assessment of mainline	Complete	May-11	1Q 2011
			Perform accelerated circuit reliability assessment of three phase	Complete	May-11	2Q 2011
			Perform accelerated circuit reliability assessment of single phase	Complete	May-11	
	Forestry to perform on cycle comprehensive circuit Tree Trim in 2011	To be completed in 2011				
	Dillsburg	00746-4	Performance driven by tree as cause at 96% of minutes. 93% of circuit minutes by trees in the 9/22/10 storm.			
			Forestry to perform on cycle comprehensive circuit Tree Trim in 2010	Complete	Dec-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	2Q 2010
			Engineering and Forestry Perform mainline vegetation assessment	Complete	Jan-11	3Q 2010
			Perform accelerated circuit reliability assessment of three phase - No Priority 1 Findings	Complete	Mar-11	4Q 2010
			Perform accelerated backbone assessment	Complete	Mar-11	1Q 2011
			Perform accelerated circuit reliability assessment of single phase	Complete	Mar-11	2Q 2011
			Upgraded existing 300A disconnects to new 600A disconnect switches	Complete	May-11	
			Installed new single phase trip and lockout recloser identified in SAIFI Analysis	Complete	Jun-11	
	GOAB Inspections identified in SAIFI Analysis	Complete	Jul-11			

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
	Orrtanna	00764-4	Performance driven by two August 2010 mainline vehicle pole contacts as cause at 52% of circuit minutes and a crimp failure on 12/12/10 at 14% of circuit minutes.			3Q 2010 4Q 2010 1Q 2011 2Q 2011
			Install animal guard 3 locations	Complete	Jun-10	
			Perform accelerated circuit reliability assessment of three phase	Complete	Sep-10	
			Perform accelerated circuit reliability assessment of mainline	Complete	Sep-10	
			Perform accelerated backbone assessment	To be completed in 2011		
			Forestry to perform on cycle comprehensive circuit Tree Trim in 2011	To be completed in 2011		
	Toina	00793-4	Circuit performance was driven by non-preventable tree cause outages (57% of minutes)			3Q 2010 4Q 2010 1Q 2011 2Q 2011
			Perform accelerated backbone and three phase assessment	Complete	Aug-10	
			Perform accelerated assessment on the circuit backbone and 3 phase of the circuit after a wind storm	Complete	Oct-10	
			Repair 2 condition items identified during Circuit assessment	Complete	Feb-11	
			Perform Accelerated backbone and three phase assessment	Complete	Feb-11	
			Forestry to perform on cycle comprehensive circuit Tree Trimming	Complete	Jul-11	
			Install two reclosers to protect the circuit backbone.	To be completed in 2011		
	Crossroads	00728-4	Performance driven by non-preventable tree cause outages (85% of minutes).			3Q 2010 4Q 2010 1Q 2011 2Q 2011
			Perform accelerated assessment on the circuit backbone and 3 phase of the circuit after a wind storm	Complete	Oct-10	
			Repair critical items identified from backbone assessment	Complete	Oct-10	
			Forestry to perform assessment of 3 phase cross-country R/W	Complete	Nov-10	
			Forestry to remove critical trees identified from cross-country assessment	Complete	Nov-10	
			Forestry to perform on cycle comprehensive circuit Tree Trimming	Complete	Mar-11	
			Perform Accelerated backbone and three phase assessment	Complete	Jul-11	
			Perform accelerated single phase assessment	Complete	Jul-11	
			Repair high priority items identified from circuit assessment	To be completed in 2011		
			Install additional Fault Indicators	To be completed in 2011		
	Grantville	00721-2	Performance was primarily driven by a vehicle accident (13%) and the damage done by the June 24, 2010 wind storm (82.5%).			2Q 2010 3Q 2010 4Q 2010 1Q 2011
			Install New Recloser and remove existing recloser	Complete	Aug-10	
			Accelerated circuit assessment 3 phase	Complete	Aug-10	
			Replace insulator on 3 phase backbone	Complete	Aug-10	
			Replace blown arrestor on 3 phase backbone	Complete	Nov-10	
			Perform accelerated backbone assessment	Complete	Jul-11	
			Replace failing crossarm on 3 phase backbone	To be completed in 2011		
			Replace insulator on 3 phase backbone	To be completed in 2011		
			Correct 4 coordination issues	To be completed in 2012		

Met-Ed						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
	Campbelltown	00731-2	Performance was primarily driven by tree caused outages (26%), wind damage (48.5%), UG cable failures (11.5%).			2Q 2010 3Q 2010 4Q 2010 1Q 2011
			Post storm assessment due to excessive damage	Complete	Jun-10	
			Forestry to perform mid-cycle assessment of remaining 3-phase	Complete	Sep-10	
			Perform accelerated backbone assessment	Complete	Mar-11	
			Perform SAIFI analysis initiative study	Complete	Feb-11	
			Trim locations identified in forestry review	Complete	Apr-11	
			Install Fault Indicators on 3 phase 6 locations	Complete	Aug-11	
			Repair high priority items identified during circuit assessment	To be completed in 2012		
	Anrville	00742-2	Performance was primarily driven by tree caused outages (27%) and wind damage (50%).			2Q 2010 3Q 2010 4Q 2010 1Q 2011
			Accelerated circuit assessment 3 phase	Complete	May-10	
			Post storm assessment due to excessive damage	Complete	Jun-10	
			Install GOAB to sectionalize	Complete	Sep-10	
			Perform accelerated backbone assessment	Complete	Mar-11	
			Install Fault Indicators on 3 phase 6 locations	Complete	Jun-11	
			Comprehensive Tree Trimming	Complete	May-11	
	Myerstown	00750-2	Performance was primarily driven by tree caused outages (81%) and vehicle caused outages (11%).			3Q 2010 4Q 2010 1Q 2011 2Q 2011
			3 Phase assessment of circuit	Complete	Mar-11	
			Repair ridge pin on 3 phase backbone	Complete	Nov-10	
			Replace crossarm on 3 phase backbone	Complete	Nov-10	
			Install Fault Indicators 15 locations	Complete	Feb-11	
			Perform accelerated backbone assessment	Complete	Mar-11	
			Extend 3 phase, balance load and add fusing to northern portion of circuit	To be completed in 2011		
			Transfer customers onto 751-2 line	To be completed in 2012		
	Bath	00873-3	Performance was driven by equipment failure, non-preventable trees, and line failure.			3Q 2010 4Q 2010 1Q 2011 2Q 2011
			Perform accelerated backbone assessment	Complete	Jul-10	
			Perform accelerated single phase assessment	Complete	Sep-10	
			Repair critical items identified from circuit patrol	Complete	Sep-10	
			Install additional backbone fusing and faulted circuit indicators	Complete	Dec-10	
			Perform SAIFI analysis initiative study	Complete	Jan-11	
			Perform accelerated backbone and three phase assessment	Complete	Mar-11	
			Install remote control on Bath substation recloser	Complete	May-11	
			Correct fuse miscoordinations identified during SAIFI analysis	To be completed in 2011		
			Replace current limiting fuses on step transformers	To be completed in 2011		
			Install new electronic recloser	To be completed in 2011		

ADDENDUM

Proposed Changes to Approved and Existing 2011-2102 Biennial Inspection, Maintenance, Repair and Replacement Plan¹

¹ The proposed changes and revisions that the Companies request herein only pertain to distribution overhead lines, distribution transformer and substation inspections.

Section 57.198(l) EDC updates. An EDC may request approval from the Commission for revising its approved plan. An EDC shall submit to the Commission, as an addendum to its quarterly reliability report under §§ 57.193(c) and 57.195, prospective and past revisions to its plan and a discussion of the reasons for the revisions. Within 60 days, the Commission or the Director of CEEP will accept or reject the revisions to the plan. The appeal procedure in subsection (k) applies to the appeal of a rejection of revisions to the plan.

Request for Revision

Pursuant to 52 Pa. Code § 57.198(l), Pennsylvania Power Company (“Penn Power”), Pennsylvania Electric Company (“Penelec”), and Metropolitan Edison Company (“Met-Ed”) (collectively, the “Companies”) hereby request to modify their current distribution overhead line, distribution transformer and substation inspection programs. The reason for revision is to implement consistent distribution overhead line, distribution transformer and substation inspection programs across the four Pennsylvania companies and West Penn Power Company following the merger between FirstEnergy and Allegheny Energy. Please see the table below for a summary of the proposed changes. The proposed distribution overhead line, distribution transformer and substation inspection programs follow on pages 41 to 61. the Penn Power revisions are found on pages 41 to 46; the Penelec revisions are found on pages 47 to 54; and the Met-Ed revisions are found on pages 55 to 62. Upon approval, these pages will replace the pages in the existing approved plans.

Penn Power, Penelec and Met-Ed <i>Approved December 15, 2009</i>	Penn Power, Penelec and Met-Ed <i>Proposed Program (effective January 1, 2012)</i>
Distribution Overhead Line Inspections	
Visual inspection on a 5-year cycle	Visual inspection on a 6-year cycle
Distribution Transformer Inspections	
Overhead transformers – inspect as part of overhead line inspection (5-year cycle)	Overhead transformers – inspect as part of overhead line inspection (6-year cycle)
Above-ground transformers – inspect on a 5-year cycle	Above-ground transformers – inspect on 6-year cycle (to align with overhead transformer and line inspections)
Substation Inspections	
Inspect all substations 12 times annually	Inspections will consist of three components: 1. Monthly Safety & Security Inspection 2. Quarterly Safety and Security Inspection with Readings 3. Biannual Safety and Security Inspection with Full Inspection

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

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

Program Description

Penn Power shall visually inspect overhead lines and equipment on a six-year cycle. The purpose for inspecting overhead lines and equipment is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the state regulatory agencies and the National Electrical Safety Code. This program shall be limited to overhead facilities.

Approximately one-sixth of all circuits will be inspected annually to levelize labor commitments and expenses. This preventative maintenance will consist of a visual inspection and recording of abnormal conditions including but not limited to the following types of overhead circuit equipment:

- Conductors (wire and cable) – excessive slack, condition, damage, clearances
- Supporting structures (wood poles) – deteriorated condition, sustained damage (lightning, vehicle, woodpecker holes)
- Pole hardware (including insulators) – condition, damage
- Guying – condition, damage
- Pole-mounted distribution equipment (including overhead transformers) – condition, damage

Further detailed information regarding Penn Power's inspection of Distribution Overhead Lines may be found in the Distribution Inspection & Maintenance Practice.

Inspection Plan

	Area	Overhead Line Inspections Planned (Number of Circuits)
		2012
Penn Power 178 total circuits	Clark 59 total circuits	11
	Zelienople 119 total circuits	20

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

Corrective Maintenance

Supporting structures with recorded defects that Penn Power could reasonably expect to affect the integrity of the circuit shall be repaired/replaced within 30 days. All remaining deficiencies will be prioritized on a case-by-case basis.

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

Justification

The practice of performing overhead line inspections on a six-year cycle is based on accepted electric utility practices. National Electrical Safety Code (NESC) Rule 12.121.A states "*lines and equipment shall be inspected at such intervals as experience has shown to be necessary.*" A periodicity of six (6) years between inspections has historically been utilized by West Penn Power Company and has proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on personal safety, equipment integrity or service reliability. In addition to the cost analysis that Penn Power has completed, this experience does not justify the expense of an increased cycle.

In addition to an inspection every six years, Penn Power has a unique opportunity that allows Company personnel to view the overhead line facilities and identify any potential issues. Penn Power's overhead line inspection program coincides with other equipment inspections, such as the annual recloser inspections. In order to address specific reliability concerns and to assess some worst performing circuit performance, additional circuit assessments are performed in addition to Penn Power's six-year inspection program. Any emergent priority overhead line problems identified during these other inspections are addressed in a timely manner.

The periodicity in the aforementioned practice is a former Allegheny Energy practice that is being adopted by Penn Power as a result of the merger between FirstEnergy and Allegheny Energy.

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

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

Program Description

Penn Power visually inspects overhead distribution transformers as part of the overhead line inspection. Above-ground pad-mounted transformers are inspected on a six-year cycle and below-ground transformers are inspected on an eight-year cycle. The purpose for inspecting distribution transformers is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the state regulatory agencies and the National Electrical Safety Code.

Overhead distribution transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, arresters, rust, dents or evidence of contact

Above-ground pad-mounted equipment (transformers and switchgear) – inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, cabinet damage, holes, washout
- Security – locking mechanisms
- Accessibility – as required for operation and maintenance purposes, including installation of fences or shrubbery that could adversely affect access to and operation of the transformer and unauthorized excavation or changes in grade near the transformer
- Warning labels – electrical hazard warning label and landscaping instructions notice

Below-ground transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Accessibility – verify cover is secured
- Equipment condition – visually inspect baffle

Further detailed information regarding Penn Power's inspection of distribution transformers may be found in the Distribution Inspection & Maintenance Practice – Underground Equipment.

Inspection Plan

	Area	Type	Transformer Inspections Planned
			Total transformers 2012
Penn Power 61,580 total transformers	Clark 26,231 total transformers	Overhead Transformers 23,699 total transformers	4,200
		Above-Ground Pad-mounted 2,532 total transformers	414
	Zelienople 35,349 total transformers	Overhead Transformers 26,432 total transformers	5,200
		Above-Ground Pad-mounted 8,896 total transformers	1481

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

Justification

The practice of performing distribution overhead transformer inspections as well as above-ground transformer inspections on a six-year cycle and below-ground transformers on an eight-year cycle is based on accepted electric utility practices and the experience of Penn Power. National Electrical Safety Code (NESC) Rule 12.121.A states *"lines and equipment shall be inspected at such intervals as experience has shown to be necessary."*

The aforementioned periodicity between inspections allows distribution overhead and above-ground transformers to be inspected in conjunction with the overhead circuit inspection which is on a 6-year cycle as well. The above periodicities between inspections have proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on personal safety, equipment integrity or service reliability.

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

Program Description

Penn Power's substation inspection program is composed of three components. The purpose of these inspections of the distribution substations is to verify the security of the substation, capture readings and to ensure that any developing substation problems are identified and addressed in a timely manner in support of system reliability and electrical safety.

These three components include:

1. Safety and Security Inspection (Class C) – monthly inspection and recording of abnormal conditions including but not limited to the following:
 - Substation control house (security breaches, roof integrity, fire protection equipment, general housekeeping)
 - Substation yard and perimeter (gate, fence, signage)
2. Safety and Security Inspection with Readings (Class B) – quarterly inspection and recording of abnormal conditions including but not limited to the following types of substation equipment:
 - Substation control house (security breaches, roof integrity, fire protection equipment, general housekeeping)
 - Substation yard and perimeter (gate, fence, signage)
 - Read and record currents, voltages, temperatures, pressures and operations counters on installed substation equipment
3. Safety and Security Inspection with Full Inspection (Class A) – a biannual visual inspection along with readings and a more comprehensive inspection and testing of the substation and including but not limited to the following types of substation equipment:
 - Substation control house (security breaches, roof integrity, fire protection equipment, general housekeeping)
 - Substation yard and perimeter (gate, fence, signage)
 - Read and record currents, voltages, temperatures, pressures and operations counters on installed substation equipment
 - Microwave/radio sites and engine generators, batteries and chargers
 - Relaying, power transformers, breakers, voltage regulators, capacitor banks, etc.

Further detailed information regarding Penn Power's inspection of substations may be found in the Substation Practice Manual.

Inspection Plan

	Area	Substation Inspections Planned (Number of Substations) 2012
Penn Power 80 total substations	New Castle 80 total substations	960

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

Justification

The practice of performing substation inspections is based on accepted utility practices and the experience of Penn Power. Providing a trained, physical presence within the substation on a regular, periodic basis has proven very successful in detecting the degradation of facilities not always captured by existing local and remote surveillance and monitoring tools. A periodicity of one month between inspections has proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on person safety, equipment integrity or service reliability.

This practice is a former Allegheny Energy practice that is being adopted by Penn Power as a result of the merger between FirstEnergy and Allegheny Energy.

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

- iv. Broken insulators*
- v. Conditions that may adversely affect operation of the overhead distribution line*
- vi. Other conditions that may adversely affect operation of the overhead distribution line*

Program Description

Penelec shall visually inspect overhead lines and equipment on a six-year cycle. The purpose for inspecting overhead lines and equipment is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the state regulatory agencies and the National Electrical Safety Code. This program shall be limited to overhead facilities.

Approximately one-sixth of all circuits will be inspected annually to levelize labor commitments and expenses. This preventative maintenance will consist of a visual inspection and recording of abnormal conditions including but not limited to the following types of overhead circuit equipment:

- Conductors (wire and cable) – excessive slack, condition, damage, clearances
- Supporting structures (wood poles) – deteriorated condition, sustained damage (lightning, vehicle, woodpecker holes)
- Pole hardware (including insulators) – condition, damage
- Guying – condition, damage
- Pole-mounted distribution equipment (including overhead transformers) – condition, damage

Further detailed information regarding Penelec's inspection of Distribution Overhead Lines may be found in the Distribution Inspection & Maintenance Practice.

Inspection Plan

	Area	Overhead Line Inspections Planned (Number of Circuits)
		2012
Penelec 1,241 total circuits	Oil City 184 total circuits	30
	Erie 200 total circuits	33
	Johnstown 176 total circuits	29
	Towanda 172 total circuits	29
	Altoona 154 total circuits	26
	Clearfield 121 total circuits	20
	Lewistown 97 total circuits	16
	Mansfield 137 total circuits	23

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

Corrective Maintenance

Supporting structures with recorded defects that Penelec could reasonably expect to affect the integrity of the circuit shall be repaired/replaced within 30 days. All remaining deficiencies will be prioritized on a case-by-case basis.

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

Justification

The practice of performing overhead line inspections on a six-year cycle is based on accepted electric utility practices. National Electrical Safety Code (NESC) Rule 12.121.A states "lines and equipment shall be inspected at such intervals as experience has shown to be necessary." A periodicity of six (6) years between inspections has historically been utilized by West Penn Power Company and has proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on personal safety, equipment integrity or service reliability. In addition to the cost analysis that Penelec has completed, this experience does not justify the expense of an increased cycle.

In addition to an inspection every six years, Penelec has a unique opportunities that allows Company personnel to view the overhead line facilities and identify any potential issues. Penelec's overhead line inspection program coincides with other equipment inspections, such as the annual recloser inspections. In order to address specific reliability concerns and to assess some worst performing circuit performance, additional circuit assessments are performed in addition to Penelec's six-year inspection program. Any emergent priority overhead line problems identified during these other inspections are addressed in a timely manner.

The periodicity in the aforementioned practice is a former Allegheny Energy practice that is being adopted by Penelec as a result of the merger between FirstEnergy and Allegheny Energy.

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

- v. Rust, dents or other evidence of contact
- vi. Leaking oil
- vii. Installation of fences or shrubbery that could adversely affect access to and operation of the transformer
- viii. Unauthorized excavation or changes in grade near the transformer

Program Description

Penelec visually inspects overhead distribution transformers as part of the overhead line inspection. Above-ground pad-mounted transformers are inspected on a six-year cycle and below-ground transformers are inspected on an eight-year cycle. The purpose for inspecting distribution transformers is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the state regulatory agencies and the National Electrical Safety Code.

Overhead distribution transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, arresters, rust, dents or evidence of contact

Above-ground pad-mounted equipment (transformers and switchgear) – inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, cabinet damage, holes, washout
- Security – locking mechanisms
- Accessibility – as required for operation and maintenance purposes, including installation of fences or shrubbery that could adversely affect access to and operation of the transformer and unauthorized excavation or changes in grade near the transformer
- Warning labels – electrical hazard warning label and landscaping instructions notice

Below-ground transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Accessibility – verify cover is secured
- Equipment condition – visually inspect baffle

Further detailed information regarding Penelec's inspection of distribution transformers may be found in the Distribution Inspection & Maintenance Practice – Underground Equipment.

Inspection Plan

	Area	Type	Transformer Inspections
			Planned
			(Total Transformers) 2012
Penelec 176,459 total transformers	Oil City	Overhead Transformers 19,896 total transformers	3,155
		Above-Ground Pad-mounted 2,995 total transformers	436
	Erie	Overhead Transformers 19,772 total transformers	3,209
		Above-Ground Pad-mounted 5,107 total transformers	962
	Johnstown	Overhead Transformers 22,626 total transformers	3,262
		Above-Ground Pad-mounted 4,634 total transformers	618
	Towanda	Overhead Transformers 19,272 total transformers	2,881
		Above-Ground Pad-mounted 2,022 total transformers	357
	Altoona	Overhead Transformers 18,539 total transformers	3,102
		Above-Ground Pad-mounted 4,328 total transformers	530
	Clearfield	Overhead Transformers 20,899 total transformers	3,348
		Above-Ground Pad-mounted 2,213 total transformers	295
	Lewistown	Overhead Transformers 14,453 transformers	2,739
		Above-Ground Pad-mounted 3,192 total transformers	444
	Mansfield	Overhead Transformers 13,536 total transformers	1,703
		Above-Ground Pad-mounted 1,263 total transformers	177

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

Justification

The practice of performing distribution overhead transformer inspections as well as above-ground transformer inspections on a six-year cycle and below-ground transformers on an eight-year cycle is based on accepted electric utility practices and the experience of Penelec. National Electrical Safety Code (NESC) Rule 12.121.A states "lines and equipment shall be inspected at such intervals as experience has shown to be necessary."

The aforementioned periodicity between inspections allows distribution overhead and above-ground transformers to be inspected in conjunction with the overhead circuit inspection which is on a 6-year cycle as well. The above periodicities between inspections have proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on personal safety, equipment integrity or service reliability.

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

Program Description

Penelec's substation inspection program is composed of three components. The purpose of these inspections of the distribution substations is to verify the security of the substation, capture readings and to ensure that any developing substation problems are identified and addressed in a timely manner in support of system reliability and electrical safety.

These three components include:

4. Safety and Security Inspection (Class C) – monthly inspection and recording of abnormal conditions including but not limited to the following:
 - Substation control house (security breaches, roof integrity, fire protection equipment, general housekeeping)
 - Substation yard and perimeter (gate, fence, signage)
5. Safety and Security Inspection with Readings (Class B) – quarterly inspection and recording of abnormal conditions including but not limited to the following types of substation equipment:
 - Substation control house (security breaches, roof integrity, fire protection equipment, general housekeeping)
 - Substation yard and perimeter (gate, fence, signage)
 - Read and record currents, voltages, temperatures, pressures and operations counters on installed substation equipment
6. Safety and Security Inspection with Full Inspection (Class A) – a biannual visual inspection along with readings and a more comprehensive inspection and testing of the substation and including but not limited to the following types of substation equipment:
 - Substation control house (security breaches, roof integrity, fire protection equipment, general housekeeping)
 - Substation yard and perimeter (gate, fence, signage)
 - Read and record currents, voltages, temperatures, pressures and operations counters on installed substation equipment
 - Microwave/radio sites and engine generators, batteries and chargers
 - Relaying, power transformers, breakers, voltage regulators, capacitor banks, etc.

Further detailed information regarding Penelec's inspection of substations may be found in the [Substation Practice Manual](#).

Inspection Plan

	Area	Substation Inspections Planned Number of Substations 2012
Penelec 414 total substations	Oil City 36 substations	432
	Warren 29 substations	348
	Erie 41 substations	492
	Towanda 32 substations	384
	Mansfield 22 substations	264
	Tunkhannock 28 substations	336
	Altoona 58 substations	696
	Richland 54 substations	648
	Clearfield 53 substations	636
	Lewistown 25 substations	300
	Indiana 13 substations	156
	Huntington 23 substations	276

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

Justification

The practice of performing substation inspections is based on accepted utility practices and the experience of Penelec. Providing a trained, physical presence within the substation on a regular, periodic basis has proven very successful in detecting the degradation of facilities not always captured by existing local and remote surveillance and monitoring tools. A periodicity of one month between inspections has proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on person safety, equipment integrity or service reliability.

This practice is a former Allegheny Energy practice that is being adopted by Penelec as a result of the merger between FirstEnergy and Allegheny Energy.

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

- vii. Broken insulators*
- viii. Conditions that may adversely affect operation of the overhead distribution line*
- ix. Other conditions that may adversely affect operation of the overhead distribution line*

Program Description

Met-Ed shall visually inspect overhead lines and equipment on a six-year cycle. The purpose for inspecting overhead lines and equipment is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the state regulatory agencies and the National Electrical Safety Code. This program shall be limited to overhead facilities.

Approximately one-sixth of all circuits will be inspected annually to levelize labor commitments and expenses. This preventative maintenance will consist of a visual inspection and recording of abnormal conditions including but not limited to the following types of overhead circuit equipment:

- Conductors (wire and cable) – excessive slack, condition, damage, clearances
- Supporting structures (wood poles) – deteriorated condition, sustained damage (lightning, vehicle, woodpecker holes)
- Pole hardware (including insulators) – condition, damage
- Guying – condition, damage
- Pole-mounted distribution equipment (including overhead transformers) – condition, damage

Further detailed information regarding Met-Ed's inspection of Distribution Overhead Lines may be found in the Distribution Inspection & Maintenance Practice.

Inspection Plan

	Area	Overhead Line Inspections Planned Number of Circuits
		2012
Met-Ed 743 Total Circuits	Boyertown 37 total circuits	9
	Hanover 111 total circuits	20
	York 199 total circuits	25
	Lebanon 96 total circuits	10
	Easton 105 total circuits	16
	Stroudsburg 32 total circuits	4
	Reading 163 total circuits	43

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

Corrective Maintenance

Supporting structures with recorded defects that Met-Ed could reasonably expect to affect the integrity of the circuit shall be repaired/replaced within 30 days. All remaining deficiencies will be prioritized on a case-by-case basis.

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

Justification

The practice of performing overhead line inspections on a six-year cycle is based on accepted electric utility practices. National Electrical Safety Code (NESC) Rule 12.121.A states "lines and equipment shall be inspected at such intervals as experience has shown to be necessary." A periodicity of six (6) years between inspections has historically been utilized by West Penn Power Company and has proven to be successful in addressing emergent problems in a timely manner, allowing for proper planning and remediation prior to the emergent problem having a negative impact on personal safety, equipment integrity or service reliability. In addition to the cost analysis that Met-Ed has completed, this experience does not justify the expense of an increased cycle.

In addition to an inspection every six years, Met-Ed has a unique opportunity that allows Company personnel to view the overhead line facilities and identify any potential issues. Met-Ed's overhead

line inspection program coincides with other equipment inspections, such as the annual recloser inspections. In order to address specific reliability concerns and to assess some worst performing circuit performance, additional circuit assessments are performed in addition to Met-Ed's six-year inspection program. Any emergent priority overhead line problems identified during these other inspections are addressed in a timely manner.

The periodicity in the aforementioned practice is a former Allegheny Energy practice that is being adopted by Met-Ed as a result of the merger between FirstEnergy and Allegheny Energy.

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

- ix. Rust, dents or other evidence of contact
- x. Leaking oil
- xi. Installation of fences or shrubbery that could adversely affect access to and operation of the transformer
- xii. Unauthorized excavation or changes in grade near the transformer

Program Description

Met-Ed visually inspects overhead distribution transformers as part of the overhead line inspection. Above-ground pad-mounted transformers are inspected on a six-year cycle and below-ground transformers are inspected on an eight-year cycle. The purpose for inspecting distribution transformers is to identify and repair unsafe conditions or conditions that may adversely affect service reliability, and to comply with the state regulatory agencies and the National Electrical Safety Code.

Overhead distribution transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, arresters, rust, dents or evidence of contact

Above-ground pad-mounted equipment (transformers and switchgear) – inspection and recording of abnormal conditions including but not limited to the following:

- Equipment condition – oil leakage, cabinet damage, holes, washout
- Security – locking mechanisms
- Accessibility – as required for operation and maintenance purposes, including installation of fences or shrubbery that could adversely affect access to and operation of the transformer and unauthorized excavation or changes in grade near the transformer
- Warning labels – electrical hazard warning label and landscaping instructions notice

Below-ground transformers – visual inspection and recording of abnormal conditions including but not limited to the following:

- Accessibility – verify cover is secured
- Equipment condition – visually inspect baffle

Further detailed information regarding Met-Ed's inspection of distribution transformers may be found in the Distribution Inspection & Maintenance Practice – Underground Equipment.

Inspection Plan

	Area	Type	Transformer
		(Total Number of Transformers)	Inspections Planned Total transformers 2012
Met-Ed 181,613	Hanover	Overhead Transformers 26,238	2742
		Above-Ground Pad-mounted 8,061	728
		Below-Ground Transformers 124	41
	Boyertown	Overhead Transformers 11,453	1622
		Above-Ground Pad-mounted 3,747	251
		Below-Ground Transformers 52	1
	York	Overhead Transformers 30,803	2192
		Above-Ground Pad-mounted 12,428	954
		Below-Ground Transformers 174	5
	Lebanon	Overhead Transformers 16,438	1109
		Above-Ground Pad-mounted 5,307	197
		Below-Ground Transformers 235	1
	Easton	Overhead Transformers 14,177	2147
		Above-Ground Pad-mounted 3,621	493
		Below-Ground Transformers 160	7
	Stroudsburg	Overhead Transformers 11,960	642
		Above-Ground Pad-mounted 1,948	47
		Below-Ground Transformers 26	
	Reading	Overhead Transformers 26,572	3786
		Above-Ground Pad-mounted 7,854	523
		Below-Ground Transformers 235	26

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

Justification

The practice of performing distribution overhead transformer inspections as well as above-ground transformer inspections on a six-year cycle and below-ground transformers on an eight-year cycle is based on accepted electric utility practices and the experience of Met-Ed. National Electrical Safety Code (NESC) Rule 12.121.A states *"lines and equipment shall be inspected at such intervals as experience has shown to be necessary."*

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

Program Description

Met-Ed's substation inspection program is composed of three components. The purpose of these inspections of the distribution substations is to verify the security of the substation, capture readings and to ensure that any developing substation problems are identified and addressed in a timely manner in support of system reliability and electrical safety.

These three components include:

7. Safety and Security Inspection (Class C) – monthly inspection and recording of abnormal conditions including but not limited to the following:
 - Substation control house (security breaches, roof integrity, fire protection equipment, general housekeeping)
 - Substation yard and perimeter (gate, fence, signage)
8. Safety and Security Inspection with Readings (Class B) – quarterly inspection and recording of abnormal conditions including but not limited to the following types of substation equipment:
 - Substation control house (security breaches, roof integrity, fire protection equipment, general housekeeping)
 - Substation yard and perimeter (gate, fence, signage)
 - Read and record currents, voltages, temperatures, pressures and operations counters on installed substation equipment
9. Safety and Security Inspection with Full Inspection (Class A) – a biannual visual inspection along with readings and a more comprehensive inspection and testing of the substation and including but not limited to the following types of substation equipment:
 - Substation control house (security breaches, roof integrity, fire protection equipment, general housekeeping)
 - Substation yard and perimeter (gate, fence, signage)
 - Read and record currents, voltages, temperatures, pressures and operations counters on installed substation equipment
 - Microwave/radio sites and engine generators, batteries and chargers
 - Relaying, power transformers, breakers, voltage regulators, capacitor banks, etc.

Further detailed information regarding Met-Ed's inspection of substations may be found in the Substation Practice Manual.

Inspection Plan

	Area	Substation Inspections Planned 2012
Met-Ed 219 total substations	York 76 substations	912
	Lebanon 33 substations	396
	Easton 47 substations	564
	Reading 63 substations	756

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

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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Joint 3rd Quarter 2011 Reliability Report :
Public Version – Pennsylvania Power :
Company, Pennsylvania Electric Company :
and Metropolitan Edison Company - :
Pursuant to 52 Pa. Code § 57.195(d) and (e) :**

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PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

CERTIFICATE OF SERVICE

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

Service by overnight United Parcel Service, as follows:

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
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Service by overnight United Parcel Service and by electronic mail, as follows:

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Dated: November 1, 2011

Original Signed:

A handwritten signature in black ink, appearing to read "L. Barman", with a long horizontal flourish extending to the right.

Lori B. Barman
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(330) 252-6380
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**PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU**

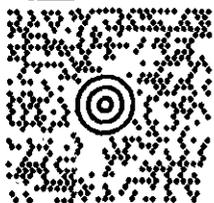
LORI B BARMAN
330-252-6380
FE SERVICE COMPANY
76 SOUTH MAIN
AKRON OH 44308

0.0 LBS LTR

1 OF 1

SHIP TO:

ROSEMARY CHIAVETTA, SECRETARY
7177727777
PENNSYLVANIA PUBLIC UTILITIES COMMI
COMMONWEALTH KEYSTONE BUILDING
400 NORTH STREET, 2ND FLOOR
HARRISBURG PA 17120



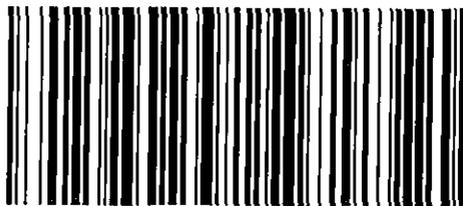
PA 171 9-20



UPS NEXT DAY AIR

TRACKING #: 1Z 475 886 01 9939 2241

1



BILLING: P/P

TO: CHIAVETTA, R. PUC (CHIAVI

Agency: PUC

Floor:

External Carrier: UPS



124758860199392241

CMPC

