

April 29, 2011

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PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU

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

Re: Joint 2010 Annual Reliability Report – Pennsylvania Power Company, Pennsylvania Electric Company and Metropolitan Edison Company- Pursuant to 52 Pa. Code § 57.195(a) and (b)

L-00030161

Dear Secretary Chiavetta,

Enclosed for filing on behalf of Pennsylvania Power Company, Pennsylvania Electric Company, and Metropolitan Edison Company (collectively, the “Companies”) are an original and six (6) copies of their Joint 2010 Annual Reliability Report.

A copy of this Joint Report is being submitted electronically to the Office of Consumer Advocate and the Office of Small Business Advocate.

Sincerely,



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President, Pennsylvania Operations  
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elliottd@firstenergycorp.com



Eric J. Dickson  
Director, Operations Services  
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**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Joint 2010 Annual Reliability Report – :  
Pennsylvania Power Company, Pennsylvania :  
Electric Company and Metropolitan Edison :  
Company - Pursuant to 52 Pa. Code § 57.195(a) :  
:**

**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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Harrisburg, PA 17120

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SECRETARY'S BUREAU

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Dated: April 29, 2011

  
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PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU



## Joint 2010 Annual Reliability Report

Pennsylvania Power Company,  
Pennsylvania Electric Company and  
Metropolitan Edison Company

Pursuant to 52 Pa. Code § 57.195(a) and (b)

**Joint 2010 Annual Reliability Report**  
**Pennsylvania Power Company, Pennsylvania Electric Company**  
**and Metropolitan Edison Company**  
**Pursuant to 52 Pa. Code Chapter § 57.195(a) and (b)**

The following Joint 2010 Report (“Report”) is submitted to the Pennsylvania Public Utility Commission (“PaPUC”) on behalf of Pennsylvania Power Company (“Penn Power”), Pennsylvania Electric Company (“Penelec”) and Metropolitan Edison Company (“Met-Ed”) (collectively, the “Companies”).

*Section 57.195(b)(1) An overall current assessment of the state of the system reliability in the EDC’s service territory including a discussion of the EDC’s current programs and procedures for providing reliable electric service.*

*Current Assessment of the State of System Reliability*

Significant benefits and improvements were realized in 2010. While this report will provide more detail into the specific accomplishments of 2010, a few of the highlights are:

- Penn Power’s SAIDI was 41% better than the Commission’s 12-Month Standard in 2010;
- Penelec’s SAIDI was 24% better than the Commission’s 12-Month Standard in 2010;
- Met-Ed’s SAIDI was 7% better than the Commission’s 12-Month Standard in 2010 and;
- Eight of nine of the Companies’ 2010 year-end reliability indices (SAIFI, CAIDI and SAIDI) were better than the Commission’s 12-Month Standard.

## Reliability Results

The Companies' 2010 year-end results reflect hard work, dedication and commitment exhibited by Penn Power, Penelec and Met-Ed to improve reliability performance for their customers in the Commonwealth of Pennsylvania. The Companies' message has been consistent – implementation of reliability improvement projects take time and, sometimes, so does the realization of benefits. The Companies' developed a reliability plan that required substantial commitment and investment in resources – people, dollars, and time. The Companies are proud that their commitment and investment are producing dividends. The table below, taken from the 4<sup>th</sup> Quarter 2010 Joint Reliability Report, shows 8 of 9 reliability indices in 2010 that were better than the Commission's 12-Month Standard (shown in green).

12-Month Rolling	Penn Power			Penelec			Met-Ed		
	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual
SAIFI	1.12	1.34	<b>1.01</b>	1.26	1.52	<b>1.31</b>	1.15	1.38	1.51
CAIDI	101	121	<b>95</b>	117	141	<b>124</b>	117	140	<b>120</b>
SAIDI	113	162	<b>95</b>	148	213	<b>162</b>	135	194	<b>181</b>
Customers Served <sup>(a)</sup>	158,102			583,914			546,740		
Number of Sustained Interruptions	3,038			11,325			13,002		
Customers Affected	159,615			763,846			823,797		
Customer Minutes	15,086,521			94,759,008			98,740,558		

(a) Represents the average number of customers served during the reporting period.

In 2010, Penn Power continued the strategy identified in 2008 by the Reliability Strategy Team. This strategy consisted of reviewing all outages by outage cause and weather, installing protective devices to minimize the impact and size of outages, continuing aggressive tree trimming, and creative shift coverage to improve response time. This included additional coverage with first line supervision during a circuit lockout to expedite restoration. During 2010, 101 circuits were reviewed to look for aging infrastructure and broken equipment such as crossarms, braces and poles, of which priority findings were addressed expeditiously. This review consisted of manual inspections with additional infrared inspections on the worst performing circuits. In its resolve to improve reliability by implementing the initiatives noted above, Penn Power remains committed to providing safe and reliable service to their customers.

Met-Ed’s higher-than-normal SAIFI is directly attributed to several non-excludable storm events. In 2010, Met-Ed implemented a series of reliability improvement initiatives to “storm proof” or “harden” the three-phase distribution backbone. Examples of these SAIFI initiatives include aggressive tree-trimming and detailed circuit-condition assessments. To limit the scope of an outage, additional protective equipment, such as fuses, reclosers and remote controlled switches were systematically added. Future reliability improvements include the application of additional reclosers and fuses, as well as additional remote controlled switches. These initiatives coupled with targeted substation and distribution asset condition assessments, targeted corrective maintenance, aggressive tree trimming, and application of technology, will further improve reliability for Met-Ed customers.

During 2010 Penelec continued the implementation of process improvements introduced in 2009. The reliability engineering group created in 2009 focused on developing specific improvement recommendations based on circuit performance and outage data, monitored progress on reliability improvement programs, investigated outages to determine additional countermeasures and coordinated analysis with the planning and protection group to maximize the benefit from installation of additional circuit protection. Reliability programs included installation of circuit protection equipment, equipment replacement programs targeting equipment that causes the most outages, installation of fault indicators to assist in the identification of fault locations and rehabilitation of circuits based on reliability performance, as well as inspection and maintenance programs, and an aggressive tree removal and trimming program. Process improvements focused on changes to crew coverage, improving crew call-out response and storm process changes to reduce the impact of bad weather on system reliability performance.

The preliminary YTD March 2011 reliability indices (shown in **green**) are listed in the table below:

12-Month Rolling	Penn Power			Penelec			Met-Ed		
	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual	Benchmark	12-Month Standard	12-Month Actual
SAIFI	1.12	1.34	<b>0.90</b>	1.26	1.52	<b>1.39</b>	1.15	1.38	<b>1.46</b>
CAIDI	101	121	<b>105</b>	117	141	<b>123</b>	117	140	<b>111</b>
SAIDI	113	162	<b>94</b>	148	213	<b>172</b>	135	194	<b>161</b>

The Companies are exceeding 8 of 9 indices for the Commission’s 12-Month Standard, through month-end March 2011. The Companies are confident that their 2011 plans will continue to have a positive impact on reliability.

As mentioned earlier in this report, a successful reliability plan requires a substantial commitment and investment in resources – people, dollars, and time. The Companies have invested in such areas as new technologies, refurbishment or replacement of equipment, and rigorous inspection and maintenance activities, such as pole inspections, thermal scans, and vegetation management. The Companies are investing to achieve the ultimate goal of providing the consistently reliable electric service that our customers expect and deserve.

*Section 57.195(b)(2) A description of each major event that occurred during the year being reported on, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted to avoid or minimize the impact of similar events in the future.*

### *Major Events*

A major event is determined by having 10% of Met-Ed, Penn Power or Penelec’s customers out of service for 5 minutes or greater as defined in 52 Pa. Code 57.192. This annual report for 2010 is based on the exclusion of major events on an individual operating company basis and is consistent with the major events reported in each of the 2010 quarterly reports. The major event for 2010, is as follows:

FirstEnergy Company	Customers Affected	Major Event		Customer Minutes	Description	Commission Approval
<b>Met-Ed</b>	81,253	Duration	6 hours 4 minutes	8,072,319	Broken crossarm on a 115kV transmission line and a 115kV switch failure in conjunction with excessive heat.	Approved September 22, 2010
		Start Date/Time	July 7, 2010 4:13pm			
		End Date/Time	July 7, 2010 10:17pm			

*Section 57.195(b)(3) A table showing the actual values of each of the reliability indices (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the EDC's service territory for each of the preceding 3 calendar years. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customer minutes interruptions, the number of customers affected and the minutes of interruption. If MAIFI values are provided, the number of customer momentary interruptions shall also be reported.*

### Reliability Indices

For the purposes of this Joint Report, all reliability reporting is based upon the Pennsylvania Public Utility Commission's definitions for "momentary outages" and "major events" (outage data excluded as a result of major events).

Historic 12-Month Rolling Reliability Indices				
	Index	2008	2009	2010
<b>Penn Power</b>	SAIFI	1.13	0.75	1.01
	CAIDI	111	116	95
	SAIDI	125	87	95
	MAIFI	2.51	1.97	1.96
	Customer Minutes	19,755,334	13,721,657	15,086,521
	Customers Affected	178,456	118,277	159,615
	Minutes of Interruption	645,764	549,249	639,323
	Customers Served <sup>(a)</sup>	157,550	157,007	158,102
<b>Penelec</b>	SAIFI	1.56	1.22	1.31
	CAIDI	142	117	124
	SAIDI	220	143	162
	MAIFI	6.76	5.42	4.24
	Customer Minutes	127,576,336	83,155,989	94,759,008
	Customers Affected	900,582	711,565	763,846
	Minutes of Interruption	2,744,249	2,192,884	2,432,603
	Customers Served <sup>(a)</sup>	578,795	580,907	583,914
<b>Met-Ed</b>	SAIFI	1.35	1.21	1.51
	CAIDI	104	111	120
	SAIDI	139	134	181
	MAIFI	4.69	4.43	3.90
	Customer Minutes	75,285,007	73,001,005	98,740,558
	Customers Affected	727,306	660,319	823,797
	Minutes of Interruption	1,867,946	1,964,675	2,870,729
	Customers Served <sup>(a)</sup>	539,896	544,056	546,740

(a) Represents the average number of customers served during the reporting period.



36-Month Rolling Year-End 2010	Penn Power		Penelec		Met-Ed	
	36-Month Standard	36-Month Actual	36-Month Standard	36-Month Actual	36-Month Standard	36-Month Actual
SAIFI	1.23	0.96	1.39	1.36	1.27	1.36
CAIDI	111	107	129	128	129	111
SAIDI	136	103	179	175	163	151

*Section 57.195(b)(4) A breakdown and analysis of outage causes during the year being reported on, including the number and percentage of service outages, the number of customers interrupted, the 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

<b>Outages by Cause</b>				
<b>2010 12-Month Rolling</b>	<b>Penn Power</b>			
<b>Cause</b>	<b>Customer Minutes</b>	<b>Number of Sustained Interruptions</b>	<b>Customers Affected</b>	<b>% Based on Number of Outages</b>
TREES/NOT PREVENTABLE	4,802,629	579	30,368	19.06%
LIGHTNING	1,667,680	493	14,065	16.23%
EQUIPMENT FAILURE	3,299,932	420	62,602	13.82%
ANIMAL	718,010	390	10,741	12.84%
BIRD	349,639	320	4,848	10.53%
LINE FAILURE	1,483,109	236	9,661	7.77%
UNKNOWN	450,890	162	4,990	5.33%
VEHICLE	1,273,276	98	7,960	3.23%
OVERLOAD	117,029	89	1,638	2.93%
FORCED OUTAGE	346,450	56	7,318	1.84%
PREVIOUS LIGHTNING	45,248	52	799	1.71%
HUMAN ERROR -NON-COMPANY	296,133	44	1,869	1.45%
TREES/PREVENTABLE	87,948	40	696	1.32%
ICE	1,811	14	15	0.46%
CUSTOMER EQUIPMENT	99,922	13	1,377	0.43%
UG DIG-UP	5,020	12	30	0.39%
OBJECT CONTACT WITH LINE	17,102	10	290	0.33%
HUMAN ERROR - COMPANY	10,845	6	198	0.20%
VANDALISM	12,114	2	136	0.07%
CONTAMINATION	1,632	1	12	0.03%
FIRE	102	1	2	0.03%
<b>TOTAL</b>	<b>15,086,521</b>	<b>3,038</b>	<b>159,615</b>	<b>100.00%</b>

## 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.

### 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 and 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.

### 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 failure and lessen the impact of outages to a smaller number of customers.

Penn Power’s review has shown an increase in the number of outages from cutouts. Porcelain cutouts were found to be the major cause for cutout-related outages, resulting in the discontinued use of porcelain cutouts for new installations, and older porcelain cutouts are being replaced with new polymer cutouts when they fail.

In 2010, all of Penn Power’s main feed three-phase backbone was inspected to identify critical problems before they cause an outage. Infrared scanning of three-phase backbone occurred on nine circuits. These scans find “hot spots” that are repaired before they can cause an outage. In addition, comprehensive helicopter inspections were performed on 119 miles of 69kV lines to identify critical problems before an outage is caused.

Outages by Cause – Penelec

Outages by Cause				
2010 12-Month Rolling	Penelec			
Cause	Customer Minutes	Number of Sustained Interruptions	Customers Affected	% Based on Number of Outages
EQUIPMENT FAILURE	21,673,206	3,337	212,441	29.47%
UNKNOWN	6,790,147	1,723	91,063	15.21%
TREES/NOT PREVENTABLE	27,244,159	1,529	140,645	13.50%
ANIMAL	2,832,370	1,150	25,231	10.15%
LINE FAILURE	13,017,146	858	113,765	7.58%
FORCED OUTAGE	2,548,171	643	44,191	5.68%
LIGHTNING	4,929,119	504	34,786	4.45%
BIRD	474,568	362	6,454	3.20%
VEHICLE	4,375,025	312	27,784	2.75%
OVERLOAD	968,447	168	13,311	1.48%
HUMAN ERROR - COMPANY	170,466	115	8,926	1.02%
HUMAN ERROR -NON-COMPANY	925,049	103	7,986	0.91%
ICE	54,316	89	356	0.79%
OTHER ELECTRIC UTILITY	246,941	84	1,341	0.74%
UG DIG-UP	378,451	74	1,876	0.65%
PREVIOUS LIGHTNING	18,945	71	148	0.63%
WIND	6,870,559	60	21,189	0.53%
TREES/PREVENTABLE	30,718	38	359	0.34%
OBJECT CONTACT WITH LINE	407,328	25	1,676	0.22%
VANDALISM	418,795	22	2,040	0.19%
FIRE	64,192	19	499	0.17%
CUSTOMER EQUIPMENT	22,084	16	101	0.14%
OTHER UTILITY-NON ELEC	86,177	12	1,852	0.11%
SWITCHING ERROR	193,786	7	5,597	0.06%
CONTAMINATION	18,843	4	229	0.04%
<b>TOTAL</b>	<b>94,759,008</b>	<b>11,325</b>	<b>763,846</b>	<b>100.00%</b>

## Proposed Solutions – Penelec

### Equipment Failure

Penelec has identified porcelain cutout failures to be a large contributor to equipment failure outages and, as such, has been replacing porcelain cutouts with polymer cutouts as a preventive measure in conjunction with existing work plans, as a part of the targeted mainline equipment replacement program.

The number of equipment failures are further mitigated by way of inspection and maintenance practices, such as circuit inspections and others. Penelec's entire main feed three-phase backbone was inspected during 2008 to identify and repair critical problems before they caused an outage. Inspections of the main feed three-phase were performed again on 50% of the circuits during 2009. Infrared scanning on the main feed three-phase has been completed on 46% of Penelec's circuits since 2008.

In addition, 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. 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.

### 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 program identifies 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 Penelec's normal tree trimming maintenance program.

### 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.

Outages by Cause – Met-Ed

<b>Outages by Cause</b>				
<b>2010 12-Month Rolling</b>	<b>Met-Ed</b>			
<b>Cause</b>	<b>Customer Minutes</b>	<b>Number of Sustained Interruptions</b>	<b>Customers Affected</b>	<b>% Based on Number of Outages</b>
EQUIPMENT FAILURE	19,426,569	2,536	233,486	24.14%
TREES/NOT PREVENTABLE	41,317,679	2,273	215,128	21.64%
ANIMAL	2,926,237	1,705	33,264	16.23%
UNKNOWN	4,780,093	1,311	48,786	12.48%
LINE FAILURE	10,822,550	889	82,550	8.46%
LIGHTNING	2,566,969	374	16,243	3.56%
FORCED OUTAGE	3,298,165	331	55,155	3.15%
VEHICLE	6,690,576	277	53,493	2.64%
BIRD	102,531	189	1,703	1.80%
TREES/PREVENTABLE	868,086	149	8,521	1.42%
OVERLOAD	1,924,803	106	12,534	1.01%
HUMAN ERROR -NON-COMPANY	380,111	73	8,347	0.69%
HUMAN ERROR - COMPANY	885,254	66	40,059	0.63%
PREVIOUS LIGHTNING	131,897	66	1,218	0.63%
UG DIG-UP	91,271	34	480	0.32%
CUSTOMER EQUIPMENT	9,227	24	102	0.23%
ICE	1,984	23	23	0.22%
WIND	1,546,748	21	4,658	0.20%
OBJECT CONTACT WITH LINE	239,998	20	2,047	0.19%
OTHER ELECTRIC UTILITY	317,881	18	2,776	0.17%
VANDALISM	360,127	15	3,040	0.14%
FIRE	51,802	4	184	0.04%
<b>TOTAL</b>	<b>98,740,558</b>	<b>10,504</b>	<b>823,797</b>	<b>100.00%</b>

## Proposed Solutions – Met-Ed

### Equipment Failure

The number of equipment failure outages 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 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 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(b)(5) A list of the major remedial efforts taken to date and planned for circuits that have been on the worst performing 5% of circuits list for a year or more.*

*Worst Performing Circuits – Remedial Action*

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



*Section 57.195(b)(6). A comparison of established transmission and distribution inspections and maintenance goals/objectives versus actual results achieved during the year being reported on. Explanations of any variances shall be included.*

*T&D Inspection and Maintenance Programs*

Inspection and Maintenance 2010			Penn Power		Penelec		Met-Ed	
			Planned	Completed	Planned	Completed	Planned	Completed
Forestry	Transmission (Miles)		189	187 <sup>a</sup>	456	451 <sup>b</sup>	133	132 <sup>c</sup>
	Distribution (Miles)		832	859	4,848 <sup>d</sup>	4,896	2,671	2,685
Transmission	Aerial Patrols		2	2	2	2	2	2
	Groundline <sup>e</sup>		150	187	2,024	2,486	1,206	1,522
Substation	General Inspections		1,044	1,044	5,526 <sup>f</sup>	5,526	2,916	2,916
	Transformers		123	123	832 <sup>g</sup>	832	488	488
	Breakers		68	68	556 <sup>g</sup>	556	159 <sup>g</sup>	159
	Relay Schemes		73 <sup>g</sup>	73	436 <sup>g</sup>	436	456 <sup>g</sup>	456
Distribution	Capacitors		983	983	8,632	8,632	4,581	4,581
	Poles		12,400	12,556	50,000	52,661	30,000	32,422
			Planned	Completed	Planned	Completed	Planned	Completed
	Reclosers <sup>h</sup>		727	734	2,480 <sup>g</sup>	2,480	877	877
	Radio-Controlled Switches (2 / year)	1st half 2010	Penn Power has no radio controlled switches		1,042	1,042	40	40
		2nd half 2010			1,065 <sup>i</sup>	1,065	40	40

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

<sup>a</sup> 187.04 miles were completed in 2010; the remaining 1.49 miles were maintained in 2010 and completed in 2011  
<sup>b</sup> 450.97 miles were completed in 2010; 3.39 miles were maintained in 2010 and completed in 2011; 1.89 miles remain open due to legal refusals which are expected to be resolved this year  
<sup>c</sup> 131.92 miles were completed in 2010; 0.88 of a mile was maintained in 2010 and completed in 2011; 0.29 of a mile remains open due to legal refusals which are expected to be resolved this year  
<sup>d</sup> Planned miles changed from 4,817 to 4,848 due to circuit mileage updates  
<sup>e</sup> Transmission groundline pole inspections:  
 - Penn Power includes 23kV  
 - Penelec includes 115 and 138kV  
 - Met-Ed includes 230, 115 and 69kV  
<sup>f</sup> Planned number of substations changed from 5,544 to 5,526 due to substations no longer owned by Penelec  
<sup>g</sup> Planned number revised due to equipment that was removed and no longer in service  
<sup>h</sup> Pursuant to Inspection, Maintenance, Repair and Replacement programs that were approved by the Commission on December 15, 2009 the Companies visually inspect and take counter readings on line reclosers annually  
<sup>i</sup> Planned number changed from 1,062 to 1,065 due to additional units that were installed

*Section 57.195(b)(7) A comparison of budgeted versus actual transmission and distribution operation and maintenance expenses for the year being reported on in total and detailed by the EDC's own functional account code of FERC account code as available. Explanations of any variances shall be included.*

*Budgeted vs. Actual T&D Operation & Maintenance Expenditures*

T&D O&M (YTD December 2010)					
Company	PUC Category	YTD Actual	YTD Budget	Variance %	Notes <sup>a</sup>
Penn Power	Corrective Maintenance	2,817,069	4,577,944	-38%	1
	Preventive Maintenance	449,777	12,174	3595%	2
	Storms	572,034	695,962	-18%	3
	Vegetation Management	674,849	3,482,580	-81%	4
	Miscellaneous	1,844,784	2,768,827	-33%	5
	Operations	1,864,979	2,579,489	-28%	6
<b>Penn Power Total</b>		<b>8,223,492</b>	<b>14,116,976</b>	<b>-42%</b>	
Penelec	Corrective Maintenance	7,938,765	14,948,507	-47%	7
	Preventive Maintenance	2,806,187	3,979,186	-29%	8
	Storms	2,847,609	2,750,007	4%	
	Vegetation Management	5,031,859	7,651,229	-34%	9
	Miscellaneous	7,716,961	6,540,399	18%	10
	Operations	16,522,011	23,738,465	-30%	11
<b>Penelec Total</b>		<b>42,863,392</b>	<b>59,607,793</b>	<b>-28%</b>	
Met-Ed	Corrective Maintenance	7,869,411	10,778,850	-27%	12
	Preventive Maintenance	2,201,322	2,961,935	-26%	13
	Storms	11,618,437	6,064,242	92%	14
	Vegetation Management	4,666,543	7,178,113	-35%	15
	Miscellaneous	5,584,379	5,628,033	-1%	
	Operations	13,775,925	30,418,454	-55%	16
<b>Met-Ed Total</b>		<b>45,716,017</b>	<b>63,029,627</b>	<b>-27%</b>	
<b>Grand Total</b>		<b>96,802,901</b>	<b>136,754,396</b>		

* Variance Explanations (variances 10% or greater):	
1	Under budget primarily due to less fix-it-now contingency work than anticipated.
2	Over budget due to higher substation and transformer preventative work than budgeted.
3	Under budget due to less storm maintenance activities than anticipated.
4	Under budget due to vegetation management costs incurred at lower levels than originally anticipated.
5	Under budget due to increased capital work.
6	Under budget due to less than anticipated outside contractor costs related to the energy efficiency program.
7	Under budget primarily due to less substation and distribution pole replacements than planned.
8	Under budget primarily due to less substation work than expected.
9	Under budget due to vegetation management costs incurred at lower levels than originally anticipated.
10	Over budget due to higher than anticipated planned meter maintenance activities.
11	Under budget due to less than anticipated outside contractor costs related to the energy efficiency program.
12	Under budget primarily due to less unscheduled repair work than anticipated.
13	Under budget primarily due to lower than planned substation repairs.
14	Under budget due to less than anticipated small storm maintenance activities.
15	Under budget due to vegetation management costs incurred at lower levels than originally anticipated.
16	Under budget due to less than anticipated outside contractor costs related to the energy efficiency program.

*Section 57.195(b)(8) A comparison of budgeted versus actual transmission and distribution operation and maintenance capital expenses for the year being reported on in total and detailed by the EDC's own functional account code or FERC account code as available. Explanations of any variances 10% or greater shall be included.*

*Budgeted vs. Actual T&D Capital Expenditures*

T&D Capital (YTD December 2010)					
Company	PUC Category	YTD Actual	YTD Budget	Variance %	Notes <sup>a</sup>
Penn Power	New Business	4,612,023	4,033,297	14%	1
	Reliability	5,658,217	9,253,672	-39%	2
	Capacity	615,916	99,532	519%	3
	Miscellaneous	1,502,407	668,293	125%	4
	Forced	7,016,375	3,985,920	76%	5
	Vegetation Management	5,551,712	1,678,339	231%	6
<b>Penn Power Total</b>		<b>24,956,650</b>	<b>19,719,053</b>	<b>27%</b>	
Penelec	New Business	16,173,865	17,227,653	-6%	
	Reliability	38,304,371	41,001,900	-7%	
	Capacity	17,590,840	18,171,872	-3%	
	Miscellaneous	5,649,645	7,744,948	-27%	7
	Forced	28,614,392	27,100,339	6%	
	Vegetation Management	20,021,115	17,405,125	15%	8
<b>Penelec Total</b>		<b>126,354,228</b>	<b>128,651,837</b>	<b>-2%</b>	
Met-Ed	New Business	17,696,271	21,384,212	-17%	9
	Reliability	20,193,763	24,629,352	-18%	10
	Capacity	16,929,134	15,259,222	11%	11
	Miscellaneous	6,185,423	4,907,552	26%	12
	Forced	23,705,169	19,135,777	24%	13
	Vegetation Management	16,820,668	16,393,794	3%	
<b>Met-Ed Total</b>		<b>101,530,428</b>	<b>101,709,909</b>	<b>0%</b>	
<b>Grand Total</b>		<b>252,841,306</b>	<b>250,080,799</b>		

* Variance Explanations (variances of 10% or greater):	
1	Over budget due to more residential and commercial underground new business work than anticipated.
2	Under budget primarily due to less fix-it-now contingency work than originally anticipated.
3	Over budget due to a year-to-date capital related payroll over head adjustment.
4	Over budget due to increased claims work as well as supervision and engineering overhead higher than budgeted.
5	Over budget due to more outage follow-up work and priority one pole replacements than scheduled.
6	Over budget due to vegetation management costs incurred at higher levels than anticipated.
7	Under budget due to lower than anticipated damage claims.
8	Over budget due to vegetation management costs incurred at higher levels than anticipated.
9	Under budget due to more residential and commercial underground new business work than anticipated.
10	Under budget due to less fix-it-now and other unplanned contingency work than originally submitted.
11	Over budget due to higher than anticipated costs for capacity related projects.
12	Over budget due to increased claims work as well as supervision and engineering overhead higher than budgeted.
13	Over budget higher than anticipated forced work driven by outage follow-ups.

*Section 57.195(b)(9) Quantified transmission and distribution inspection and maintenance goals/objectives for the current calendar year detailed by system area (that is, transmission, substation and distribution).*

*T&D Inspection & Maintenance Programs – 2011 Goals / Objectives*

<b>T&amp;D Inspection &amp; Maintenance Programs - 2011</b>			
<b>Program/Project</b>	<b>Penn Power</b>	<b>Penelec</b>	<b>Met-Ed</b>
<b>Forestry</b>			
Transmission	30.39 Miles	185.35 Miles	78.58 Miles
Distribution	1,136 Miles	3,729 Miles	2,874 Miles
<b>Transmission</b>			
Aerial Patrols	2	2	2
Groundline (Poles)	0	1,301	0
<b>Substation</b>			
General Inspections	960	4,956	2,616
Transformers	125	761	337
Breakers	36	439	241
Relay Schemes	87	736	315
<b>Distribution</b>			
Capacitors	995	8,654	4,621
Poles	10,600	41,111	28,433
Reclosers	748	2,478	901
Radio-Controlled Switches (2 / year)	Not Applicable	1,082 / 6 months	46 / 6 months

Section 57.195(b)(10) Budgeted transmission and distribution operation and maintenance expenses for the current year in total and detailed by the EDC's own functional account code or FERC account code as available.

*2011 T&D O&M Budget*

<b>T&amp;D O&amp;M Budget - Annual 2011</b>		
<b>Company</b>	<b>PUC Category</b>	<b>Total Year Budget</b>
Penn Power	Corrective Maintenance	368,409
	Preventive Maintenance	0
	Storms	1,195,123
	Vegetation Management	884,234
	Miscellaneous	5,186,713
	Operations	1,402,946
<b>Penn Power Total</b>		<b>9,037,425</b>
Penelec	Corrective Maintenance	3,695,388
	Preventive Maintenance	5,032,902
	Storms	3,866,263
	Vegetation Management	4,986,170
	Miscellaneous	13,844,151
	Operations	16,212,823
<b>Penelec Total</b>		<b>47,637,697</b>
Met-Ed	Corrective Maintenance	2,656,243
	Preventive Maintenance	3,733,258
	Storms	8,796,475
	Vegetation Management	4,784,291
	Miscellaneous	9,672,868
	Operations	11,637,799
<b>Met-Ed Total</b>		<b>41,280,934</b>
<b>Grand Total</b>		<b>97,956,056</b>

- **T&D O&M definitions:**
  - Corrective Maintenance – Program or non-program O&M costs associated with the unplanned repair and maintenance of the system, which may or may not be scheduled. This excludes any capital work resulting from corrective maintenance.
  - Preventive Maintenance – Program or non-program O&M costs associated with the planned repair and maintenance of they system, which may or may not be scheduled.
  - Storms – Costs associated with all weather-related conditions.
  - Vegetation Management – Costs associated with planned or unplanned tree trimming and vegetation management program.
  - Miscellaneous – Costs associated with miscellaneous type categories that can include, but are not limited to, damage claims, joint use, and purchase of tools.
  - Operations – O&M costs associated with the activities related to managing and directing the operations of the Company.

*Section 57.195(b)(11) Budgeted transmission and distribution capital expenses for the current year in total and detailed by the EDC's own functional account code or FERC account code as available.*

*2011 T&D Capital Budget*

<b>T&amp;D Capital - Annual 2011</b>		
<b>Company</b>	<b>PUC Category</b>	<b>Total Year Budget</b>
Penn Power	New Business	2,860,500
	Reliability	8,884,642
	Capacity	516,666
	Miscellaneous	1,302,047
	Forced	4,805,563
	Vegetation Management	4,867,980
<b>Penn Power Total</b>		<b>23,237,398</b>
Penelec	New Business	19,321,082
	Reliability	39,198,455
	Capacity	18,435,969
	Miscellaneous	17,564,055
	Forced	28,527,644
	Vegetation Management	15,669,629
<b>Penelec Total</b>		<b>138,716,834</b>
Met-Ed	New Business	21,454,639
	Reliability	25,848,587
	Capacity	7,944,344
	Miscellaneous	9,522,347
	Forced	21,518,803
	Vegetation Management	15,756,410
<b>Met-Ed Total</b>		<b>102,075,130</b>
<b>Grand Total</b>		<b>264,029,362</b>

**General Notes:**

*T&D Capital definitions:*

- New Business – Costs associated with providing service to new customers (i.e. residential, commercial, industrial, and streetlighting).
- Reliability – Costs incurred to improve/reinforce the reliability of the infrastructure assets.
- Capacity – Costs associated with projects required to improve, relieve, or correct an existing or projected voltage or thermal condition.
- Miscellaneous – Costs associated with miscellaneous type categories that can include, but are not limited to, damage claims, joint use, and purchase of tools.
- Forced – Costs associated with projects that are required usually by federal or state regulatory bodies. This category can also include costs associated with highway and bridge projects or that are related to weather conditions.
- Vegetation Management - Costs associated with planned or unplanned tree trimming and vegetation management program.

*Section 57.195(b)(12) Significant changes, if any, to the transmission and distribution maintenance programs previously submitted to the Commission.*

*Changes to T&D Maintenance Programs*

FirstEnergy continues to review the inspection and maintenance practices to confirm that they are consistent with industry standards and that they support the achievement of the applicable Commission reliability benchmarks and standards. The 2010 revisions to the inspection and maintenance practices are as follows:

<b>Summary of Revisions 2010</b>	
<b>Distribution Practices</b>	
<b>Equipment</b>	<b>Summary of Change</b>
Reclosers	<ul style="list-style-type: none"> <li>▪ Visually inspect and take counter readings annually</li> </ul>
<b>Substation Practices - No Significant Changes</b>	
<b>Transmission Practices - No Significant Changes</b>	

## ATTACHMENT A

### Worst Performing Circuits – Remedial Action



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<b>Penn Power</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
Perry	W-156	<b>Performance was driven by one outage caused by a non-preventable tree and one outage caused by line failure both occurring during minor storms.</b>		
		Cable was reattached at time of restoration	Complete	May-10
		Problem tree was removed at time of restoration	Complete	Oct-10
Evans City	D-611	<b>Performance was driven by one outage caused by a non-preventable tree and one outage caused by human error non company during tree trimming incident.</b>		
		The out of right of way tree that was cut down by customer was removed at time of restoration	Complete	Jan-10
		Problem tree was removed at time of restoration	Complete	Apr-10
		Forestry to trim circuit in 2011	To be completed 2011	
Mercer	W-167	<b>Performance was driven by one outage caused by a non-preventable tree during a minor storm.</b>		
		Engineering field review of the section of circuit served by the recloser	Complete	Jul-09
		Problem tree was removed at time of restoration	Complete	May-10
		Forestry to trim circuit in 2011	To be completed 2011	
Hartstown	W-126	<b>Performance was driven by three outages caused by non-preventable trees during minor storms.</b>		
		Engineering field review of the section of circuit served by a recloser. No additional work identified	Complete	Jul-09
		Engineering field review of the section of circuit served by substation breaker. No additional work identified	Complete	May-09
		Complete reliability work identified	Complete	Sep-09
		Problem tree was removed at time of restoration	Complete	Dec-09
		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 of identified conductors and equipment.	Revised completion date: Capital project to be completed in 2011	

<b>Penelec</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
Springboro	00237-52	<b>Performance was driven by trees non-preventable during a minor storm and car-pole accident.</b>		
		Repaired damage from car-pole accident	Complete	Jan-10
		Repaired damage from minor storm	Complete	Jun-10
		Review circuit for additional fault indicators	Complete	Apr-10
		2011 Circuit Inspection	To be completed in 2011	
		Full cycle tree clearing	To be completed in 2011	
Warren South	00220-41	<b>Performance was driven by non-preventable tree damage during minor storm, animal and lightning damage.</b>		
		Repaired lightning damage - arrester	Complete	Apr-10
		Repaired equipment due to animal contact	Complete	May-10
		Repaired damage from minor storm	Complete	May-10
		Repaired damage from minor storm	Complete	Jun-10
		Full cycle tree clearing	To be completed in 2011	
Curryville	00644-71	<b>Performance was driven by car-pole accident, equipment failure and equipment failure during minor storm.</b>		
		Repair damage from car-pole accident	Complete	Feb-10
		Repaired damage from minor storm.	complete	Apr-10
		Review circuit for additional fault indicators	Complete	Oct-10
		Targeted mainline reliability equipment replacement	Complete	Oct-10
		Full cycle tree clearing	To be completed in 2011	
Rolling Meadows	00310-31	<b>Performance was driven by line failure during minor storm.</b>		
		Repaired minor storm damage	Complete	May-10
		Full Cycle Tree Clearing	To be completed in 2011	
Grover	00527-63	<b>Performance was driven by equipment failure and non-preventable trees during minor storms.</b>		
		Repair damage from minor storm	Complete	Apr-10
		Repair equipment damage	Complete	Aug-10
		Full cycle tree clearing	To be completed in 2011	

<b>Penelec</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
Powell Ave	00237-31	<b>Performance was driven by equipment failure and trees non-preventable during minor storm.</b>		
		Reliability Coordinator to inspect circuit based on outage history	Complete	Feb-10
		Repair conditions found by previous reliability inspection	Complete	Feb-10
		Repair damage from minor storm	Complete	Mar-10
		Repair equipment failure - UG terminator	Complete	Jul-10
		Review circuit for additional fault indicators	Complete	Aug-10
		2011 Circuit Inspection	To be completed in 2011	
		Full cycle tree clearing	To be completed in 2011	
Union City	00206-43	<b>Performance was driven by equipment failure, trees non-preventable, unknown, animal, lightning and damage during minor storms.</b>		
		Targeted mainline reliability equipment replacement	Complete	Nov-09
		Repair damage from minor storm	Complete	May-10
		Repair damage from minor storm	Complete	Jul-10
		Reliability Coordinator to inspect circuit based on outage history	To be completed in 2011	
Madera	00166-22	<b>Performance was driven by trees non-preventable and equipment failure.</b>		
		Reliability Coordinator to inspect circuit based on outage history	Complete	Feb-10
		Repair conditions found by previous reliability inspection	Complete	Feb-10
		Review circuit for additional fault indicators	Complete	May-10
		Add additional protection per circuit coordination	Complete	Aug-10
		Full cycle tree clearing	To be completed in 2011	
Fairview East	00218-34	<b>Performance was driven by line and equipment failure during minor storm.</b>		
		Repair damage from minor storm	Complete	Jun-10
		Add additional protection per circuit coordination	Complete	Oct-10
Erie South	00259-31	<b>Performance was driven by trees non-preventable during minor storm, equipment failure and unknown.</b>		
		Targeted mainline reliability equipment replacement	Complete	Sep-09
		Repair damage from minor storm	Complete	Jun-10
		Repair conditions found by previous reliability inspection	Complete	Jun-10
		Reliability Coordinator to inspect circuit based on outage history	To be completed in 2011	

<b>Penelec</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
Tonesta Switching Station	00498-51	<b>Performance was driven by lightning damage during minor storm.</b>		
		Repaired damage from minor storm	Complete	Jun-10
		Review circuit for additional fault indicators	Complete	Aug-10
		Full cycle tree clearing	To be completed in 2011	
Green Garden	00224-31	<b>Performance was driven by equipment failure, trees non-preventable and equipment failure during minor storm.</b>		
		Repair damage from minor storm	Complete	May-10
		Add additional protection per circuit coordination	Complete	Oct-10
		2011 Circuit Inspection	To be completed in 2011	
		Full cycle tree clearing	To be completed in 2011	
Athens	00514-61	<b>Performance was driven by trees non-preventable and trees non-preventable during minor storm.</b>		
		Repair damage from minor storm	Complete	May-10
		Repair damage due to trees non-preventable	Complete	Sep-10
		Repair damage from minor storm	Complete	Nov-10
		Add additional protection per circuit coordination	Complete	Dec-10
Blairsville East	00080-13	<b>Performance was driven by equipment failure, trees non-preventable and lightning during minor storm.</b>		
		Repair equipment damage	Complete	Jan-10
		Targeted mainline reliability equipment replacement	Complete	Jan-10
		Repair damage from minor storm	Complete	Sep-10
		Full cycle tree clearing	To be completed in 2011	
Philipsburg	00162-22	<b>Performance was driven by lightning during minor storms, equipment and line failure.</b>		
		Repair lightning damaged insulator	Complete	Aug-10
		Targeted mainline reliability equipment replacement	To be completed in 2011	
		Add additional protection per circuit coordination	To be completed in 2011	
Roxbury	00138-83	<b>Performance was driven by equipment failure and unknown.</b>		
		Repair equipment failure	Complete	Feb-10
		Full cycle tree clearing	Complete	Dec-10

<b>Penelec</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
Brady Street	00136-23	<b>Performance was driven by car-pole accident.</b>		
		Repair damage from car-pole accident	Complete	Feb-10
		Full cycle tree clearing	To be completed in 2011	
Lake Como	00788-65	<b>Performance was driven by equipment failure and an unknown cause.</b>		
		Repair equipment failure	Complete	Mar-10
		2011 Circuit Inspection	To be completed in 2011	
Birmingham	00168-22	<b>Performance was driven by non-preventable trees, car-pole accident and line failure.</b>		
		Add additional protection per circuit coordination	Complete	Aug-10
		Repair damage from car-pole accident	Complete	Jul-10
		Review circuit for additional fault indicators	Complete	Jul-10
		2011 Circuit Inspection	To be completed in 2011	
DuBois	00137-23	<b>Performance was driven by trees non-preventable and lightning during minor storm, equipment failure and an unknown cause.</b>		
		Perform mainline Reliability Inspection	Complete	Dec-09
		Reliability Coordinator to inspect circuit based on outage history	Complete	Feb-10
		Repair damage from minor storm	Complete	Nov-10
		Full cycle tree clearing	To be completed in 2011	

<b>Met-Ed</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
Yorkana	00708-4	<b>Performance driven by a wind storm which caused non-preventable tree outages (68% of minutes).</b>		
		Crossarm and arrestor repairs	Complete	Jul-09
		Installed additional fault indicators	Complete	Dec-09
		Perform accelerated circuit three phase backbone assessment after wind storm	Complete	Feb-10
		Perform accelerated assessment on the circuit backbone and three phase of the circuit after a major hail storm	Complete	May-10
		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
		Replaced damaged recloser found during repair of hot spot identified from thermal scan	To be completed 2011	
		Perform accelerated backbone assessment	To be completed 2011	
Perform SAIFI analysis initiative study	To be completed 2011			
Shawnee	00822-3	<b>Performance driven by line failure, equipment failure, and non-preventable trees. 50% of circuit minutes due to line failure during storm restoration on 11/18/10 while backfeeding other circuits</b>		
		Repair critical items identified from backbone assessment and circuit patrol	Complete	Sep-09
		Perform accelerated backbone assessment	Complete	Jan-10
		Perform accelerated three phase assessment	Complete	Jan-10
		Install fault indicators	Complete	Apr-10
		Perform accelerated single phase assessment	Complete	Jun-10
		Perform accelerated backbone and three phase assessment	To be completed 2011	
		Repair critical items identified from circuit patrol	To be completed 2011	
Newberry	00576-4	<b>Performance was driven by non-preventable tree cause outages (80% of minutes).</b>		
		Perform line patrol of high line failure area of the circuit	Complete	Dec-09
		Repair critical items identified from the backbone assessment	Complete	Dec-09
		Perform accelerated assessment on the circuit backbone and 3 phase of the circuit	Complete	Feb-10
		Forestry to perform on cycle comprehensive circuit tree trimming	Complete	Mar-10
		Perform accelerated assessment on the circuit backbone, three 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 three 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	To be completed 2011	
		Install three radio controlled switches and recloser with fault indicators	To be completed 2011	

<b>Met-Ed</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
Dillsburg	00746-4	<b>Performance driven by tree as cause at 94% of minutes. 58% of circuit minutes from trees during the 9/22/10 storm.</b>		
		Perform accelerated circuit reliability assessment of mainline- No Priority 1 findings	Complete	Oct-09
		findings	Complete	Dec-09
		Replace 3 insulators and 1 misc item found during Line patrol	Complete	Jan-10
		Perform accelerated circuit reliability assessment of three phase- No Priority 1 findings	Complete	Apr-10
		Perform accelerated circuit reliability assessment of mainline- No Priority 1 findings	Complete	Apr-10
		Forestry to perform on cycle comprehensive circuit Tree Trim in 2010	Complete	Dec-10
		Perform accelerated backbone assessment	To be completed 2011	
Perform SAIFI analysis initiative study	To be completed 2011			
Windsor	00795-4	<b>Circuit performance was driven by storm events (97% of minutes). 41% of the storm minutes were caused by a broken pole outage.</b>		
		Perform Accelerated circuit three phase backbone assessment	Complete	Oct-09
		Install additional fuses to protect the circuit backbone	Complete	Dec-09
		Perform Accelerated circuit three phase backbone assessment after wind storm	Complete	Jul-10
		Investigate additional fault indicators	Complete	Jul-10
		Install additional fault indicators	Complete	Aug-10
		Perform accelerated assessment on the circuit backbone and three phase of the circuit after a wind storm	Complete	Oct-10
		Perform accelerated backbone assessment	To be completed 2011	
Barlo	00705-1	<b>Performance driven by trees non preventable (55%), primarily during two small storms and by a circuit breaker failure (25%).</b>		
		Install mainline tap fuses	Complete	Jul-09
		Perform accelerated backbone assessment	Complete	Mar-10
		Perform accelerated three phase assessment	Complete	Mar-10
		Perform fault current indicator installation engineering study	Complete	Mar-10
		Install Fault Current Indicators at seven locations	Complete	May-10
		Replace overloaded fuse with a single phase recloser, upgrade a fuse downstream of this location/ install fault indicators	To be completed 2011	
		Install Fault indicators on a heavily wooded section downstream of the new single phase recloser as three locations	To be completed 2011	
		Perform accelerated backbone assessment	To be completed 2011	
		Perform SAIFI analysis initiative study	To be completed 2011	
		Forestry to perform off cycle patrol and trim	To be completed 2011	



<b>Met-Ed</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
Birdsboro	00756-1	<b>Performance driven by trees non-preventable (76%) three large outages occurred during a small storm June 24-25, 2010.</b>		
		Perform Fault Current Indicator Installation Engineering Study	Complete	Oct-09
		Install Fault Current Indicators at six locations	Complete	Dec-09
		Perform accelerated backbone assessment	Complete	Mar-10
		Perform accelerated three phase assessment	Complete	Mar-10
		Forestry to perform on cycle comprehensive circuit Tree Trimming	Complete	Jul-10
		Upgrade T-12 Tie Recloser	Complete	Oct-10
		Install Fault Indicators one additional mainline location	Complete	Nov-10
		Perform accelerated backbone assessment	To be completed 2011	
Perform SAIFI analysis initiative study	To be completed 2011			
Fox Hill	00816-3	<b>Performance was driven by equipment failure and non-preventable trees.</b>		
		Study additional backbone protection	Complete	Aug-09
		Perform accelerated backbone assessment	Complete	Mar-10
		Perform accelerated three phase assessment	Complete	Mar-10
		Perform accelerated single phase assessment	Complete	Sep-10
		Study automation of sectionalizer on circuit	To be completed 2011	
		Perform accelerated backbone and three phase assessment	To be completed 2011	
Forestry to perform off cycle patrol and trim	To be completed 2011			
Shawnee	00860-3	<b>Performance driven by insulator equipment failure (fuses and CLF's) and non-preventable trees.</b>		
		Perform accelerated three phase assessment	Complete	Jan-10
		Repair items identified from three phase assessment	Complete	Feb-10
		Install radio control communication equipment on sectionalizer	Complete	Jul-10
		Perform fuse and coordination study	Complete	Sep-10
		Perform accelerated backbone and three phase assessment	To be completed 2011	
Repair critical items identified from circuit patrol	To be completed 2011			

<b>Met-Ed</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
No Bangor	00826-3	<b>Performance was driven by non-preventable trees and equipment failure.</b>		
		Perform accelerated backbone assessment	Complete	Mar-10
		Perform accelerated three phase assessment	Complete	Mar-10
		Forestry to perform on cycle comprehensive circuit tree trimming	Complete	Jun-10
		Perform in depth inspection of backbone fuses	To be completed 2011	
		Perform accelerated backbone and three phase assessment	To be completed 2011	
Campbelltown	00731-2	<b>Performance was primarily driven by tree caused outages, wind damage, UG cable failures and lightning damage.</b>		
		Forestry to perform mid-cycle assessment of three phase backbone	Complete	Dec-09
		Replace UG cable along Gentry Drive	Complete	Jan-10
		Accelerated circuit assessment three phase	Complete	May-10
		Post storm assessment due to excessive damage	Complete	Jun-10
		Forestry to perform mid-cycle assessment of remaining three phase	Complete	Sep-10
		Install Fault Indicators on three phase in six locations	To be completed 2011	
		Perform accelerated backbone assessment	To be completed 2011	
		Perform SAIFI analysis initiative study	To be completed 2011	
		Trim locations identified in forestry review	To be completed 2011	
Yorkana	00715-4	<b>Performance was driven by non-preventable tree cause outages (31% of minutes) and equipment problems (66% of minutes).</b>		
		Repair critical items identified from comprehensive circuit patrol	Complete	Sep-09
		Install 5 additional sectionalizing switches	Complete	Nov-09
		Perform accelerated assessment on the three phases of the circuit	Complete	Nov-09
		Repair critical items identified from backbone assessment	Complete	Dec-09
		Perform removal of danger trees	Complete	Dec-09
		Install additional fuses to protect the circuit backbone	Complete	Dec-09
		Perform danger tree removal on the tree problem areas of the circuit	Complete	Dec-09
		Installed additional Fault Indicators	Complete	Dec-09
		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 accelerated backbone assessment	To be completed 2011	
		Perform SAIFI analysis initiative study	To be completed 2011	
Forestry to perform off cycle patrol and trim	To be completed 2011			

<b>Met-Ed</b>				
<b>Substation</b>	<b>Circuit</b>	<b>Remedial Action Planned or Taken</b>	<b>Status of Remedial Work</b>	<b>Date Remedial Work Completed</b>
Newberry	00586-4	<b>Performance driven by a vehicle cause outage during a wind storm (72% of minutes).</b>		
		Perform accelerated assessment on the circuit backbone	Complete	Oct-09
		Perform accelerated assessment on the circuit backbone and three phase of the circuit	Complete	Feb-10
		Perform accelerated assessment on the circuit backbone and three phase of the circuit.	Complete	Jun-10
		Forestry to perform on cycle comprehensive circuit tree trimming	Complete	Jun-10
		Perform accelerated backbone assessment	To be completed 2011	
		Install fault indicators on the circuit three phase backbone.	To be completed 2011	
Pleasureville	00710-4	<b>Performance driven by a wind storm which were non-preventable tree cause outages (97% of minutes).</b>		
		Perform accelerated assessment on the circuit backbone	Complete	Oct-09
		Perform accelerated assessment on the three phases of the circuit	Complete	Dec-09
		Perform accelerated assessment on the circuit backbone and three phases of the circuit	Complete	Jul-10
		Forestry to perform on cycle comprehensive circuit Tree Trimming	Complete	Dec-10
		Install fault indicators on the circuit three phase backbone.	Complete	Dec-10
		Perform accelerated backbone assessment	To be completed 2011	

ATTACHMENT B

Met-Ed Neutral Connection Failures

*Pursuant to Docket No. C-20077273<sup>10</sup>, Metropolitan Edison Company shall commence monitoring the failure rate of its neutral connections by location, the cause of failure and the installation date<sup>11</sup>, if available. A report that includes this data is to be filed with the Commission for the next three years as an attachment to the reliability report filed on an annual basis by Metropolitan Edison Company Inc.<sup>12</sup>*

<b>2010 Met-Ed Neutral Connection Failures</b>		
<b>Date</b>	<b>Location (District)</b>	<b>Cause of Failure</b>
1/3/2010	Lebanon District	Bad connection
1/7/2010	Stroudsburg	Bad connection
1/10/2010	York	Bad connection
1/12/2010	Hamburg	Bad connection
1/12/2010	York	Bad connection
1/18/2010	Easton	Bad connection
1/23/2010	York	Bad connection
1/25/2010	York	Bad connection
1/27/2010	Reading	Bad connection
1/29/2010	York	Bad connection
2/9/2010	York	Bad connection
2/24/2010	Stroudsburg	Bad connection
2/24/2010	Reading	Bad connection
3/1/2010	York	Bad connection
3/18/2010	Easton	Bad connection
3/19/2010	York	Bad connection
3/22/2010	Easton	Bad connection
3/24/2010	Easton	Bad connection
4/7/2010	Gettysburg	Bad connection
4/8/2010	York	Bad connection
4/17/2010	Dillsburg	Bad connection
4/27/2010	Easton	Bad connection
4/29/2010	Gettysburg	Bad connection
5/12/2010	Easton	Bad connection
5/20/2010	Stroudsburg	Bad connection
6/6/2010	Gettysburg	Bad connection
6/29/2010	Boyertown	Bad connection
7/14/2010	York	Bad connection
7/17/2010	Reading	Bad connection

<sup>10</sup> *Michael Strickhauser v. Metropolitan Edison Company*, Docket No. C-20077273. (Order entered December 20, 2007).

<sup>11</sup> Installation dates are unavailable

<sup>12</sup> Pursuant to Docket No. C-20077273, Met-Ed has provided neutral connection failure data as an attachment to its annual reliability reports for the years 2008, 2009 and 2010.

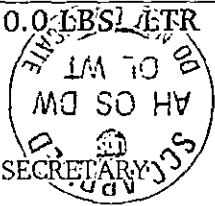
<b>2010 Met-Ed Neutral Connection Failures</b>		
<b>Date</b>	<b>Location (District)</b>	<b>Cause of Failure</b>
9/8/2010	York	Bad connection
9/22/2010	Easton	Bad connection
9/24/2010	Hanover	Bad connection
9/30/2010	York	Bad connection
10/1/2010	Gettysburg	Bad connection
10/11/2010	Boyertown	Bad connection
11/4/2010	York	Bad connection
11/11/2010	York	Bad connection
11/28/2010	Dillsburg	Bad connection
12/13/2010	Hamburg	Bad connection
12/17/2010	York	Bad connection
12/19/2010	Dillsburg	Bad connection
12/30/2010	Stroudsburg	Bad connection

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

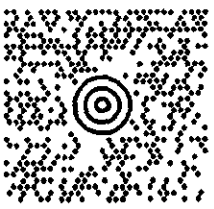
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400 NORTH STREET, 2ND FLOOR  
HARRISBURG PA 17120



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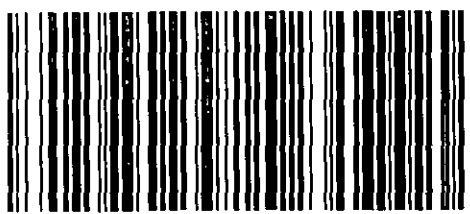


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