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February 1, 2013

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PA PUBLIC UTILITY COMMISSION  
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**VIA UNITED PARCEL SERVICE**

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

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

Dear Secretary Chiavetta:

Pursuant to 52 Pa. Code § 57.195(d) and (e), enclosed for filing on behalf of Pennsylvania Power Company, Pennsylvania Electric Company, and Metropolitan Edison Company (collectively, the “Companies”) are two copies of the Joint 4<sup>th</sup> Quarter 2012 Reliability Report – Public Version (“Joint Report”). Please date stamp the additional copy and return it in the postage-prepaid envelope provided.

On December 22, 2004, the Companies filed an Application for Protective Order at Docket No. L-00030161. The Application was granted, allowing the Companies to file proprietary versions of the quarterly reliability reports. The Proprietary Version of this Joint Report is being filed under separate cover.

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

Sincerely,

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

February 1, 2013

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

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## Joint 2012 4th Quarter Reliability Report

Pennsylvania Power Company,  
Pennsylvania Electric Company and  
Metropolitan Edison Company

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

## Joint 4<sup>th</sup> Quarter 2012 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 future<sup>1</sup>.*

### Major Events

FirstEnergy Company	Customers Affected	Time and Duration of the Event		Cause of the Event	Commission Approval Status
<b>Met-Ed</b>	296,592	Duration	10 days, 8 hours and 20 minutes	Hurricane Sandy	Pending; Request for Exclusion submitted to PaPUC on January 25, 2013
		Start Date/Time	October 29, 2012 12:03pm		
		End Date/Time	November 8, 2012 8:23pm		
<b>Penelec</b>	96,856	Duration	5 days, 2 hours and 47 minutes	Hurricane Sandy	Pending; Request for Exclusion submitted to PaPUC on January 25, 2013
		Start Date/Time	October 29, 2012 12:16pm		
		End Date/Time	November 3, 2012 3:03pm		

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

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

*Reliability Index Values*

4Q 2012 (12-Mo Rolling)	Penn Power		
	Benchmark	12-Month Standard	12-Month Actual
SAIFI	1.12	1.34	1.17
CAIDI	101	121	114
SAIDI	113	162	133
Customers Served	157,482		
Number of Sustained Interruptions	3,330		
Customers Affected	184,126		
Customer Minutes	20,952,827		

Penelec 4Q 2012 (12-Mo Rolling)	Benchmark	12-Month Standard	12-Month Actual assuming approval of Major Event Exclusion filed on February 1, 2013	12-Month Actual assuming denial of Major Event Exclusion filed on February 1, 2013
SAIFI	1.26	1.52	1.41	1.58
CAIDI	117	141	138	178
SAIDI	148	213	194	280
Customers Served			583,225	583,225
Number of Sustained Interruptions			11,475	12,478
Customers Affected			822,879	919,708
Customer Minutes			113,314,355	163,423,140

<b>Met: Eq 4Q, 2012 (12-Mo Rolling)</b>	<b>Benchmark</b>	<b>12- Month Standard</b>	<b>12-Month Actual assuming approval of Major Event Exclusion filed on February 1, 2013</b>	<b>12-Month Actual assuming denial of Major Event Exclusion filed on February 1, 2013</b>
<b>SAIFI</b>	1.15	1.38	1.29	1.83
<b>CAIDI</b>	117	140	120	919
<b>SAIDI</b>	135	194	155	1,686
<b>Customers Served</b>			548,153	548,153
<b>Number of Sustained Interruptions</b>			8,978	11,426
<b>Customers Affected</b>			708,512	1,005,155
<b>Customer Minutes</b>			84,691,211	924,052,550

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

### *Worst Performing Circuits – Reliability Indices*

The methodology the Companies use to identify worst performing circuits is based on both System Average Interruption Frequency Index (“SAIFI”) and System Average Interruption Duration Index (“SAIDI”). The methodology consists of the following steps:

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

Penn Power’s rankings of the 5% Worst Performing Circuits are provided in Attachment A to this report.

Penelec and Met-Ed’s ranking of the 5% Worst Performing Circuits will be provided in a supplemental submission following a final outcome on Penelec and Met-Ed’s January 25, 2013 Major Event Exclusion Requests.

*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's Remedial Actions for Worst Performing Circuits are provided in Attachment B to this report.

Penelec and Met-Ed's ranking of the 5% Worst Performing Circuits will be provided in a supplemental submission following a final outcome on Penelec and Met-Ed's January 25, 2013 Major Event Exclusion Requests.



*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

<b>Outages by Cause</b>				
<b>4th Quarter 2012 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	7,883,570	759	36866	23%
LIGHTNING	2,996,554	643	17,143	19%
ANIMAL	1,067,067	485	19,826	15%
BIRD	302,385	339	3,688	10%
EQUIPMENT FAILURE	2,750,656	332	30660	10%
LINE FAILURE	2,294,859	286	16,222	9%
OVERLOAD	301,395	86	4,636	3%
VEHICLE	872,390	72	8,644	2%
PREVIOUS LIGHTNING	36,879	66	295	2%
UNKNOWN	246,839	64	2,695	2%
FORCED OUTAGE	610,131	53	7,632	2%
HUMAN ERROR - NON-COMPANY	254,954	35	1,627	1%
HUMAN ERROR - COMPANY	676,759	34	28,928	1%
TREES/PREVENTABLE	77,425	27	893	1%
CUSTOMER EQUIPMENT	428,545	15	2909	0%
OBJECT CONTACT WITH LINE	52,291	10	422	0%
UG DIG-UP	15,390	8	109	0%
FIRE	58,674	5	800	0%
VANDALISM	4,518	4	13	0%
CONTAMINATION	4,930	3	14	0%
WIND	4,478	2	14	0%
CALL ERROR	11,088	1	84	0%
OTHER UTILITY-NON ELEC	1,050	1	6	0%
<b>TOTAL</b>	<b>20,952,827</b>	<b>3,330</b>	<b>184,126</b>	<b>100.00%</b>

## Proposed Solutions – Penn Power

### Trees Not-Preventable

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

### Lightning

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

### Animal

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

Outages by Cause – Penelec

Penelec's Outage by Cause and Proposed Solutions will be provided in a supplemental submission following a final outcome on Penelec's January 25, 2013 Major Event Exclusion request.

Outages by Cause – Met-Ed

Met-Ed's Outage by Cause and Proposed Solutions will be provided in a supplemental submission following a final outcome on Met-Ed's January 25, 2013 Major Event Exclusion request.

*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*

Information is not required for the 4<sup>th</sup> Quarter report.

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 Expenditures*

Information is not required for the 4<sup>th</sup> Quarter report.

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

*Budgeted vs. Actual T&D Capital Expenditures*

Information is not required for the 4<sup>th</sup> Quarter report.

*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*

Penn Power 2012					
Department	Staff	1Q	2Q	3Q	4Q
Line	Leader / Chief	27	26	27	27
	Lineman	63	64	66	66
Substation	Technician	4	4	4	4
	Construction & Maintenance (C&M)	20	21	21	21
<b>Total</b>		<b>114</b>	<b>115</b>	<b>118</b>	<b>118</b>

Penelec 2012					
Department	Staff	1Q	2Q	3Q	4Q
Line	Leader / Chief	155	153	147	148
	Lineman	187	181	177	191
Substation	Technician	6	7	7	7
	Construction & Maintenance (C&M)	73	72	71	72
<b>Total</b>		<b>421</b>	<b>413</b>	<b>402</b>	<b>418</b>

Met-Ed 2012					
Department	Staff	1Q	2Q	3Q	4Q
Line	Leader / Chief	52	52	52	51
	Lineman	171	171	179	179
Substation	Technician	15	15	15	15
	Construction & Maintenance (C&M)	56	56	59	59
<b>Total</b>		<b>294</b>	<b>294</b>	<b>305</b>	<b>304</b>



*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*

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

ATTACHMENT A

Worst Performing Circuits - Reliability Indices

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PennPower													
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	Jackson	W730	Zelienople	1,960	18	0	784,950	2,164	4.98	400	1.1	363	0.0
2	Evans City	D611	Zelienople	950	33	1	667,571	2,363	4.24	703	2.49	283	1.0
3	Stoneboro	W-132	Clark	1,072	41	1	583,475	2,532	3.71	544	2.36	230	0.0
4	Stoneboro	W-130	Clark	808	38	0	400,418	1,897	2.54	496	2.35	211	0.2
5	Union	W-562	New Castle	944	16	0	342,063	1,625	2.17	362	1.72	211	2.0
6	Hadley	W-195	Clark	936	43	0	334,292	1,292	2.12	357	1.38	259	0.0
7	Wheatland	W-149	Clark	838	18	1	318,042	1,209	2.02	380	1.44	263	2.0
8	Bessemer	D-393	New Castle	1,084	39	0	305,907	1,311	1.94	282	1.21	233	0.0
9	Hermitage	W-260	Clark	2,428	68	0	287,482	2,927	1.83	118	1.21	98	3.0

- (1) Average Customers served by the circuit for the 12-month period.
- (2) Number of unique outages experienced by one or more customers on the circuit during the period, due to distribution outage causes.
- (3) Number of circuit lockouts during the period
- (4) Total customer minutes of outage during the period due to distribution outage causes.
- (5) Number of customer outages during the period due to outage causes.
- (6) Impact of the outages on this circuit to the Company's system SAIDI.
- (7) Distribution circuit SAIDI, SAIFI, CAIDI and MAIFI due to distribution outage causes.

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.

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

Penn Power						
Rank	Substation	Circuit	Remedial Action Planned or Taken	Status of Remedial Work Completed	Date Remedial Work Completed	Appeared in 4 of 6 Quarters
6	Hadley	W-195	<i>Performance was driven by one outage caused by a non-preventable tree during weather conditions</i>			
			The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12	
			Reliability job to make two coordination changes	Complete	Aug-12	
			Field review of circuit to identify visible equipment failures	Complete	Sep-12	
			Reliability job to install fault indicators, fuses and replace switches	Complete	Oct-12	
			Forestry to trim circuit	To be completed 2013		
7	Wheatland	W-149	<i>Performance was driven by one outage caused by a non-preventable tree.</i> The problem tree was removed and associated repairs were made at time of restoration	Complete	May-12	
8	Bessemer	D-393	<i>Performance was driven by one outage caused by a non-preventable tree.</i> The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12	
9	Hermitage	W-260	<i>Performance was driven by one outage caused by lightning during weather conditions.</i> Equipment that was broken by lightning was replaced at time of restoration	Complete	Aug-12	
	Zelienople	D603	<i>Performance driven by one outage caused by a non-preventable tree</i>			
			Problem tree was removed and associated repairs were made at time of restoration	Complete	Apr-11	
			Forestry to trim circuit in 4th Qtr 2012	Complete	Dec-12	
	Canal	W-102	<i>Performance driven by one outage caused by a non-preventable tree during weather conditions.</i>			
			Problem tree was removed and associated repairs were made at time of restoration	Complete	May-11	
			Forestry to trim circuit	Complete	Dec-12	
	Camp Reynolds	W-134	<i>Performance driven by two outages one caused by a line failure and one caused by a human error non-company</i>			
			Cable was reattached at time of restoration	Complete	Dec-11	
			Equipment that was broken due to farmer plowing field was repaired at time of restoration	Complete	May-12	
			Protection review including replacement of three reclosers	Complete	Mar-12	
			Reliability job to replace one cutout and make one coordination change	Complete	Apr-12	
			Nine Fault Indicators to be installed	Complete	Aug-12	
			Field review of circuit to identify visible equipment failures	Complete	Sep-12	
			Forestry to trim circuit	To be completed 2013		
	Mars	D616	<i>Performance was driven by two outages both caused by non-preventable trees during weather conditions.</i>			
			The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12	
			The problem tree was removed and associated repairs were made at time of restoration	Complete	Jul-12	
			Field review of circuit to identify visible equipment failures	Complete	Oct-12	
			Forestry to trim circuit	To be completed 2013		



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**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Joint 4<sup>th</sup> Quarter 2012 Reliability Report – :**  
**Pennsylvania Power Company, :**  
**Pennsylvania Electric Company and :**  
**Metropolitan Edison Company :**

**CERTIFICATE OF SERVICE**

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

Service by first class mail, as follows:

Steven C. Gray  
Acting Small Business Advocate  
Office of Small Business Advocate  
Suite 1102, Commerce Building  
300 North Second Street  
Harrisburg, PA 17101

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

Dated: February 1, 2013



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